

INVESTIGATING THE CAUSES AND EFFECTS OF IP CONTRACT STRAIN

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Investigating the Causes and Effects of IP Contract Strain

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ABSTRACT

Currently private sector global markets are driven by sharing and trading of intellectual property (“IP”) assets, as facilitated by IP contracts. Experts recognize that IP contracts can be problematic. Prior literature analyzed problems in IP contracts through a lens of legal rules. Adopting a wider vantage than the prior literature, this thesis examines the role of IP assets in IP contracts and identifies the problems in this relationship as IP contract strain. Specifically, this thesis queries: What are the causes and effects of IP contract strain?

IP contract strain has several causes including contractual terms failing to recognize the IP distinguishing traits of an IP asset. This set of traits provides a base definitional framework, applicable to an analysis of IP assets in IP contracts. A review of foundational IP theories reveals that specific IP distinguishing traits, such as balance, control and flexibility/evolution, lie at the core of IP assets. If one trait is omitted, altered or distorted by contractual terms the contract may not recognize or support the IP asset. A second cause is conflict between IP distinguishing traits and contract legal principles. These causes both have significant effects for contractual uses of IP assets.

Private sector companies may actively draft contracts affected by IP contract strain as influences, such as pressures to attain market advantage, can induce strain. Moreover, emerging IP contract strategies may sustain this activity. Looking through a legal pluralism lens it is evident that causes of IP contract strain may be influenced by legal rules, practice and institutions, collectively or individually.

IP contract strain may have numerous far-reaching effects, such as: contracts that do not achieve a contractual use of the whole of an IP asset; defective IP asset chains of title; or systemic problems caused by the number of IP contracts and the reliance placed upon these in

the private sector. The outcome of IP contract strain may be confusion regarding IP asset status and erosion of investor confidence in IP contracts and IP assets. As such, IP contract strain has the potential to result in negative private sector consequences if left unchecked.

SOMMAIRE

De nos jours, les marchés mondiaux dans le secteur privé sont axés sur le partage et l'échange d'actifs associés à la propriété intellectuelle (« PI »), par le biais de contrats en matière de PI. Les experts reconnaissent que de tels contrats présentent des difficultés. Les articles à ce sujet analysent les enjeux relatifs aux contrats en matière de PI sous l'angle des règles juridiques. En adoptant un point de vue plus large, la présente thèse examine le rôle des actifs associés à la PI dans les contrats en matière de PI et qualifie les problèmes liés à cette relation de « tension sur les contrats en matière de PI ». De façon plus particulière, la présente thèse pose la question suivante : Quelles sont les causes et les conséquences de la tension sur les contrats en matière de PI?

Il existe plusieurs causes de tension sur les contrats en matière de PI, tel le fait que les clauses contractuelles ne reflètent pas les caractéristiques distinctives des actifs associés à la PI. L'analyse des théories de base en matière de PI indique que certaines caractéristiques distinctives de la PI, comme l'équilibre, le contrôle et la flexibilité/capacité évolutive, forment l'élément central des actifs associés à la PI. S'il y a omission, modification ou distorsion d'une de ces caractéristiques dans les clauses contractuelles, il est possible que le contrat ne reconnaisse ou ne soutienne pas l'actif associé à la PI en question. Une deuxième cause de tension est l'existence de contradictions entre les caractéristiques distinctives de la PI et les principes juridiques liés aux contrats. Ces causes ont toutes deux d'importantes répercussions sur l'utilisation que l'on fait des actifs associés à la PI, selon les clauses d'un contrat.

Les entreprises oeuvrant dans le secteur privé rédigent parfois activement des contrats en matière de PI marqués de tension puisque certains facteurs, tels que les pressions liées à l'obtention d'un avantage commercial, suscitent parfois de la tension sur les contrats en matière

de PI. Par ailleurs, de nouvelles stratégies touchant les contrats en matière de PI peuvent garder cette activité en place. Sous l'angle du pluralisme juridique, il devient évident que les causes de tension sur les contrats en matière de PI sont influencées par les règles juridiques, la pratique et les établissements, de façon collective ou individuelle.

La tension sur les contrats en matière de PI a peut-être de nombreuses répercussions importantes, telles des clauses contractuelles qui ne tirent pas parti de l'ensemble d'un actif associé à la PI, des chaînes de titres viciés en ce qui a trait aux actifs associés à la PI ou des difficultés systémiques engendrées par le nombre de contrats en matière de PI qui existent et le recours à ces derniers au sein du secteur privé. Les conséquences possibles de tension sur les contrats en matière de PI sont la confusion relative au statut juridique des actifs associés à la PI et l'effritement de la confiance des investisseurs dans les contrats en matière de PI et les actifs associés à la PI. En conséquence, si la tension sur les contrats en matière de PI n'est pas maîtrisée, le secteur privé en subira potentiellement les répercussions.

INTRODUCTION

Business, political, and even religious leaders identify intellectual property (“IP”) as a critical asset in the global marketplace.¹ There is now a perception that “IP is everywhere. We are surrounded by it.”² IP assets drive national and international economies and are influential tools in private sector transactions.³ The transactional role of an IP asset is expressed through IP contracts which are governed by IP contract terms.⁴ This role may involve a transfer of an IP asset, creation of an IP asset, exploitation of an IP asset, employment of an IP asset, or use of an IP asset. (For the purpose of this thesis these are referenced generally as “contractual uses” of IP assets.)

Contractual uses of IP assets are on the rise in the private sector, and consequently so are the number and types of IP contracts being drafted. Still, commentators suggest that “we have not yet come to grips” with the meaning of the commercial value (e.g. economic value,

¹ The Honourable Paul Martin, noted the importance of innovation to Canada’s economic growth in a speech given at a Luncheon Event Co-Sponsored by the Canada Club, the Association of Canadian Investment Dealers and the Canada-United Kingdom Chamber of Commerce in London, England on February 15, 2001. The Honourable Tony Blair of the United Kingdom stated that innovation is crucial for British economic advancement, “*Blair views biotechnology as key to Britain’s economic future*” Agence France Press (31 July 2006). Pope John Paul II, *Centesimus Annus*, 1991 commented that: “Whereas at one time the decisive factor of production was the land and later capital...today the decisive factor is increasing man himself, that is, his knowledge.” See also: Wayne R. Barnes, “Contemplating a Civil Law Paradigm for a Future International Commercial Code” (2005) 65 La. L. Rev. 677 at 731-732; and Ben Depoorter, “The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law” (2004) 9 Va. J.L. & Tech. 4 para. 7. Depoorter states that, “there is currently a strong trend to ‘propertize’ everything in the realm of information. Intellectual property law is expanding on an almost daily basis as new rights are created or existing rights are applied to give intellectual property owners rights that they never would have had in an earlier time.”

² David Vaver, “Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity” (2002) 25:1 Dalhousie L.J. 10 at 11. See also: Robert P. Merges, “Intellectual Property Rights, Input Markets, and the Value of Intangible Assets” (1998) 8 RPM 1 online: <<https://www.law.berkeley.edu/institutes/bclt/pubs/merges/iprights.pdf>> at 28. Merges asks “what is the relationship between property rights and contracts?”

³ See: Vaver, “Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity”, *supra* note 2; Edward C. Walterscheid, “The Nature of the Intellectual Property Clause: A Study in Historical Perspective” (2001) 83 J. Pat. & Trademark Off. Soc’y 763; Jane Ginsburg & Robert Merges, *Foundations of Intellectual Property* (New York: Foundation Press, 2004).

⁴ Robert P. Merges, “Intellectual Property Rights and New Institutional Economics” (2000) 53 Vand. L. Rev. 1857 at 1860.

institutional value, etc.) that may be generated by way of contractual uses of IP assets.⁵ In particular, there is a lack of understanding of the effect of IP assets for commercial contracts.⁶ Thus, both, the role of IP assets in IP contracts and the problems in the relationship between IP assets and IP contracts, are ripe for analysis and study.

Notably, experts recognize that IP contracts can be problematic.⁷ In this thesis a particular basis for problems in IP contracts, namely IP contract strain, is examined.⁸ A potential consequence of such strain is that an IP contract may be rendered incapable of fulfilling a contractual use of an IP asset. This can have significant effects due to the reliance the private sector places upon IP contracts to achieve corporate goals. IP contracts that cannot fulfill their intended purpose can induce chain of title defects and diminished confidence in IP assets. Such contracts can further pose systemic problems. Thus, it is the purpose of this thesis to query: What are the causes and effects of IP contract strain? To formulate an answer to this question it is necessary to examine the role of IP assets in IP contracts, as well as the factors that influence the drafting of IP contracts.

Existing IP contract literature focuses upon legal rules as both a cause of problems for IP contracts and a source of solutions to such problems.⁹ Several articles point to the intersection of contract laws and IP laws in IP contracts as particularly problematic.¹⁰ That the initial approach

⁵ Jeff Kuester & Brett Bartel, "Evolution of the IP Market" *Intellectual Asset Management* 37 (September/October 2009) at 32.

⁶ Raymond T. Nimmer, "Revised Article 9 and Intellectual Property Asset Financing" (2001) 53 Me. L. Rev. 287 at 289.

⁷ Paul Henderson & Michael Pierantozzi, "Increasing transparency in the IP transaction markets" *Intellectual Asset Management Magazine* 31 (2008) 66 at 69. See also Chapter 4.

⁸ Notably, this thesis specifically defines IP contract strain as strain that causes a contract to fail to achieve a contractual use of an IP asset.

⁹ See: J.H. Reichman & Jonathan A. Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information" (1999) 147 U. Pa. L. Rev. 875.

¹⁰ Presenters at a symposium hosted in April, 1998 by the Berkeley Center for Law and Technology on "Intellectual Property and Contract Law in the Information Age" focused on this issue in particular. See: Pamela Samuelson, "Symposium: Intellectual Property and Contract Law in the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Transactions in Information and Electronic Commerce" (1998) 13

to problems in IP contracts is grounded in legal rules may be due to the fact that in several countries, including Canada, legislation relevant to IP contracting has not kept pace with the rate of the drafting such contracts.¹¹ In fact, the amount of legislation directed to IP contracts in many jurisdictions is negligible.¹² Thus, this gap, as well as legislative attempts to fill it, have captured the attention of commentators and dominated the literature on the topic of IP contracts up to this point.¹³ Such articles are discussed later in this Introduction and are presented in Appendix “A”.

Rather than furthering the established legal rule based vein of IP contract research, this thesis builds upon that foundation and delves further into an analysis of the potential causes of IP contract strain. One such cause is a failure of IP contract terms to reflect or acknowledge (and thereby support) the core traits of an IP asset. The core traits of an IP asset are essential to the asset and must exist in all IP assets, as is discussed in more detail in this thesis.

Although some traits of IP assets have been addressed in isolation in the past, such as balance,¹⁴ this thesis shifts the focus upon IP asset traits to consider the potential benefits that a recognized set of core traits of IP assets may pose for IP contract analysis. To fully understand this point it should be noted that core traits of IP assets are distinct from IP rights. Core traits of IP assets are inherent attributes of an IP asset, whereas IP rights reflect rights in the IP asset that

Berkeley Tech. L.J. 809; and Pamela Samuelson, "Intellectual Property and Contract Law for the Information Age: Foreword to a Symposium" (1999) 87 Cal. L. Rev. 1.

¹¹ See: Jonathan Zuck, "How to Make the EU a land of Opportunities" *Intellectual Asset Management* 37 (September/October 2009) 77 at 78; Rachael Diamant & Meir Pugatch, "Measuring Technology Transfer Performance in Public-Private Partnerships - A Discussion Paper" (2007) Prepared for the IP Academy in Israel, Meeting of the Tech Transfer Group, September 4, 2007, Ministry of Health, Tel-Aviv at 5; and Michael Geist, "The Toronto Music Industry Town Hall" (August 27, 2009), online: <www.michaelgeist.ca/content/view/4329/125>.

¹² Sharon K. Sandeen, "A Contract by Any Other Name is Still a Contract: Examining the Effectiveness of Trade Secret Clauses to Protect Databases" (2005) 45 IDEA 119 at 123. Sandeen comments that: "Those who promote the use of contracts to fill the gaps of intellectual property law invoke the principle of freedom of contract and argue that individuals and companies should generally be free to order their private relationships any way they see fit." See also: Elizabeth I. Winston, "Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property" (2006) 14 Geo. Mason L. Rev. 93.

¹³ See: Appendix “A”.

¹⁴ Recent decisions of the Supreme Court of Canada emphasize the trait of balance in relation to IP rights. See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, [2002] 2 S.C.R. 336; *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2004] 1 S.C.R. 339; *Apotex Inc. v. Wellcome Foundation Ltd.*, [2002] 4 S.C.R. 153; and *Harvard College v. Canada (Commissioner of Patents)*, [2002] 4 S.C.R. 45.

are granted based upon the inherent attributes of an IP asset. Generally, IP rights are predominantly defined by statute and common law. (This point is discussed in more length in Chapter 3.)

The importance of establishing of a set of core traits of an IP asset is that the set offers a framework upon which a definition (or at the very minimum an understanding) of what constitutes an IP asset may be grounded. The set of core traits of an IP asset may not always fully define the IP asset, but it provides at least skeletal support for a definition of an IP asset. Therefore, the framework, represented by the set of IP asset core traits, can be used as a baseline reference by drafters and interpreters of IP contracts to determine whether the description of an IP asset in IP contract terms corresponds with the IP asset definition.

Thus, IP contract drafters and interpreters can use the set of core traits to determine if the IP asset described in IP contract terms matches the base definition of the IP asset provided by the set. For most contracts that involve tangible assets it is easier to perform an assessment as to whether the description in contractual terms matches an actual asset than it is in the context of IP contracts. This is true because many tangible assets have clear visible boundaries. The fact that IP assets are intangible means they lack visually discernible boundaries. Therefore, the set of core traits can become a critical framework for the activity of establishing whether the description in the terms of an IP contract matches an IP asset, at either the point of contract drafting or interpretation. (An example of this type of use of the set of IP asset core traits from the perspective of IP contract interpretation is provided in section 4.3.1.1.1.1.)

Moreover, the framework set of IP asset core traits can also be used to identify instances of IP contract strain. IP contracts affected by IP contract strain may be drafted in response to a variety of influences. In general these types of influences may be identified as fitting within a

category of “legal influences” when viewed through the lens of legal pluralism (as discussed below). As such, this thesis reviews influences upon IP contracts and queries how these may impact causes of IP contract strain.

Notably such influences can include legal rules, as well as practices and institutions. For example, IP contract terms may reflect contracting influences that include: respect for particular contract laws; attainment of business aims; and adherence to institutional practices.¹⁵ These may even sometimes overshadow or colour the understanding of an IP asset that is the subject matter of an IP contract. For example, a contract drafter may be influenced by a business aim to attain exclusive rights in a market sector, and consequently he may draft terms that fail to acknowledge or reference the core traits of an IP asset. This is evidence that this practice is an IP contracting norm in the private sector environment, as discussed in Chapter 1. In particular, private sector IP contract norms legitimize the drafting of contract terms to mould IP assets and the exercise of contract legal principles as paramount in IP contract interpretation.¹⁶ These norms are grounded in the private sector experience wherein “competitive races are common”¹⁷ and control of IP assets is a primary goal. The resulting contract may be affected by IP contract strain.

Just as the factors influencing IP contract drafting may be varied, so may the contract drafters engaged in creating contracts exhibiting IP contract strain. Sophisticated transactions in particular can involve numerous contract drafters. For example, contract drafters may include: legal practitioners, corporate negotiators, IP holders, and all other parties involved in the development of an IP contract. Another example of contract drafters includes intermediaries who

¹⁵ Patrick H. Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation* (New York: John Wiley & Sons, Inc., 1998) at 111.

¹⁶ See: Raymond T. Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law" (1998) 13 Berkeley Tech. L.J. 827 at 830; and Peter Drahos, *A Philosophy of Intellectual Property* (Aldershot: Dartmouth, 1996) at 85.

¹⁷ James Turney, "Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal Innovation" (2005) 3 Nw. J. Tech. & Intell. Prop. 179 para. 8.

facilitate the creation of relationships between IP creators and IP consumers by way of IP contracts. Intermediaries are becoming increasingly important in light of new contractual uses of IP assets and may include: institutional IP aggregators/acquisition funds; IP technology development companies; licensing agents; IP brokers; IP-based M&A advisors; IP auction houses; IP/technology exchanges or clearing houses; IP-backed lenders; royalty stream securitization firms; patent analytic service providers; university technology transfer intermediaries; and IP/technology spin-off financiers.¹⁸

The analysis of influences on IP contracts highlights the fact that the activity of drafting IP contracts affected by IP contract strain may be unwitting in some instances, as discussed in Chapter 4. Contract drafters may even produce terms¹⁹ that alter, distort or omit core traits of an IP asset when drafting such terms in accordance with accepted contract norms (see Chapter 1). Chapter 3 examines IP theories and identifies three core traits of IP assets, namely – control²⁰, balance²¹, and flexibility/evolution²² – herein referenced as IP distinguishing traits. These are

¹⁸ See: Raymond Millied & Ron Laurie, "Meet the Middlemen" *Intellectual Asset Management Magazine* 28 (2008) 53 at 53-58.

¹⁹ Contractual terms can be both orally expressed and written terms. (See: *Robertson v. Thomson Corp.*, [2006] 2 S.C.R. 363 at para. 56.) Notably, contractual terms may be distinct from the spirit of the contract. The spirit of the contract may be an interpretation of the contract or negotiations that leads to an expectation that certain obligations, activities and purposes that are not bounded by a written form are defined by an agreement. IP contract strain can occur in the context of written terms as well as the spirit of the contract. This thesis focuses on written contractual terms because they are routinely the first source for contract interpretation (see the discussion of contractual interpretation in Chapter 4).

²⁰ Control is perhaps the best known IP distinguishing trait. It is embodied by the exclusivity and monopoly of the right of IP ownership. The control characteristic of IP is often criticized as the basis for heavy-handed usage of IP rights that cause harsh outcomes for users and competitors. However, not all authors see control in this manner. In the opinion of R. Polk Wagner, control has many benefits (See: R. Polk Wagner, "Information Wants to be Free: Intellectual Property and the Mythologies of Control" (2003) 103 Colum. L. Rev. 995 at 1029).

²¹ Balance recognizes the roles of the creator of a work or invention, the user of the IP and the public. Recent decisions of the Supreme Court of Canada emphasize this element of IP rights (See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14). Moreover, a wider understanding is slowly developing within society of the importance of balance. Health challenges, such as the potential for a bird-flu or swine-flu pandemic, bring to light the need for broad access to IP protected products. In 2005 Roche Holding AG, the owner of the Tamiflu, the vaccine for bird-flu, met with four generic-drug makers to discuss granting licenses for the purpose of increasing the stock of the vaccine for the benefit of the public (Jeanne Whalen, "Roche sets talk with drug firms to make Tamiflu" *The Wall Street Journal* (21-23 October 2005) at 3). Additionally, in the course of the *Research in Motion v. NTP Inc.* suit, the federal government of the U.S. intervened on behalf of BlackBerry users, arguing that BlackBerry service should not be shut down due to the negative effect of such a move upon a public that rely upon the

inviolable traits of IP assets. As a set the inviolable traits can be used as a framework providing a base definition of an IP asset, to be utilized while drafting or interpreting an IP contract. The traits can also be used as a guide to identify instances of IP contract strain – for example, contractual terms that fail to support the IP distinguishing traits of an IP asset represent a primary cause of IP contract strain.

An analogy of the primary cause of IP contract strain can be drawn to the transfer of a physical book. A book is defined and understood to be required to comprise core parts including: a binding; a cover; and at least one page. These parts function collectively to form a book – the page(s) provides content, the cover encases the content, and the binding holds the encasement and content together. In the case that two parties agree to contract for the transfer of a book from Company A to Company B, the terms of the contract must recognize, and thereby support, all of the core parts of the book. In the case that the contract terms only support the transfer of the binding and cover from Company A to Company B the aim of the parties is not met because the core of the book is not transferred between the parties. The binding and cover do not make-up the whole of the book. In fact an asset that includes solely a cover and a binding might instead be defined as a binder. A binder is a different asset than a book.

The relationship between an IP asset and its IP distinguishing traits is similar to the book and its core parts. However, an IP asset may include both property rights and core traits. This thesis focuses its analysis upon the core traits that must be part of an IP asset. These are found to

technology (See: Thomas Kellner, "For RIM: Careful What You Ask For" *Forbes* (6 December 2005); Grant Gross, "BlackBerry Gets a Boost" *PCWorld* (15 November 2005); Yuki Noguchi, "BlackBerry Users Remain in the Dark" *Washington Post* (10 December 2005); and Kevin Restive, "U.S. wades into RIM fight" *Financial Post* (11 November 2005)).

²² Flexibility/Evolution mean that IP rights must be able to adapt to changes in innovation. IP rights may protect technologies that were not even considered when an IP system first emerged. There are several examples of the effects of IP rights lagging behind technology, a marked one is digital music. See: Mark A. Lemley, "The Economics of Improvement in Intellectual Property Law" (1997) 75 Tex. L. Rev. 989; Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2 at 13; and Gerard Porter et al., "The patentability of human embryonic stem cells in Europe" *Nature Biotechnology* 24:6 (2006) 653.

be crucial and to be useful in the context of IP contracting, particularly when grouped as a set. If IP contract terms do not support all of the IP distinguishing traits of an IP asset, namely the terms do not acknowledge or reference the core traits, this may effect a contractual use of an asset other than the IP asset. The result is an IP contract affected by IP contract strain.

A second possible cause of IP contract strain may be conflict between IP distinguishing traits of an IP asset and contract legal principles. Two contract legal principles are discussed in Chapter 2 – bindingness and respect for the intent of the contracting parties. Notably, these principles are not commensurate with contract laws, although they may each be reflected in contract laws. They are principles that guide contract interpretation. It may be difficult for contract legal principles and IP distinguishing traits to interact peaceably in the context of an IP contract. For example, if the terms of an IP contract omit an IP distinguishing trait of an IP asset it may then be impossible to transfer the whole of the IP asset to a second party. However, it may be the intent of the parties to transfer the whole of the IP asset. Thus, an interpretation of the contract will encounter conflict that necessitates a choice between respecting the intent of the parties and recognizing the IP distinguishing traits as the core traits of an IP asset. Both the IP distinguishing traits and the contract legal principles cannot be applied simultaneously in a contract afflicted by this cause of IP contract strain, as discussed in more detail in Chapter 1.

The identification of instances of IP contract strain should not be viewed as representing a means of refuting freedom of contract. Contracting parties should be generally free to draft contractual terms. However, there may be a threshold of freedom to be respected by contracting parties when the contractual terms are based upon IP assets. In such a case the contractual terms derive their authority from the scope of the IP assets. Therefore, in this circumstance contract terms should correspond to an IP asset, and in particular to the core traits of the asset. In this

manner the core traits provide a guiding baseline framework for IP contracting parties. If the set of core traits is supported by the IP contract terms there is an increased chance that the IP contract reads on the IP asset. However, should one or more of the core traits of an IP asset be altered, distorted or omitted by the IP contract terms, then the result may be IP contract strain.

IP contract strain can produce significant effects. Looking again to the book example, as Company A originally owned all of the core parts of the book – its cover, binding and pages – if contractual terms dictate that only the binding and cover are transferred to Company B then Company A must retain ownership of the property right in the pages. The result is that even if Company A passes the whole of the physical book into the hands of Company B, contractually Company B only attains ownership of the property rights in the cover and binding. Company A retains ownership of the property right in the pages. Should Company B wish to transfer the book to Company C in the future such a transfer can pose problems. Company B may be unaware that it does not hold property rights to the whole of the book – ownership of the property right in the pages remains with Company A. Nonetheless, due to a failure to attain ownership of the property right in the whole of the book, Company B does not have the right to transfer the whole of the book to Company C.

This example highlights four major problems that can result from contract terms that do not support all of the core parts of an asset. First, the aim of the parties, to transfer the book between them is not met. Therefore, the contract fails to meet its goal. Second, an asset other than the asset the parties intend to contract for is the subject of the contract terms and is thereby transferred. (In the book example a binder is transferred instead of a book.) Third, conflict may arise between contract legal principles and IP distinguishing traits of an IP asset. Fourth, and this problem relates to all of the previously identified problems, the ownership of the rights in the

asset becomes divided and therefore potentially confused. Depending upon the level of dilution of an asset occurring through one or more transactions, relevant ownership(s) may be difficult to ascertain.

The essential problem is that an asset having any of the IP distinguishing traits omitted therefrom, or that has traits that are distorted or altered, cannot be an IP asset. This is so because the asset lacks traits that must be part of the core of the IP asset. Core traits are part of the definition, make-up and content of IP assets. Therefore an asset that lacks one or more core traits cannot be defined as an IP asset because the make-up and content of the asset is not that of an IP asset. Consequently, contract terms that omit, alter or distort any of the IP distinguishing traits cause the contract to read on an asset that is not an IP asset. In this manner IP distinguishing traits provide a framework for parties undertaking IP contracting drafting and interpretation, offering guidance regarding the traits of an IP asset that must be supported by the contract terms.

An IP contract that includes terms that omit, alter or distort an IP distinguishing trait cannot carry out a contractual use of the IP asset. Therefore, although a contract that omits, alters or distorts an IP distinguishing trait of an IP asset may be purported to be an IP contract it cannot truly be an IP contract. Contracts that do not support an IP asset are not IP contracts, but “non-IP contracts”. In this context the term “non-IP contract” is not meant to define a category of contracts including all contracts that do not involve IP assets. Instead the term is applied to the category of contracts that are meant to effect a contractual use of IP assets, but include terms that cause the contract to fall short of this goal. The result is a contract affected by IP contract strain.

Omission, alteration or distortion of an IP distinguishing trait can occur for many reasons, some of which are related to influences upon IP contracts. Such contracts may be easily drafted due to the “fuzzy” nature of IP assets, as is discussed in more detail in Chapter 3. Moreover, as

discussed in Chapter 1, contract drafters may be swayed by pressure to attain the aims of an institution to promote market advantage to create a contract that augments the IP distinguishing trait of control of an IP asset. One commentator states that “a new culture of [IP] abuse has arisen that’s...fuelled a bubble of investment.”²³ Furthermore, contract drafters may simply draft contracts that omit, alter or distort traits due to a lack of expertise regarding IP assets, as discussed in Chapter 4. Contract drafters may therefore willfully or inadvertently draft IP contract terms that omit, distort or alter an IP distinguishing trait. As discussed above, at least in part, this outcome can occur quite easily because drafters do not presently have a guiding framework whereby the nature of an IP asset may be ascertained when an IP contract is drafted. Such a framework may be provided by a recognized set of IP asset core traits.

Viewed from the vantage of a single contract, IP contract strain may not seem to pose a significant problem. However, the effect of IP contract strain has the potential to be considerable. As mentioned above and discussed in more detail in Chapter 5, the creation of contracts affected by IP contract strain represents a systemic problem. Many purported IP contracts exist around the world today and this number increases daily.²⁴ As the number of purported IP contracts grows so does reliance of the private sector upon these contracts to result in particular contractual uses of IP assets.²⁵ If IP contract strain thwarts the expected results of a significant number of contracts the outcome may erode investor confidence in IP contracts and IP assets.

In light of its potential effects, IP contract strain is a problem that merits attention. The roots of IP contract strain lie in the role of IP assets in IP contracts, which is influenced by legal

²³ Kuester & Bartel, "Evolution of the IP Market", *supra* note 5 at 34. The commentator quoted is Richard J. Lutton Jr., chief patent counsel for Apple Computer.

²⁴ See: Barnes, "Contemplating a Civil Law Paradigm for a Future International Commercial Code", *supra* note 1 at 731-732 and Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 7. See also: Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2; Walterscheid, "The Nature of the Intellectual Property Clause: A Study in Historical Perspective", *supra* note 3; and Ginsburg & Merges, *Foundations of Intellectual Property*, *supra* note 3.

²⁵ Kuester & Bartel, "Evolution of the IP Market", *supra* note 5 at 32.

rules, practices and institutions.²⁶ Admitting the problem of IP contract strain and probing its scope is a first step towards finding a workable means of resolving the strain. Such a resolution may be beyond a new legal rule, as discussed in Chapter 5. Notably, this thesis does not produce a resolution to IP contract strain.²⁷ It is diagnostic, not prescriptive. Therefore, this thesis takes a first step towards understanding IP contract strain by investigating its causes and effects.

To explain the purpose and progression of this thesis several topics are introduced in this chapter: an overview of prior IP contract literature; an introduction to IP contract strain; and a consideration of the significance of allowing IP contract strain to persist. An explanation of the scope of this thesis and an overview of the subsequent chapters are also presented.

A. IP Contracts Literature Overview

In general, prior commentary on IP contracts promotes the view that IP contract issues are both: based in legal rules; and solvable by legal rules.²⁸ Predominantly articles on the topic of IP contracts include content that responds to the introduction of Article 2B as a proposed amendment to the United States (“U.S.”) *Uniform Commercial Code*²⁹ (“UCC”). Article 2B later became the *Uniform Computer Information Transactions Act* (“UCITA”). Article 2B and UCITA generally include provisions that govern the creation of shrinkwrap or clickwrap contracts relating to digital technologies. Due to the nature of digital technologies, Article 2B and UCITA are applicable to copyright IP assets.

²⁶ See: E. Richard Gold et al., *Towards a New Era of Intellectual Property: From Confrontation to Negotiation: A Report from the International Expert Group on Biotechnology Innovation and Intellectual Property* (Montreal, Canada, 2008).

²⁷ Possible elements of potential solutions are offered in Chapter 6, but generally this thesis focuses on identifying the causes and effects of IP contract strain.

²⁸ Juliet M. Moringiello & William L. Reynolds, "Survey of the Law of Cyberspace: Internet Contracting Cases 2004-2005" (2005) 61 Bus. Law. 433 at 443-444). See also: Charles R. McManis, "The Privatization (or “Shrink-Wrapping”) of American Copyright Law" (1999) 87 Cal. L. Rev. 173 at 175.

²⁹ *Uniform Commercial Code* 1995, § 5-102.

This section presents an overview of the Article 2B and UCITA debate. The arguments presented represent formative IP contract scholarship. Generally, prior literature represents IP contracts as an intersection between IP laws and contract laws. Several articles regarding UCITA argue that this legislation permits contractual terms to override copyright laws.³⁰ Other articles propose new legal rule solutions for problems in IP contracts. The general theme of the prior literature is that IP contract problems are caused by, and solvable by, legal rules. (A more detailed review contributing authors to the IP contract literature is further offered in Appendix “A”.)

1. Article 2B & the Uniform Computer Information Transactions Act

Article 2B and its successor UCITA each provoked significant debate in the late 1990’s on the subject of IP contracts. As the UCC was originally created to address the paradigm of sale of goods and to govern the development of contracts for this purpose,³¹ Article 2B was proposed to expand the scope of the UCC to provide rules for contracts involving digital copyright products. The UCC would thereby encompass contracts involving software, and issues relating to electronic signatures, as well as shrinkwrap or click-wrap licenses.³² These topics were not explicitly dealt with by the UCC, and consequently Article 2B had the potential to fill a perceived legislative gap by providing guidance regarding contracting for digital goods.

Article 2B was developed from the work of two study groups originally formed to consider: (i) the issues raised by mass-market licenses applied in the software industry; and (ii) how to overcome the fact that due to ‘no clear “meeting of the minds” and a questionable level of

³⁰*Uniform Commercial Code* art. 2B Preface (Draft, Aug. 1, 1998) .

³¹ Raymond T. Nimmer, "The Metamorphosis of Contract into Expand" (1999) 87 Cal. L. Rev. 17 at 21.

³² *Ibid.*

asset, initial commentary and case law suggested that no binding contract was formed.’³³ The National Conference of Commissioners on Uniform State Law (“NCCUSL”) and the American Law Institute created a joint initiative to “create a new commercial law of licensing” for inclusion in the UCC.³⁴ Article 2B was a product of the labour of these groups.

After some amendments thereto, Article 2B was implemented as UCITA. On July 1999 the NCCUSL approved UCITA as a uniform law. Following the approval of UCITA all U.S. states were permitted to adopt UCITA. Notably, at present only two states, Virginia and Maryland, have taken this step.³⁵ As such, UCITA is neither widely embraced nor generally applied throughout the U.S. This outcome could be due to reasons addressed by the opposition levied against both Article 2B and UCITA.

Shortly after the introduction of Article 2B, debate arose regarding its true effect. Generally it was not accepted as an effective means of governing IP contracts for digital goods. Authors contributing to the Article 2B commentary recognize critical problems in the proposed legislation for IP contracting. This debate was firmly grounded in the context of legal rules. It focuses upon: the utility of Article 2B as a new legal rule; the effect of Article 2B upon existing legal rules; and the need for alternative legal rules to govern IP contracts.³⁶ Some of the specific issues raised include: the proposal that contract terms override copyright law; the introduction of additional legal rules to temper the effect of Article 2B and UCITA; and the effectiveness of Article 2B and UCITA to reconcile the conflict between IP laws and contract laws.

³³ Pamela Samuelson & Kurt Opsahl, "How Tensions Between Intellectual Property Policy and UCITA Are Likely to be Resolved" (1999) Practising Law Institute, Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series, PLI Order No. G0-0090 at 746.

³⁴ Ibid. at 747.

³⁵ See: Carlyle C. Ring Jr., "An Overview of the Virginia UCITA" (2001) 8 Rich J.L. & Tech. 1; and <http://mlis.state.md.us/2000rs/billfile/HB0019.htm>.

³⁶ See Appendix “A”.

i. Overriding Copyright Law & Preemption

Some authors accuse Article 2B of allowing, “those who draft the contract terms to enforce almost any terms they desire.”³⁷ Others state that Article 2B permits contractual terms to override IP laws by “agreement of the parties.”³⁸ In the words of one critic,

Article 2B solves a non-problem to the extent that it aspires to protect the exclusive rights of authors granted under the Copyright Act from improper uses of digital products by end users. The rights of copyright proprietors are already fully protected by the Copyright Act without the need for bilateral contracts, and thus a fortiori without the need for any provisions under the U.C.C. validating mass market contracts.³⁹

Nonetheless, the introduction of Article 2B and UCITA alter the role of copyright by introducing, in the view of some authors, cooperative, and in the view of others, superseding, legal rules.⁴⁰

Article 2B expressly states that IP laws may be circumvented by contractual clauses.⁴¹ This may be interpreted as approval for freedom of contract in IP contracts. One motive for supporting freedom of contract as a driving principle for IP contracts is the promotion of market forces.⁴² Yet, no matter what the motivation may have been, authors identify the possible outcome of Article 2B to be an unbalanced economic system wherein the IP contracts “alter or

³⁷ Mark A. Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing" (1999) 87 Cal. L. Rev. 111 at 123.

³⁸ *Uniform Commercial Code*, art. 2B, *supra* note 30.

³⁹ Nimmer, "The Metamorphosis of Contract into Expand", *supra* note 31 at 22.

⁴⁰ *Ibid.* Nimmer expresses the overriding interest in contract principles over IP issues in the interpretation of IP contracts under Article 2B by stating that “Article 2B’s provisions actually push the envelope a little bit, but fundamentally follow the Restatement (Second) of Contracts, stating that if you objectively manifest assent to the contract terms, then you are bound by that contract. Following that rule, Article 2B winds up enforcing almost all standard form contracts, subject to some contract term limitations.” See also: George A. Cooke Jr. et al., "Symposia: Before UCITA: Licensing, Selling, and Using Information Under the Proposal Formerly Known as UCC Article 2B and Federal Database Protection Legislation" (2000) 18 Cardozo Arts & Ent. L.J. 615 at 625.

⁴¹ *Uniform Commercial Code*, *supra* note 30.

⁴² Samuelson & Opsahl, "How Tensions Between Intellectual Property Policy and UCITA Are Likely to be Resolved", *supra* note 33 at 749.

ignore the balance between incentives to create and free competition...codified in statutory intellectual property laws.”⁴³

Some authors argue that the effect of this aspect of Article 2B is minimal because under U.S. law any attempt to draft contractual terms that disrupt the balance that IP rights are intended to create between a user and an owner should be negated through the doctrine of preemption.⁴⁴ In fact, the drafters of Article 2B expressly reference the doctrine of preemption.⁴⁵ In the U.S. in particular, preemption can be applied to address conflict between state and federal laws. This conflict may occur due to contractual terms of IP contracts that generate rights deemed to be equivalent to rights granted by federal law, such as copyright. U.S. law exhibits a reluctance to allow states to substitute their own regulations for those of a national government.⁴⁶ Moreover, applying state contract law to uphold these rights may in fact thwart national objectives. In the circumstance that contract terms generate equivalent rights to those created by federal statute or common law, the doctrine of preemption is applicable so that the contract terms can be preempted to thereby protect the national objective.⁴⁷

As an example, under U.S. law the doctrine of preemption can be applied to render contractual clauses that disrupt the balance that copyright is intended to create between a user and a copyright holder unenforceable.⁴⁸ The reference to preemption in Article 2B is interpreted

⁴³ Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9 at 878.

⁴⁴ *Ibid.*

⁴⁵ *Uniform Commercial Code*, art. 2B, *supra* note 30.

⁴⁶ *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) at 1455. For example, 17 U.S.C.A §301(a) is a section of U.S. law titled "Preemption with respect to other laws". It holds that all legal or equitable rights equivalent to those expressed by the Copyright Act as works of authorship in a fixed tangible medium of expression are deemed to be governed by copyright. Consequently, no other person will be entitled to the same right in the same work under common law or State statutes.

⁴⁷ *National Car Rental System, Inc. v. Computer Associates International Inc.*, 991 F.2d 426, 433 (8th Cir. 1993) at 428.

⁴⁸ See: Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37.

by some authors as evidence that contracts drafted in accordance with Article 2B will not run afoul of IP laws.⁴⁹

Albeit true that in theory, preemption may represent a safeguard, in application preemption has not previously been sufficient to protect IP rights from contortion by contractual clauses.⁵⁰ This is so in part because U.S. courts do not consistently interpret IP contracts in a manner that supports preemption.⁵¹ Moreover, the drafters of Article 2B provided a disclaimer stating that preemption will seldom apply to computer information and thereby diminished its remedial power.⁵² As computer information is routinely the subject-matter of online agreements, the disclaimer deflects virtually any application of preemption to contracts drafted in accordance with Article 2B.

ii. Legal Rules to Temper the Effect of Article 2B and UCITA

Other authors suggest that the legal doctrine of misuse may temper the effect of UCITA contract terms and be a “subtler” option than preemption.⁵³ These authors characterize the misuse doctrine as applicable so that “any attempt to extend an intellectual property grant of monopoly rights beyond the statutory scope renders the federal right temporarily unenforceable. It prevents an intellectual property rightsholder from thwarting the public policies underlying the grant”.⁵⁴ The authors additionally point out that copyright misuse is most likely to affect UCITA, and this form of misuse is underdeveloped in comparison to other forms of misuse.⁵⁵ One author notes that codified laws are preferable to a common law approach to digital technology issues,

⁴⁹ Christina Bohannon, "Copyright Preemption of Contracts" (2008) 67 Md. L. Rev. 616 at 621-22.

⁵⁰ See: Chapter 4.

⁵¹ See: Chapter 4.

⁵² Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9 at 910.

⁵³ Samuelson & Opsahl, "How Tensions Between Intellectual Property Policy and UCITA Are Likely to be Resolved", *supra* note 33 at 765.

⁵⁴ *Ibid.* at 763.

⁵⁵ *Ibid.* at 764.

due to the time required to achieve common law results.⁵⁶ Other authors see no insurmountable tension between IP and contract laws.⁵⁷

Moreover, some authors propose the introduction of alternative or complimentary legal rules to address Article 2B. For example, Jerome Reichman and Jonathan Franklin propose a doctrine of “public-interest unconscionability” to temper the effect of Article 2B.⁵⁸ The legal rule doctrine prohibits contracting parties from creating licenses that “decrease innovation, discourage competition, and stifle the traditional marketplace of ideas”.⁵⁹ It further permits lawmakers to “combine the concept of unconscionability, as applied to standard form contracts in general, with the abiding concern for public-interest objections that characterize domestic intellectual property policy”.⁶⁰ Reichman and Franklin suggest that this doctrine will address the subordination of public interests to private interests as well as the threat to competition imposed by Article 2B/UCITA.⁶¹ The authors further comment that, although the drafters of Article 2B may believe that they are creating policy that stems from a classical IP system, in fact “they paint a distorted picture of how that system actually operates”.⁶²

Reichman and Franklin further endeavour to reconcile freedom of contract with public good use of information in their doctrine. To this end they intend to present “a truly enlightened set of default rules” that are intended to “chart appropriate limits to the contractual powers of information providers”.⁶³ The authors’ goal is to find a way to grant entrepreneurs “broad powers contractually to control the online exchange of downstream products”, while simultaneously

⁵⁶ Jessica Litman, "Information Privacy/Information Property" (2000) 52 Stan. L. Rev. 1283 at 1313.

⁵⁷ Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16.

⁵⁸ Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9 at 929.

⁵⁹ *Ibid.* at 881.

⁶⁰ *Ibid.* at 929.

⁶¹ *Ibid.* at 880.

⁶² *Ibid.* at 891.

⁶³ *Ibid.* at 915.

limiting their “autonomy to restrict use of the unbundled information in their possession as raw materials of science and education”.⁶⁴

Reichman’s interest in addressing IP contract issues by way of legal rules is evidenced in other of his articles as well. For example, he suggests an expansion of IP laws to extend protection to subpatentable innovations by way of a liability-right,⁶⁵ and to create access controls for scientific data⁶⁶. Notably, Reichman recognizes the importance of balance in an IP asset, although he does not identify this as an IP distinguishing trait. In his articles he: (i) states that new laws must uphold balance between public and private interests in a manner consistent with IP legislation;⁶⁷ and (ii) supports the introduction of rules to uphold new forms of IP rights formulated to promote innovative progression through commercial exploitation that fosters a financial benefit.⁶⁸ However, Reichman’s interest in balance is grounded in the relationship these enjoy with either statutory or common laws, which is consistent with his interest in IP assets generally. Reichman’s message suggests that he considers IP contracts to be hindered by some existing laws. His answer to this perceived problem is to fight fire with fire – to correct the effects of problematic laws with newly introduced laws.

iii. Reviewing the Conflict between IP Laws and Contract Laws

Other authors engaging in the Article 2B/UCITA debate offer commentary that reviews the effectiveness of Article 2B and UCITA as a means of reconciling the conflict between IP laws

⁶⁴ Ibid. at 881.

⁶⁵ J.H. Reichman, "Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation" (2000) 53 Vand. L. Rev. 1743.

⁶⁶ J.H. Reichman & Paul Uhler, "A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment" (2003) 66 Law & Contemp. Probs. 315.

⁶⁷ Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9 at 936.

⁶⁸ See: Reichman, "Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation", *supra* note 65; and Jerome H. Reichman, "Non-Voluntary Licensing of Patented Inventions: Historical Perspective, Legal Framework under TRIPS, and an Overview of the Practice in Canada and the USA" (2003) UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development.

and contract laws in IP contracts. These authors also ground IP contracts problems, and solutions to these, in legal rules.⁶⁹ Some commentators see the attempt of Article 2B to expand contract law to allow it to alter IP laws as a backdoor means of reconciling conflicts between IP laws and contract laws.⁷⁰ Another author suggests amendments to UCITA, such as the incorporation of the McManis Motion into a new law.⁷¹ The McManis Motion ‘states that a contractual term that is inconsistent with certain provisions of federal copyright law, including the various “users’ rights” enumerated therein, cannot become part of a contract under the mass-market license provision.’⁷² One author characterizes the motion as a legal rule amendment intended to ensure that users of copyrighted works are not victimized by the Article 2B contractual device.⁷³ Generally, this is a legal rule that ties IP contracts to other legal rules.

Looking to other authors addressing IP contracts, Jessica Litman accuses Article 2B of sanctioning legal procedures that already are in place and which are comfortable to commercial lawyers.⁷⁴ She argues that a new digital data issue, namely data privacy, “really needs” federal statutory protection.⁷⁵ However, she further states in a later article that the creation of legal rules

⁶⁹ See Appendix “A”.

⁷⁰ Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37 at 125 & 136.

⁷¹ McManis, "The Privatization (or “Shrink-Wrapping”) of American Copyright Law", *supra* note 28 at 176.

⁷² *Ibid.*. A background for McManis’ comments is provided by his 1998 article wherein he considers the future of the combination of IP and mergers and acquisitions, and more particularly the influence of digital technologies on this combination. Charles R. McManis, "Intellectual Property and International Mergers and Acquisitions" (1998) 66 U. Cin. L. Rev. 1283. McManis notes that academic journals are virtually silent on the issue of the relationship of IP law and mergers and acquisitions (at 1285). In this work McManis articulates his view into the future of digital technology availability in cyberspace and sees that IP laws may be rendered inapplicable in such an environment due to “a new set of rules” which may support free content and has the potential to “turn the world of intellectual property upside down”. McManis notes that academic journals are virtually silent on the issue of the relationship of IP law and mergers and acquisitions (at 1300 & 1305). He bases this discussion in a review of the long-term relevance of TRIPs and therefore is really looking at the potential laws required to govern future international IP contracts.

⁷³ McManis, "The Privatization (or “Shrink-Wrapping”) of American Copyright Law", *supra* note 28 at 186.

⁷⁴ Jessica Litman, "The Tales that Article 2B Tells" (1998) 13 Berkeley Tech. L.J. 931 at 940-41.

⁷⁵ Litman, "Information Privacy/Information Property", *supra* note 63 at 1313.

solutions can be “gradual and slow”.⁷⁶ Thus, Litman’s writings point out three flaws in legal rule solutions; they can be: (i) narrow; (ii) practice driven; and (iii) slow to implement.

Wendy Gordon considers IP contracts as a rival of copyright and notes that copyright is a means of binding all parties, whereas contract can only bind the contracting parties.⁷⁷ IP systems enjoy a wider influence than IP contract terms. However, she recognizes that the digital age is altering the relationship between and IP assets and contracts.⁷⁸ While contracts were once expensive and difficult to apply to many parties, digital resources cause contractual terms to be applicable to many parties, quickly and easily, without the need for expending negotiation costs for each contract.⁷⁹ In light of this fact she does not advocate for the imposition of a mixture of technological protections and contract terms.⁸⁰ Instead she remains convinced that legal rules that govern IP assets have a critical role to play in an IP contract.⁸¹

One author who does not criticize Article 2B or UCITA is Raymond Nimmer. He does not consider Article 2B to have the capacity to expand contract law to a position of control over IP assets.⁸² Nimmer sees IP assets as having always relied upon a relationship with contract laws to realize commercialization.⁸³ Although there may be points of tension between IP and contract laws he believes adequate means of addressing such tension exist, namely other legal rules.⁸⁴

Generally, it is the tendency of articles written on the topic of Article 2B and UCITA to identify legal rules as the driving force of IP contracts. While legal rules undoubtedly influence

⁷⁶ Ibid.

⁷⁷ Wendy Gordon, "An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent and Encouragement Theory" (1989) 41 Stan. L. Rev. 1343 at 1419.

⁷⁸ Wendy J. Gordon, "Intellectual Property as Price Discrimination: Implications for Contract" (1998) 73 Chi.-Kent L.Rev. 1367 at 1378-79.

⁷⁹ Ibid. at 1380.

⁸⁰ Ibid. at 1386.

⁸¹ Ibid.

⁸² Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 829.

⁸³ Ibid. at 888.

⁸⁴ Ibid. at 889.

IP contracts,⁸⁵ not all IP contract issues, or even the majority of IP contract issues, are necessarily caused by either the implementation of legal rules or a clash between IP laws and contract laws. This thesis builds upon, and expands, the analysis of IP contract problems presented by prior literature. Whereas the prior literature views IP contracts as an intersection between IP laws and contract laws, this thesis offers an alternate view. This thesis perceives IP contracts as an intersection between IP assets and contract legal principles. Thus, the thesis finds the causes of IP contract strain to be based in the relationships between: IP contracts and IP distinguishing traits of IP assets; and/or IP distinguishing traits and contract legal principles. These relationships are governed by contract terms that are influenced by legal rules, practices and institutions.

B. IP Contract Strain

As is stated above, it is the purpose of this thesis to answer the following question: What are the causes and effects of IP contract strain?

There are numerous causes of IP contract strain. Two of these have already been presented. A primary cause stems from a general lack of support for IP distinguishing traits of IP assets in contract terms. A secondary cause is due to tension between these traits and contract legal principles. These causes in turn may be a result of influences on IP contracts, such as: legal rules; institutions; practices; or any combination of these. Thus, probing IP contract strain is an undertaking of some complexity and in the course of answering the primary question of this thesis, it is necessary to address a string of additional questions. For example: (i) What is an IP

⁸⁵ A difference between IP contract prior literature and this thesis can be seen by looking at Article 2B and UCITA through the lens of IP contract strain. Article 2B in particular permits contract legal principles to override IP distinguishing traits and thereby averts the need to address the role of IP assets in IP contracts altogether. Article 2B therefore promotes IP contract strain. Furthermore, merely tempering Article 2B with alternative or complimentary legal rules may not address IP contract strain. The issue of IP contract strain is caused by more than merely legal rules; it is influenced by practices and institutions as well.

asset?; (ii) What is an IP contract?; and (iii) Does a means of resolving IP contract strain already exist?

In order to address these questions with any level of clarity it is necessary that the language utilized in this thesis be defined. There is a tendency for IP terminology to be indeterminate and susceptible to variant definitions, as discussed in Chapter 3. Variant definitions of IP terms can obscure discussions of IP contracts. The following terms are integral to this thesis – “IP assets”, “IP contract”, “legal rules”, “practices”, “institutions”, “contract legal principles”, and “IP distinguishing traits”. A definition of each is provided below.

1. IP Assets

This thesis utilizes the term “IP assets” to reference IP rights owned by private sector entities. The term is consistent with both the lexicon and viewpoint of private sector entities. The primary tools at the disposal of a private sector entity generally include shares and assets.⁸⁶ These categories of tools are evident in the classification of the two main types of private sector purchase contracts: share purchase agreements, and asset purchase agreements.⁸⁷ Shares are statutorily defined as a specific type of security that may be of a class or series,⁸⁸ whereas assets are defined as other “property available to meet debts” owned by the private sector entity⁸⁹. IP rights fit into the latter category and are therefore viewed in the private sector environment as IP assets.

The application of the term IP asset is consistent with the assumption amongst the private sector that everything it owns represents an asset. In the words of Joel Bakan, “over the last century and a half, the corporation has sought and gained rights to exploit most of the world’s

⁸⁶ Jacob S. Ziegel et al., *Cases and Material on Partnerships and Canadian Business Corporations*, 3rd ed. (Toronto: Carswell, 1994) at 650-53.

⁸⁷ John Swan, *Canadian Contract Law*, student ed. (Toronto: LexisNexis, 2006) at 456.

⁸⁸ *Ontario Business Corporations Act*, R.S.O. 1990, c. B.16 s.1(1) “security”.

⁸⁹ *The Oxford English Dictionary*, 7th ed., s.v. “asset”.

natural resources and almost all areas of human endeavor.”⁹⁰ Moreover, authors generally apply the term “IP asset” to reference IP rights that private sector participants either hold or are authorized to use.⁹¹ Examples of private sector applications of the term “IP asset” are found in contractual terms⁹² and decisions by regulatory bodies, such as the TSX and the Ontario Securities Commission.⁹³

Notably, IP rights are bundles represented as either a patent right, copyright, a trade-mark right, or an industrial design right.⁹⁴ A bundle of IP rights, such as that of a patent right, and an IP asset enjoy a one-to-one relationship. The difference between the terms “IP right” and “IP asset” is that the private sector, and increasingly the public sector, view IP rights as having institutional value (e.g. economic value, institutional value, etc.). This view is nuanced so as to characterize IP rights as a corporate IP asset. Thus, when a private sector entity is an IP rights holder the IP right is viewed through the lens of corporate exploitation and seen as a means of

⁹⁰ Joel Bakan, *The Corporation: The Pathological Pursuit of Profit and Power* (Toronto: Penguin Canada, 2004) at 112.

⁹¹ See: Brian S. Kelly et al., "Intellectual Property Issues" (2009) PLI Order 18988 at 682; David H. Kennedy, "Selected Intellectual Property Issues Arising in the Context of Acquisitions" (2007) PLI Order 11544 at 162-63; and Richard J. Testa, "Venture Capital Financing" (2005) 1 BLI MA-CLE at §13.6.1.

⁹² See: John M. Hession, "Raising Private Capital" (2009) 1 CDI MA-CLE at 3.08; and Franci J. Blassberg, "Asset Purchase Agreement" (2008) SP031 ALI-ABA 139 at 148.

⁹³ See: Ontario Securities Commission, "In the Matter of Hyal Pharmaceutical Corporation" (April 17, 2001) Order by John Hughes; and Ontario Securities Commission, "In the Matter of Genetronics Biomedical Corporation" (March 28, 2002) Order by Brent Aitken.

⁹⁴ See: Appendix “A”. Other intangible assets are sometimes included in the category of IP rights, such as *sui generis* IP systems (e.g. plant breeders’ rights), as well as informal systems of protecting intangible assets (e.g. trade secrets). These are not defined as IP assets for the purpose of this thesis because they are either not codified (e.g. trade secrets) or are of less general interest to the private sector (e.g. plant breeders’ rights which are only of interest to specific industries). For example, trade secret can have great significance for the soft drink sector. (Associated Press, "Trio charged with stealing Coca-Cola trade secrets" (6 July 2006)); and IT sector (Ronald J. Mann, "Do Patents Facilitate Financing in the Software Industry?" (2005) 83 Tex. L. Rev. 961 at 1020), the fashion industry ("Intellectual Property in the Fashion Industry" *WIPO Magazine* (May/June 2005) 16), as well as private/public joint ventures (Derek Bok, *Universities in the Marketplace: The Commercialization of Higher Education* (Princeton: Princeton University Press, 2001) at 143). That the significance of various IP assets and systems have different weights for specific industries is further acknowledged in a survey undertaken by Cornell University and reported in the following article (W. Lesser, "Role of IPR in Biotechnology Transfer - Corporate Views" (1997) ISAAA Briefs No. 3). The thesis also declines to discuss pure corporate knowledge as an IP asset (Julius Melnitzer, "Executive Knowledge Wars" *Lexpert* 65 (2005)).

generating value, because “everything can be turned into cash”.⁹⁵ The IP rights that a private sector entity can turn into cash are recognized, at least internally, as IP assets. Looking through a property lens, the “basic stuff of ownership” of private property is defined as rights, liberties and duties that create “a complex bundle” of legal relations.⁹⁶ These relations can exist between the property and its owner, the owner and third parties, as well as third parties and the property.⁹⁷

In particular, the private sector focuses upon the exclusive right extended to IP asset holders to exclude third parties from accessing the property, namely the patent, trade-mark, copyright or industrial design.⁹⁸ This exclusivity is exploited by private sector owners to generate wealth that is measurable and commoditized, through the application of the IP right as a corporate asset.⁹⁹ Notably, IP assets can represent a variety of sources of wealth generation, such as economic, organization, or infrastructural value.¹⁰⁰ Moreover, various IP assets can represent different values for specific industries.¹⁰¹

Viewing IP as a private sector asset is furthermore consistent with the statutory duties of corporate directors and officers. They are to act in the best interests of the corporation by

⁹⁵ David Vaver, *Intellectual Property Law* (Concord: Irwin Law, 1997) at 3.

⁹⁶ Jeremy Waldron, *The Right to Private Property* (Oxford: Clarendon Paperbacks, 1988) at 27-28.

⁹⁷ Ibid. at 62. The definition of IP is dominated by rights based arguments which are “an appeal to rights: one defends a social arrangement by showing how it respects or promotes respect for the rights that people have.”

⁹⁸ William W. Fisher, “Symposium on the Internet and Legal Theory: Property and Contract on the Internet” (1998) 73 Chi.-Kent L. Rev. 1203 at 1211-12.

⁹⁹ See: Suzanne Harrison & Patrick H. Sullivan Sr., *Einstein in the Boardroom: Moving Beyond Intellectual Capital to I-Stuff* (Hoboken: John Wiley & Sons, Inc., 2006). Harrison and Sullivan set out steps that constitute a path to generating private sector value from intangible assets in their book. These include building a portfolio of intangible assets (Chapter 5) and leveraging that portfolio (Chapter 5). These steps are derived from ICM Gathering meetings which brought together seven companies (Dow, DuPont, Hewlett-Packard, Huges Space and Communications, Hoffman LaRoche, Skandia, and the Law & Economics Consulting Group) in Berkeley California in January 1995 to pool their experience of intellectual capital management strategies. Harrison and Sullivan’s book offers insight into the collective knowledge of the ICM Gathering participants, and consequently the steps are representative of the viewpoint of some of the most influential U.S. companies.

¹⁰⁰ See note 8 for a definition of infrastructural and organizational corporate value.

¹⁰¹ This is confirmed by a survey undertaken by Cornell University. See: Lesser, “Role of IPR in Biotechnology Transfer - Corporate Views”, *supra* note 94.

supporting the business aims of the company and generating profit for the shareholders.¹⁰² The legal systems of Canada and other jurisdictions have “come to accept this capitalist imperative” that requires classification of IP rights as a form of personal property functionable as a private sector asset for value generation.¹⁰³ Therefore, in accordance with the lexicon of the private sector, business regulators and authors alike, this thesis applies the term IP asset.

As final comment, a new private sector view of IP assets as having relationships with each other is discussed in Chapter 6. However, this is still a growing strategic viewpoint. Traditionally the private sector views IP assets as individual assets – in much the same way that each desk in a corporation is understood to be a separate corporate asset. Each desk can be used to derive corporate value by facilitating a place for an employee to undertake work which will generate value for the benefit of the corporation. IP assets are also perceived as individually capable of generating private sector value. Thus, for the purpose of this thesis, IP assets are defined to include patents, industrial designs, copyright and trade-marks. (Each is described in more detail in Appendix “B”.) Moreover, the essential definition of the IP asset and its core traits is the same as that of the corresponding IP rights. (It should be understood however that IP rights are not equivalent to IP distinguishing traits. For example, the IP distinguishing trait of control is not fully represented by the right of control granted in the IP asset. Instead the trait of control is an attribute of the IP asset, not a right in the IP asset. This is discussed in more detail in Chapter 3.)

¹⁰² *Ontario Business Corporations Act*, *supra* note 88 ss. 134(1). The common law duty of officers and directors is a fiduciary duty to the shareholders (Ziegel et al., *Cases and Material on Partnerships and Canadian Business Corporations*, *supra* note 86 at 453 & 531). See also: Bakan, *The Corporation: The Pathological Pursuit of Profit and Power*, *supra* note 90 at 34. In the words of Bakan, corporate executives are required to “make as much money as possible for their shareholders”.

¹⁰³ Vaver, *Intellectual Property Law*, *supra* note 95 at 4.

2. IP Contracts

A contract generally represents an agreement between two or more parties for particular activities to occur.¹⁰⁴ More particularly, a contract creates the basis for a relationship between parties, and the contract terms define the purpose, boundaries and scope of this relationship. An IP contract includes terms that govern a contractual use of an IP asset. Due to this characteristic, an IP contract essentially represents the contractual use of the IP asset governed by its terms as allowable in accordance with, and sanctioned by, the scope of the IP asset. For example, a patent holder may draft an IP contract to include terms that prevent a contracting party from undertaking a particular use of a product protected by the patent asset. (Such an IP contract is as described in the discussion of the Monsanto Technology Users Agreement in Chapter 1).

The contract drafter justifies the contractual terms that restrict the use of the product as merely reflecting the rights associated with the IP asset. (In this manner the limitations upon uses of the IP asset articulated in IP contract terms may be distinct from many other types of contracts. Generally, other contracts include terms that govern activities which are justified by the parties as legitimate because the activities are agreed upon by the parties. In these contracts the justification for the contractual terms is not linked to, or based upon, the scope of a specific asset.) In IP contracts the scope of the contract terms is considered to be based upon the scope of the IP asset. Therefore, IP contract terms are generally assumed to be validated by the IP asset.

As exemplified in Chapter 4, should the contractual relationship be disputed by one or more of the IP contracting parties, the courts will generally look to the terms of the contract to establish details of the relationship and activities of the contracting parties (e.g. the scope,

¹⁰⁴ Waddams describes a contract as representing an enforceable promise (S.M. Waddams, *The Law of Contracts*, 5 ed. (Aurora: Canada Law Book, 2005) at 15). Collins states that a contract must “support the implicit understanding of...the joint economic interests of the parties” (Hugh Collins, "Introduction: The Research Agenda of Implicit Dimension of Contracts" in David Campbell ed., *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts* (Oxford: Hart Publishing, 2003) at 4-5).

obligations and duties). Additionally, as presented in Chapter 2, there may be particular terms, often articulated by legislation, that must be included in a contract. However, at this point there is limited legislation directed specifically to IP contracts and the contractual terms that must be included therein. As a result the relationship between IP contract parties relies heavily upon the drafted contract terms.

An IP contract is defined in this thesis as a contract that has at least one IP asset as its subject matter. Generally private sector IP contracts are required to facilitate the contractual use of an IP asset. It is the terms of an IP contract that govern the specific details whereby the contractual use of an IP asset is to be achieved. Presently there is no particular framework or guide utilized by contracting parties to ensure the terms of the contract accurately read upon an IP asset (meaning the terms reflect the actual scope of an IP asset, as opposed to expanding or diminishing the scope of the IP asset). Ensuring the contract terms reflect the true scope of an IP asset is an important consideration as IP assets are generally considered to be nebulous and “fuzzy”. The dearth of guidance means that variant assumptions may exist amongst contract drafters and interpreters regarding the scope of an IP asset. In some cases, IP contracting environment influences can even cause contracting parties to draft contract terms that misrepresent the scope of the IP asset (see Chapter 4).

Once drafted, parties to an IP contract are commonly assumed to be bound by the terms of the contract and consequently the terms affect the activities and obligations of the parties. For example, Party A may be required to transfer IP asset X to Party B. In this circumstance, upon transfer of the asset: (i) Party A is no longer the holder of IP asset X; and (ii) Party B becomes the holder of IP asset X.

The opposite of an IP contract is a non-IP contract. As previously stated, non-IP contracts do not represent a category of contracts that includes all contracts that do not have IP assets as their subject matter. Rather a non-IP contract is defined as a contract that purports to be an IP contract, and attempts to achieve a contractual use of an IP asset, but in fact fails to do so. Generally, the failure occurs because the contract terms do not recognize or reference the IP distinguishing traits that form the core of an IP asset. The result is that a contractual use of the IP asset cannot be achieved by the terms of the contract. As discussed in more detail in Chapter 1, non-IP contracts represent a cause of IP contract strain.

3. Legal Pluralism & Legal Significance

As stated above, in the course of probing causes of IP contract strain this thesis examines whether IP contract terms provide support for an IP asset (e.g., by referencing and recognizing the IP distinguishing traits of the IP asset). If it is found that the terms do not support the IP asset this thesis queries: why such an outcome occurs; and whether a lack of support is caused by influences upon IP contracts, such as legal rules, practices and institutions. Each of these can influence the contract terms created by contract drafters.

Practices and institutions are not routinely defined as having legal significance. One view of the legal world perceives a division as existing between “inside forces” that have legal significance and “outside forces” which do not.¹⁰⁵ For example, legal rules are considered to be inside forces, as are forms of legislation generally. The judiciary is also considered an inside force, as it aids in the production of legal rules. Institutions (e.g., individuals or groups of individuals represented by organizations, such as private sector corporations or industries, etc.) and practices (e.g., non-legal practices, as well as legal practices such as contracting, or other

¹⁰⁵ John Griffiths, "What is Legal Pluralism" (1986) 24 J. of Legal Pluralism 1 at 3.

activities) are outside forces. Essentially, the perception views practices and institutions as existing outside the traditional realm of legal significance.

This view of the world is defined as “legal centralism”. It holds that “law is and should be the law of the state, uniform for all persons, exclusive of all other law, and administered by a single set of state institutions”.¹⁰⁶ The concept of “legal pluralism” is a direct challenge to what constitutes law and the legal realm. Legal pluralism identifies a pluralism of society, which can be viewed as encompassing rules and norms, and thereby expands the definition of what is legal.¹⁰⁷ John Griffiths defines legal pluralism as “a concomitant of social pluralism: the legal organization of society is congruent with this social organization. ‘Legal pluralism’ refers to the normative heterogeneity attendant upon the fact that social action always takes place in a context of multiple, overlapping ‘semi-autonomous social fields’, which, it may be added, is in practice a dynamic condition.”¹⁰⁸

This is a step beyond the original so-called “weak form” of legal pluralism. Weak legal pluralism solely recognizes multiple sources for laws once these are accepted by a single institution, most often the government (e.g. customary laws).¹⁰⁹ By accepting many sources of laws as existing in society one author suggests that legal pluralism offers an “accurate description of the world we live in”.¹¹⁰ In the words of Griffith: “Legal pluralism is the fact. Legal centralism is a myth.”¹¹¹

¹⁰⁶ Ibid.

¹⁰⁷ Brian Z. Tamanaha, "Understanding Legal Pluralism: Past to Present, Local to Global" (2008) 30 Sydney L. Rev. 375. Tamanaha states that “legal pluralism is everywhere. In the past two decades, the notion of legal pluralism has become a major topic in legal anthropology, legal sociology, comparative law, international law, and socio-legal studies, and it appears to be gaining popularity” (at 376). He further notes that this wide embracing of legal pluralism can create a hurdle for its acceptance because “one factor that contributes to the continuing disagreement is that participants come from several disciplines bring different concepts and orientations to the subject” (at 390).

¹⁰⁸ Griffiths, "What is Legal Pluralism", *supra* note 105 at 38.

¹⁰⁹ See: Ibid. at 7; and Sally Engle Merry, "Legal Pluralism" (1988) 22 Law & Soc'y Rev. 869 at 870.

¹¹⁰ Paul Schiff Berman, "Federalism and International Law Through the Lens of Legal Pluralism" (2008) 73 Mo. L. Rev. 1151 at 1152.

¹¹¹ Griffiths, "What is Legal Pluralism", *supra* note 105 at 4.

Legal pluralism is applicable to property, including IP assets, in a manner that “eschews singular narratives in understanding property law, focusing instead on the varied and often competing normative and instrumental concerns embodied in the institution.”¹¹² Thus, the role of IP assets in IP contracts reflects legal pluralism in that both “inside forces” and “outside forces” can influence IP contract drafting, interpretation and application.

Figure 1

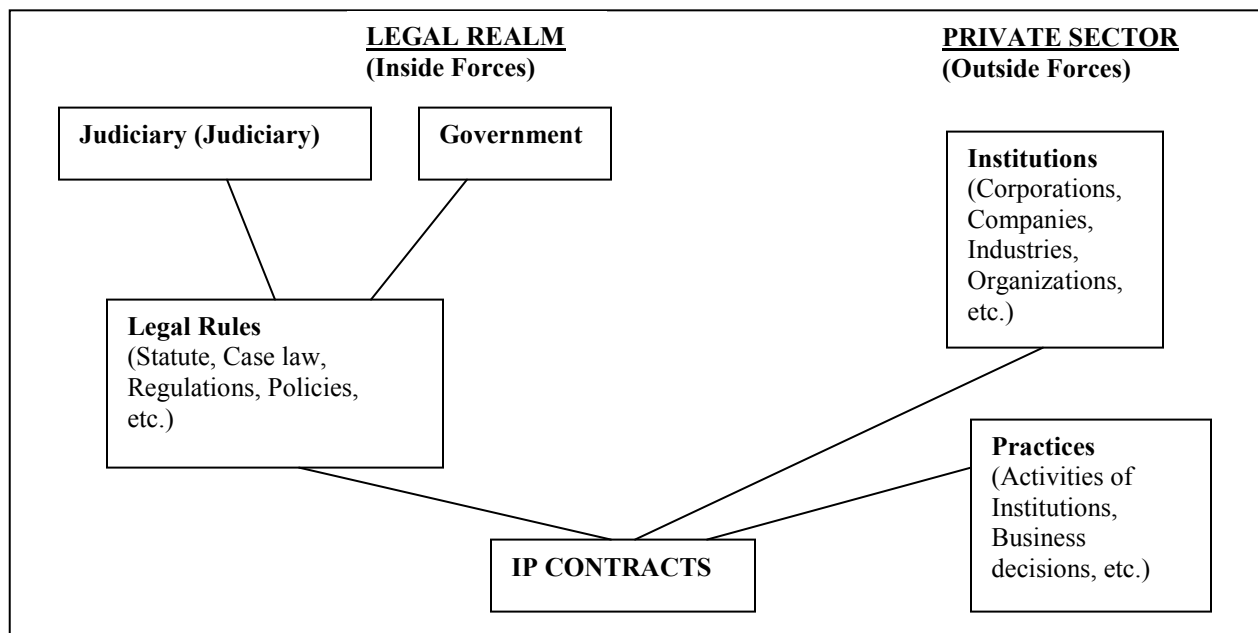


Figure 1 depicts the relationship of inside and outside forces upon IP contracts. As shown, legal rules are created and/or sanctioned by the judiciary and/or the government. Thus, legal rules exist within what is acknowledged to be the legal realm and are understood to govern IP contracts. This acceptance of the role of legal rules may be a reason why authors of prior literature expect legal rules representing inside forces to provide answers to IP contract problems.

However, other forces, including institutions and practices also influence IP contracts. For example, institutional needs, such as the need for a particular technology, may be the basis for

¹¹² Nestor M. Davidson, "Standardization and Pluarism in Property Law" (2008) 61 Vand. L. Rev. 1597 at 1600.

drafting an IP contract. Moreover, the practice of particular institutions, such as compliance with a policy of owning technologies and never licensing IP assets, can guide IP contracts. Yet, because institutions and practices exist outside of the traditional realm of legal significance they are not routinely considered in the context of solutions to IP contract problems. Through the lens of legal pluralism both legal rules and influences are of legal significance. As discussed in Chapter 1, these all can influence causes of IP contract strain.

Notably, relationships exist between legal rules, institutions and practices. For example, some institutions, such as corporations, are created in accordance with specific legal rules, namely federal or provincial business corporations legislation.¹¹³ Moreover, some practices must conform to legal rules. For example, some contracts must be in writing in order to be valid.¹¹⁴ The inter-relationship between legal rules, practices and institutions is further evidence of the legal impact of each of these factors upon IP contracts. Thus, both inside forces and outside forces are brought to bear upon IP contracts and all of these have legal significance in the context of IP contract strain.

4. IP Distinguishing Traits & Contract Legal Principles

Three IP distinguishing traits are identified in this thesis as forming the core of IP assets. These traits are not synonymous with IP rights. The traits represent attributes of the IP asset, not the rights granted in an IP asset. However, this being said, although the identified core traits of an IP asset are not equivalent to IP rights, there can be a relationship between the IP distinguishing traits and the IP rights granted in an IP asset, as is described in more detail below.

¹¹³ An example of such national legislation is that of Canada, namely the *Canada Business Corporations Act*, R.S.C. 1985, c. C-44, R.S.C. 1985, c. C-44.

¹¹⁴ For example, the Canadian *Copyright Act*, R.S.C. 1985, c. C-42 s. 13, requires that exclusive licenses must be in writing.

The core traits of an IP asset include at least control, balance and flexibility/evolution. This set of IP asset core traits acknowledged in this thesis (all of these traits being shown to be required by contract theories in Chapter 3) can have two benefits: (1) the set can aid in the definition (or understanding) of what constitutes an IP asset; and (2) the set can be utilized to determine when IP contract strain affects an IP contract.

With reference to the former benefit, the set of core traits can be utilized as a framework to guide drafters and interpreters of IP contracts. (In particular, one means of utilizing the set of core traits in the context of IP contract interpretation is addressed in section 4.3.1.1.1.1.) The set of core traits provides a basis for analyzing IP contract terms to determine if these terms accurately describe an IP asset. Moreover, as represented by the latter benefit, the identification of IP contracts that include terms that alter, omit or distort one or more core traits of an IP asset, is a means of identifying IP contract strain.

Each of the core traits of control, balance and flexibility/evolution are discussed in detail in Chapter 3, but as a brief introduction: control means that an IP owner has control over the IP asset as against non-owners; flexibility/evolution means that categories of IP assets can evolve over time and be flexible to protect certain emerging technologies; and balance means that an IP asset must be utilized in a manner that promotes a balance of rights between the owner and society. Each IP distinguishing trait is identified as a result of an analysis of IP theories. Both the means of identifying the traits and the relationship between the traits and theories are integral aspects of the methodology of this thesis, as discussed below.

Additionally, this thesis recognizes that an IP contract creates an intersection between IP distinguishing traits of IP assets and contract legal principles. Chapter 2 reviews the nature and basis for the contract legal principles of bindingness and respect for the intent of contracting

parties. In some instances it will be difficult to reconcile both traits and principles simultaneously in the context of a contract interpretation. IP distinguishing traits and contract legal principles may conflict. Nonetheless, both traits and principles play a role in IP contracts and the occurrence of conflict between these is a cause of IP contract strain.

As both IP distinguishing traits of IP assets and contract legal principles can be involved in causing IP contract strain, an analysis of both traits and principles, and a review their interaction, offers insight into the causes and effects of IP contract strain. The undertaking of this analysis in this thesis adheres to a particular methodology.

i. Methodology

The methodology of this thesis begins with a discussion of causes of IP contract strain. Two causes are highlighted in Chapter 1 – non-IP contracts; and tension between IP distinguishing traits of IP assets and contract legal principles. Before a comprehensive analysis of these causes and a review of their effects are possible, it is necessary to examine these traits and principles.

Theory is acknowledged as a foundation underlying legal principles, core traits of IP assets, practices, institutions and laws. Theories are therefore reviewed to identify and define IP distinguishing traits and contract legal principles, as well as the role of each in IP contracts. Particular theories are selected for review in this thesis as, due to the substantial number of individual theories, it would be an immense undertaking to review all existing IP theories and/or contract theories. Moreover, it is impossible to point to a single representative theory in either category as neither claims a dominant theory. Each of the theories is analyzed to evidence the foundation of contract legal principles in the case of contract theories (in Chapter 2), and IP distinguishing traits in the case of IP theories (in Chapter 2).

The review of contract theories highlights two contract legal principles that are routinely referenced in contract jurisprudence – bindingness and respect for the intent of the contracting parties – and describes how each is grounded in contract theories. Notably, a dispute over whether contract essential elements exist has waged for years in the literature and remains undetermined.¹¹⁵ This thesis does not engage in that debate and, therefore, bindingness and respect for the intent of the parties are not presented as contract distinguishing traits, which would be core traits of contracts. Instead bindingness and respect for the intent of the parties are presented as contract legal principles, namely principles that guide contract interpretation.

The review of IP theories results in the identification of three IP distinguishing traits, namely control, balance, and flexibility/evolution. These IP distinguishing traits are commonly identified by the IP theories discussed in this thesis as being part of an IP asset. Consequently, these IP distinguishing traits are presumed to be integral to IP assets and are therefore acknowledged as representing core traits of IP assets.

The methodology described herein is chosen and applied because it offers particular advantages to this thesis project. Notably, it is not directly copied or tailored from another project, but has been created specifically for this work. In particular, showing a firm tie between legal theory, contract legal principles, and IP distinguishing traits averts a problem identified by James Gordley – the application of a legal analysis that sustains a chasm between theories and principles/traits.¹¹⁶ Gordley notes that if a tie between theory and principles/traits is not insisted

¹¹⁵ According to some contract experts, contract is “a concept with an essence, an irreducible descriptive and normative core” (Mark L. Movsesian, “Formalism in American Contract Law: Classical and Contemporary” (2006) 12 *IUS Gentium* 115 at 116 & 118). See also: Thomas C. Grey, “Langdell’s Orthodoxy” (1983) 45 *U. Pitt. L. Rev.* 1; Melvin Aron Eisenberg, “The Emergence of Dynamic Contract Law” (2000) 88 *Cal. L. Rev.* 1743; *Lochner v. New York*, 198 U.S. 45 (1905); Alan Schwartz & Robert E. Scott, “Contract Theory and the Limits of Contract Law” (2003) 113 *Yale L.J.* 541; and Julie E. Cohen, “Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management”” (1998) 97 *Mich. L. Rev.* 462.

¹¹⁶ James Gordley, *The Philosophical Origins of Modern Contract Doctrine* (Oxford: Clarendon Press, 1991) at 7.

upon they can become “divorced from the values that underlie” them.¹¹⁷ Beginning the search for contract legal principles and IP distinguishing traits at the theory level permits the analysis of this thesis to be built upon a firm foundation of theory bedrock.

As a further comment, the methodology utilizes the contract legal principles and IP distinguishing traits identified in Chapters 2 and 3 to analyze the causes and effects of IP contract strain in Chapters 4-6. A preferred means of highlighting the primary cause of IP contract strain would be an examination of IP contractual terms. However, producing such proof is problematic. To date a comprehensive analysis of a large number of IP contracts terms, that encompasses considerations of aspects of IP assets contracted for, has not been produced. Thus, it is not possible to look to any report for the purpose of probing whether contractual terms generally support the IP distinguishing traits of IP assets. Moreover, the generation of such a review would be too large an undertaking for this thesis project to encompass. Another option would be to consider a handful of contracts in isolation. This is not attempted in this thesis because individual contractual terms do not necessarily represent IP contracting norms. (Also, due to confidentiality issues, recent private sector IP contracts that reflect current IP contracting practices are not easily accessible. Moreover, even if copies are obtained, restrictions may be imposed to prohibit referencing such agreements in a work such as a thesis.) As a consequence the results of such an analysis would not bear the weight necessary to support the aims of this thesis.

Therefore, instead of looking to contract terms this thesis presents literature and judicial decisions of U.S. and Canadian courts as a primary means of showing the causes and effects of IP contract strain. In particular, the judiciary is challenged to interpret IP contracts in a manner whereby IP distinguishing traits of IP assets and contract legal principles are addressed simultaneously. Courts choose to side-step this endeavour and instead apply a standard of IP

¹¹⁷ E. Richard Gold, "The Reach of Patent Law and Institutional Competence" (2004) 1 UOLTJ 263 at 283.

contract interpretation having a singular focus upon either IP law or contract law. Moreover, economic value is routinely held as a defining attribute of an IP asset by courts and a determination of the scope of the IP asset is rarely undertaken.

At present there is no standard of judicial review that requires an analysis as to whether IP contract terms support IP assets. Often the IP contract interpretations sustain IP contract strain in IP contracts. This is problematic as common law judicial decisions are expected to provide guidance for future IP contract interpretation endeavours. This can cause the perpetuation of IP contract strain.

Generally, the methodology of this thesis is a means of identifying IP distinguishing traits of IP assets and contract legal principles and applying these as analytic tools to probe the causes and effects of IP contract strain. Additionally, a legal pluralism view is applied to encompass legal rules, practices and institutions as factors of legal significance influencing IP contracts in the analysis. The results are: an understanding of the causes and effects of IP contract strain; and recognition as to why these merit attention and further study.

C. If IP Contract Strain Persists

The discussion of the effects of IP contract strain in Chapter 5 is of particular importance to this thesis project. At present there are no legal rules, or any practice or institution initiatives, that effectively curb causes of IP contract strain. Thus, several unfettered effects can occur as a result of IP contract strain. For example, implementation of contracts that do not support the IP distinguishing traits of an IP asset can result in a defect in the asset's chain of title. This outcome can affect the right of ownership granted in the asset, as well as the ability to transfer the IP asset in the future. It may be assumed by the contract drafters that the whole of the IP asset is applied by contract terms and can be subsequently transferred in the future, but this is not necessarily the

case. The result can be a confused web of title for an IP asset, spun and stretched by contracts affected by IP contract strain.

Moreover, as the number of IP contracts grows virtually daily, it may be assumed that the number of non-IP contracts is also growing at an equivalent rate.¹¹⁸ IP contract strain therefore represents a systemic problem.¹¹⁹ An analogy can be drawn to the discussion by Penelope Andrews of how violence against women can represent a societal problem even though it is an act that occurs between individuals.¹²⁰ The end result is a systemic problem that affects a large percentage of women and is a concern for all women. IP contract strain may present a similar systemic effect. Its effects will be experienced not only in relation to individual contracts and contracting parties, but within market sectors dominated by non-IP contracts.

The IT bubble highlights a possible outcome which may follow the recognition of IP contract strain by the private sector. The IT market sector experienced its height of U.S. market capitalization in late 1999.¹²¹ At that time many IT businesses were start-ups or early stage businesses relying upon venture capital.¹²² They were spurred by innovative ideas and innovator enthusiasm, but lacked capital to function unassisted in the marketplace.¹²³ As noted by one author, incentives for investment are closely linked to contracts.¹²⁴ Thus, as IT innovators sought

¹¹⁸ Kuester & Bartel, "Evolution of the IP Market", *supra* note 5 at 32.

¹¹⁹ See: Mark S. Brodin, "Behavioural Science Evidence in the Age of Daubert: Reflections of a Skeptic" (2005) 73 U. Cin. L. Rev. 867; Catharine A. MacKinnon, "Points Against Postmodernism" (2000) 75 Chi.-Kent L. Rev. 687; K.J. Greene, "Intellectual Property at the Intersection of Race and Gender: Lady Sings the Blues" (2008) 16 Am. U.J. Gender Soc. Pol'y & L. 365; Dana Neacsu, "The Red Booklet on Feminist Equality: Instead of a Manifesto" (2008) Women's Rts. L. Rep. 30 106; and Leslie Bender, "Teaching Torts as if Gender Matters: Intentional Torts" (1994) Va. J. Soc. Pol'y & L. 2 115.

¹²⁰ Penelope Andrews, "'Democracy Stops at my Front Door': Obstacles to Gender Equality in South Africa" (2007) 5 Loy. U. Chi. Int'l Rev. 15 at 28.

¹²¹ Elizabeth F. Brown, "The Tyranny of the Multitude is a Multiplied Tyranny: Is the US Financial Regulatory Structure Undermining US Competitiveness?" (2008) 2 Brook J. Corp. Fin. & Com. L. 369 at 374.

¹²² Kab Lae Kim, "Implications of U.S. Venture Capital for the Korean Venture Ecosystem" (2008) 2 J. Bus. Entrepreneurship & L. 142 at 170-71.

¹²³ *Ibid.* at 170.

¹²⁴ Ichiro Kobayashi, "Private Contracting and Business Models of Electronic Commerce" (2005) 13 U. Miami Bus. L. Rev. 161 at 164.

IP rights as a means of protecting their innovations from competitors, IP contracts facilitated the relationships and ties between innovators, investors and IP assets. The market was based upon the perceived value of the IT innovations, yet in the end “investors massively overestimated the speed at which the marketplace would adopt dot-com innovations.”¹²⁵ Expected returns on the investments were not achieved, investors were anxious to remove their funds from the IT sector, and new innovations could not attract new investments. The IT bubble burst and the market crashed. The effects of both the rise and burst of the bubble were widespread – including effects in national economies. For example, the U.S. headed into a recession¹²⁶, and the real estate market was affected as IT company staff members lost their jobs and livelihoods¹²⁷.

Generally the IT bubble burst because investors lost confidence in the value of IP assets.¹²⁸ IP contract strain sets up a situation whereby a similar outcome could occur. Recognizing the effects of IP contract strain could lead to a lack of confidence in the ability of purported IP contracts to achieve their intended contractual uses of IP assets, as discussed in detail in Chapter 5. In particular, there may be a lack of confidence that IP assets are wholly applied by IP contracts and IP asset holdings achieved by contract terms may consequently be suspect. This could erode private sector confidence in IP contracts generally. Two particular results could occur: (i) the transaction costs of IP contracting could rise as measures to verify ownership of IP assets are enforced; and (ii) the rate of IP contracting could decline.

As the bursting of the IT bubble had effects reaching beyond IT markets, so could recognition of IP contract strain. In particular, there could be a slow-down in investment in innovation research and development (“R&D”). After all, if the value of the innovation is

¹²⁵ Ibid. at 163.

¹²⁶ Brown, "The Tyranny of the Multitude is a Multiplied Tyranny: Is the US Financial Regulatory Structure Undermining US Competitiveness?", *supra* note 121 at 374.

¹²⁷ Gary Dymski, "What has Never Happened Before and is Happening Again: Development and Discrimination in the San Joaquin Valley" (2007) 9 Berkeley J. Afr.-Am. L. & Pol'y 95 at 108.

¹²⁸ Kobayashi, "Private Contracting and Business Models of Electronic Commerce", *supra* note 124 at 163.

directly related to the exclusive rights of IP protection for aspects of the innovation and the ability to use and trade these rights in the marketplace, should contractual uses of IP assets become uncertain then the value of IP assets may be perceived as dubious. (Value in this sense includes economic value, infrastructure value, competitive value, and other types of values represented by IP assets.) As a consequence the incentive to support innovation may decline.

These are but two possible effects of IP contract strain. Each shows that IP contract strain has the potential to result in broad negative outcomes for the private sector. Allowing IP contract strain to persist may further augment these consequences. It is necessary therefore not only to recognize IP contract strain, but to take steps to understand its causes and thwart its effects.

D. Thesis Scope: To the Edge of the Canyon

As stated previously, this thesis introduces IP contract strain, but does not propose a resolution thereto. It may be argued that this approach is analogous to leaving the reader sitting at the edge of a canyon looking down upon the boulders below, but without a means of crossing the canyon floor safely. The reason for this result is that finding a way across the canyon depths represents the basis of an entirely separate research project.

Notably, this thesis offers a limited presentation of options that may be considered in the context of producing a resolution to IP contract strain (in Chapter 7). These are merely suggestions to be integrated into the future task of designing a resolution to IP contract strain. It should be further noted that a resolution is distinct from a fix. It may be possible to fix contracts affected by IP contract strain on a contract-by-contract basis, as discussed in Chapter 5. However, this activity would be time-consuming and costly. A resolution would offer a means of eradicating IP contract strain in existing contracts and also of ensuring that strain does not affect future contracts.

This thesis recognizes a need for a resolution to IP contract strain. However it further acknowledges that such a resolution cannot be crafted without an understanding of the causes and effects of IP contract strain. The purpose of this thesis therefore is to facilitate the first step – recognition of the causes and effects of IP contract strain.

E. Thesis Outline

The examination of the causes and effects of IP contract strain progresses in following manner in this thesis. Chapter 1 examines the environment of IP contracting and identifies causes of IP contract strain. Chapter 2 reviews contract theories to show support for two prevalent contract legal principles, namely bindingness and intent of the parties. Chapter 3 examines IP theories to identify IP distinguishing traits of evolution/flexibility, balance and control as core traits of IP assets. This analysis provides a set of IP distinguishing traits that may be utilized as a framework for reviewing terms of an IP contract. Chapter 4 examines IP contract strain in light of IP distinguishing traits and contract legal principles through two steps. First, it reviews some of the factors affecting causes of non-IP contracts, to highlight the roles of IP distinguishing traits of IP assets and contract legal principles in IP contracts. Second, it analyzes methods of judicial review of IP contracts and contract doctrines to determine if these address IP contract strain. Chapter 5 explores the effects of IP contract strain and highlights the potential breadth of these. It further highlights limitations that constrain legal rules from presenting a workable resolution for IP contract strain.

Chapter 6 exemplifies the practice of IP contracting in the context of emerging, grass-roots IP contracting initiatives – intellectual asset management and open source. It considers the role of these initiatives as generators of IP contract strain and their potential to provide a means of addressing IP contract strain. Chapter 7 points to options that may be considered by future

researchers working to find a resolution for IP contract strain that responds to its causes and effects. These are options made apparent by the analysis of this thesis.

F. Conclusion

The conclusion of this thesis is that IP contract strain is primarily caused by contract terms that either: do not support IP distinguishing traits of IP assets; or create conflict between traits and contract legal principles. The creation of such contracts is influenced by legal rules, private sector practices, and institutions. IP contracts are a means of gaining market advantage and the tactics employed to attain this end can cause IP contract strain. IP contract strain therefore merits timely attention. Its effects, including its systemic nature, means the problem may be increasing. Outcomes of the effects of IP contract strain may induce diminishing private sector confidence in IP contracts. Thus, ignoring the strain merely augments its potential for negative consequences. It is a goal of this thesis to offer a crucial first step to combat negative outcomes of IP contract strain – recognition of its causes and effects.

1 CAUSES OF IP CONTRACT STRAIN

1.1 Introduction

IP contracts are drafted to achieve specific results that are often aligned with business aims. IP assets become “powerful marketing tools” through contractual uses¹²⁹ and may generate private sector value (e.g. economic value, institutional value, etc.). IP assets are “valuable assets on capital markets”,¹³⁰ and IP portfolios are “important tools in attracting investment and venture capital – working as a signal of the credibility of a business venture.”¹³¹ This chapter explores the role of IP assets in IP contracts and examines how this role can lead to causes of IP contract strain. A problem arises when IP contracts cannot achieve their expected results, and this can have a negative impact upon the private sector.

To begin this chapter addresses the private sector IP contracting environment and norms that dominate that sphere. It then considers the relationship between IP assets and IP distinguishing traits and how recognition of the core traits in contract terms has a direct effect upon whether contractual uses of IP assets are facilitated. From this context it is possible to point to two causes of IP contract strain – (i) contract terms that alter, distort or omit IP distinguishing traits of IP assets (non-IP contracts); and (ii) contractual conflict between IP distinguishing traits

¹²⁹ Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 38.

¹³⁰ Ibid. A more succinct view states that IP “used to be the tail that failed to wag the dog in commercial transactions. Now it is the dog itself” (Lanning G. Bryer & Melvin Simensky, ed. *The New Role of Intellectual Property in Commercial Transactions* (New York: John Wiley & Sons, Inc., 1994) at xvii). See also: Howard P. Knopf, "Security Interests in Intellectual Property: An International Comparative Approach" in Howard P. Knopf ed., *Security Interests in Intellectual Property* (Toronto: Thompson, 2002) at 4; Kate L. Birenbaum & Joby A. Hughes, "Insuring Intellectual Property Risks: Creative Solutions on the Cutting Edge" (1999) 586 PLI/Pat 203 at 203; Thomas G. Field Jr., "Book Review: Edison in the Boardroom: How Leading Companies Realize Value from their Intellectual Assets" (2002) 43 IDEA 147 at 147; and Melnitzer, "Executive Knowledge Wars", *supra* note 94 at 66. Melnitzer notes that one expert estimates that “a corporation’s intellectual capital can be worth three or four times its tangible book value”, where as experts, such as Lief Edvinsson, argue that “the ratio is at least 5:1 and may be as high as 16:1” (at 66).

¹³¹ Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 38.

and contract legal principles. The chapter further offers several examples that contextualize the topics presented and ground these in real-world situations.

1.2 Private Sector IP Contracting Environment

Private sector IP contracts are drafted in a specific environment driven by the corporate goal to derive maximum value from IP assets. As of 2008 approximately 80% of the value of U.S. publicly traded companies was represented by IP assets.¹³² As Nguyen and Maine state:

[I]ntellectual property rights allocate and maximize the firm's own resources in addition to serving interfirm functions in the market. Thus, as the economy becomes increasingly dependant on information and technology, the proprietary rights of intellectual property are important to the firm and its existence. For example, a firm's repository of intellectual property rights often functions as a signal of the firm's financial prospects, among other things. Consequently, the firm has a strong desire to control its repository for optimum return.¹³³

In this environment control of IP assets to achieve optimum return can, in some cases, result in anticompetitive behaviour or "monopolization beyond what is expressly allowed by the intellectual property grant."¹³⁴ Two results that exemplify this environment are: the norm of moulding IP assets through contractual terms; and the influence of legal rules, practices and institutions upon contract drafters.

1.2.1 IP Contracting Norm: Defining/Moulding IP Assets by Contract Terms

To achieve maximum value for a company contract drafters often face a temptation to draft terms that distort the scope of an IP asset (e.g., to amplify its trait of control).¹³⁵ Due to the lack of any explicit definition for an IP asset, contract drafters choose to believe that IP assets can be

¹³² Millied & Laurie, "Meet the Middlemen", *supra* note 18 at 53. This research conducted by Ned Davis Research for Ocean Tomo LLC, shows a significant increase in IP asset value over the past three decades – thirty years ago only 20% of a company's value came from IP assets.

¹³³ Jeffrey A. Maine & Xuan-Thao Nguyen, "Giving Intellectual Property" (2006) 39 U.C. Davis L. Rev. 1721 at 1723.

¹³⁴ David A. Balto et al., "Intellectual Property and Antitrust: General Principles" (2006) 867 PLI/Pat 9 at 24.

¹³⁵ See: A. H. Rajani & Alison Watkins, "Foreward" (2007) 22 Berkely Tech. L.J. 1 at 1; and *Kirkbi AG v. Ritvik Holdings, Inc.*, [2005] 3 SCR 302 para 37.

defined by way of contract terms. This engenders a belief that IP assets are malleable.¹³⁶ This belief is even reflected in some jurisprudence, such as the Commission of the European Communities *Magill* decision of 1988¹³⁷ which is described as asserting that IP assets “are not sacrosanct” and are therefore “malleable”.¹³⁸ A view of IP assets as malleable promotes the golden rule of the marketplace: “those with the gold (i.e. IP assets) can now make the rules.”¹³⁹

An example of defining, and consequently moulding, an IP asset by way of contract terms is the act of drafting a license to augment specific traits of an IP asset, such as control. The resulting contract terms may circumvent legislated restrictions inherent in the asset.¹⁴⁰ For example, augmenting the trait of control of an IP asset by way of contractual terms allows the asset holder to wield an increased level of control over the asset than is expressly permitted by IP legal rules. As a result, greater obligations or limitations of access or use may be imposed by the IP asset holder upon a party seeking access to the IP asset than are imposable in accordance with legislation.

Notably, when IP assets are viewed as malleable the sole limit upon such assets that the private sector readily admits of is the term of validity imposed by law (e.g. patents are only valid for up to 20 years, copyright is generally valid for 50 years after the author’s death, etc.).¹⁴¹ Yet,

¹³⁶ See: Davidson, "Standardization and Pluarlism in Property Law", *supra* note 112.

¹³⁷ *Commission Decision 89/205, Magill TV Guide/ITP, BBC and RTE*,.

¹³⁸ Alan Devlin & Michael Jacobs, "Success, Dominance and Interoperability" (2009) 84 Ind. L.J. 1157 at 1169. If IP assets are not sacrosanct then the “foundation of the entire new economy” is called into question as this “lies on the security of such rights, yet the exclusivity inherent in their employment carries considerable and explicit harm to consumers and allocative efficiency” (at 1200).

¹³⁹ Millied & Laurie, "Meet the Middlemen", *supra* note 18 at 53.

¹⁴⁰ Winston, "Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property", *supra* note 12 at 93.

¹⁴¹ *Patent Act*, R.S.C. 1985, c. P-4 s. 44; and *Copyright Act*, *supra* note 114 s. 6.

even this limitation has been challenged in recent legal proceedings.¹⁴² Other limitations, such as limits upon exclusivity, are routinely overridden by contractual terms.¹⁴³

The practice of defining and moulding IP assets through contract terms is presently identified in the private sector as “an accepted norm”.¹⁴⁴ The result is that “now owners of many types of intellectual property are relying on private legislation, rather than public legislation, to regulate users' rights” in IP assets.¹⁴⁵ This practice is pursued by many companies due to the advantages attainable by modifying the scope of IP assets from that dictated by jurisprudence and legislation (e.g., such as “monopolization”). Notably, this practice is not characterized as an expansion or mis-use of IP assets, but rather as an approach of “private ordering” or “privately legislated” IP assets.¹⁴⁶ However, as Mark Lemley points out, “[g]iving the parties unlimited power under contract law to vary the rules of intellectual property creates considerable tension”¹⁴⁷, which may be expressed as IP contract strain.

For example, tension may exist between IP distinguishing traits of an IP asset and contract legal principles, as discussed below. Contract drafters may justify moulding IP assets through contract terms by adopting a perception of contract legal principles as the dominant force in IP contracts. In some cases this can exacerbate IP contract strain, as discussed in Chapter 4. In the

¹⁴² See: *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135.

¹⁴³ A limit upon exclusivity may be said to be the requirement that a balance exist between an IP asset holder and a user. This right is described in jurisprudence. See: *Society of Composers, Authors and Music Publishers of Canada v. Canadian Association of Internet Providers*, [2004] 4 S.C.R. 45; *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14; and *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14.

¹⁴⁴ Winston, “Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property”, *supra* note 12 at 93. See also: Nimmer, “Breaking Barriers: The Relation Between Contract and Intellectual Property Law”, *supra* note 16 at 830; and Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 85.

¹⁴⁵ Winston, “Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property”, *supra* note 12 at 93.

¹⁴⁶ Sandeen, “A Contract by Any Other Name is Still a Contract: Examining the Effectiveness of Trade Secret Clauses to Protect Databases”, *supra* note 12 at 122; and Winston, “Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property”, *supra* note 12 at 93. Winston comments that “now owners of many types of intellectual property are relying on private legislation, rather than public legislation, to regulate users' rights in their chattels.”

¹⁴⁷ Lemley, “Beyond Preemption: The Law and Policy of Intellectual Property Licensing”, *supra* note 37 at 125. Lemley in particular points to tension with the balanced incentive structure of IP assets.

opinion of one author, the freedom of the private sector to mould IP assets through contract has “gone too far”.¹⁴⁸

1.2.2 IP Contract Influences: Legal Rules, Practices & Institutions

A review of the IP contracting environment shows that the norms and perceptions that dominate this sphere are influenced by legal rules, practices and institutions.¹⁴⁹ These are all interrelated. For example, practices and institutions can drive IP contracting norms and perceptions.¹⁵⁰ Norms may further support existing legal rules, supplant legal rules, or provide the basis for new legal rules.¹⁵¹

Influences of practices and institutions on IP contracts can be relational to the amount of reliance placed upon IP assets by the private sector.¹⁵² Statistics articulate the importance of IP assets to private sector markets as a significant generator of wealth:

Intellectual property is traded on huge, transnational markets. Over five percent of GDP in North America and Europe is attributed to the “copyright industries,” a whopping USD 430 billion annually in the United States alone. For much of the last decade and a half, the growth rate of the intellectual property market has been about

¹⁴⁸ See also: Anatole F. Krattinger, "Technology transfer to developing countries and technology diffusion: the future role of institutions in capacity, regulation and funding" in Paul Christou & Harry Klee ed., *Handbook of Plant Biotechnology* (London: John Wiley & Sons, 2007) at 12.

¹⁴⁹ Researchers identify legal rules, practices and institutions as the three domains of IP assets. See: Gold et al., *Towards a New Era of Intellectual Property: From Confrontation to Negotiation: A Report from the International Expert Group on Biotechnology Innovation and Intellectual Property*, *supra* note 26.

¹⁵⁰ Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at 111. See also: Henry E. Smith, "Institutions and Indirectness in Intellectual Property" (2009) 157 U. Pa. L. Rev. 2083 at 2083. Smith comments that “institutions are important” to IP assets and that this is especially true in light of the difficulties of contracting for information, which is the essence of IP assets. In particular, Smith states that contractors can face challenges “from asymmetric information, and some of the limits on people's ability to contract stem from the problems of incomplete information.”

¹⁵¹ See: Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 830; and Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 85.

¹⁵² IP transactions drive national economies by facilitating the corporate contractual uses of IP assets through IP contracts. See: Bryer & Simensky, ed. *The New Role of Intellectual Property in Commercial Transactions*, *supra* note 130 at xvii; Knopf, "Security Interests in Intellectual Property: An International Comparative Approach", *supra* note 130 at 4; Birenbaum & Hughes, "Insuring Intellectual Property Risks: Creative Solutions on the Cutting Edge", *supra* note 130 at 203; Field Jr., "Book Review: Edison in the Boardroom: How Leading Companies Realize Value from their Intellectual Assets", *supra* note 130 at 147; and Melnitzer, "Executive Knowledge Wars", *supra* note 94 at 66.

double the growth rate of the (quite healthy) general U.S. economy, thereby increasing its share of the overall economic output.¹⁵³

This value produces two outcomes: (i) a willingness to find or create new IP assets; and (ii) motivation to ensure that IP assets enjoy a wide scope, which in turn leads IP asset holders to “often overstate their claims.”¹⁵⁴ The result is an environment wherein exploitation of the legal monopoly granted by IP assets walks a tightrope between legitimacy and illegitimacy.¹⁵⁵ The effect of this tug-of-war is evident in IP contracts and is often expressed as IP contract strain, as discussed below.

Exploitation of the legal monopoly represented by IP assets may occur due to the significant pressure on contract drafters to create terms that emphasize the aspects of exclusivity of IP assets.¹⁵⁶ Exclusivity represents influence in the marketplace. The outcome is that IP contracting is presently at a governance cross-road that raises a key question: Should it be dictated by laws or by practice norms?

Other areas of law have faced a similar dilemma due to the interrelation of the influence of practices and institutions with legal rules. For example, the law of the United Kingdom on investment securities stated that a share certificate was not a negotiable instrument, yet it was common practice of institutions to use share certificates in the same manner as negotiable instruments.¹⁵⁷ Essentially, the law held that the paper certificate was not like a paper dollar bill.

¹⁵³ Viktor Mayer-Schonberger, "In Search of the Story: Narratives of Intellectual Property" 10 Va. J.L. & Tech. 11 para. 1. Schonberger goes on to offer examples of IP asset output and ultimately finds that “[o]verall, Americans consume more than three thousand hours of intellectual property annually, almost fifty percent more than the amount of hours they spend working.” (para. 2).

¹⁵⁴ Ben Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 54.

¹⁵⁵ Giovanni B. Ramello, "Intellectual Property and the Markets of Ideas" *Review of Network Economics* 4:2 (2005) 68 at 15. See also: Richard A. Posner, "The Social Costs of Monopoly and Regulation" in Ruth Towse & Rudi Holzhauer ed., *The Economics of Intellectual Property*, vol. 5 (Cheltenham: Elgar Reference Collection, 2002) 3.

¹⁵⁶ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para 37.

¹⁵⁷ See: *Wookey v. Pole*, 4 Barn & Ald. 1, 106 Eng.Rep. 839 (K.B.1820); James M. Holden, *The History of Negotiable Instruments in English Law* (University of London: The Athlone Press, 1955) at 94-98; and James Steven Rogers, "Negotiability, Property and Identity" (1990) 12 Cardozo L. Rev. 471.

The difference may be understood thus: if a paper dollar bill is stolen the person who steals the paper bill receives good title to the bill, meaning the paper bill can be exchanged by the thief for value or goods; whereas, share certificates were to represent a value, but have no value in and of themselves. However, the practice was to treat certificates like dollar bills, and to trade them in a manner whereby it was insinuated that the paper certificates themselves held value. Eventually, the legislators recognized that the practice had overrun the law. It was therefore held to be a necessary step to change the law to accord with common practice.¹⁵⁸

It should be noted that it is not always the response of legislators to legitimize practice and institution norms as law. For example, prior to the *Fraser River*¹⁵⁹ decision, third parties were protected through insurance contracts as a practice norm. Following the *Fraser River* decision, the practice was abandoned because the law would not enforce contracts including terms that protected third parties.

As IP assets are embraced as important private sector assets, both the significance and complexity of IP contract terms are continuously increasing.¹⁶⁰ It is not out of the ordinary for a discrepancy to arise between the legal definition of IP assets and contracting norms influenced by practices and institutions. In this manner norms can be a cause of IP contract strain. As described below, IP contracts may be drafted to omit, alter or distort the core traits (i.e., IP distinguishing traits) of an IP asset. Such a contract may be unable to effect a contractual use of

¹⁵⁸ Rogers, "Negotiability, Property and Identity", *supra* note 157.

¹⁵⁹ *Fraser River Pile & Dredge Ltd. v. Can-Dive Servs. Ltd.*, [1999] S.C.R. 108.

¹⁶⁰ Even though IP rights are nationally held, for the most part, they can become the basis for international corporate power struggles that involve individuals, companies and even a political contingent. Such a dispute is that which Bacardi's has been embroiled with Cuban rum producers over rights to the brand "Havana Club" in the U.S. See: Peter Foster, "Castro's Trademark" *National Post* (31 August 2006); Guillermo Cabrera Infante, "The Old Man and the Brand-name" (1956) 5:2 *Ciclón* 110; Anthony P. Maingot, "Rum: Revolution and Globalization - Past, Present and Future of a Caribbean Product" *Presentation to the Cuba Lecture Series, The Cuban Research Institute, Florida International University, The Biltmore Hotel* (25 March 2004); Mark P. Sullivan, "Cuba: Issues for the 108th Congress" *RL31740* (3 June 2003); Daniel J. Gervais, "The TRIPs Agreement after Seattle: Implementation and Dispute Settlement Issues" (2000) 5 *J. of World Int. Prop.* 504; Daniel W. Fisk, "Cuba: The End of an Era" (2001) *The Washington Quarterly* 93; Vanessa O'Connell, "Bacardi Blocks Cuba in Rum Feud" *The Wall Street Journal Europe* (9 Aug 2006); and Dan Hunter, "Culture War" (2005) 83 *Tex. L. Rev.* 1105.

an IP asset. This can produce a significant outcome because contracts provide a means of controlling trade in IP assets.¹⁶¹ Therefore, trade can be negatively affected by norms that cause IP contract strain.

The example that follows highlights aspects of the environment of IP contract drafting through a discussion of patent trolls. Specifically, patent trolls exert practice and institutional influence upon IP contracts. Their aims can impose temptations upon contract drafters to draft terms that mould IP assets. From the vantage of a patent troll IP assets are malleable and mouldable by contract terms.

1.2.3 IP Contract Drafters Example: Patent Trolls

The term “patent troll” originally defined persons who collected patents solely for the purpose of obtaining a “nuisance-value settlement”.¹⁶² However, its meaning has expanded to include “any entity or individual that uses its patents to extract licensing revenues.”¹⁶³ Essentially a patent troll collects patents for the sole purpose of holding those patent rights hostage until an entity or individual who needs the rights to conduct business agrees to enter a, usually exploitative, licensing agreement.¹⁶⁴ Such agreements are described as exploitive because the contract terms augment the exclusive rights of the patent holder in a manner that alters or distorts the asset to limit access thereto, or use thereof. Patent trolls employ these agreements to take advantage of the need of the entity or individual seeking the patent asset.

¹⁶¹ John T. Ramsay, *Ramsay on Technology Transfers and Licensing*, 2 ed. (Markham: Butterworths, 2002) at 3. Ramsay comments that “the technology must be employed in some manner. It may be released to the general public for all to use, the innovator (whether an individual or a company) may keep the technology for its own use or the technology may be made available to others for their use in exchange for valuable consideration”.

¹⁶² James Nurton, "Patent Trolls: They're out there Somewhere" *Managing Intellectual Property* (2006) 22 at 22. See also: Angela Furlanetto & Jenna Wilson, "U.S. cases on “patent trolls” will address important principles for Canadian IP" (2006) 25 *The Lawyer's Weekly* 3.

¹⁶³ Nurton, "Patent Trolls: They're out there Somewhere", *supra* note 162 at 22.

¹⁶⁴ Terrence P. McMahon et al., "Who is a Troll? Not a Simple Answer" (2006) 7 *Sedona Conf. J.* 159 at 165-166.

An increasing number of companies, as well as public sector organizations, fit the definition of patent troll. This is pointed to as evidence that troll behaviour is prevalent in the private sector.¹⁶⁵ For example, in the IT and software industries some companies claim that they are “hit by patent trolls every day.”¹⁶⁶ Consequently companies take preventative measures against troll behaviour to avert risk.¹⁶⁷ The demands of trolls, and the licensing contracts executed to meet these demands, have a profound effect upon business practice, institutions, the market and the flow of goods and services. Moreover, the increasing prevalence of patent trolls has a significant effect upon the number of license contracts that are executed, as well as attitudes towards licenses generally.

Notably, anti-troll activity also generates IP contracts. New forms of patent pools, such as the Allied Security Trust have arisen in the marketplace to collect patents and keep these beyond the reach of trolls.¹⁶⁸ Members of the trust are granted non-exclusive licenses in the patent rights, and the patent may be put back into the open market for sale.¹⁶⁹

In light of past evidence, litigation is not an empty threat in the private sector. Consequently, licenses are increasingly viewed as a viable option to save a company the cost of

¹⁶⁵ A famous example of a patent troll is NTP Inc., which recently engaged in a suit against Research In Motion (“RIM”), accusing RIM of wrongfully utilizing technology NTP owned (Julius Melnitzer, “Patent Trolls and Jury Trials: RIM’s Cautionary Tale” *Lexpert* 67 (2006) 69). The case was eventually settled for a USD\$613.5 million payment and a license agreement with NTP. Other companies are well-positioned to behave as patent trolls, such as ARM, a company “whose whole business model depends upon licensing rather than manufacturing” (Nurton, “Patent Trolls: They’re out there Somewhere”, *supra* note 162 at 22).

¹⁶⁶ Nurton, “Patent Trolls: They’re out there Somewhere”, *supra* note 162 at 25.

¹⁶⁷ See: Lisa Lerer, “Mind Games” (2006) *IP Law & Business* 32. For example, Intellectual Ventures is a company with a mandate to brainstorm, develop and patent ideas. It is not the company’s mandate to manufacture, or commercialize a product. Nathan Myhrvold explains the company’s reasoning by saying, “[w]e are purely about invention...[r]eally big ideas have to come from somewhere” (at 32). However, the stockpile of patent rights collected by Intellectual Ventures makes others nervous. The ideal solution is for Intellectual Ventures to, “collect a huge patent library and, for a fee, license a variety of different technologies. Most licenses will be non-exclusive, an offer made particularly to the investors” (at 36). However, it is just as possible that Intellectual Ventures will choose to take on a troll persona. Only time will tell.

¹⁶⁸ “Taking the fight to the trolls” *Intellectual Asset Management Magazine* 31 (2008) 4 at 4-6.

¹⁶⁹ *Ibid.*

litigation.¹⁷⁰ One author describes the reaction to patent trolls as a change from a litigation mentality to that of a corporate transactional lawyer.¹⁷¹ This means that instead of preparing to argue to avert the pressure created by a patent troll upon corporate business, a spirit of negotiation and deal-making prevails.¹⁷² This leads to contracts drafted to exploit the patent holder's dominance. This can be achieved by way of contract terms that alter or distort the IP distinguishing traits to augment control of the IP asset by the patent holder. Thus, contracts drafted in response to the influence of patent trolls reflect the practice norm of moulding IP assets through contract terms to cater to practice and institution influences. This environment facilitates a high potential for contracts to be affected by IP contract strain.

1.3 IP Assets & IP Distinguishing Traits

IP assets are an integral element of IP contracts. Each IP asset has a particular nature and role,¹⁷³ as presented in Appendix "B". For example, a patent asset protects an invention and is granted only after the completion of a successful patent application prosecution, whereas copyright protects a work and is granted automatically upon the production of the work. Moreover, although no clear definition of IP assets exists, the nature and role of an IP asset are indicated by the core traits of IP assets, namely IP distinguishing traits. Thus, IP contracts, IP assets and IP distinguishing traits exist in relationship to one another.

¹⁷⁰ Rodger Sadler & Bob Cote, "Survival Strategies in the New IP Economy" *Managing Intellectual Property* (2006) 26 at 27. The routine course of troll attack begins as threat to sue for patent infringement. In the course of the litigation process the troll offers to settle for a payment and a license agreement. The litigation aspect of textbook troll attacks has garnered much discussion. Articles warn corporations about patent troll tactics and offer advice about defensive strategies. See: Melnitzer, "Patent Trolls and Jury Trials: RIM's Cautionary Tale", *supra* note 165; and Nurton, "Patent Trolls: They're out there Somewhere", *supra* note 162. However, few focus on the use of IP contracts by trolls.

¹⁷¹ Melnitzer, "Patent Trolls and Jury Trials: RIM's Cautionary Tale", *supra* note 165 at 80.

¹⁷² *Ibid.*

¹⁷³ See: W.L. Hayhurst, "When Sovereignties May Collide - Sovereignties and the Regulation of Business in Relation to Intellectual Property: A Canadian Perspective" (1994) 20 Can.-U.S. L.J. 195 at 196.

The debate regarding the definition of IP assets arises due to the fact that they are “fuzzy” assets. This fuzziness is discussed in more detail in Chapter 3, but generally it means that IP assets lack easily definable, tangible boundaries. The lack of boundaries frustrates attempts to define an IP asset. It further complicates endeavours to distinguish assets that constitute IP assets from those that do not. To address this complexity, authors recognize that the IP assets should include particular attributes.¹⁷⁴ This acknowledgement of attributes of IP assets represents a first step towards identifying IP distinguishing traits. IP distinguishing traits are the core traits of IP assets. These do not necessarily represent the whole scope of an IP asset, but they are specific traits that ground the definition of the asset. Thus, IP distinguishing traits are inviolable traits of IP assets.

A description of IP assets is provided by a combination of legislation and jurisprudence. Legislation sources, such as the *Patent Act*, the *Copyright Act*, etc., offer basic information about the rights represented by IP assets. For example, the *Copyright Act* states that copyright grants a “sole right to produce or reproduce the work...to perform the work...in public...to publish the work”, etc.¹⁷⁵ Legislation further sets out technical rules for paying fees and submitting relevant documents to a national IP office. Jurisprudence considers the legislative description and offers commentary on the definition of IP assets – such as the existence of the trait of balance.¹⁷⁶ Although, legislation and jurisprudence can be referenced to derive portions of a definition of an IP asset, neither explicitly defines the rights and traits that comprise an IP asset.

¹⁷⁴ Ian David McClure, "Commoditizing Intellectual Property Rights: The Practicability of a Commercialized and Transparent International IPR Market and the Need for International Standards" (2008) 6 Buff. Intell. Prop. L.J. 13 at 15. In McClure's opinion, the “most important attributes” of IP assets are “(1) exclusivity of control over the intellectual property, (2) free transferability of one or all rights, and (3) the ability of the owner to set a price for the license to use, or the ownership of, those rights.” Of these three attributes, it is notable that control is identified as the first. Indeed the attributes 2 and 3 may be said to be related to the IP distinguishing trait of control, as control must exist in order to obtain attributes 2 and 3.

¹⁷⁵ *Copyright Act*, *supra* note 114 s. 3.

¹⁷⁶ See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14.

Furthermore, both legislation and jurisprudence are alterable. Legislation in particular can be altered by legislators of a State. Therefore, if statute is to be the sole source for a definition of IP assets, the long-term stability of the definition of IP assets becomes questionable.¹⁷⁷ For this reason it is difficult presently to overcome the “symbiotic” view that “treats federal [IP] laws as background rules subject to alteration by contract”.¹⁷⁸ Identifying the inviolable traits of IP assets provides a foundation for any contractual definition of IP assets by imposing a necessity to accurately reflect at least these core traits in the terms of an IP contract. This is of importance as it aids in defining IP assets and sets the “extent to which licenses and other forms of contract may alter the scope of [IP assets] as traditionally defined”.¹⁷⁹

A review of theories shows the importance of the relationship of certain traits to IP assets, as discussed in Chapter 3. The most critical traits are those that are uniformly accepted by IP theories as inherent characteristics of IP assets and these represent IP distinguishing traits. Such traits highlight the importance of establishing a traditional definition of IP assets that

¹⁷⁷ See: Davidson, "Standardization and Pluarism in Property Law", *supra* note 112. Davidson comments that it is a common view that the freedom of the state ‘to moderate and modify the “forms” of patent, copyright, and trademark is somehow more fluid than the latitude granted to the state in, for example, defining estates in land. Normatively, the debate becomes framed as a question of how close intellectual property should be to a static vision of more traditional property as the bastion of exclusionary rights, relatively free from state ordering.’ As an example of this type of state freedom to treat copyright law as fluid, authors argue that proposed amendments to Candian copyright law presented as Bill C-61 indicate the possibility that the Canadian government could pass laws that fail to tie copyright to the core trait of balance and instead include articles that promote private industry goals. See: Karen L. Durell, "Proposed Reform of the Canadian Copyright Act: Unanimity substituted for balance" (2005) Centre for Intellectual Property Policy online:<<http://www.cipp.mcgill.ca/en/news/current/16>>; Michael Geist, "The Canadian DMC: Check the Fine Print" (June 12, 2008), online:<<http://www.michaelgeist.ca/content/view/3025/125/>>; and Virgil Cojocaru, "Bill C-61 and DRM: How the Canadian Consitution Ensure a Balance of Copyrights" *IPilogue* (2009).

¹⁷⁸ Pratik A. Shah, "The Uniform Computer Information Transactions Act" (2000) 15 Berkeley Tech. L.J. 85 at 97.

¹⁷⁹ Rajani & Watkins, "Foreward", *supra* note 135 at 1. Rajani and Watkins provide an overview of the “the novel legal issues posed by advancing technologies, mixing scholarly analysis with useful research tools for the practitioner” addressed in the Berkeley Technology Law Journal and states that of the 24 Notes in the 2007 edition “many Notes analyze the extent to which licenses and other forms of contract may alter the scope of intellectual property rights as traditionally defined.” Thus, this is a topic of growing concern and interest.

acknowledges the roots and foundation of IP assets. Upholding these root traits establishes continuity of IP assets over time.¹⁸⁰

The recognition of IP distinguishing traits as core traits shows that IP assets are not malleable as private sector norms suggest.¹⁸¹ Moreover, the traits of IP assets may be directly related to the possible uses of the asset.¹⁸² Thus, the recognition of IP distinguishing traits of IP assets in IP contracts can directly influence the feasibility of a contractual use of an IP asset. The role of IP distinguishing traits in IP contracts is exemplified by a view of “fenceposts” as marking the boundaries of an IP asset, and the potential for IP assets to act as standardized property forms, as discussed below.

1.3.1 Shifting the Fenceposts of IP Assets in IP Contracts

To examine the relationship between IP assets and IP distinguishing traits and the role of IP assets in IP contracts, it can be instructive to conceptualize IP assets as existing within a set of fenceposts. This view reflects the analogy offered by the Supreme Court of Canada.¹⁸³ The fenceposts mark the perimeter wherein the IP asset (comprised of traits) exists. IP distinguishing traits need not be the only traits within the fenceposts. However, IP distinguishing traits are those that must be situated within the fenceposts because they are the core of an IP asset.

Thus, while fenceposts mark the boundaries of an IP asset, they also contain the content of the IP asset, including the IP distinguishing traits. Consequently, when contracting parties

¹⁸⁰ Davidson, "Standardization and Pluralism in Property Law", *supra* note 112 at 1615. IP assets are defined as providing “rich examples of stability in form coupled with dynamism in content.”

¹⁸¹ Authors characterize IP asset as “collections of valued attributes that are hard to measure” and comment that these attributes help define IP assets as a form of property (Smith, "Institutions and Indirectness in Intellectual Property", *supra* note 150 at 2085). See also: Jack Russo et al., "Inventors and their Innovations: Intellectual Property and the Evolution of its Regulation" (2008) 947 PLI/Pat 1213 at 1223. Russo et al, describe IP assets as property “not because they are naturally proper to any one person to the exclusion of others, but because the law says these assets should be invested with similar attributes as tangible property. Intellectual property has status in law because the law invests it with said status.”

¹⁸² Smith, "Institutions and Indirectness in Intellectual Property", *supra* note 150 at 2086.

¹⁸³ See: *Free World Trust v. Électro Santé Inc.*, [2000] 2 S.C.R 1024; and *Whirlpool Corp. v. Camco Inc.*, [2000] 2 S.C.R. 1067.

attempt to alter, distort or omit an IP distinguishing trait through contract terms, in effect what is occurring is that fenceposts of an IP asset are being shifted. The shift causes an alteration, distortion or omission of an IP asset and this can occur when: (i) IP contract terms fail to recognize, or reference, core traits of an IP asset; or (ii) when core traits are augmented or diminished in magnitude. Notably, the magnitude, or level, of each IP distinguishing trait of a specific type of IP asset may differ and this difference may be evident by the placement of the fenceposts. (Appendix “B” offers further examples of the magnitude of IP distinguishing traits in IP assets.)

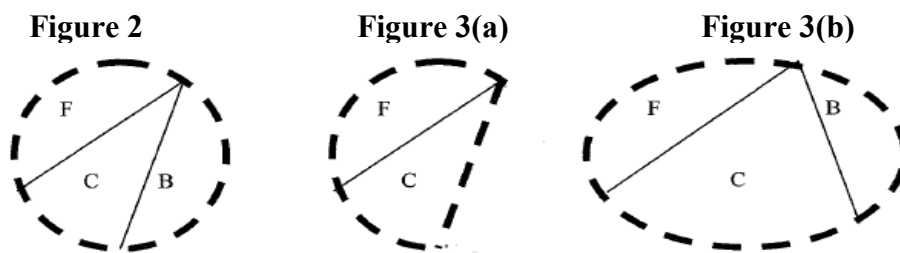
For example, the IP distinguishing trait of control will exist at a higher magnitude in a patent than in a trade-mark. This is true because a patent (which includes rights and traits that protect an innovation against anyone else who wants to copy the invention) offers a greater magnitude of a trait of control of the asset than a trade-mark (which is limited to rights and traits that prohibit others from using the mark with respect to a proscribed number of wares and/or services). Also, the trait of flexibility/evolution may be at a higher magnitude for copyright assets than for patent assets because copyright generally extends protection to subject matter immediately as new categories of works emerge.¹⁸⁴ (An example of a recently emerging work is digital sound recordings. Provisions of the *Copyright Act* originally drafted to provide protection to analog sound recording are now recognized as the basis for protection of digital sound recordings as well.¹⁸⁵) Conversely, patentable subject matter in some jurisdictions, such as

¹⁸⁴ Karen Lynne Durell, "Intellectual Property Protection for Computer Software: How Much and What Form is Effective?" (2000) 8 International Journal of Law and Information Technology, Oxford University Press 231.

¹⁸⁵ See: *BMG Canada Inc. and others v. Doe and others*, 2005 FCA 193; and *Copyright Board of Canada, Private Copying 2003-2004 decision*, 12 December 2003. The Federal Court of Appeal and the Copyright Board each accept digital sound recordings as copyright protected.

Canada, is less likely to embrace new areas of invention as readily as copyright.¹⁸⁶ Each of these occurs in part due to the temptation to utilize contract terms to define or mould IP assets.

Distortion, alteration and omission of an IP distinguishing trait may be clarified by a review of Figures 2, 3(a) and 3(b). In these examples, the fenceposts are positioned to encompass the IP distinguishing traits of balance (B), control (C) and flexibility/evolution (F). Figure 2 shows the IP asset. Shifting the fenceposts to accommodate alteration, distortion or omission of IP distinguishing traits can alter the IP asset, as shown in Figures 3(a) and 3(b).



Thus, the effect of not recognizing and referencing all of the IP distinguishing traits of an IP asset in IP contract terms and consequently changing the boundary of an IP asset, can follow at least two models. A first model is depicted in Figure 3(a) which shows the effect of contract terms that omit the IP distinguishing trait of balance. Notably, the fenceposts must be shifted, from their original positions shown in Figure 2, so as to solely encompass the IP distinguishing traits of flexibility/evolution and control. Moving the fenceposts in this manner causes an IP distinguishing trait, namely balance, to be left outside the perimeter of the posts. The result is that the trait is omitted from the IP asset altogether. The resulting asset is no longer the IP asset of Figure 2, because it lacks an IP distinguishing trait. Therefore the asset shown in Figure 3(a) does not comprise all of the core traits necessary to be an IP asset.

¹⁸⁶ Software provides an example of this difference. In Canada copyright has expanded to protect software, however software is only patentable under strict conditions. See: Durell, "Intellectual Property Protection for Computer Software: How Much and What Form is Effective?", *supra* note 184.

A second model is shown in Figure 3(b), exemplifying the effect of contract terms that augment an IP distinguishing trait of an IP asset. In this model the fenceposts must be shifted from their original positions to encompass an IP distinguishing trait of control that is at a higher magnitude than it is in the IP asset shown in Figure 2. The result of this model is not an IP asset. The asset is altered so that it does not include the core traits of the IP asset at the magnitude the traits must represent to be an IP asset.

Notably, pinpointing when the fenceposts and magnitude of IP distinguishing traits are altered sufficiently so as to render the asset no longer an IP asset is not an easy task.¹⁸⁷ The exact point of variation that crosses the threshold from being an IP asset to being an asset that is not an IP asset is difficult to explicitly identify. It is possible for a comparison to the expected magnitude of traits, as shown in Figure 2, to highlight the occurrence of an alteration.¹⁸⁸ At a magnitude that represents an IP asset, the IP distinguishing traits temper one another, as

¹⁸⁷ For each IP asset there will be an optimum magnitude of IP distinguishing traits and a proper position for the fenceposts to contain those traits. The optimum magnitudes may be similar amongst types of IP assets (e.g. patents, copyright, etc.). However, as a wide variety of types of intangible assets may be granted protection as particular IP asset types, true consistency of IP distinguishing trait magnitudes may be generally consistent amongst categories of IP types. For example, copyright is granted to works that range from photos, to performances, to digital recordings, to software code. Thus the trait magnitudes may vary somewhat between specific protected works – software copyright includes different trait magnitudes than a performer’s performance. Therefore, similarities between magnitudes of IP assets may be more apparent in types of works, such as all digital sound recordings. Fencepost positions and IP distinguishing trait magnitudes of particular assets can be compared to such optimum magnitudes to establish whether the asset is, or is not, an IP asset.

¹⁸⁸ Conceivably an alteration in the magnitudes of traits may even cause an IP asset to be altered so as to represent a different IP asset, although this will require further research and analysis. For example, should Figure 2 represent a patent and the fenceposts not be moved, but the magnitudes of IP distinguishing traits be altered to diminish control and augment flexibility/evolution, the result may be an asset that is copyright instead of a patent. In such a case the alteration does not create an asset that is not an IP asset, but an asset that is a different type of IP asset than the IP asset the contracted was to be drafted to include. All IP assets must include the core traits, but the traits may exist at different magnitudes in different types of IP assets. Thus, although the IP distinguishing trait of control exists in a patent and a trade-mark, it may have a different magnitude in each type of IP asset. Consequently, the fenceposts positions to contain magnitudes of control for patents and trade-marks, and flexibility/evolution for copyright and patents, will not be exactly the same. Therefore, the alteration of magnitudes of traits will only be noticeable by a comparison to an example of the magnitudes of traits in a specific type of IP asset, such as a patent. Figure 2 offers this type of comparison tool, showing the fencepost positions and magnitudes of traits. In the case that an IP asset is altered by way of contract terms to create another IP asset, for the purpose of this thesis this result is equivalent to creating an asset that is not an IP asset. This is so because what is created is not the intended IP asset.

discussed in Chapter 3. Yet, the exact point when the alteration causes an asset to no longer be an IP asset remains unclear. Future research may aid in establishing this point.

As another means of clarifying the effect of altering, distorting, or omitting the IP distinguishing traits of an IP asset an analogy can be drawn between an IP asset and a traditionally apple pie. A traditional apple pie consists of at least three core components, namely pastry, apples and sugar.¹⁸⁹ If the pastry is omitted from the apple pie the result of sugar and apples is applesauce. This is a different asset than a traditional apple pie. Additionally, there is a ratio between the components that must be upheld in order for the combination to represent an apple pie. If the ratio between components is reconstituted to include a large amount of pastry and a small amount of apples and sugar, the asset may not be an apple pie but an apple strudel. Thus, altering, distorting or omitting any of the core components can create a different asset than a traditional apple pie. Likewise, altering, distorting or omitting IP distinguishing traits can generate an asset that is not an IP asset.¹⁹⁰

¹⁸⁹ Notably, other forms of “apple pie” exist but these are not the same as traditional apple pie, and often such non-traditional apple pies are known by other names. Examples include, Dutch apple pie (made with a single pastry crust and a crumble top crust), Apple Tart (made to be open faced), tarte Tatin (a single crust upside down pie). None of these are typically identified as traditional apple pie.

¹⁹⁰ It is further noteworthy that IP statutes in some jurisdictions permit IP contracts to transfer less than the whole of an IP right. For example, an IP contract can include terms that extend a right of use of an IP asset that is limited to a specific territory, such as a province or city (See: *Patent Act*, *supra* note 141 s. 49(2); and *Copyright Act*, *supra* note 114 s. 13(4)). This is equivalent to applying only a portion of the IP asset which grants rights of use to a wider territory, such as a whole nation. Canadian patent legislation offers an example of this right to effect the application of a portion of an IP asset by way of contract. Section 49(2) of the *Patent Act* of Canada states that, an applicant may assign in writing “the whole or part of his property or interest in the invention” (*Patent Act*, *supra* note 141). Section 50(1) of the *Patent Act* further states that either “the whole interest” or “any part thereof” in any “patent issued” for an invention is assignable. To better clarify the argument of this thesis, it is necessary to consider what constitutes a contractually applicable “part” of an IP asset. The analogy between an IP asset and an apple pie is useful to describe the application of a part of an IP asset. It is possible for the owner of the apple pie to transfer less than the whole of the apple pie to a third party by passing a slice to another party. However, the slice must include pastry, apples and sugar to be a slice of apple pie. If the owner of the apple pie divides the pie differently, and transfers only some of the components of the pie, such as the apples and the sugar, what is transferred is not a slice of apple pie, but applesauce. Apple pie and applesauce are different assets. Refocusing the discussion back to IP assets, statutory provisions that permit the transfer of a part of an IP asset by way of contractual terms do not authorize the separation of IP distinguishing traits of the IP asset. This is apparent from the wording of the statute. For example, section 50 of the *Patent Act* references assigning part of a “patent issued”. Therefore, the asset that is assigned must be recognizable as the “patent issued”. In accordance with the premise of this thesis, a “patent issued” should include all of the IP distinguishing traits that are core traits of the patent. For example, a part of an IP asset may be a right of

Returning to the private sector norm that accepts IP assets as malleable,¹⁹¹ the recognition of IP distinguishing traits may permit a middle ground between an IP asset that is wholly malleable and one that is strictly defined. Elizabeth Winston suggests that it may be “necessary” to vary some rights that comprise IP assets by way of contract terms in some cases.¹⁹² Yet, she recognizes that contracts should not “circumvent public legislation” because this upsets the “ever-precarious balance” between protecting a right to contract of an IP asset holder and the interest of the public in the IP asset which must be preserved.¹⁹³ Thus, although this argument appears on its face to suggest that IP assets are malleable, upon closer inspection it admits that the IP distinguishing traits of control and balance need to be part of an IP asset.

Accepting IP distinguishing traits as core traits overcomes some of the uncertainty of the definition of IP assets by providing a foundational definition. As such, IP distinguishing traits may be accepted as functioning in a manner similar to the core traits of tangible property – to create a base for a stable, reliable definition of an IP asset that can be applied to resist moulding the core of IP assets through contractual terms.¹⁹⁴ Yet, IP distinguishing traits may simultaneously promote a “property form” that “represents a balance between mandatory components and private variation.”¹⁹⁵ The IP distinguishing traits are the mandatory components and the private variation may be created by way of contractual terms affecting traits other than

use of a Canadian patent by a third party solely in Ontario. Separating IP distinguishing traits distorts the IP asset so that it cannot be defined as the “patent issued”. The result of separating IP distinguishing traits and thereby applying an asset that does not include all of the IP distinguishing traits is the application of an asset other than the IP asset. It is equivalent to transferring applesauce. This is arguably not what the legislation permits.

¹⁹¹ Devlin & Jacobs, “Success, Dominance and Interoperability”, *supra* note 138 at 1169.

¹⁹² Winston, “Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property”, *supra* note 12 at 94.

¹⁹³ *Ibid.* at 94-95.

¹⁹⁴ See: Eduardo Moisés Peñalver, “Property Outlaws” (2007) 155 U. Pa. L. Rev. 1095 at 1134; and McClure, “Commoditizing Intellectual Property Rights: The Practicability of a Commercialized and Transparent International IPR Market and the Need for International Standards”, *supra* note 174 at 15.

¹⁹⁵ Davidson, “Standardization and Pluarlism in Property Law”, *supra* note 112 at 1616. This supports IP assets that are “examples of stability in form coupled with dynamism in content”, which is the definition Davidson applies to IP assets (at 1615).

the IP distinguishing traits. Thus IP distinguishing traits represent a sacrosanct portion of an IP asset.

An example of the use of IP distinguishing traits to represent a foundation for the definition of an IP asset is provided by a review of moral rights and fair dealing in copyright.

1.3.1.1 IP Asset Example: Moral Rights and Fair-Dealing of Copyright

Aspects of individual IP assets, such as moral rights and fair-dealing of copyright assets, exemplify potential sources of uncertainty for contract drafters. Moral rights rest with the creator of a work and are not transferred when a transfer of copyright from the creator to a subsequent asset holder occurs.¹⁹⁶ Moral rights are intended to protect the integrity of the creator. Whereas, fair dealing is a category of permitted uses of a work that are excluded from copyright, such as copying for: research or private study;¹⁹⁷ criticism or review;¹⁹⁸ and news reporting¹⁹⁹.

Moral rights and fair dealing may be aligned with particular IP distinguishing traits. For example, a moral right may be aligned with the trait control, as the creator of a work is granted control over his personal connection with the work. This control may continue during the term of the copyright despite transfers of the copyright to subsequent holders. Fair dealing may be described as a form of the trait balance, because it retains equilibrium between copyright holders and copyright users.

When drafting an IP contract involving a copyright asset, in accordance with the premise of this thesis, the omission of either the IP distinguishing traits of control or balance from the contract terms can distort or alter the IP asset. A contract that omits either of these traits will not

¹⁹⁶ Moral rights may be distinct from copyright in the view of some authors, yet in accordance with legislation moral rights are extended with copyright and are thereby alignable with the grant and scope of copyright. See: *Copyright Act*, *supra* note 114, Part 1 “Copyright and Moral Rights in Works” and s. 14.

¹⁹⁷ *Ibid.* s. 29.

¹⁹⁸ *Ibid.* s. 29.1.

¹⁹⁹ *Ibid.* s. 29.2.

support fair dealing or moral rights. Consequently, an asset other than the IP asset of copyright will be supported by the contract.

1.3.2 Standardized Property, Numerus Clausus, Mandatory Rules & IP Assets

The expectation that property be definable and include core traits that must be respected by contract terms is consistent with other types of property.²⁰⁰ In the words of one author, “property law resists changes to its contours for the very reason that change, as such, strikes at what decision makers typically view as one of its core traits.”²⁰¹ The recognition that property assets have core characteristics and that these must be acknowledged, referenced and otherwise supported by contracts terms is commonly defined as “formalism” or “essentialism”.²⁰² For example, standardized forms of property are recognized as having specific sacrosanct traits for contracting purposes.²⁰³ A parallel can be drawn between standardized forms of tangible property and IP assets, whereby, looking through the lens of property contracts, the relationship of IP assets and their core IP distinguishing traits presents a basis for perceiving of IP assets as a

²⁰⁰ See: Smith, "Institutions and Indirectness in Intellectual Property", *supra* note 150; and Russo et al., "Inventors and their Innovations: Intellectual Property and the Evolution of its Regulation", *supra* note 181.

²⁰¹ Peñalver, "Property Outlaws", *supra* note 194 at 1134.

²⁰² The concept of core traits and essentialism has emerged as the basis of academic study in other topics. For example, in equality law there is a ‘notion that a unitary, “essential” experience defines particular genders (Angela P. Harris, "Race and Essentialism in Feminist Legal Theory" (1990) 42 Stan. L. Rev. 581 at 585). Notably, a backlash against gender essentialism introduced anti-essentialism, but this concept is criticized as including significant gaps. Essentialism therefore remains an accepted ideology (Gowri Ramachandran, "Book Review: Manliness by Harvey Mansfield" (2007) 19 Yale J.L. & Feminism 201). See also: Carys J. Craig, "Reconstructing the Author-self: Some Feminist Lessons for Copyright Law" (2007) 15 Am. U.J. Gender Soc. Pol'y & L. 207; and Janet E. Halley, "Sexual Orientation and the Politics of Biology: A Critique of the Argument from Immutability" (1994) 46 Stan. L. Rev. 503. Although often associated with women, gender essentialism is applied to many forms of gender identification. For example: essentialist gender labels are used by people to self-identify (Mariana Valverde, *Sex, Power and Pleasure* (Toronto: The Women's Press, 1985) at 110-11); feminism seeks to widen the essentialism of religious experience to be that of humanity and not male (Rosemary Radford Ruether, *Sexism and God-talk: Toward a Feminist Theology* (Boston: Beacon Press, 1993)); essentialism of gender has developed over centuries of social enforcement (Barbara Enrenreich & Deirdre English, *For Her Own Good: 150 Years of the Experts' Advice to Women* (New York: Anchor Books, 1978)); the effects of accepting gender essentialism are wide-ranging from knowledge to careers (Louise A. Tilly & Joan W. Scott, *Women, Work & Family* (New York: Holt, Rinehart and Winston, 1978); and Greta Hofmann Nemiroff, ed. *Women and Men: Interdisciplinary Readings on Gender* (Montreal: Fitzhenry & Whiteside, 1990)).

²⁰³ Thomas W. Merrill & Henry E. Smith, "Optimal Standardization in the Law of Property: The Numerus Clausus Principle" (2000) 110 Yale L.J. 1 at 4.

type of standardized property. From this vantage the IP distinguishing traits of IP assets are sacrosanct.

The civil law doctrine of *numerus clausus* articulates the requirement that property laws “must conform to certain standardized forms”.²⁰⁴ This doctrine has also been adopted in common law, despite the tendency of common law courts to “flirt with the notion that property forms should be subject to modification by contract.”²⁰⁵ Standardized property forms are recognized as having particular traits which contracts must support. In accordance with the doctrine of *numerus clausus* courts uphold the existence of standardized forms of property and respect these in judicial decisions.²⁰⁶ The *numerus clausus* doctrine even holds its ground against the “hostility” of Anglo-American commentators to accepting that forms of property may have limitations.²⁰⁷ At this point, standardized property forms for tangible property are “so deeply entrenched, that it is rarely commented upon”.²⁰⁸

Moreover, standardized property forms are accepted as the basis of mandatory contract rules. Such contract rules require recognition of, and reference to, standardized property forms.²⁰⁹ Mandatory contract rules are distinct from default rules. Mandatory contract rules enforce promissory obligations, whereas default rules fill gaps. Often it is the courts that set

²⁰⁴ Ibid.

²⁰⁵ Ibid. at 6-8.

²⁰⁶ Ibid. Merrill and Smith note that libertarians in particular offer a critique of the *numerus clausus* doctrine as revoking freedom of contract (at 43). However, the authors also present an example of the complicit acceptance of the *numerus clausus* doctrine in the instance of landlord-tenant law reaction to a lease for tenancy during the “duration of a war” (at 11). The authors suggest that such a contract would be interpreted to fit within known property forms of either a periodic tenancy or a tenancy at will. The outcome is therefore a reluctance to accept the ability of contracting parties to create new forms of property through property contract clauses.

²⁰⁷ Ibid. at 6-8.

²⁰⁸ Ibid. at 24.

²⁰⁹ See: John H. Langbein, “Mandatory Rules in the Law of Trusts” (2004) 98 Nw. U. L. Rev. 1105. It should be noted that essentialism plays a role in this debate, which centers around “doctrines, which serve to define the exact scope of contractual obligations” and makes a distinction between mandatory rules that must be contractually obeyed and “default rules” which are variable and can be utilized to fill in contractual gaps (Richard Craswell, “Contract Law, Default Rules, and the Philosophy of Promising” (1989) 88 Mich. L. Rev. 489 at 489-90 & 523). Other terms are applied to default terms such as “background rules” or “implied-in-law” rules (Randy E. Barnett, “The Sound of Silence: Default Rules and Contractual Consent” (1992) 78 Va. L. Rev. 821 at 822).

mandatory rules.²¹⁰ These cannot be contracted out of or around, and consequently mandatory rules can overpower institutional contracting practices.²¹¹ For this reason, mandatory rules are criticized as hindering freedom of contract and the individual liberty of contracting parties.²¹² Despite this opposition, mandatory rules are routinely relied upon in contract interpretation.

Mandatory rules are addressed by academics as a means of holding contracting parties to particular promises, and thereby creating support for a “morality of promissory practices”.²¹³ However, for the purposes of this discussion it is notable that mandatory rules limit the capability of contractual terms to mould property assets, or invent new property forms.²¹⁴ Moreover, where the mandatory rules reflect core traits of property,²¹⁵ contract legal principles are constrained

²¹⁰ Todd J. Zywicki, "The Rise and Fall of Efficiency in the Common Law: A Supply-Side Analysis" (2003) 97 Nw. U. L. Rev. 1551 at 1623-25. This leads to further policy debate about the role of the courts as law makers. See: Adriaan Lanni, "'Verdict Most Just': The Modes of Classical Athenian Justice" (2005) 16 Yale J.L. & Human. 277.

²¹¹ Zywicki, "The Rise and Fall of Efficiency in the Common Law: A Supply-Side Analysis", *supra* note 210 at 1629-30.

²¹² Craswell, "Contract Law, Default Rules, and the Philosophy of Promising", *supra* note 209 at 514. In the realm of trust law specifically, the *Uniform Trust Code*, (2000), 7C U.L.A. 126 (Supp. 2003), produced by the National Conference of Commissioners on Uniform State Laws and enacted in 21 jurisdictions, is intended to codify the law of trusts. Nonetheless, it does not entirely overcome debate surrounding the identification of mandatory and default contract rules as applicable to trusts. Dana G. Fitzsimons Jr., "Navigating the Trustee's Duty to Disclose" (2009) 23 FEB Prob. & Prop. 40 at 42-43.

²¹³ Daniel Markovits, "Contract and Collaboration" (2004) 113 Yale L.J. 1417 at 1435. Markovits presents a theory that collaboration between contracting parties must invoke a form of respectful recognition of certain norms of promising that overcome contracting “egocentrism” and further support public order and social stability (at 1514-17). Such collaboration becomes tenuous in light of new electronic forms of contracting that accompany emerging digital technologies (Moringiello & William L. Reynolds, "Survey of the Law of Cyberspace: Internet Contracting Cases 2004-2005", *supra* note 28 at 443-44). Additionally, social considerations, such as the need for individuals to act upon their own knowledge which is crossed with the expectations that contracting parties will also take into account “inaccessible personal and local knowledge of others”, raises significant hurdles for the definition of mandatory and default rules (Barnett, "The Sound of Silence: Default Rules and Contractual Consent", *supra* note 209 at 841). The issue of imperfect knowledge of an asset in the course of contracting is a particular problem in the realm of IP contracts. This highlights the need for some limit upon absolute freedom of contract.

²¹⁴ *Keppell v. Bailey*, 39 Eng. Rep. 1042 (Ch. 1834) at 1049. Lord Chancellor Brougham states that a “great detriment would arise and much confusion of rights if parties were allowed to invent new modes of holding and enjoying real property, and to impress upon their lands and tenements a peculiar character...it would hardly be possible to know what rights the acquisition of any parcel conferred or what obligations it imposed” (at 1049).

²¹⁵ Langbein, "Mandatory Rules in the Law of Trusts", *supra* note 209 at 1122. Mandatory rules may be interpreted as representing core traits of property where the rules require that certain traits be contractually recognized as a part of a form of property. For example, as described below, trust law requires that loyalty, impartiality or prudence in conduct of a trust administrator be contractually recognized as invoked by a trust.

from taking a dominant position in contract interpretation. This means contract legal principles are prohibited from trumping either the importance or the role of core traits of property.

For example, the U.S. *Uniform Trust Code 2000* sets out in section 105(a) that all trust law is default rules, excepting any rules expressly represented in the code as mandatory rules.²¹⁶ None of the core fiduciary duties that may be invoked by a trust – loyalty, impartiality or prudence in conduct of a trust administrator – are listed as mandatory rules.²¹⁷ However, courts acknowledge that a contract must support at least one of the core fiduciary duties, otherwise the trust, which comprises the subject matter of the contract, is illusory.²¹⁸ This requirement is identified by John H. Langbein as “intent-implementing”, because, if it is the intent of the contracting parties to create a contract that involves a trust, then an interpretation of the contract must find it to support at least one core fiduciary duty (e.g., a distinguishing trait) of a trust.²¹⁹ Thus, recognizing standardized property forms can reduce contractual uncertainty by limiting the ability of contracting parties to alter the definition of property by way of contract terms.

Thomas W. Merrill and Henry E. Smith discuss the applicability of standardized property forms to IP assets. The authors state that “numerus clausus is probably at its weakest in the area of intellectual property”.²²⁰ The rationale for this statement is that courts are known to sanction the creation of new IP interests by contractual terms, such as a right to information in news dispatches, and a right of publicity.²²¹ As the primary source for the traits of these IP interests rests in contract terms the authors find no basis for core traits. However, not all authors agree

²¹⁶ *Uniform Trust Code (2000)*, 7C U.L.A. 126 (Supp. 2003).

²¹⁷ Langbein, “Mandatory Rules in the Law of Trusts”, *supra* note 209 at 1122.

²¹⁸ *Ibid.*

²¹⁹ *Ibid.* at 1123. In the words of Langbein, “In this way, the requirement that a trust must have enforceable duties has the consequence of placing aggregate limits on the manner and the extent to which a settler can oust the default law” (at 1123).

²²⁰ Merrill & Smith, “Optimal Standardization in the Law of Property: The Numerus Clausus Principle”, *supra* note 203 at 19.

²²¹ *Ibid.* at 19-20.

with Merrill and Smith that standardized property forms and the *numerus clausus* doctrine are ill-fitted to IP assets.²²² To provide a context for a review of IP assets as a standardized form of property this section considers two factors: costs; and IP distinguishing traits as core traits.

1.3.2.1 IP Asset Definitions & Costs

One means of evaluating the benefit of acknowledging IP assets as standardized forms of property is a consideration of costs. As IP assets are intangible and therefore cannot easily be defined by physical boundaries, the costs of permitting contractors to amend the definition of an existing IP asset through contractual terms are high.²²³ The costs of this activity can include: costs for due diligence to ascertain the chain of title for an IP asset; costs of an analysis of the IP distinguishing traits of the asset; and costs pertaining to an investigation of institutions and practices, as these may influence contract terms and thereby render legal rules unreliable to govern the definition of IP assets.

Harry E. Smith argues that permitting IP contracts to create or alter property imposes a low cost for society.²²⁴ He states that contracts are a form of communication, and therefore may be written in idiosyncratic language, unique to the contracting parties, or in language that may be understood by a wider audience.²²⁵ In the context of IP assets, Smith states that ‘in the case of land, fences and other boundaries may be easily processed by a lay audience – anyone might

²²² See: Davidson, "Standardization and Pluarlism in Property Law", *supra* note 112.

²²³ Merrill & Smith, "Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle", *supra* note 203 at 26-28. The authors recognize that the creation of new contractual property forms in an adhoc manner, without any ties to particular forms or traits, can impose particular costs. Such property forms are produced by contract terms that create new property, or alter existing property at will. In particular, the costs of this activity affects strangers, including market participants, who are third parties to a contract and cannot know the terms of a contract. An example of a "hypothetical property right" created by contractual terms that is presented by the authors is "an easement in people wearing hats" (Henry E. Smith, "The Language of Property: Form, Context, and Audience" (2003) 55 *Stan. L. Rev.* 1105 at 1147). Costs for third parties can include investigation costs, such as due diligence to establish the boundaries of the property, as well as any chain of title for either the whole or portions of the property. Knowledge of the boundaries of property is necessary to ensure that third parties do not violate the rights of a property holder (Merrill & Smith, "Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle", *supra* note 203 at 32).

²²⁴ Smith, "The Language of Property: Form, Context, and Audience", *supra* note 223 at 1174-76.

²²⁵ *Ibid.* at 1110-11.

stray onto the land – but, in the case of patents the possibility of a non-expert inadvertently “trespassing” on a patent is less likely.’²²⁶ He bases this opinion upon an expectation that a “limited audience of potential violators” exists.²²⁷ Consequently, in Smith’s estimation, few people are required to process “highly detailed” and specific information “indispensable” to IP assets, such as patents.²²⁸

Arguably Smith provides an accurate description of the difficulty of understanding IP assets caused by undefined boundaries and technical information that a definition of the asset may comprise. However, his comments regarding the level of vigilance required by third parties to determine the boundaries and scope of such assets do not match present realities. An example of the investigation costs involved in understanding an IP asset by third parties is provided by the suits launched against music-downloaders. As Chapter 3 explains, music-downloading is generally considered by the public to be a culturally acceptable practice. Yet, despite societal acceptance, copyright infringement allegations were directed by record companies at members of the public for downloading music.²²⁹ This is an instance when third parties were required to undertake significant investigation to understand: the scope of copyright in music recordings; and the right of a music provider to offer the recording for downloading.²³⁰ Some of these points were contractually defined.²³¹ Notably, these suits occurred after Smith wrote his article.

²²⁶ Ibid. at 1174-75.

²²⁷ Ibid. at 1175.

²²⁸ Ibid.

²²⁹ See: Liane Cassavoy, "Music Labels Declare War on File Swappers: RIAA files 261 lawsuits, promises more-- and offers limited amnesty for repentant swappers" *PCWorld.com* (September 8, 2003).

²³⁰ See: *Digital Millennium Copyright Act*, 1998, Pub. L. No. 105-304, 112 Stat. 2860. Another example of an occurrence that requires the public to accept investigation costs is the new technological measures for preventing digital media copying. These are now routinely applied to digital products. Circumvention of such measures is an offence. These measures and the music downloading events change the relationship between the public and the IP asset holder.

²³¹ In some instance terms of use may even be included in the liner notes that accompany a music medium, such as a CD, upon sale.

Society needs to know the boundaries of an IP asset to avoid inadvertently stepping within the asset's fenceposts.²³² In today's litigious society, trespass risks an infringement charge. Such a charge can be costly to defend in terms of both time and money. For this reason Smith's comment that non-expert third parties require little information as to the communication between contracting parties regarding an IP asset misjudges society's experience. The information cost borne by third parties when contracting parties draft IP contracts so as to alter an IP asset, or create a definition of IP assets that is inconsistent with the core traits of the IP asset, can be significant.²³³

Moreover, Chapter 3 offers a discussion of the problem posed by the lack of clarity in the realm of IP assets, including the lack of an IP lexicon. In order to comprehend its meaning the language in a contract may be subject to interpretation. The added layer of IP linguistic inconsistencies can therefore exacerbate the difficulties of the process of IP contract interpretation. Contracts for IP assets may require more investigation in order for third parties to understand the terms in comparison to contracts for tangible property. Consequently, the investigation costs may be higher than for other forms of property contracts. Additionally, discovering the exact terms of some private sector IP contracts is impossible, because the contracts are kept secret.

Furthermore, the investigation costs for members of society are not necessarily limited to the costs imposed due to IP contracts. There can be a cost to becoming a party to all of the IP

²³² Gordon, "An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent and Encouragement Theory", *supra* note 77 at 1419.

²³³ Authors argue that "allowing providers to contract for more protection than" exists in an IP asset "imposes costs upon third parties in a manner that alters the incentive/ access tradeoff" that the IP rights the IP asset represents attempt to achieve (Mark A. Lemley, "Intellectual Property and Shrinkwrap Licenses" (1995) 68 S. Cal. L. Rev. 1239 at 1274-91; and Roger D. Blair & Thomas F. Cotter, "An Economic Analysis of Seller and User Liability in Intellectual Property Law" (1999) 68 U. Cin. L. Rev. 1). As an example, alteration of an IP asset by contract terms may cause the IP asset to have uses beyond the traditional uses of the IP asset and consequently "nonowners may not even know the members of the set" of uses for an IP asset (Smith, "Institutions and Indirectness in Intellectual Property", *supra* note 150 at 2088).

contracts necessary to establish a full right of use for the collection of IP asset tools necessary to engage in some activities. For some projects, such as research, many tools may be required. In some cases rights to each tool may only be granted by way of individual license agreements.²³⁴ Should a party wishing to utilize a set of research tools fail to execute the necessary agreements they will: (i) not have rights to use any of the research tools; and (ii) be at risk of an infringement allegation by the party that holds the rights in the research tools. Certain R&D projects never even begin due to the cost of executing the multiple license agreements pertaining to all of the IP assets necessary to conduct the research.²³⁵ Both costs of producing IP contracts, and investigation costs for researching the boundaries of the IP assets, must be borne in order to be sure that a research project will not be accused of IP infringement. This IP asset tool collection cost can be significant.²³⁶

Thus, the lack of a certain definition of IP assets imposes significant costs in the context of IP contracting. Requiring that IP distinguishing traits of IP assets be supported by IP contract terms can alleviate some of these costs. A means of enforcing this requirement is to recognize IP assets as a standardized property form.

1.3.2.2 IP Assets as Standardized Property Forms & IP Distinguishing Traits

Despite the apprehensions of Merrill and Smith, IP assets may easily fill the role of a standardized property form. Requiring an IP contract to support IP distinguishing traits of an IP asset has a parallel effect to the requirement that a contract for a trust support one core fiduciary duty, as discussed above. Each instance recognizes that a property form has core traits. Trust property must include at least one distinguishing trait from a group of traits, whereas IP assets

²³⁴ See: World Health Organization, "Intellectual Property Rights and Vaccines in Developing Countries" (2004) WHO/IVB/04.21 at 12. See also: Royal Society of London et al., *Transgenic Plants and World Agriculture* (London: National Academy Press, 2000) at 31.

²³⁵ See: Organization, "Intellectual Property Rights and Vaccines in Developing Countries", *supra* note 234 at 12. See also: al., *Transgenic Plants and World Agriculture*, *supra* note 234 at 31.

²³⁶ See: Chapter 5.

must include at least the three distinguishing traits identified in this thesis – control, balance, and flexibility/evolution. The difference is that IP distinguishing traits are not an either/or option as are trust property distinguishing traits. This is due to differences in the nature of trusts and IP assets.

Aligning the requirement that IP distinguishing traits must exist in an IP asset with the *numerus clausus* doctrine, it is consistent with the doctrine that IP assets having at least three distinguishing traits may represent a standardized form of property for IP contracts. The *numerus clausus* doctrine, as well as mandatory and default contract rules, exemplify instances whereby the intersection of contract law and property law is governed by an acknowledgement that certain inviolable property traits cannot be altered by contractual terms. *Numerus clausus* and mandatory and default contract rules are enunciated in the context of laws and each offers evidence that contracts involving property must recognize particular traits of that property as sacrosanct.

Applying this premise to IP assets would obligate IP contracts to support IP distinguishing traits of IP assets, even in the absence of an explicit rule. It would furthermore counter Merrill and Smith’s premise that *numerus clausus* is weak in the area of IP.²³⁷ In fact Nestor Davidson comments that “the legal system preserves standardization to provide platforms for resolving myriad social conflicts” and standardization can further set “ground rules for defining private relations through property.”²³⁸ Thus, a result of recognizing IP assets as a standardized property form is to bring clarity to the definition of IP assets by providing a “platform” and “ground rules”.

As an additional comment *numerus clausus* can be linked to legal pluralism. In the words of Nestor Davidson:

²³⁷ Merrill & Smith, "Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle", *supra* note 203 at 19.

²³⁸ Davidson, "Standardization and Pluarlism in Property Law", *supra* note 112 at 1636.

A pluralist account of standardization approaches the *numerus clausus* as a mechanism for structuring the preconditions for ownership. The *numerus clausus* principle is a near-universal feature of property not because standardization necessarily enhances efficiency or because the forms tend to represent coherent categories of meaning. Rather, legal systems standardize property law because regulating the variety of allowable forms provides platforms onto which property law's competing social and political goals can be engrafted onto private ordering. Put another way, standardization is a near-universal feature of property systems because the phenomenon facilitates the use of property law to define, control, and regulate the public aspects of private legal relations with respect to things – the foundational top-down element of property law.²³⁹

From this vantage IP assets may function in IP contracts in the context of private legal relations. The core traits of an IP asset may therefore be influenced by private ordering considerations as well as legal rules. A legal rule acknowledging IP assets as a standardized form of property and requiring respect for IP distinguishing traits could provide a foundation for the private legal relation of the contracting parties.

Furthermore, recognition of IP assets as a standardized form of property may create a basis for a consistent definition of IP assets. Accepting the *numerus clausus* doctrine as applicable to IP assets may even “call into question any assumption that the malleability and *ex ante* state control so evident in intellectual property is somehow categorically distinct from other categories of property.”²⁴⁰ IP assets as standardized forms of property may be defined as having inviolable traits, namely IP distinguishing traits, which must be treated as sacrosanct in IP contracts.

1.4 Probing Contracts for Causes of IP Contract Strain

Having examined IP assets and recognized the role of IP distinguishing traits as core traits, an analysis of IP contracts to identify causes of IP contract strain is now possible. IP contract strain hinders an IP contract from achieving contractual uses of an IP asset. There are several

²³⁹ Ibid. at 1601.

²⁴⁰ Ibid. at 1659.

causes of IP contract strain. This thesis considers two causes: non-IP contracts; and conflict between IP distinguishing traits of an IP asset and contract legal principles.

1.4.1 A Cause of IP Contract Strain: Non-IP Contracts

In general, contract terms that move fenceposts to alter, distort or omit IP distinguishing traits, and thereby read on an asset other than an IP asset, cause IP contracts strain. Such contracts result in non-IP contracts. These are contracts that purport to be IP contracts, but in fact do not reference, and thereby support, an IP asset. Non-IP contracts are the primary cause of IP contract strain. There are multiple reasons why non-IP contracts are drafted. Some of these are discussed in Chapter 4.

1.4.1.1 IP Contracts and Non-IP Contracts

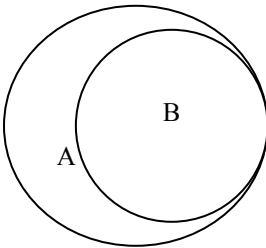
To show the difference between IP contracts and non-IP contracts it is possible to depict these contracts through set theory and Venn diagrams.²⁴¹ This depiction is offered to clarify the characterization of IP contracts and non-IP contracts. The figures below provide imagery showing the relationship between: (i) a contract, including contract terms within set A; and (ii) an IP asset having particular IP distinguishing traits within set B.

An IP contract is consistent with the premise that: a contract A (which includes all of the duties and obligations expressed by the contract terms), and an IP asset B (which includes all of the rights, duties, IP distinguishing traits and other traits, that are part of the IP asset), intersect to

²⁴¹ Marh Tiles, *The Philosophy of Set Theory: An Historical Introduction to Cantor's Paradise* (Mineola: Dover Publications, Inc., 1989) at 25. Set theory holds Aristotelian logic and the theory of syllogism at its core. These uphold “a valid argument consisting of two premises and a conclusion, which between them contain just three terms, each of which occurs twice”. For example, the two premises may be represented as closed sets A & B and the conclusion may define the relationship between these sets. A closed set may contain a finite number of limit points (at 202). The points of a closed set include those within the circle as well as those constituting the boundary of the circle. An axiomatic approach to set theory is also possible; this sees sets and the relationship between sets as: (i) expressing basic truths about particular types of objects; (ii) providing the “basic building blocks and principles for constructing a universe of objects of a certain kind”; or (iii) offering the rules of a “game” that is meant to employ new symbols that are capable of particular moves that correspond to certain proofs (at 118). See also: Keith Devlin, *The Joy of Sets* (New York City: Springer Verlag, 1993); and Matthew Foreman & Akihiro Kanamori, ed. *Handbook of Set Theory* (New York City: Springer Verlag, 2009).

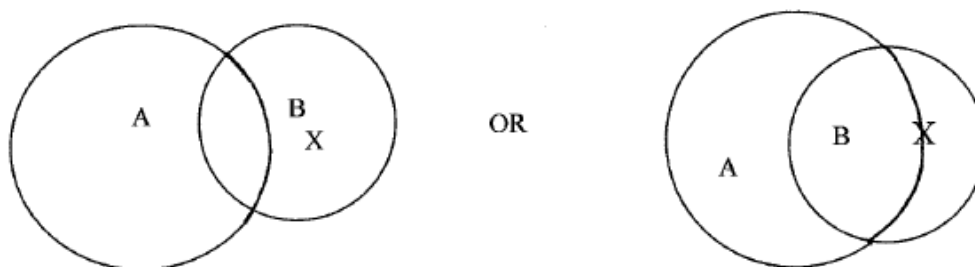
have the result that B is supported by A and B is part of A. An alternative form of this statement is to say: there are no B's that are not A's. This relationship is depicted in Figure 4.

Figure 4



A contract that is a non-IP contract, omits, alters or distorts an IP distinguishing trait, and therefore the contract terms do not support the IP distinguishing traits of an IP asset. This invokes the premise that: a contract A, and an IP asset B, intersect to have the result that B is not supported by A, and therefore some B's are not A's. An alternative form of this statement is to say: there is at least one B that is not part of A. This relationship is depicted in Figure 5.

Figure 5



The Venn diagrams of Figures 4 and 5 show the effect of altering the relationship between sets. This is essentially a question of identity. Figure 5 in particular shows an IP distinguishing trait as represented as "x". In each example of Figure 5, the "x" sits either fully outside or partially just beyond the boundary of A. This represents an IP distinguishing trait that is either fully outside the contract and is therefore omitted, or a trait that is altered or distorted so that part

of the trait is pushed beyond the boundary of the contract. Collectively Figure 5 illustrates that, if not all of the IP distinguishing traits of IP asset B are included within contract A, then the subject matter that is included in contract A are IP distinguishing traits that are less than the whole of the set B. This means that less than the whole of set B, specifically less than all of the IP distinguishing traits of the IP asset, is supported by the terms of contract A. Consequently, less than the whole of the IP asset is within the boundary of the contract.

Any attempt to utilize the contract of Figure 5 as if it includes a whole IP asset must create IP contract strain. Contract A does not include the whole of IP asset B, so it will be impossible to cause contract A to undertake a contractual use of the whole of the IP asset B. Additionally, subsequent contractual uses of the IP asset will be undermined. Contract A is therefore a non-IP contract affected by IP contract strain.

1.4.1.1.1 Non-IP Contract Example: Monsanto's Technology User Agreement

The Technology Users Agreement of Monsanto offers an example of a contract affected by IP contract strain. Monsanto Canada Inc. ("Monsanto") is a subsidiary of Monsanto Company, a U.S. entity with headquarters in St. Louis, Missouri. As a company Monsanto, "is focused on agriculture and supporting farmers around the world in their mission to feed, clothe and fuel our growing world. [It is] an agricultural company."²⁴² Along with other products, Monsanto sells genetically-engineered canola seed. The company's Technology User Agreement ("TUA"), which all purchasers of Monsanto's seed were required to execute, prohibits any purchaser from saving seed from a crop to replant in future years. Courts characterize the TUA as an acceptable IP contract.²⁴³ However, an analysis of the TUA in accordance with the definitions provided in this thesis indicates that it is a non-IP contract.

²⁴² See: <http://www.monsanto.ca/>.

²⁴³ *Monsanto Canada Inc. v. Schmeiser*, [2004] 1 S.C.R. 902. See: Chapter 4.

The TUA is a license agreement. Licenses are a normal part of IP business in domestic and international transactions. A license may “cover patents, trade-marks, technical assistance, and other matters. Licensing agreements typically call for the licensees to pay a certain percentage of its sales to the licensor, plus a flat fee for technical help in some cases. Ownership of any property rights is retained by the licensor. Licenses give permission to do some thing that would otherwise be an infringement of the property rights”.²⁴⁴ This form of contract is popular for many reasons:

While it has not always been so, patent licensing agreements are now generally considered to be desirable because of the role they play in the development of new products and processes, and in disseminating innovation. For example, the ability to contribute a patent to a business relationship through the grant of license allows smaller firms to gain access to the resources of larger partners. Also, patent licenses facilitate the transfer of technology that might not otherwise be available to the licensee until expiration of the patent. However, contractual provisions often found in licensing agreements can create a number of competition law issues. For example, in exchange for the rights to use the licensed patent, the licensee not only agrees to make payments to the licensor, but usually will also agree to be bound by various restrictions and limitations on the use of the licensed patent and other aspects of its business activities.²⁴⁵

The extra restrictions and limitations placed upon use of Monsanto’s technology by its TUA are not necessarily recognized as such, but are assumed to be based in the patent right.

Yet, although seed purchasers may assume that Monsanto’s TUA terms are grounded in its patent right, a patent right does not explicitly restrict use of progeny of the initial invention. A patent grants an exclusive right over the sale and use of the claimed aspects of the seed. Therefore, the TUA terms impose a policy of use that is stronger than the patent right.²⁴⁶ As a

²⁴⁴ Keith E. Maskus & Guifang (Lynn) Yang, "Intellectual Property Rights and Licensing: An Econometric Investigation" in Carsten Fink & Keith E. Maskus ed., *Intellectual Property and Development: Lessons from Recent Economic Research* (Washington: World Bank & Oxford University Press, 2005) 111 at 119.

²⁴⁵ Alan Gutterman, "Inter-Firm Co-operation, Competition Law and Patent Licensing: A US-EC Comparison" in Ruth Towse & Rudi Holzhauser ed., *The Economics of Intellectual Property*, vol. 5 (Cheltenham: Elgar Reference Collection, 2002) at 143.

²⁴⁶ Maskus & Yang, "Intellectual Property Rights and Licensing: An Econometric Investigation", *supra* note 244 at 111-13.

consequence, the TUA terms over-inflate Monsanto's patent right, either by augmenting the IP distinguishing trait of control, omitting the trait of balance, or both, and thereby shift the fenceposts surrounding the IP asset.

Under U.S. law the scope of a patent right may be limited by the patent exhaustion doctrine – an initial authorized sale of a patented item terminates the patent rights in the item. This doctrine was implemented to counter instances wherein the owner of a patent limited the use of patented products to secure market control of unpatented items.²⁴⁷ The terms of Monsanto's TUA override patent exhaustion by limiting a purchaser's future use of a product in the name of patent rights.²⁴⁸ It is notable that the patent exhaustion doctrine is applicable in the U.S. specifically. Patent laws of other jurisdictions, such as Canada, do not explicitly support such a doctrine.²⁴⁹

In the case of the TUA, a purchaser's lack of knowledge of the true scope of Monsanto's patent, and her consequent reliance upon the contract terms as reflecting the patent asset, may therefore cause the purchaser to incur financial loss.²⁵⁰ As mentioned above, the TUA alters the

²⁴⁷ *Quanta Computer Inc. v. LG Electronics Inc.*, 2008 06-937 (Fed. Cir. App.) at 10.

²⁴⁸ It may be argued that a first sale may be inclusive of the progeny of the product. In fact, the Supreme Court of Canada comments in *Harvard College v. Canada (Commissioner of Patents)*, that it is the view of the Canadian Biotechnology Advisory Committee that higher life forms should be patentable and that relevant patent rights should cover "not only the particular plant, seed or animal sold, but also all of its progeny containing the patented invention" (*Harvard College v. Canada (Commissioner of Patents)* para. 170). The Court ultimately holds in that case that higher life forms are not patentable. As a result there is no clear indication as to whether patent exhaustion is applicable to the progeny of a purchased patented product.

²⁴⁹ Patent exhaustion exists in Canada, but it has received limited jurisprudential or legislative attention and therefore is considered unclear. The case law commentary that does exist references the law of other countries. The Supreme Court of Canada states at paragraph 100 in *Eli Lilly & Co. v. Novopharm*, [1998] 2 S.C.R. 129, that "the sale of a patented article is presumed to give the purchaser the right 'to use or sell or deal with the goods as the purchaser pleases'" (See: *Badische Anilin und Soda Fabrik v. Isler*, [1906] 2 Ch. 443 (CA), at p. 610). "Unless otherwise stipulated in the licence to sell a patented article, the licensee is thus able to pass to purchasers the right to use or resell the article without fear of infringing the patent. Further, any limitation imposed upon a licensee which is intended to affect the rights of subsequent purchasers must be clearly and unambiguously expressed; restrictive conditions imposed by a patentee on a purchaser or licensee do not run with the goods unless they are brought to the attention of the purchaser at the time of their acquisition: see *National Phonograph Co. of Australia, Ltd. v. Menck*, [1911] A.C. 336 (P.C.)."

²⁵⁰ W. David Slawson, *Binding Promises: The Late 20th-Century Reformation of Contract Law* (Princeton: Princeton University Press, 1996) at 24.

IP distinguishing trait of control of the patent asset. For example, the purchaser is agreeing to license terms that extend control beyond the exclusive right of the seller of the Monsanto seed. This occurs when the purchaser agrees not to use seed from their crop to propagate future crops. It is true that the purchaser signs a contractual agreement and therefore may be assumed to intend to comply with the TUA terms, but he or she may do so due to a mistaken belief that Monsanto has the right to impose such terms in accordance with its patent rights.

If the loss is multiplied by all of the TUAs signed the significance of the problem becomes apparent. Additionally, an interpretation of the TUA highlights conflict between IP distinguishing traits and contract legal principles (a secondary cause of IP contract strain, as discussed below). Contract legal principles instruct the purchaser to conform to the TUA terms because these reflect the intent of the parties, whereas IP distinguishing traits require an IP asset to include control as well as balance. These aspects of the TUA show that although it may represent an IP contract norm, it is affected by IP contract strain. The contract terms do not support the IP distinguishing traits of Monsanto's patent.

As a related point, it is interesting to note that Monsanto's licensing practices are presently being scrutinized by competitors and antitrust regulators. In particular, "DuPont claims, and federal and state antitrust regulators are probing whether, Monsanto is using abusive patent license provisions and other tricks of the trade to hobble the development of both the generic versions of Roundup Ready and a patented rival DuPont product, known as Optimum GAT."²⁵¹ Although this review does not consider IP distinguishing traits of an IP asset expressly, the basis of the complaint recognizes that Monsanto's contractual use of its IP asset may not be consistent with the scope of that asset.

²⁵¹ Roger Parloff, "Monsanto's Seeds of Discord" *Fortune Magazine* (May 11, 2010), online:<http://money.cnn.com/2010/05/06/news/companies/monsanto_patent.fortune/index.htm>.

DuPont argues that Monsanto's licensing practices in relation to its Round-up Ready resistant soybeans, whereby limitations similar to those in the TUA are placed upon consumers regarding seed use, are overly restrictive. In particular, Monsanto is accused of prohibiting competitors "from even starting the multiyear process of developing, testing, and internationally registering generic versions of Roundup Ready until its patent term has expired" in 2014, which will "effectively extend its monopoly an extra five to seven years, if not longer."²⁵² Specifically, Monsanto's licensing practices prevent rivals from accessing the seed in a manner that would allow them to undertake R&D directed to creating a generic seed product having Round-Up Ready resistance included as a stacked trait.

In light of the discussion above, this commentary provides another example of Monsanto augmenting the trait of control in its patent asset by restricting access to its seed and thereby thwarting specific user purposes. In this instance, as in the TUA discussed above, Monsanto asserts the contractually imposed limitation as permissible in accordance with its patent asset ownership. Therefore, Monsanto's contracting practices do not merely represent an instance of requiring compliance with contract terms that extend significant control over the product it sells, but Monsanto further justifies its right to the control it imposes as derived from its patent assets.

Utilizing the set of IP distinguishing traits as a framework may aid antitrust regulators in this case. The set of traits may be applied to determine whether Monsanto's licenses actually reflect an asset that is beyond the scope of Monsanto's actual patent assets. Such a use of the set may establish that Monsanto's contracts are affected by IP contract strain.

1.4.1.2 Non-IP Contracts & IP Contract Practice

IP distinguishing traits are not routinely identified in the course of present day IP contract drafting or negotiation. This is not surprising as the traits are not expressly listed in legislation

²⁵² Ibid.

but are discernable from IP theories, as discussed in Chapter 3. Theory plays a minimal role in legal practice and legal education generally and virtually no role in business training.²⁵³ Paul W. Kahn points out that when lawyers contemplate legal theory “they are likely to express the view that it is...too disconnected from the practice of law to be of any interest or use.”²⁵⁴ Theory is viewed as existing outside the realm of practical law,²⁵⁵ and is therefore routinely ignored in the course of drafting contracts and devising corporate strategies.²⁵⁶

One author notes that “only since about 1970 has legal theory been a major focus of legal thinking.”²⁵⁷ More recently there has been a concerted effort over the last decade to include philosophy and theory in the law school curriculum.²⁵⁸ The addition of theory to legal thinking and education has had a minimal effect upon daily legal practice. Some groups, such as pragmatists, believe that theory is completely unnecessary, as discussed in Chapter 7.²⁵⁹ However, as is discussed in more detail in Chapter 3, in the case of IP contracts, ignorance of theory can mean that contract drafters are entirely unaware of the fact that IP assets have core traits. As mentioned above, the identification of the IP distinguishing traits of IP assets can provide an important framework for IP contract analysis and may be applied by either drafters or interpreters of IP contracts.

Moreover, contract terms that ignore IP distinguishing traits to effect the contractual use of an IP asset in an exclusive manner can produce benefits for private sector entities. For example,

²⁵³ See: Joff Wild, "The Phillips Formula" *Intellectual Asset Management Magazine* 28 (2008) 27 at 29. This statement reflects a general overview of business training and legal education. The effect of IP education will vary amongst institutions.

²⁵⁴ Paul W. Kahn, *The Cultural Study of Law: Reconstructing Legal Scholarship* (Chicago: The University of Chicago Press, 1999) at 7. (at 1).

²⁵⁵ Richard A. Posner, *Frontiers of Legal Theory* (Cambridge: Harvard University Press, 2001) at 3.

²⁵⁶ Kahn, *The Cultural Study of Law: Reconstructing Legal Scholarship*, *supra* note 254 at 1.

²⁵⁷ Posner, *Frontiers of Legal Theory*, *supra* note 255 at 3.

²⁵⁸ See: Brad Faught, "The Evolution of Law and Philosophy at UofT Law School" *Nexus* (Spring/Summer 2005)17-21.

²⁵⁹ See: Adam D. Moore, "Intellectual Property: Theory, Privilege, and Pragmatism" (2003) 16 Can. J.L. & Juris. 191.

the market advantage obtained by Monsanto through its TUA demonstrates the advantage that non-IP contracts can offer a company. (Monsanto's seed can only be obtained from Monsanto sellers and sold to Monsanto approved buyers. Purchasers are not even permitted to retain seed from their own crops to plant in the future.) These types of contract terms can influence the activities of other market participants.

For example, market participants cannot engage in sales of their product with Monsanto's competitors, or even use the fruits of the product they purchase to meet their own seed requirements in the future. They are forced to purchase additional seed of the same variety from Monsanto annually. Moreover, the market cannot rightfully admit a competitor selling a duplicate product because competitors are prohibited from copying the exact patented product. Therefore, there is no substitute for seed that is resistant to Round-up Ready. There may be seeds resistant to other chemicals, or seeds that are not canola seeds resistant to Round-Up Ready, but these cannot truly be "substituted" for a canola seed resistant to the chemical compound of Round-Up Ready. To obtain this type of seed the purchasers must contract with Monsanto.

Additionally, researchers or consumers wanting to undertake R&D to develop seeds utilizing Monsanto's Round-Up Ready resistant soybeans are prohibited from starting this work until the end of the patent term. This has significant effects because "In the world of ag-biotech" in contrast to pharmaceutical R&D 'a consumer...is constrained by the fact that a plant can grow from only one seed. If a farmer wants his crop to contain more than one patented genetic trait -- say, soybeans with the Roundup Ready trait and an insect-resistance gene engineered by a competitor...-- the traits must be bred into a single seed, that is, "stacked" on top of each other.'²⁶⁰ Limitation on the use of purchased seed, in particular for purposes other than sale for non-planting purposes, can thwart consumers and researchers from developing seeds with

²⁶⁰ Parloff, "Monsanto's Seeds of Discord", *supra* note 251.

stacked traits. This limits the products that can provide substitutes for the Monsanto soybeans, not only during the patent term, but for years after the patent term (e.g., years that must be devoted to R&D of generic brands). The result is that the term of Monsanto's exclusive rights in its product extends for a period of time after the patent term expires.

Thus, it can be important for a contract drafter to move beyond his legal contemplation comfort zone to produce a contract that contemplates legal considerations, such as: theory; the core traits that constitute the framework of an IP asset; and the interaction between IP assets and contract legal principles. As Ernest J. Weinrib points out "private law can be understood only from within and not as the juridical manifestation of extrinsic purposes".²⁶¹ Ripstein further notes that different areas of law, such as constitutional law and torts may think about questions in a different way, yet each "have to think about them".²⁶² Reflection on the theoretical foundation of IP assets can be integral to an understanding of IP assets and their role in IP contracts. Moreover, non-IP contracts can be the result of a failure by contract drafters to acknowledge IP distinguishing traits as the core of IP assets.

Non-IP contracts can impose significant limitations upon the use of IP assets if these contracts are imposed. If IP distinguishing traits of an IP asset are omitted, altered or distorted in contracts the result may even be a prohibition on uses of assets altogether. The example below points out that non-IP contracts are even creeping into everyday life.

1.4.1.2.1 Example: Non-IP Contracts in Every Day Life

McManis warned that shrinkwrap licenses may be extended beyond software to cover other works, such as books, and that "the next time you go to your local megabookstore, or for that matter, your friendly neighborhood public library, you may discover that all the new books come

²⁶¹ Ernest J. Weinrib, "Purpose in Private Law" *Nexus* (Spring/Summer 2005) at 26.

²⁶² Arthur Ripstein, "Theoretically Speaking" (2005) 1 *Nexus* 22 at 22.

equipped with snaps – and contain some nasty legal surprises inside”.²⁶³ A review of craft industry patterns, such as quilting patterns, shows these to contain licenses of this sort. Upon opening the pattern the user contracts to make “personal use” thereof, so that “items cannot be made for sale from this pattern” or “sharing in any manner”.²⁶⁴ These contract terms demonstrate the potential for of IP contract strain to affect everyday life. To read a book, or to make a quilt, users may have to agree to contract terms that stretch the fenceposts of the IP asset and omit, alter or distort its IP distinguishing traits.

There may not be any safeguards against such an outcome. For example, the doctrines that limit the extension of IP rights, such as the previously presented U.S. doctrine of patent exhaustion, would not apply in the above-referenced circumstances. The doctrine of patent exhaustion holds that an initial authorized sale of a patented item terminates the patent rights in the item.²⁶⁵ This doctrine is limited in application to patented items. The examples above relate to copyrighted items. Moreover, even the doctrine of copyright exhaustion may not ameliorate these examples.²⁶⁶ The lock on the book, and the restriction on selling items made from a pattern, may be deemed to be activities directly relating to an initial authorized sale.

²⁶³ McManis, "The Privatization (or “Shrink-Wrapping”) of American Copyright Law", *supra* note 28 at 187.

²⁶⁴ Lazy Girl Design, quilting pattern #123, for “Miranda Day Bag”, Joan Hawley, 2007.

²⁶⁵ *Quanta Computer Inc. v. LG Electronics Inc.*, *supra* note 247 at 10.

²⁶⁶ See: Victor Vandebek, "Realizing the European Community Common Market by Unifying Intellectual Property Law: Deadline 1992" (1990) B.Y.U.L. Rev. 1605 at 1626-27. Copyright exhaustion is defined as occurring following an authorized first sale. Once the sale is completed the copyright is exhausted and any re-sale of the work is without copyright protection. Attempts have been made to implement copyright exhaustion as an international legal rule, but at present only some jurisdictions, such as the U.S. have adopted this rule. See: Vincent Chiappetta, "The Desirability of Agreeing to Disagree: The WTO, TRIPs, International IPR Exhaustion and a Few Other Things" (2000) 21 Mich. J. Int'l L. 333; and Ryan L. Vinelli, "Bringing Down the Walls: How Technology is Being Used To Thwart Parallel Importers Amid the International Confusion Concerning Exhaustion of Rights" (2009) 17 Cardozo J. Int'l & Comp. L. 135 at 152. Moreover, copyright exhaustion is considered to be a less well articulated legal rule than patent exhaustion. See: Michele L. Vockrodt, "Patent Exhaustion and Foreign First Sales: An Analysis and Application of the Jazz Photo Decision" (2005) 33 AIPLA Q.L. 189 at 204. Although, both are acknowledged to be grounded in balance. See: Chiappetta, at 362; and Daniel R. Cahoy, "Oasis or Mirage?: Efficient Breach as a Relief to the Burden of Contractual Recapture of Copyright and Patent Limitations" (2003) 17 Harv. J.L. & Tech 135 at 145.

1.4.2 A Cause of IP Contract Strain: Conflict between IP Distinguishing Traits & Contract Legal Principles

While non-IP contracts are a primary cause of IP contract strain a secondary cause is conflict between IP distinguishing traits and contract legal principles. Notably this is distinct from tension between IP laws and contract laws. An example of the secondary cause of IP contract strain is a contract that omits the IP distinguishing trait of balance.²⁶⁷ This may be a non-IP contract, but a separate cause of IP contract strain also exists. Specifically, the IP distinguishing traits of the IP asset and contract legal principles cannot be applied simultaneously to an interpretation of this contract without clashing.

A first consideration of contracting is generally whether the contract is compliant with the contract legal principles of bindingness and respect for the intent of the parties. A contract may be assumed to impose terms that are binding on the parties. For a non-IP contract that omits the IP distinguishing trait of balance the intent of the parties may be more complex than it appears on its face. Applying the contract in accordance with its written terms will create a difficulty in light of the IP asset's IP distinguishing traits. For example, if the contract terms do not support the IP distinguishing trait of balance, then the terms do not truly support the IP asset. Therefore, allowing the contract to be utilized to achieve the contractual use of the IP asset intended by the parties becomes problematic.

Notably, it may be difficult to ascertain whether: (i) the intent of the parties is to facilitate the contractual use of an IP asset, and the contract terms fail to meet this objective; or (ii) the intent of the parties is not to undertake a contractual use of the IP asset, but instead to effect a contractual use of the asset defined in the terms of the contract. As it may never be clear which

²⁶⁷ Such a contract may have an effect commensurate to digging a large trench around an IP asset – wherein competitors will fear to tread. The result is that, due to the restrictive terms of the contract, the IP asset owner will enjoy a significant market advantage.

represents the true intent of the parties, (i) or (ii), a person involved in an interpretation of the contract will be required to make an educated guess as to whether the intent of the contracting parties is in accordance with the former or latter choices. It is also questionable whether this contract should even be binding.

The outcome is that there is conflict between the outcomes of interpreting the contract in accordance with IP distinguishing traits, and in accordance with contract legal principles. The conflict creates a dilemma for IP contract interpretation. This conflict is a cause of IP contract strain.

Contracts are used for a variety of purposes. Yet, conflict between IP distinguishing traits and contract legal principles may thwart these purposes. For example, a business sector survey of industry participants indicates, by way of a unanimous response, that industry participants draft contract terms to cause patents to block competitor activities.²⁶⁸ It is possible that the terms of such contracts omit, alter or distort IP distinguishing traits of IP assets. For example, a means of blocking the activities of competitors in a common marketplace may be to draft contract terms that omit, alter or distort IP distinguishing traits of an IP asset, in compliance with the intentions of the contracting parties. Such a contract will be virtually impossible to interpret in accordance with both contract legal principles and IP distinguishing traits simultaneously. This is problematic because, contract and IP aspects of contracts “both serve important goals, and when those goals come into conflict, we need some...means of reconciling them.”²⁶⁹ Without such a means, the result is a contract affected by IP contract strain.

²⁶⁸ W.B. Phillips & Daniel A. Dierker, "The Search for the Holy Grail?: Maximizing Social Welfare Under Canadian Biotechnology Patent Policy" *IP Strategy Today* 6 (2003) 45 at 58.

²⁶⁹ Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37 at 136.

1.4.2.1 Conflict between Traits and Principles Example: Mandela Copyright License

A copyright license executed by Nelson Mandela exemplifies the occurrence of a conflict between IP distinguishing traits of an IP asset and contract legal principles in an IP contract. In 2001 Mr. Mandela entered an agreement with his business manager, Ismail Ayob, whereby copies of copyright protected artwork depicting Robben Island as created by Mr. Mandela (the so-called Madiba artwork) would be made available for public sale.²⁷⁰ A limited number of prints would be sold and the proceeds of the sale were to be given to charity.

After the agreement was executed Mr. Mandela became aware that Mr. Ayob (and an associate, Ross Calder) “earned an estimated \$7.5-million [R2,200,000] from the sale of artwork...and that the charities never saw the money.”²⁷¹ A civil suit was launched in the Johannesburg High Court, and an initial characterization of the agreement held it was an assignment of copyright from Mr. Mandela to Mr. Ayob, granting Mr. Ayob “control over Mr. Mandela’s copyright and intellectual property.”²⁷² The case was eventually settled, prior to a final adjudication by the Court, for approximately R800,000, payable to the Nelson Mandela Trust Fund, as well as an apology from My Ayob.²⁷³

For the purposes of this thesis the effect of characterizing the agreement as a copyright assignment is of particular interest. As an assignment the agreement was considered to recognize that Mr. Ayob, as owner of the copyright, could do as he wished with both the artwork and the proceeds from the sale of the artwork. This interpretation granted Mr. Ayob’s particular liberties that relied upon the perceived broad scope of the IP asset. The interpretation further disregarded

²⁷⁰ See: Stephanie Nolen, "Mandela fights back in art feud" *The Globe and Mail* (13 May 2005) A1.

²⁷¹ Ibid.

²⁷² Ibid. See also: Legalbrief Africa, online:<http://www.legalbrief.co.za/publication/archives.php?mode=archive&p_id=Legalbrief_Africa&issueno=130&format=html>.

²⁷³ Siyabonga Mkhwanazi, "Ayob to pay money back and apologise to Madiba; Out-of-court settlement ends 'unfortunate' high court action" *The Star (South Africa)* (28 February 2007).

the negotiations between Mr. Ayob and Mr. Mandela (e.g., the parties' intent). Through this characterization the agreement may be said to be an IP contract that distorts the IP distinguishing traits (it over expresses the control IP distinguishing trait of the copyright IP asset and omits the trait of balance) and that further experiences tension between the IP asset and the contractual legal principles.

Addressing the former issue, in such a case it may have been possible to reinstate the trait of balance by raising a legal argument asserting the moral rights of Mr. Mandela. As the creator of the Madiba artwork he is granted moral rights under s. 20 of the South Africa *Copyright Act*. Infringements of moral rights are defined by s. 20 to include an "action that is or would be prejudicial to the honour or reputation of the author." Thus, it could be argued that the use of the Madiba artwork for personal profit by Mr. Ayob was prejudicial to Mr. Mandela's philanthropic reputation and his honour. Such an argument was not raised at bar, but it may have been an option to cause the trait of balance to be expressed in the copyright asset.

Looking now to the latter point problem in the IP contract, the case provides an example of a court being faced with several IP contract interpretation options. Each option has the potential to cause variant outcomes for the relationship between the IP asset and the contract legal principles. For example, as "Option A" a court could read the trait of balance into the contract terms – perhaps through the recognition of Mr. Mandela's moral right. Choosing Option A may cause the contract to read on the whole of the IP asset (including all of the IP distinguishing traits), but it may also cause tension with the contract legal principle of respect for the intent of the contracting parties. For example, it is unclear whether the intent of both parties, and Mr. Ayob in particular, was to create an agreement that omitted the trait of balance.

As a second interpretation option, Option B, a court may read the contract terms to exclude the IP distinguishing trait of balance. Option B may therefore be consistent with the characterization of the IP contract as an assignment agreement. However, the result of this interpretation may be to provide a contract that does not read on the whole of the IP asset. It may in fact cause the contract to read on an asset that is not an IP asset. As a consequence Option B may have the outcome that the terms fail to provide support for a contractual use of the copyright asset. On the other hand, this interpretation may be in accordance with the contract legal principle of bindingness. Yet, looking to another contract legal principle, it may be questionable as to whether Option B respects the intent of the parties.

Thus, this example shows how in an IP contract the IP distinguishing traits of an IP asset and contract legal principles can experience a relationship fraught with tension. Moreover, as the interpretation options show, it can be difficult to resolve such tension. Contracts wherein an IP asset and contract legal principles cannot be reconciled simultaneously provide an example of a cause of IP contract strain.

1.5 Conclusion

IP contracts create an environment wherein IP assets and contract legal principles intersect and may be expected to interact. This interaction should be respectful of certain relationships, such as the relationship between IP assets and their IP distinguishing traits. These IP distinguishing traits provide a foundational definition of IP assets. Additionally, the relationship between IP distinguishing traits and contract legal principles should be acknowledged by contract drafters to avert tensions affecting contract interpretation.

There are many reasons why IP contract drafters may fail to create contracts that respect these relationships. Several reasons reflect the IP contracting environment and its unique aspects,

such as the influence of legal rules, practices and/or institutions on IP contracting. In particular, the norm that treats IP assets as malleable by way of contract terms is a catalyst. Nonetheless, no matter what the reason may be, the outcome is the same – the creation of a contract affected by IP contract strain.

The contract may be expected to function to achieve contractual uses of IP assets in the marketplace but will ultimately be unable to achieve this result. The problem may be obscured through measures such as assumptions and judicial standards of IP contract interpretation, as discussed in Chapter 4, yet these do not address the IP contract strain.

Armed with a basic understanding of the relationships which IP contracts must facilitate between IP assets, IP distinguishing traits and contract legal principles, it is now possible to analyze IP contracts in more detail. The subsequent chapters examine contract legal principles, review IP distinguishing traits and probe the relationship between these to further analyze the effects of IP contract strain. An understanding of the causes of IP contract strain is therefore a critical building block for this thesis.

2 CONTRACT THEORIES & CONTRACT LEGAL PRINCIPLES

2.1 Introduction

This chapter highlights two contract legal principles that are routinely applied to contract interpretations, namely bindingness and respect for the intent of the contracting parties. The relationship between these principles and contract theories shows that these contract legal principles are linked to and may even be derived from contract theories. The discussion of the chapter further provides details of the prevailing legal perception of the role and justification of contracts.

Many theories vie for dominance as the defining contract theory, but no single theory is paramount.²⁷⁴ For this reason support for contract principles is examined in the context of several theories in this chapter. Prominent contract theories are reviewed to determine if these provide support for the contract legal principles of bindingness and respect for the intent of the parties. Subsequent chapters utilize these principles to review the influences upon causes of IP contract strain and its effects. Notably, the lack of a dominant contract theory has repercussions for many layers of the contract legal realm – theories, principles, institutions and legal rules (e.g. black-letter law, regulation, common law) – as each of these layers interacts with the other layers. Therefore, a lack of clarity at one level will have consequences for all levels. There is no express guidance as to which layer is the one that sets the standards for the others.

Looking to bindingness and respect for the intent of the parties, these are long-established, influential contract legal principles that are reflected in laws as well as theories, as discussed below. The activity of showing a relationship between contract theories and these contract legal principles may be considered by some academics as an obvious association. For example,

²⁷⁴ Charles Fried, *Contract as Promise* (Cambridge: Harvard University Press, 1981) at 2. Charles Fried references the search for a unifying principle contract as a “will-o’-wisp, an illusion”.

contracting parties, the judiciary and academics generally assume that the contract legal principles of bindingness and respect for the intent of the parties, individually and collectively influence IP contract interpretation.²⁷⁵ Thus, the legal principles may be deemed to generate common law. Due to the level of import ascribed to these contract legal principles it may be assumed that they can be utilized to measure the validity of legal theories. From this viewpoint, if a contract theory was found not to support either bindingness or respect for the intent of the parties, that theory may be held to be either an invalid contract theory, or one that revolutionizes the realm of contract theory, legal principles and laws.

An alternative view is that theories and principles are meant to be tightly bound.²⁷⁶ This approach considers contract theories to provide a base from which contract legal principles are derived. As such contract theories ground contract legal principles. From such a vantage it may be necessary for a contract theory to exist before a contract legal principle can be found to exist, as the principle must be supported by the theory. Therefore, if laws, principles and theories are viewed as a set of legal layers, theory lies at the base of the stack, comprising the foundation. Some authors argue that if the base level of theory is murky an understanding of contract legal principles becomes elusive.²⁷⁷

Notably, resolving the question of the order of precedence of contract theories and contract legal principles is beyond the scope of this thesis. However, the review of contract theories in this chapter shows a link between principles and contract theories. As such, both contract legal principles and contract legal theory have significant influence over contract drafting and interpretation. In particular, the review of contract theories in this thesis highlights the link

²⁷⁵ See: Chapter 4.

²⁷⁶ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 7.

²⁷⁷ Peter Benson, "The Unity of Contract Law" in Peter Benson ed., *The Theory of Contract Law: New Essays* (Cambridge: Cambridge University Press, 2001) at 118.

between the contract legal principles of bindingness and respect for intent of the parties, and contract legal theories.

As a further comment, this chapter should not be interpreted as attempting to define bindingness and respect for the intent of the parties as contract distinguishing traits – meaning traits that represent the core of contracts and that therefore must exist in every IP contract. The debate as to whether contract essentialism exists is one that has waged for many years.²⁷⁸ This thesis does not enter this forum of discussion. Whether contracts in isolation do, or do not, incorporate inherent core elements is immaterial to this thesis.

Each of the two contract legal principles identified herein is discussed in detail in this chapter. This provides a base for the review of these principles in the context of IP contracts undertaken in subsequent chapters. The discussion of contract theory in this chapter includes three primary segments. First, the historical and present states of contract theories highlight the long-running disconnect between theory and law. Second, a review is undertaken of the relationship between contract theory and each of the following contract legal principles: (i) the binding nature of contract; and (ii) respect for the intention of the parties. This involves an examination of specific contract theories. Third, the fact that contract theories do not explicitly reference subject-matter considerations and the effect of this upon IP contracts is investigated.

2.2 How Contract Theory & Principles Disconnected

Before examining contract legal principles supported by contract theories it is important to set the stage upon which present day theories perform. James Gordley suggests that the reason why it is difficult to state with authority a rationale as to why contracts are enforceable is

²⁷⁸ See: Movsesian, "Formalism in American Contract Law: Classical and Contemporary", *supra* note 115 at 116 & 118. See also: Grey, "Langdell's Orthodoxy", *supra* note 115; Eisenberg, "The Emergence of Dynamic Contract Law", *supra* note 115; *Lochner v. New York*, *supra* note 115; Schwartz & Scott, "Contract Theory and the Limits of Contract Law", *supra* note 115; and Cohen, "Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management""", *supra* note 115.

because present day contract theory has drifted apart from its roots. He notes that the doctrines have drifted, they are “cut off from their old philosophical moorings and left without any real tie to the professed philosophical beliefs of the jurists” who disseminate them.²⁷⁹ A connection is assumed between contract law and theory, but in Gordley’s opinion the bases for these ties are no longer remembered. We must look to history to understand the extent and effect of the theoretical drift. This examination is instructional to an understanding of the relationship between contract theories and contract legal principles, as is pursued later in this chapter.

2.2.1 History of Contract Theory

Aristotle and Thomas Aquinas are heralded as the originators of present-day contract theory.²⁸⁰ Although Aristotle and Aquinas may not have intended to take on this role, they were thrust into it when their writings were espoused and enhanced by the late scholastics (a group of contract theorists living in Spain during the sixteenth and early seventeenth centuries).²⁸¹ Within Aristotle and Aquinas’ works, the late scholastics found concepts of virtue and justice which they used to analyze Roman law.²⁸² The effect of this, according to legal theorists like Gordley, is that much of present-day contract law can be traced back to the work of Aristotle and Aquinas.²⁸³

For example, one virtue espoused by both Aristotle and Aquinas is the act of keeping promises which they characterize as a moral law governing promissory obligations.²⁸⁴ Thus, not only the promise itself, but what the promise will achieve, is assumed to be within the contemplation of the parties. Following this logic, Aristotle finds that two virtues are achievable

²⁷⁹ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 7.

²⁸⁰ *Ibid.* at 3 & 69.

²⁸¹ *Ibid.*

²⁸² *Ibid.* at 71.

²⁸³ *Ibid.* at 3 & 69.

²⁸⁴ *Ibid.* at 11.

through a promise: communicative justice,²⁸⁵ and liberality. The specific obligation accruing to a promising party is dependent upon which virtue is being exercised.²⁸⁶

If these concepts sound unfamiliar to the ears of modern-day contract drafters, it is because through time they were deemed too difficult to understand and consequently divorced from contract theory.²⁸⁷ Gordley argues that, although contract law continued to hold to some of the tenets espoused by the late scholastics for many years, eventually the full meaning of the original foundation of their work, namely the principles of Aristotle and Aquinas, was forgotten. An example of this is provided by the 1764 writings of Wolff who agrees that promises are binding.²⁸⁸ However, he does not elaborate as to whether it is justice or fidelity which renders the promise binding.²⁸⁹ In Gordley's opinion Wolff's primary flaw is that he does not understand the "Aristotelian doctrinal foundations" he attempts to modernize and revive.²⁹⁰ Future generations of legal theorists and jurists dropped elements which they did not easily understand and kept solely the kernel of legal principles.²⁹¹ As a result legal theories became detached from legal principles.

Simultaneously with the drift of principles from originating theory, contractual interpretation grew in importance in the eighteenth and nineteenth centuries. Consequently legal

²⁸⁵ Ibid. at 14. Communicative justice is concerned with arithmetic proportion, meaning that transactions must achieve justice by preserving, or establishing equality between parties. Consequently, when an exchange occurs between the contracting parties, the transfer supports the parties in equal positions – one party is not left with more than the other as a result of the exchange. (Aristotle distinguishes communicative justice from distributive justice.) Aquinas argues that selling an item at an unjust price, selling faulty products, and other such acts are contrary to equality. Some contract theorists consider concepts of justice to have no relevance in modern-day societies and to have been rightfully replaced by new ideals (W. David Slawson, "Why Expectation Damages for Breach of Contract Must be the Norm: A Refutation of the Fuller and Perdue "Three Interests" Thesis" (2003) 81 Neb. L. Rev. 839 at 858).

²⁸⁶ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 12.

²⁸⁷ Ibid.

²⁸⁸ Ibid. at 75.

²⁸⁹ Ibid.

²⁹⁰ Ibid. at 133.

²⁹¹ Ibid. at 134. In the opinion of Gordley, the result is that, "although they claimed that their legal doctrines rested on higher philosophical principles, these doctrines lost their original moorings in Aristotelian philosophy without finding a new philosophical anchorage. Legal doctrine and moral philosophy began to drift apart" (at 121).

theorizing moved beyond being solely within the purview of theorists. Lawyers and laypersons took up the challenge of answering questions of contract law.²⁹² Although this shift may offer gains due to the accessibility of the means of performing law reform it has been said to be offset by “a loss in philosophical depth and rigour of argument” that further widened the theory/principle gap from a crack to a chasm.²⁹³

Atiyah echoes the concerns of Gordley regarding the unmooring of legal theory and argues that establishing a link between the obligation created by a promise and the nature of the promise is critical.²⁹⁴ A danger of drifting theory is that it can lead to circular reasoning. For example, some theories argue that contracts are binding specifically because contracts are defined as having a binding nature.²⁹⁵ According to this logic a contract must be binding due to its definition which says it is binding. Such reasoning invokes the purposeless exercise of theoretical tail-chasing.

Moreover, picking and choosing aspects of predecessor theories and principles does not advance a unified contract theory. This is exemplified by the category of contract theory known as the “Will Theories”. This category of theories adopted some Aristotelian concepts, but abandoned virtues that originally accompanied will, namely promise-keeping, communicative justice, and liberality.²⁹⁶ Generally, Will Theories hold that the will of two people constitutes an agreement, or contract – “the will itself is an independent event and it alone is important for the formation of legal relations.”²⁹⁷ The result is that a contract must be enforced because it is the will of the parties that this be so. This is a simplistic explanation of Will Theories, but basically

²⁹² Ibid. at 134.

²⁹³ P. S. Atiyah, *Essays on Contract* (Oxford: Clarendon Press, 1986) at 17; and Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 132.

²⁹⁴ Atiyah, *Essays on Contract*, *supra* note 293 at 4.

²⁹⁵ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 233.

²⁹⁶ Ibid. at 161

²⁹⁷ Ibid. at 190.

the important point is that the will of the parties overrides other contracting virtues. This augmentation of the role of the will of the parties in contracts causes the definition of the contract to change. No reason need be given why the will of the parties is to be respected. Essentially it is argued that “the contract is obligatory simply because it is a contract”.²⁹⁸

Will Theory expounds a belief that particular aspects of legal principles may be dominant and therefore capable of eclipsing other aspects. This trend is now prevalent in contract law. An example is an emphasis on the will of the parties that extends in contract interpretation so as to eclipse the written terms of the contract in importance. Moreover, although the field of contract theory has moved on from the position of Will Theories, a traditional law school curriculum will likely teach some remnants of Will Theories. This occurs because common law jurisdictions still heavily reference the importance of the will of the contracting parties in contract case law.²⁹⁹ This evidences the problem created by borrowing principles from previous philosophers without an understanding of the theory that supports such principles.

To correctly and accurately apply borrowed principles future generations must at least attempt to fully understand the whole of the principle, including its justification. Unfortunately, this is not what has happened through the history of contract theory. Instead of seeking an understanding of the whole principle and its justification (including its theoretical roots), theorists pick and choose principles from preceding theories. This creates significant problems as, “for three and a half centuries, modern philosophers have been living in a world in which jurists are unable to work....Many jurists have become skeptical about the possibility of coherent

²⁹⁸ Ibid. at 163.

²⁹⁹ Slawson, *Binding Promises: The Late 20th-Century Reformation of Contract Law*, *supra* note 250 at 17.

legal doctrine...For a long time, jurists have been unable to win playing with the cards that modern philosophers have dealt them.”³⁰⁰

The practice of picking and choosing principles developed some of the contract theories that exist at present. In the disjointed landscape that encompasses multiple competing contract theories we are faced with three options: (i) to resolve inconsistencies in theory, which continues to be a pursuit of legal theorists; (ii) to develop new theories; or (iii) to re-evaluate legal principles to ensure close ties to theories are maintained. This thesis pursues the third option which involves a review of contract theories.

2.3 Evaluation of Contract Theories

While some legal scholars despair that we lack the criteria to adjudicate competing theories,³⁰¹ others, such as Steven Smith and Melvin A. Eisenberg, propose means of evaluating the theories in existence at present.³⁰²

Smith applies two questions to his analysis of contract theories: an analytic question, meant to search the nature of contract law; and a normative question, intended to probe the justification for contract law.³⁰³ As part of his analysis Smith offers instructive commentary regarding the utility and coherence of contract theories. In Smith’s opinion, the “contract as promise” theory justifies the creation of new rights where none existed previously.³⁰⁴ Promissory obligation further holds that “a promise should be kept even if it turns out to be inconvenient, inefficient, or

³⁰⁰ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 246.

³⁰¹ Benson, "The Unity of Contract Law", *supra* note 277 at 118.

³⁰² Stephen A. Smith, *Contract Theory* (Oxford: Oxford University Press, 2004) at 54; and Melvin A. Eisenberg, "The Theory of Contracts" in Peter Benson ed., *The Theory of Contract Law* (Cambridge: Cambridge University Press, 2001).

³⁰³ Smith, *Contract Theory*, *supra* note 302. After detailed deliberation Smith ultimately considers the promissory, rights-based theories to offer the most coherent answers to his two questions. He achieves this determination through the application of a set of evaluation criteria: fit, coherency, justification and transparency (at 36).

³⁰⁴ *Ibid.* at 103.

otherwise undesirable to perform it.”³⁰⁵ However, in his conclusion Smith notes that the view of contracts as promises is inconsistent with other theoretical branches, in particular efficiency and utilitarian theories.³⁰⁶ It is thus evident that even the most methodical of evaluations cannot reconcile all of the existing theories or pick from amongst them one which is clearly superior to the others.

Eisenberg also undertakes an evaluation of existing contract theories whereby he examines them as being marked by their relation to doctrinal and social propositions.³⁰⁷ An effective theory, in Eisenberg’s opinion, is one that provides a principle that establishes the best content of contract law – what contract law should be.³⁰⁸ He considers two broad categories of theories – metric and generative.³⁰⁹ Of the two, generative theories are wider in scope, being able to accommodate a large number of variables. Metric theories remain limited in the number of variables each can work with. According to Eisenberg, the number of variables a theory can accommodate is directly related to its ultimate value. He says single-value metric theories are unable to generate complete and desirable rules of contract law in and of themselves because they lack the requisite scope to do so, whereas, generative theories have this capability.³¹⁰

In the evaluation of contract theories within this thesis the aim is not to reconcile theories with each other or to evaluate their coherency. A single contract theory is not proclaimed as dominant. Instead theories are examined to determine if each encompass two common contract legal principles – namely bindingness and respect for the intent of the parties. This relationship is critical to show that these contract legal principles are commonly rooted in contract theories.

³⁰⁵ Ibid. at 163.

³⁰⁶ Ibid.

³⁰⁷ Eisenberg, "The Theory of Contracts" in at 302.

³⁰⁸ Ibid. at 206.

³⁰⁹ Ibid. Metric theories are defined as those that identify one or two variables which, if they are properly applied, result in determinative legal outcomes. Thus metric theories are likened to scientific principles. Generative theories consider methodologies that should be employed to produce the best rules of law.

³¹⁰ Ibid. at 240.

Moreover, evidence of the grounding of the principles offers legitimacy to each. This is important in light of the use of the principles in subsequent chapters to probe the causes and effects of IP contract strain.

2.4 Contract Legal Principles Supported by the Category of Contract Theories

Although this chapter fails to canvass all contract theories, what it teaches can be applied to contract theories generally. This chapter addresses several theories including: economic theory; relational theory; regulation theory; and entitlements theory. The examination of these theories is undertaken in two parts, each being organized to reflect support for a contract legal principle. The discussion of this section further highlights links between the contract legal principles.

2.4.1 Binding Nature of Contracts

Looking to the contract legal principle of bindingness first, we can start from the premise that this principle is hailed as the most salient characteristic of contracts.³¹¹ Contract theories generally attempt to justify the enforceability of contract obligations. Enforceability is achieved when a contract is recognized as binding. Economic theories are significant proponents of contractual enforceability and are often hailed as the prevailing contract theory. Economic theory dominates both legal and non-legal perceptions of contracts. For this reason this chapter begins with a discussion of economic theory.

2.4.1.1 Economic Theories

In general terms, economic theory supports the enforcement of promises through an assertion that contracts are efficient.³¹² Economic theory purports that the act of multiple parties achieving an agreement must reflect an efficient result. Such a result is achieved due to the negotiation process in which each party enjoys equal activity. Thus, equality is assumed to be

³¹¹ Slawson, *Binding Promises: The Late 20th-Century Reformation of Contract Law*, *supra* note 250.

³¹² Richard Craswell, "Two Economic Theories of Enforcing Promises" in Peter Benson ed., *The Theory of Contract Law: New Essays* (Cambridge: Cambridge University Press, 2001) 19 at 19.

inherent in contract negotiations. Additionally contracts are assumed to encompass terms that represent all parties' interests. In basic terms economic theory looks to these qualities to produce an efficient outcome, and ultimately make a contract enforceable.

In an evaluation of economic theory it is important to further note that it is an interdisciplinary field involving a combination of legal and economic thought. This is the cause of some of the confusion surrounding economic contract theory.³¹³ It is true that, in the context of contract, both the fields of the study of law and of economics are striving towards the same goal, namely the creation of efficient contracts.³¹⁴ However, this shared aim does not necessarily facilitate harmony. Legal contract theorists focus upon the rights that the contract encompasses, and consider the means by which these rights attain significance, whereas economic contract theorists consider the contract as a tool that affects institutions and trade generally. These vantages are not always compatible.

2.4.1.1.1 Economic Contract Theory – Economist Viewpoint

Jacques Ghestin exemplifies the position of an economic contract theorist. He defines a contract as a legal concept that has a functional purpose and notes that a classical contract is an exchange of goods and services facilitating a transfer of value tied to trade.³¹⁵ Although he admits that “objective law” must play a role in contract, Ghestin is confused by the emphasis legal scholars place upon rights and considers this emphasis to have the effect of blinding jurists to important aspects of trade.³¹⁶

³¹³ Posner, *Frontiers of Legal Theory*, *supra* note 255 at 31.

³¹⁴ David Martimort & Eric Malin, "Transaction Costs and Incentive Theory" in Eric Brousseau & Jean-Michel Glachant ed., *The Economics of Contracts: Theory and Applications* (Cambridge: Cambridge University Press, 2002) at 162.

³¹⁵ Jacques Ghestin, "The Contract as Economic Trade" in Eric Brousseau & Jean-Michel Glachant ed., *The Economics of contracts: Theory and Applications* (Cambridge: Cambridge University Press, 2002) at 99-101.

³¹⁶ *Ibid.* at 101. Ghestin points out that eighteenth century economists, “rehabilitated the concept of trade. Their starting point was precisely that which legal scholars had neglected, the real and broad aspect of trade, from which

“New institutional economics” is the label given to this type of view, as applied by Coase’s 1937 article *The Nature of the Firm*.³¹⁷ This school of thought holds that perfectly enforceable contracts are a goal of contract theory. However, to develop a useable theory one must admit that we do not exist in “a world where parties can costlessly think and negotiate about the future, and judges are perfect.”³¹⁸ New institutional economics further delineates an economic bias, stating that it is necessary to ascertain how contracts fit within economic theory. This can cause several issues to arise, including the inconsistent language applied in economic contract theories.

Although a common lexicon is used by both economists and jurists, the meanings of terms as applied by each may differ.³¹⁹ For example, economists understand incentive theory to be a means of coaxing either previously undisclosed information from a party or ensuring compliance with the wishes of one party.³²⁰ It is a tool intended to “describe real-world institutions and organizations”³²¹, and to consider the externalities that affect the rent-efficiency of contracts.³²² Craswell points out that the very definition of “efficiency” can be a stumbling block for

they set out to reconstitute the law...Economists thus uncovered the idea, noticed and then abandoned by legal scholars, that trade is the pursuit of necessities.”

³¹⁷ Ronald Coase, "The New Institutional Economics" in Eric Brousseau & Jean-Michel Glachant ed., *The Economics of contracts: Theory and Applications* (Cambridge: Cambridge University Press, 2002) at 45. Coase’s work introduces transaction costs into economic analysis of contracts.

³¹⁸ Oliver Hart, "Norms and the Theory of the Firm" in Eric Brousseau & Jean-Michel Glachant ed., *The Economics of contracts: Theory and Applications* (Cambridge: Cambridge University Press, 2002) at 181. Hart further states that the imperfect contracting environment means that theories must consider the weight and significance of norms.

³¹⁹ Nathan Oman, "Corporations and Autonomy Theories of Contract: A Critique of the New Lex Mercatoria" (2005) 83 Denv. U.L. Rev. 101 at 127. Oman says, ‘when economists speak of contract they are generally using the term broadly to include all voluntary transactions. It can encompass everything from simultaneous exchanges and informal deals to highly formalized long-term written agreements...In contrast, lawyers use the term contract in a much more limited way...as “a promise or set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty.”’ For example, the concept of “incentive theory” is utilized by economists and jurists in the context of contract, but it holds different meanings each.

³²⁰ Jean-Michel Glachant & Eric Brousseau, "The Economics of Contracts and the Renewal of Economics" in Eric Brousseau & Jean-Michel Glachant ed., *The Economics of contracts: Theory and Applications* (Cambridge: Cambridge University Press, 2002) at 9.

³²¹ Martimort & Malin, "Transaction Costs and Incentive Theory", *supra* note 314 at 176.

³²² *Ibid.* at 169.

economic contract theories. He defines efficiency to mean that an increase in the overall welfare of the contracting parties will be achieved.³²³

Legal contract theorists are more interested in understanding why and how contracts can be used as a reliable tool – the basis of contractual rights – not the uses contracts are put to as tools (e.g. the role of contracts in negotiations between parties).³²⁴ Moreover, economists working in contract theory assume that a “well-functioning legal system” exists.³²⁵ Whereas, legal scholars probe the basis for contractual rights and, consequently, question the adequacy of these rights as part of the legal system.

This chapter will focus upon the legal theorists’ viewpoint addressing the question of how contractual rights are formed. This emphasis does not undervalue the pursuit of economist theorists. However, legal economic contract theories are aligned with the goal of this chapter to uncover contract legal principles supported by contract theories.

2.4.1.1.2 Economic Contract Theory – Legal Viewpoint

Even though economic theory is assumed by many legal scholars and practitioners to be the dominant contract theory, many strains of economic theory exist. This section offers an overview of some of the legal perspectives of economic contract theory.

Richard A. Posner comments that legal economic theory provides a mechanism for acknowledging the similarities between situations which seem, upon a purely analytic glance, entirely unrelated.³²⁶ Such situations are actually aligned because they deal with identical

³²³ Craswell, "Two Economic Theories of Enforcing Promises", *supra* note 312 at 20.

³²⁴ Martimort & Malin, "Transaction Costs and Incentive Theory", *supra* note 314 at 161.

³²⁵ Mathias Dewatripont & Patrick Bolton, *Contract Theory* (Cambridge, Mass.: The MIT Press, 2005) at 3.

³²⁶ Posner, *Frontiers of Legal Theory*, *supra* note 255.

economic issues. In fact Posner makes the claim that: “Whole fields of law are interchangeable when viewed through the lens of economics.”³²⁷

Posner further asserts that economists provide information regarding consequences that other thinkers overlook.³²⁸ This information is the crux of economic theory and is critical to the development of rational judgements and decisions because it is the root of efficient outcomes. Modern theorists, such as Becker, have taken the importance of efficiency and expanded economics from being embedded in the market-sector, so that economic analysis is now applied to multiple areas of non-market law.³²⁹ This type of thinking admits of a natural synergy between contracts and economics.

Contract efficiency is a unifying theme in economic contract theory. It offers an excellent vantage to discover the varying lenses applied by theorists in this realm. Below are several viewpoints of efficiency in an economic contract theory context.

2.4.1.1.2.1 Efficiency & Wealth:

Posner argues that an efficient contract is one that involves wealth facilitation and has a normative nature. Wealth in this context does not merely mean money, but encompasses a more social benefit view of wealth.³³⁰ The normative nature is an important element as it is the reason why a contract must be obeyed. In Posner’s opinion, contracts are normative because they support an efficient outcome that promotes social wealth. Contracts that are not efficient,

³²⁷ Ibid. at 40.

³²⁸ Ibid. at 51.

³²⁹ Ibid. at 61.

³³⁰ Ibid. at 304. While choosing an appropriate contract theory, Posner rejects the utilitarian theory, and suggests that “utility” should be substituted by “wealth”. In Posner’s opinion the concept of wealth is more than merely monetary. He holds wealth to encompass all forms of owned value measured by its transaction market value. Posner defines wealth as: “all the valued objects, both tangible and intangible, in society, weighted by the prices they would command if they were to be traded in markets. In other words, the market transaction is taken as paradigmatic of morally appropriate action” (at 98). See also: Atiyah, *Essays on Contract*, *supra* note 293 at 161.

meaning they diminish social wealth, may be deemed to be bad and consequently unenforceable.³³¹

2.4.1.1.2.2 Pareto Efficient

Michael J. Trebilcock argues that contracts are efficient if they strive to create a state of mutual improvement for the parties. Such contracts are “pareto efficient”.³³² When this is not possible economists must judge the contract based upon its social welfare effect.³³³ Trebilcock establishes four criteria which must be integrated into contract law to ensure a pareto optimal outcome. Contract law must: (i) set remedies for contractual breach³³⁴; (ii) encompass implied terms which parties may expressly contract out of if the terms are inappropriate to the agreement³³⁵; (iii) include default or background rules to fill in gaps in contracts,³³⁶ and (iv) include a set of excuses for contract enforcement whereby the enforcement of efficient exchanges is permitted and the enforcement of inefficient transactions is discouraged.³³⁷ Collectively these four elements of contract law act to support contract efficiency and enforceability.

³³¹ Posner, *Frontiers of Legal Theory*, *supra* note 255 at 98-102.

³³² Michael J. Trebilcock, *The Limits of Freedom of Contract* (Cambridge: Harvard University Press, 1993) at 7. Trebilcock admits that non-voluntary agreements can meet the pareto efficient criteria, but this is rare. Most non-voluntary agreements create winners and losers. Posner states that, “a state of affairs is Pareto optimal if it cannot be changed without making at least one person worse off, and it is Pareto superior to another state of affairs if it makes at least one person better off and no one worse off.” Posner, *Frontiers of Legal Theory*, *supra* note 255 at 100-101.

³³³ Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332 at 7-8. Trebilcock says the judgement must consider, “whether the net effect of these decisions is an increase in social welfare as judged by all affected individuals in terms of the impact of such decisions on their levels of present or prospective utility.” As this determination is extremely difficult to measure, and in the opinion of some, entirely unmeasurable, economists often limit their contractual analysis to the welfare of the parties to the agreement (at 8). The goal is the minimization of divergences between private costs and social costs as well as between private benefits and social benefits (at 10).

³³⁴ *Ibid.* at 16. These may arise as conventions in some societies. Codified or common law remedies act as a check on opportunism which is necessary for modern society.

³³⁵ *Ibid.* This element will be discussed at greater length in Chapter 4.

³³⁶ *Ibid.* at 17. The rules should be formed to “maximize the parties’ joint welfare” and be one to which rational parties would have agreed.

³³⁷ *Ibid.* The basis for applying an excuse is to be a Paretian perspective which considers the consequences for the parties – parties are left better-off or worse-off.

2.4.1.1.2.3 Efficiency & Incentives

Rather than characterizing an efficient contract, Richard Craswell, looks at the possible outcomes of pointing to efficiency as the basis for enforcing promises. He identifies two possibilities: performing a promise fosters efficiency;³³⁸ or creating a set of incentives through promises fosters efficiency.³³⁹ In Craswell's opinion, the best means of attaining efficient enforceability is to balance the incentives involved in a problem.³⁴⁰ Thus, he finds that an incentive-based analysis of efficiency is preferable.

Incentive-based efficiency deals with a wider group of variables than mere performance and is able to address a larger scope of situations than the performance-based understanding of efficiency. An incentive-based efficiency viewpoint promotes a result whereby, when performance is no longer efficient, the combination of incentives created by a promise may still

³³⁸ Craswell, "Two Economic Theories of Enforcing Promises", *supra* note 312. Pitfalls in the understanding of efficiency must be avoided. Efficiency of performance is the meaning often attributed to an economist's meaning of "efficiency" in non-economic literature, but this is a mistaken premise. A focus upon performance promotes the assumption that economic contract theory is akin to the theory of economic efficient breach. This is too narrow a definition of economic contract theory (at 23). Furthermore, an assumption that economic efficiency is a performance-based evaluation fails to consider the correct variables and assumes that promises must either: oblige performance; or lack moral force (at 27). A plethora of problems arise from this assessment of efficiency, and these stir-up many questions. For example: If the efficiency of contracts occurs because the promises are made voluntarily by contracting parties, does this necessarily mean that all contracts must be binding? Moreover, law excuses some contracts from enforceability (e.g. contracts executed under duress or fraud), but what happens when circumstances change for the parties during the life of the contract; should a contract be excused in this case due to an altered situation? Craswell points out that current judicial decisions suggest that if a change in circumstances is drastic then a contractual agreement may be put aside (at 26). However, he also points out that, although the judgement is based upon efficiency assessments in many such cases, the understanding of efficiency held by economists has moved on from this relatively simplistic view applied to a more complex evaluation (at 26).

³³⁹ *Ibid.* at 19. The evaluation which economists rely upon considers the efficiency of incentives created by a contract. The argument holds that contractual obligation involves an assessment of the incentives created by contractual promises. The most obvious incentives are those created by the threat of damages. The question must be asked is it more efficient to meet the contractual obligations or to pay damages. However, other incentives have been added to the list over time (at 28). Recent economic literature focuses on the issue of how enforceability affects the efficiency of the parties' reliance (at 29). Unlike a performance-based consideration of efficiency, an incentive-based analysis understands enforceability to be a matter of degree, not an all-or-nothing proposition. Moreover, enforceability does not necessarily require performance of a contract, but may be enforcement through a monetary penalty instead (at 26).

³⁴⁰ *Ibid.* at 30. This can involve considering multiple forms of incentives, and weighing even those that appear to conflict. For example, Craswell points out that the form of enforceability that optimizes incentives to perform may differ from those that incentivize reliance. Both types of incentives must be evaluated in order to arrive at an efficient enforceability level.

be efficient. As such, incentive efficiency may justify the enforcement of a promise where performance efficiency fails.³⁴¹

2.4.1.1.2.4 Efficiency & Freedom of Contract

Atiyah considers the application of an efficiency result as a justification for the enforceability of contracts in the context of the effect of contracts upon freedom of choice. Atiyah argues that binding contracts revoke the right of an actor to make choices that do not correspond with contractual terms. Thus, the freedom of the parties is impinged by contractual terms.³⁴² Other contractual efficiency arguments assume that mutually agreed upon terms must represent what is best for the contracting parties. Atiyah disagrees and proposes that contracting parties may not be the best judges of their own interests³⁴³ and consequently, contract terms may not represent what is truly “best” for the parties. As a result contract terms may be inefficient.³⁴⁴ Notably, Atiyah sets corporate contracts in a league of their own, finding that such contracts may be able to effectively balance risks to achieve efficiency through contractual terms. Thus,

³⁴¹ Ibid. at 35. Craswell tests the incentives-based theory against several situations in his article and finds that the theory adequately addresses issues which stump the performance-based efficiency evaluation. Furthermore, he argues that enforceability gives contract a purpose. Consequently contractual terms must be accepted as binding as a means of ensuring a contract is enforced. For example, even in the situation wherein performance of the contract may no longer be efficient, it is possible for economic theory to require that the contract be respected as binding due to the imposition of an incentive-based efficiency argument. Efficiency may be found to exist upon a consideration of a wider view of the contractual circumstances than just the aspect of performance. As economic theory rests upon the tenet that contracts must be binding to support efficiency, if a contract is deemed efficient when viewed through an incentive-based efficiency lens, then the contract must be respected as enforceable, which means it is binding.

³⁴² Atiyah, *Essays on Contract*, *supra* note 293 at 161.

³⁴³ Ibid. at 155. Some economic contract theorists assume that parties voluntarily entering into a contract are undoubtedly the best judges of their own welfare (Craswell, "Two Economic Theories of Enforcing Promises", *supra* note 312 at 37).

³⁴⁴ Craswell, "Two Economic Theories of Enforcing Promises", *supra* note 312 at 25. Craswell addresses this concern and points out that some changes in circumstances, such as fraud or duress, negates the ability of a contract to increase the parties' welfare, and therefore negates efficiency. Such contracts should not be enforced if there is a total lack of efficiency in the contract. As has already been discussed, performance-based inefficiency does not guarantee a total lack of efficiency. Efficiency by other means, such as incentives, may still exist (at 35). However, other economists argue that if altered circumstances offset the balance or incentives represented by the contract, parties may be relieved partially or fully of their promises (at 36).

corporate contracts may offset the costs of denying contracting parties the right to change their minds after a contract is executed.³⁴⁵

2.4.1.1.2.5 Efficiency & Fairness

An additional issue is whether the distribution of entitlements achieved by contracts is fair, and therefore efficient.³⁴⁶ Atiyah suggests that the efficiency arguments of the economists do not actually determine if the assumption in law that contracts should be binding is truly sound.³⁴⁷ Modern economic theory aims to achieve an efficient amount of reliance upon contractual terms so that enforced parties receive “an incentive to rely efficiently but no further.”³⁴⁸ This view offers a greater breadth to the means and limits of enforceability, while still upholding the general tenet that contracts are binding.

From the preceding text it is obvious that economic contract theory offers a variety of characterizations of efficient contracts. Although the definitions granted to “efficiency” vary amongst scholars, it is clearly a basic tenet of economic contract theory. Efficiency is encompassed by the contract legal principle of bindingness. The ability of parties to form an agreement will result in an efficient contract. Furthermore, it is the efficiency of the contract that

³⁴⁵ Atiyah, *Essays on Contract*, *supra* note 293 at 169. While Atiyah opposes the assumption that free and voluntary exchange is to be advantageous to the parties absent third party effects, he allows that private sector agreements may be able to build terms to ensure the resulting contracts are efficient. Atiyah may accept corporate contracts in part because these agreements normally offer an alternative to strict compliance, in that parties can “accept an obligation either to perform or to pay some other agreed-upon measure of damages” (Craswell, “Two Economic Theories of Enforcing Promises”, *supra* note 312 at 27). The outcome is still efficient in the view of some economic theorists, as it involves a commitment to a promise (whereby the promise includes either performance or payment).

³⁴⁶ Atiyah, *Essays on Contract*, *supra* note 293 at 134. Atiyah says: “The fact that the law of contract, like the Ritz Hotel, is open to all, does not mean that the distribution is fair to all alike”. The concern is that those who have skills to manipulate the system to their advantage will obtain a greater share than is achieved by others. It is doubtful that the outcome of such a contract is truly efficient.

³⁴⁷ *Ibid.* at 159. Atiyah says, “it is clear that much of the theory being drawn upon by writers on economic issues in contract law appears to be utilized to bolster up the sagging structure of classical contract theory” (at 158). Economic theorists oppose this view believing that enforceability of contracts does not have to be an all-or-nothing situation; degrees of bindingness can be supported (Craswell, “Two Economic Theories of Enforcing Promises”, *supra* note 312 at 30).

³⁴⁸ Craswell, “Two Economic Theories of Enforcing Promises”, *supra* note 312.

causes it to be enforceable and in turn this enforceability requires that the terms be held as binding.

2.4.1.2 Relational Theories

Relational theory does not find justification for the binding nature of contract in the efficiency of the agreement between the parties. Instead agreements are recognized by relational theory as existing amongst societal relationships and are consequently composed of social, moral and legal ideas.³⁴⁹ From the vantage of relational theories, contracts are about interaction. Speaking of the traditional economic analysis of contract Atiyah says:

The first question, they would urge, is whether there is, simply is, an agreement, as a pure matter of fact; the second question is whether that agreement ought to be legally recognized as creating an obligation, or perhaps ought even to be recognized as creating a moral obligation. Again, this view seems to me to be wrong, both descriptively and normatively. I do not believe we can identify such a thing as an ‘agreement’ as a pure matter of fact; an agreement is a social or moral or legal construct, and is therefore necessarily already imbued with our social or moral or legal ideas.³⁵⁰

The outcome is that the binding nature of contracts rests in the realm of community and is influenced by society’s ideas.

Several aspects of contract, including some derived from the environment surrounding a contract, cause it to be binding – “reciprocal benefits, acts of reasonable reliance, and voluntary human conduct.”³⁵¹ Not all relational contract theorists agree about the weight of social influences upon the binding nature of contract. For example, Atiyah assumes that changes in the contracting environment, caused by factors beyond the contracting parties’ control, provide adequate justification for limiting the force of bindingness on some contracts. Whereas Scanlon is not sure that reducing bindingness is the correct outcome. Despite these minor variations,

³⁴⁹ Atiyah, *Essays on Contract*, *supra* note 293 at 5.

³⁵⁰ Ibid.

³⁵¹ Ibid. at 43.

relational theorists generally agree that contracts should be respected as binding. We can look further to Atiyah and Scanlon to view distinctions in relational contract theory that ultimately arrive at this conclusion.

2.4.1.2.1 P.S. Atiyah

There are many different forms of cooperative activity and social interaction, and Atiyah believes that contract law should likewise be envisioned as aligned with particular families of situations. By this he means a class of related circumstances may all benefit from the application of a similar contract. This mode of understanding contractual obligation differs greatly from that of economic theory because it removes the aim of the contract from solely relying upon the intent of the parties.³⁵² Atiyah does not suggest that intent is not a relevant factor in contractual obligation, but rather that it should not be the paramount factor.³⁵³ Contractual obligation is created by a mixture of inter-related elements, including “reciprocal benefits, acts of reasonable reliance, and voluntary human conduct.”³⁵⁴ These factors, some of which lie beyond the parties to a contract, must all be considered in relational contract theory.³⁵⁵

For example, although relational theorists agree that contracts should be binding, they also consider influences outside a contract upon its terms. As has been mentioned earlier, situations may change mid-way through a contract’s lifetime. Due to circumstances outside their control, parties to a contract may need to alter the original agreement. Thus, although a contract is to be binding, it may be necessary to temper this principle. While economic theory is bound to consider the outcome of such a situation in terms of how it affects the parties to the contract, relational theory takes a wider view and understands that, “changing your mind imposes costs on

³⁵² Ibid. at 13. Atiyah comments that modern day concepts of contracts hold that contracts are about what is intended by the parties, rather than what the parties actually do.

³⁵³ Ibid. at 25.

³⁵⁴ Ibid. at 43.

³⁵⁵ Ibid. at 168.

other people, and these are the costs which the normal moral and legal views about binding agreements are designed to avoid. But not being able to change your mind imposes costs too; and these costs are habitually ignored by moral and legal views about binding agreements”.³⁵⁶

What is required is an external viewpoint, one that considers the wider social or moral implications of a situation. Atiyah considers this question as an aspect of legal entitlement. He says,

questions of entitlement can be determined by social agreement, or by rule or by custom and precedent, or perhaps even by simple coincidence of behaviour...Obligations within the social group can just be created because the social group is in charge of the rules of the group, and does just create the rules....The position of the individual thus differs from that of the group. He cannot just create moral rules or moral obligations by what he does, because he is not in charge of relations between himself and other members of the group.³⁵⁷

Thus, not merely the agreement of the parties, but also norms that are created and recognized by societal groups can be the basis for contractual obligation.³⁵⁸

It is the mixture of factors that permits contract to be recognized as binding. The identification of the multiple factors further exemplifies that bindingness is but one principle of relational contract theory. Its importance is identified as the result of weighing all of the factors in the context of each contract.

2.4.1.2.2 Thomas Scanlon

Scanlon agrees that contract theory is based in relationships, but, unlike Atiyah, he does not argue for a purely societal theory of contracts. Scanlon is not convinced that social practices should dictate the binding nature of contracts.³⁵⁹ He does, however, agree with Atiyah that there are families of conditions. For example, families of moral wrongs exist, but these are not

³⁵⁶ Ibid. at 129.

³⁵⁷ Ibid.

³⁵⁸ Ibid. at 136.

³⁵⁹ Thomas Scanlon, "Promises and Contracts" in Peter Bensen ed., *The Theory of Contract Law: New Essays* (Cambridge: Cambridge University Press, 2001) at 87.

founded upon social practices but rather upon the conduct that we owe one to another.³⁶⁰ A moral obligation is raised when a promise creates an expectation of future conduct.³⁶¹ Scanlon backs up his argument with a series of calculated principles. For example, principle F, that of fidelity, requires performance instead of compensation, thus establishing that an expectation must be fulfilled and that protection against loss is not an adequate substitute.³⁶² This is critical, as expectation is often aligned with compensation in modern thought regarding contracts.

Scanlon ultimately identifies his philosophical thinking as distinct from traditional relational contract theories. He makes the following comment to delineate his opinion:

There are three roles that a social practice of agreement-making might play in the genesis of obligations to keep agreements. First, it might serve as a mechanism for signaling our intentions and our understanding of the situation we are in. Second, it might serve as a source of motivation, and hence as a ground for expectations about what others will do. Third, the moral standing of a practice might play a crucial role in generating the obligation to keep particular agreements.³⁶³

Scanlon indicates that the first is merely a matter of convenience, and that an identical obligation can be founded upon other bases. The second he admits is true, but not essential, and the act of promising does not need to fulfill the third role at all. Instead the importance that people attach to assurance that a thing will happen is the vital consideration. Scanlon holds that fidelity will not be a justification for the binding nature of contracts in societies that do not value assurance.³⁶⁴ Yet, for societies that value assurance, fidelity is a moral justification for binding contracts.

2.4.1.3 Regulation Theories

Theorists working in the area of privately enacted regulation contract theory find yet another justification for the binding nature of contracts – the importance of trust in a contract. In

³⁶⁰ Ibid.

³⁶¹ Thomas Scanlon, "Promises and Practices" (1990) 19:3 *Philosophy and Public Affairs* 199 at 200.

³⁶² Ibid. at 208.

³⁶³ Ibid. at 220.

³⁶⁴ Ibid. at 222.

this sense “contract” does not mean the written document *per se*, but rather encompasses the whole of the agreement between the parties. Theorists in this category stress that contracts are not created in a void, but in a world that is governed by a web of laws. The effect of the web is that contracts may invoke regulations that the parties are unaware of and thus contracts may have unintended consequences.

Despite this potential stumbling block, regulation theorists argue that contracts must be enforced and enforceable within the context of the regulation web.³⁶⁵ Thus, an inadvertent limitation imposed by regulation should not necessarily defeat a contract. Such an outcome would undermine the parties trust in the agreement. Instead, there must be room to interpret a contract in a manner that results in reliance upon its enforceability. As such, privately enacted regulation contract theory justifies the binding nature of contract through an emphasis on the expectations of the parties.

Parties subject themselves to a set of rules when they enter legally enforceable contracts. These rules are supplied by the legal system (e.g. legislators, jurists or both). Thus, privately enacted regulation theories differ from other contract theories which look to the contractual document to find justification and meaning.

Slawson founds his work upon the following premise: “[c]ontracts are not made in a vacuum. They are made in the web of countless laws of all kinds to which anyone who lives in a modern society is subject.”³⁶⁶ He supports his position by offering an example of a transaction to purchase a toaster and says: “The toaster probably came with a limited warranty, which changes the rules of damages, for example. If the sale was on credit, the customer’s credit contract with the store probably also changed the rules of damages by making her liable for the store’s

³⁶⁵ Slawson, "Why Expectation Damages for Breach of Contract Must be the Norm: A Refutation of the Fuller and Perdue "Three Interests" Thesis", *supra* note 285 at 845.

³⁶⁶ W. David Slawson, "The Futile Search for Principles for Default Rules" (1993) 3 S. Cal. Interdisc. L.J. 29 at 31.

attorney's fees if it became necessary to take legal action to collect the charge account."³⁶⁷ The lesson is that a simple transaction can invoke many layers of regulation and law.

Slawson does not believe we should throw up our hands in despair of contracting. This would be folly because it is unthinkable to conduct business without contracting in modern society. However, Slawson also believes it is unrealistic for parties to expect to understand all the contractual terms to which they are bound. He says, "a person today who refused to contract unless he understood what he was committing himself to would deny himself most of the means of living in society."³⁶⁸ Actions aiming to reduce the web of laws and regulation for the purpose of reducing the complexity of the effect of contractual terms are also not advisable because everyone needs the law's protection.³⁶⁹ Limiting the number of laws and regulations may inadvertently cause harm. Contracts must be enforced and enforceable within the context of our world.³⁷⁰ It is Slawson's opinion that parties to transactions may not even be aware of all of the legal implications of agreements. Or, alternatively, the knowledge that so many layers exist may cause a party to place less emphasis on the wording of the contract, a response that is contrary to previous contractual wisdom.³⁷¹ In some cases parties may not even read the contract.³⁷²

Ultimately wording of a contract has diminished importance because it is affected by so many laws external to the contract. The critical factor is trust in the agreement.³⁷³ A contract is no longer the result of a struggle between two parties, as it was previously understood. This is true because parties neither have time to undertake this step, nor could possibly understand the

³⁶⁷ Ibid.

³⁶⁸ W. David Slawson, "The Role of Reliance in Contract Damages" (1990) 76 Cornell L. Rev. 197 at 21.

³⁶⁹ Ibid. at 32.

³⁷⁰ Slawson, "Why Expectation Damages for Breach of Contract Must be the Norm: A Refutation of the Fuller and Perdue "Three Interests" Thesis", *supra* note 285 at 845.

³⁷¹ W. David Slawson, "The New Meaning of Contract: The Transformation of Contracts Law by Standard Forms" (1984) 46 U. Pitt. L. Rev. 21 at 55.

³⁷² Ibid. at 31 & 55.

³⁷³ Ibid. at 29.

implication of every contract.³⁷⁴ Thus, each party needs to trust that that other(s) will act to achieve the mutually agreed upon outcome. This theory shares some similarities to economic contract theory. However, it ultimately holds trust in contractual terms as the basis for bindingness.

2.4.1.4 Binding Contracts Generally

These prior examples of how the contract legal principle of a binding nature may be drawn from multiple contract theories exemplify the importance each attributes to this principle. The justifications for bindingness differ, encompassing: efficiency; social good; and trust. Moreover, the contract legal principle of bindingness may be granted varying weight by the theories.³⁷⁵ Some theories, such as economic theory, hold it as a paramount principle while others, such as relational theory, considers bindingness to be but one of many contract legal principles. The common denominator for the purpose of this thesis is that, despite applying different reasoning, each theory requires that contracts exhibit a binding nature.

2.4.2 Respect for the Intent of Parties

An additional characteristic that contract theories support in common is respect for the intent of the contracting parties. In the context of business transactions it has been said that,

...the whole model is suffused with the idea that the fundamental purpose of contract law is to give effect – within limits of course – to the intentions of the parties. It is their decision, and their free choice, which makes the contract binding, and determines its interpretation, and its result in the event of breach.³⁷⁶

This exhibits not only the importance of the intent of the parties, but also the link between this attribute of contract theory and bindingness. Compliance with the intent of the parties, if such intent is given voluntarily, is the subject of the terms that are held as binding. It further presents

³⁷⁴ Ibid. at 28-29.

³⁷⁵ Slawson, "The Role of Reliance in Contract Damages", *supra* note 368 at 17.

³⁷⁶ Atiyah, *Essays on Contract*, *supra* note 293 at 12.

two important pieces of information. First, it identifies the contract legal principle of respect for the intention of contracting parties as a principle of contract theory. Second, it highlights the relationship between intention and bindingness.

As is true of bindingness, the contract legal principle of intention is not approached in an identical manner by all theorists. In the classical model, the focus remains on what the parties intended, not on their actions.³⁷⁷ This pure form of intent of the parties is the contract legal principle that continues to dominate legal textbooks and law school lectures.³⁷⁸ This section considers traditional and non-traditional characterizations of intent. Moreover, rather than repeating an evaluation of theories previously presented through the lens of intent, it reviews both contract legal principles in the light of regulation theory and entitlements theory.

2.4.2.1 Regulation Theory – The New Meaning of Contract

The role of trust in contract has been previously canvassed in the discussion of privately enacted regulation theory. The characterization of contract as based in trust is dubbed the “new meaning of contract”. In Slawson’s words, “whereas under the old meaning, the contract is the parties’ manifestations of mutual assent, which are interpreted to try to fulfill their reasonable expectations, under the new meaning the reasonable expectations are the contract.”³⁷⁹ Thus, from this vantage reasonable expectations of contracting parties represent the intent of the parties.

Slawson defends placing great emphasis upon the expectations of parties because expectation measures can be applied to every situation.³⁸⁰ In Slawson’s opinion the new meaning

³⁷⁷ Ibid. See also: Smith, *Contract Theory*, *supra* note 302 at 212-215.

³⁷⁸ Atiyah, *Essays on Contract*, *supra* note 293 at 13. See also: Slawson, "The New Meaning of Contract: The Transformation of Contracts Law by Standard Forms", *supra* note 371 at 31.

³⁷⁹ Slawson, "The New Meaning of Contract: The Transformation of Contracts Law by Standard Forms", *supra* note 371 at 23.

³⁸⁰ Slawson, "Why Expectation Damages for Breach of Contract Must be the Norm: A Refutation of the Fuller and Perdue "Three Interests" Thesis", *supra* note 285 at 846. This is not true of other elements contract theorists look to, such as reliance and restitution. Moreover, the fact that a contract is only practically enforceable if breach offers an injured party sufficient damages to make it worth suing, is further proof of the utility of the expectations of the

of contract has emerged due to four inter-related³⁸¹ societal and legal developments: (i) increased reliance upon standard form contracts by businesses, for reasons of cost-efficiency; (ii) living in the modern world requires the use of a myriad of products, all of which must be required by a form of contract; (iii) the increasing “number and complexity of legal implications” that every transaction now gives rise to, which are constantly rising in difficulty for the average person to understand and are often the result of new legislation or common law; and (iv) the prevalence of mass media and other forms of commercial communications, from which people receive constant information which influences the expectations created regarding the subject-matter of agreements.³⁸²

Placing the emphasis on the expectations of contracting parties rather than on the written contract, is characterized as less individualistic than other views that perceive of contracts as socially influenced.³⁸³ Notably, this new meaning is relatively ignored by mainstream sources of contract law (e.g. casebooks).³⁸⁴ Focus upon party expectations means that contracts reflect the promises made by the parties. The new meaning of contract thereby finds that contract legal principles should include binding promises and respect for the intent of the parties.

parties – expectation creates the right to recover damages immediately (at 847). Reliance, for example, creates a delay in offering damage rights. Expectation is therefore a superior basis for observing contracts as binding.

³⁸¹ Slawson, "The New Meaning of Contract: The Transformation of Contracts Law by Standard Forms", *supra* note 371 at 26. The following explanation gives a description of the relationship between factors in the case of a contract between a manufacturer and a consumer: “Because of the first condition, it is generally only consumers who really transact blind. The fourth condition, mass commercial communications, has both aggravated this situation and provided the basis for the new meaning of contract. The situation is aggravated by the fact that consumers typically come to transactions with their expectations about the product already largely formed. If businesses are able to create whatever legal implications they like [in standard forms], they not only can create implications that the consumer does not expect, but they can destroy or reverse the expectations that the consumer has already formed. The new meaning of contract, however, enables fairness to be restored by making the contract include the reasonable expectations that the consumer has already formed”.

³⁸² *Ibid.* at 24-25.

³⁸³ *Ibid.* at 29.

³⁸⁴ *Ibid.* at 31. Slawson voices an opinion that jurists are preferable to legislators as creators of laws and regulations that affect contracts (See: Slawson, "The Role of Reliance in Contract Damages", *supra* note 368 at 161). This view is based in a review of recently enacted laws that ultimately finds that recent reforms augment the importance of contractual obligation (at 173).

2.4.2.2 Regulation Theory – The Basic Contracts Principle

Eisenberg offers an additional argument for the identification of respect for the intent of contracting parties as a contract legal principle. He does so through the addition of his “basic contracts principle” to the category of regulation based theories. Eisenberg describes the principle as having two branches; one addresses the content of contract law and the other the manner of determining the content.³⁸⁵ He deems this to be the best approach because the branches are linked – the content of laws is dependent upon the method applied to determining each law. Eisenberg says that the objectives of contracting parties should be upheld unless a set of rules constrain the objectives. If, but only if, appropriate conditions are satisfied and subject to appropriate constraints, the law should effectuate the objectives of parties to a promissory transaction.³⁸⁶ He further states that it must be a legislator who undertakes to create contract rules because this class of decision-makers is unaffected by precedent and independent therefrom.³⁸⁷ Judges are swayed and directed by pre-existing principles and therefore are unsuitable to make such rules.

Thus, according to Eisenberg the force of law is what causes a contract to be binding and the intent of the parties is to be paramount. Moral obligations to keep a promise may be strong, but ultimately are insufficient to form a legal obligation.³⁸⁸ Good laws, made in conformity with the basic contracts principle can ground legal contractual obligations. This is partly due to the ability of law-makers to weigh multi-variables in the formation of the laws. Additionally, conflicts between competing values may be averted. For example, conflicts with social values

³⁸⁵ Eisenberg, "The Theory of Contracts", *supra* note 302 at 206. Eisenberg endows his work with elements of both metric and generative theories.

³⁸⁶ *Ibid.* at 241.

³⁸⁷ *Ibid.*

³⁸⁸ *Ibid.* at 260.

that cripple other theories do not undermine the basic contracts principle, because the social values are one of the many variables that will be weighed-in when contract laws are created.³⁸⁹

The action of weighing factors allows contract laws to be connected to certain values, while keeping the laws from becoming merely narrowly-focused tools formed for the single purpose of achieving particular outcomes.³⁹⁰ Laws formed in this manner can cause a wide-range of contractual obligations to be binding. Under the basic contracts principle, law is intended to effectuate the objective of a party to a promissory transaction, in other words their intent, as long as requisite conditions, such as capacity, are satisfied and no special constraints apply.³⁹¹ As such, this basic contracts principle supports the contract legal principles of bindingness and respect for the intent of the parties simultaneously.

2.4.2.3 Set of Legal Entitlements Theory

Moving now from regulation theory to legal entitlements theory, it is possible yet again to establish the existence of a contract legal principle requiring respect for the intent of contracting parties. In his response to the questions of why contracts are binding and why the intent of the contracting parties must be respected, Peter Benson characterizes contractual relations as a transfer of entitlements between parties.³⁹² This is a fresh view, and also one that has strong analogies to property law.³⁹³ In Benson's opinion contractual obligation arises from a contract itself.³⁹⁴ Contract formation is a source of the entitlements passing from one party to another. Thus, contract is a mode of acquisition and is the means whereby the promisee attains his

³⁸⁹ Ibid. at 244.

³⁹⁰ Ibid. at 257. For example, distributive justice may be achieved by a law, without the law becoming an instrument of redistribution.

³⁹¹ Ibid. at 261.

³⁹² Benson, "The Unity of Contract Law", *supra* note 277 at 126.

³⁹³ Robert P. Merges, "A Transactional View of Property Rights" (2005) 20 Berkeley Tech. L.J. 1477 at 1482. Merges points out that the link between contract and property was not well examined previously (at 1480), but now commentators such as Williamson place "transactions at the center of his economic theory" (at 1482).

³⁹⁴ Benson, "The Unity of Contract Law", *supra* note 277 at 128.

entitlement.³⁹⁵ Of course, the entitlement is given to the promisee with the express consent of the promisor, which further ensures that the transfer is voluntary in nature.³⁹⁶

There are three distinct steps that underpin both the binding nature of contracts and respect for the intent of the parties. Benson links each to principles that shape contract law, an exercise that this chapter does not discuss at any length, but it exemplifies the importance Benson attributes to the justification of the unifying nature of his theory. The first step is a decision to alienate property, which involves the owner consenting to alienation.³⁹⁷ Step two is appropriation by the other party.³⁹⁸ According to Benson, this step absolutely must occur subsequent to step one, as the party to whom the entitlement is to transfer cannot decide to accept the entitlement until the decision is made to alienate it. Both steps exemplify the intent of the parties. This being said Benson believes that the first and second steps are integrated, not individual acts,³⁹⁹ as exhibited by the third step, the “principle of continuity”.⁴⁰⁰

The principle of continuity encompasses the activities of the first and second steps in the process of contracting. Alienation and appropriation occur as a continuous flow. In fact, the subsequent acquisition can only occur by and through the original owner’s consent. Benson says that “the requirement of continuity implies that these acts of will have as their object one identical thing which belongs to both parties at the same time.”⁴⁰¹ Continuity means that the act of transferring the subject-matter of the contract, be it a good or a service, is not an individual alienation and appropriation divided by time and space, but rather a single transfer of an

³⁹⁵ Ibid.

³⁹⁶ The issue of voluntariness is not one that Benson elaborates upon, but it is important as a means of comparing and contrasting the existing contract theories considered in this chapter – the voluntary nature of contract is a crucial element in the eyes of several other theorists.

³⁹⁷ Benson, "The Unity of Contract Law", *supra* note 277.

³⁹⁸ Ibid. at 129.

³⁹⁹ Ibid. at 131.

⁴⁰⁰ Ibid. at 130.

⁴⁰¹ Ibid.

entitlement. Thus, continuity causes the transfer of an entitlement, as formulated by a contract, to obligate both parties to abide by the contractual terms. Continuity requires bindingness. Thus, entitlement theory exhibits bindingness and respect for the intent of the contracting parties as key contract legal principles.

2.4.2.4 Contractual Intent Generally

The discussion above shows that the contract legal principle of respect for the intent of the parties is supported by many contract theories, and that it is often entwined with bindingness. The previous discussion of contract theories further highlights the relationship between theories, contract legal principles and legal rules (e.g. laws). From one vantage contract theory is the first layer and from this it is possible to derive contract principles. Such principles are relied upon and considered by lawmakers in the course of fashioning legal rules. Thus, principles are distinct from both legal rules and theories, but enjoy a relationship with each. It should further be noted that the contract legal principle of intention can experience a difficult relationship with other contract tenets, such as freedom of contract.

Courts routinely rely upon the superiority of the intent of the parties within a contract, “to reconcile the principle of mutual assent with excuses of performances that were not foreseen by the parties. The presumption is based on the fiction that if the parties are retrospectively made aware of the unforeseen occurrence, then they would have reasonably intended a way of dealing with that occurrence.”⁴⁰² Where the intent of the parties is not clearly stated in the contractual provisions the intent will be divined by the courts.⁴⁰³ This legal principle is attributed to Lord

⁴⁰² Larry A. DiMatteo, *Contract Theory: The Evolution of Contractual Intent* (East Lansing: Michigan State University Press, 1998) at 31.

⁴⁰³ Smith, *Contract Theory*, *supra* note 302 at 271. Smith identifies this as the objective approach, because the court is asking how the terms would have been either reasonably, or objectively, understood by the person to whom they were communicated. See also: DiMatteo, *Contract Theory: The Evolution of Contractual Intent*, *supra* note 402 at 85.

Denning,⁴⁰⁴ but is generally followed by all level of courts in many nations. In *Lloyd's Bank Canada*, the Canadian Court holds that the wording of a contract is not an end, but a tool for determining intent.⁴⁰⁵ It is intent that represents the understanding of the parties regarding the meaning of the words. An English decision, *Printing Company v. Sampson* holds that people should be granted “the utmost liberty of contract” and that free and voluntary contracting be “held sacred” and enforceable.⁴⁰⁶ Courts, echoing theory, hold intention to be a critical contract legal principle.

In Slawson’s opinion, “contracting should be accorded the protections associated with freedom only when the parties engage in an honest effort to express what they both reasonably expect.”⁴⁰⁷ According to this view freedom of contract should not be used as a means of permitting one party to impose terms at its fancy. For example, the assertion of implied terms or the imposition of alternate interpretations of contractual wording for the purpose of arriving at ends the other party did not reasonably expect is a misuse of freedom of contract.

The doctrine of freedom of contract not only protects the tenet that parties should be able to enter into contracts at will, but also the concept that the content of a contract be protected and its scope not be unduly limited. A view that intertwines intention and freedom of contract believes that, “the law of contract should recognize not only that parties have a liberty to promise or not as they wish – that is, freedom *to* contract – but also that they can choose the content of their self-imposed obligations as they desire – freedom *of* contract.”⁴⁰⁸ The freedom from/to dichotomy has also been described as being *free from* legal and moral duties and *free to* make

⁴⁰⁴ DiMatteo, *Contract Theory: The Evolution of Contractual Intent*, *supra* note 402 at 80.

⁴⁰⁵ *Ibid.* at 53.

⁴⁰⁶ *Printing Company v. Sampson*, L.R. 19 Eq. 462.

⁴⁰⁷ Slawson, "The New Meaning of Contract: The Transformation of Contracts Law by Standard Forms", *supra* note 371 at 55.

⁴⁰⁸ Benson, "The Unity of Contract Law", *supra* note 277 at 198.

contracts of one's own choosing.⁴⁰⁹ Freedom to contract is linked to the contract legal principle of binding contracts. It defines the obligations to be enforced as the intentions of the parties, and these in turn represent the essence of the binding agreement.

In fact, the assumption that parties contract freely, and therefore produce efficient agreements which reflect the mutual wishes of all of the contracting parties, is the very basis of economic theory. This exemplifies the relationship between the binding nature of contract and the contract legal principle of intention. Freedom to contract grounds the economic theory assertion that contracts are efficient. It is the ability of the parties to express their intentions, and the fact that all parties to a contract each have this ability, that causes contracts to be deemed efficient. Economic contract theory relies upon individual parties to know their unique situation, and to apply this knowledge as a driving force that will allow them to make mutually beneficial contracts. This theory accords individuals a significant scope to make judgements about efficiency.

As has been discussed, economic theory rests upon an assumption that an individual is in the best position to make decisions regarding how to formulate an agreement to be able to protect his interests against those of another contracting party. The outcome, when all contracting individuals arrive at a mutual agreement is an efficient contract. The reasoning is as follows:

One need not have so promised in the first place. But, this view contends, once having done so (free from duress, fraud, misrepresentation, and so forth) one cannot reasonably expect the law of contract to permit one to escape from the promise, whatever its terms: If it were to do so, the law would fail to take seriously one's moral power to assume self-imposed obligations; it would dishonour one's capacity for autonomy and treat one as an infant.⁴¹⁰

This assumption has a large flaw. It overlooks a reality of many, possibly most, contracting scenarios – e.g., power imbalance causing an unequal bargaining power to exist amongst

⁴⁰⁹ Slawson, "The Role of Reliance in Contract Damages", *supra* note 368 at 11.

⁴¹⁰ Benson, "The Unity of Contract Law", *supra* note 277 at 199.

parties.⁴¹¹ Thus, voluntariness, a foundational tenet of freedom of contract, may not be equivalent between parties executing a contract. For instance, and of particular relevance to IP contracts, it is acknowledged that certain technologies create bargaining power imbalances by increasing the producers' power, due to the complexity of the product.⁴¹²

In the face of hurdles such as those discussed herein, contract theorists still persevere to justify that the intent of contracting parties is a key contract legal principle. This is exemplified in their attitude towards a number of tacit contractual principles. For example, the requirement imposed by economic theory that parties understand contract terms.⁴¹³ In the context of understanding some theorists see voluntariness.⁴¹⁴ Slawson considers freedom of contract to be directly related to the manifestation of a contract, rather than its efficiency.⁴¹⁵ The contract, "exists independently of the parties' actual consents...has a meaning of its own, independent of either party's actual intention."⁴¹⁶ Intention is not irrelevant, but it is just one contract legal principle.

⁴¹¹ See: DiMatteo, *Contract Theory: The Evolution of Contractual Intent*, *supra* note 402 at 113; and Slawson, "The Role of Reliance in Contract Damages", *supra* note 368 at 23, 32 & 38. Slawson points out that "a lack of bargaining power in one or both parties is a reason for limiting their freedom of contract, their contracting power, or both" (at 23). He defines "bargaining power" as the power to set contractual terms (at 38).

⁴¹² Slawson, "The Role of Reliance in Contract Damages", *supra* note 368 at 26 & 32. Even sophisticated business parties can fall prey to unequal bargaining power caused by complex technologies (at 32).

⁴¹³ Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332 at 19-20. Economic theorists are not to be easily thwarted by the allegation that contracts lack voluntary participation. Counter-arguments, as to the indeterminate nature of what is voluntary, are raised in defence. Economic theorists admit to problems in their midst: "A common theme runs through critiques of the private ordering model. It is that collective or community values are unavoidable and central to a determination of the scope of the domain of the market and of the ground rules which will constrain its operation even within its proper domain, and that an "internal" theory of exchange or contract which is premised on vindication of private preferences or individual autonomy and consent is likely to be a seriously incomplete account of the normative bases of the law of contracts" (at 21). Yet, generally they refuse to see these as hurdles that ultimately topple freedom of contract. Instead, the flaws are bases for acknowledging limits to freedom of contract. In the instance of voluntary consent, theorists opine that the very definition granted to consent will affect whether a contract is, or is not, deemed voluntary (at 79).

⁴¹⁴ Milton Friedman, *Capitalism and Freedom* (Chicago: Chicago University Press, 1962).

⁴¹⁵ Slawson, "The Role of Reliance in Contract Damages", *supra* note 368 at 20-21.

⁴¹⁶ *Ibid.* at 21. This is an expression of the objective theory.

Several theorists suggest that we must persist with contracting despite serious flaws.⁴¹⁷ Virtually all transactions create third party effects, whether for market competitors, or for society. Despite recognizing this fact, scholars point out that if “externalities should count in prohibiting the exchange process or in justifying constraints upon it, freedom of contract would largely be at an end.”⁴¹⁸ Contract is saved if we take moderating steps, such as identifying externalities worthy of consideration.⁴¹⁹ These moderating steps act to support, rather than override, the contract legal principles of bindingness and intent of the parties.

Thus, although the contract legal principle of intent is not easily identified in all contract theories, we see that it does exist in each. For this reason it is a contract legal principle, along with bindingness. This thesis relies upon both these contract legal principles for the purpose of undertaking an analysis of IP contract strain.

2.5 Contractual Subject Matter & Theory

Besides the contract legal principles of intention and binding nature, contract theories generally have another common aspect that is of relevance to this thesis. Contract theories do not directly reference or consider the subject of the contract. In this instance the term “subject” refers to the entity to which the contract relates. A contract may alter, transfer or have some other effect upon its subject. In some instances the subject may not be the sole, or even primary, focus of the contract. Examples of contractual subject include a house in a real estate agreement, land in a property transfer, or an IP asset in a joint innovation development contract. Most, if not all,

⁴¹⁷ See: Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332; and Slawson, "The Role of Reliance in Contract Damages", *supra* note 368.

⁴¹⁸ Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332 at 58.

⁴¹⁹ *Ibid.* at 59.

corporate transactions involve a subject, yet contract theory is mute regarding this aspect of a contract.⁴²⁰

In the words of one author: “[t]he law of contract recognizes no inherent limitations on the nature or the duration of the interests that can be the subject of a legally binding contract.”⁴²¹ The omission of contract legal principles to consider contractual subject specifically is considered a means of promoting freedom of contract. When limits are imposed upon the subject the freedom of contract becomes qualified, so that contracting parties are not “free to be as whimsical or fanciful as they like in describing the promise to be performed, the consideration to be performed, the consideration to be given in return for the promise, and the duration of the agreement.”⁴²²

This omission is critical to the process of interpreting a contract. It is impossible to describe the relevance of subject to contract theory if it offers no comment regarding this factor.⁴²³ The question arises: if theory is silent regarding an aspect of contracts how do we ground legal principles regarding that aspect?

After all, a contractual transfer of a subject involves an understanding of more than just the act of transfer. For example, the idea of a transfer of ownership implies the formation of a particular conception of the subject involved in the transfer.⁴²⁴ This conception will at minimum

⁴²⁰ Atiyah, *Essays on Contract*, *supra* note 293 at 9 & 23. Commercial/private business contracts are identified as being different from other types of transactions. This thesis is limited to the consideration of corporate transactions. In fact Atiyah says: “commercial transactions are so far removed from the ordinary experience of most persons that it is hard to believe a contractual model based on the commercial transaction would today have a wide and pervasive application outside the particular sphere of business” (at 18).

⁴²¹ Merrill & Smith, "Optimal Standardization in the Law of Property: The Numerus Clausus Principle", *supra* note 203 at 3.

⁴²² *Ibid.* at 3.

⁴²³ Eisenberg, "The Theory of Contracts", *supra* note 302 at 214.

⁴²⁴ Benson, "The Unity of Contract Law", *supra* note 277 at 130.

extract the reason and interests of the parties for engaging in the transfer. Thus, the subject of a contract has implications for the types of conduct that “count as making a contract”.⁴²⁵

Some authors assume a “continuous reciprocal relationship between subject and object” of a contract, but this is by no means assured.⁴²⁶ A significant gap can exist between the two understandings. A common conceptualization of the subject being contracted for by the parties is critical to the formation of a contract. The subject will to some extent shape the terms as well as the means of accomplishing compliance with said terms.

Compliance is relatively facile in the case of contracts having subjects that are tangible and easily defined. However, if the subject of the contract is difficult to ascertain, it is not necessarily a foregone conclusion that both parties will understand it in identical, or even accurate, terms.⁴²⁷ A misunderstanding by a contracting party of the nature of the contract subject is a potential pitfall that must be avoided. However, this danger is not easily remedied by existing contract theory or contract legal principles.

A lack of direct reference to a contractual subject is evident from a review of contract theory, contractual essence and contract legal principles. Contract essence, an unarticulated aspect of contract, does not remedy the lack of express discussion of subject in contract theory. Contract legal principles do not require express articulation, but do require application in contract interpretation. These principles, allow the interpreter to read between the lines. Thus, contract legal principles are relevant to the purpose of identifying common principles from contract theories because they cause a reader to consider a contract theory omission. Specifically,

⁴²⁵ Collins, "Introduction: The Research Agenda of Implicit Dimension of Contracts", *supra* note 104 at 1. Unilateral actions are not of interest in this view. Rather the focus is the actions of each party as occurring in a relationship between the parties.

⁴²⁶ DiMatteo, *Contract Theory: The Evolution of Contractual Intent*, *supra* note 402 at 85.

⁴²⁷ Nicolas W. Vermeys & Karim Benyekhlef & Vincent Gautrais, "Réflexions juridiques autour de la terminologie associée aux places d'affaires électroniques" (2004) 38 R.J.T. 641.

these mute aspects engage subject in a manner that ensures that contract theory does not need to do so.

2.5.1 Contractual Essence

Contractual essence is a factor whereby a contract's subject may be engaged. Gordley states that "once we say that certain features of a transaction are so critical that a party does not consent if he fails to understand them, we are talking about the essence of a transaction whether we use that expression or not."⁴²⁸ He goes on to say,

If a party enters into the transaction to acquire a certain object, we must therefore single out an end that defines that object for purposes of that transaction, and we must distinguish this end from the party's other ends. If we can do so, an error in the features that define the object will be, at once, an error in its identity, an error in the type of object it is defined to be, and an error in features that are critical to an end of the parties to such a transaction.⁴²⁹

The essence of a contract may include its subject.⁴³⁰

The intersection of contract and some subjects, such as real property, have produced specific doctrines that prescribe limitations upon contractual terms. An example of this is the *numerus clausus* doctrine.⁴³¹ This doctrine holds that property must conform to certain forms within a contract. Chapter 1 offers a more detailed discussion of the *numerus clausus* doctrine. For the purposes of this section, it is important to note that limitations relating to the subject of a contract solely arise in the context of the specific subject. Not all subjects invoke limitations. There is no general contract legal principle that holds that all contractual terms should be weighed in relation to the subject of the contract.

⁴²⁸ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 241.

⁴²⁹ *Ibid.*

⁴³⁰ The use of "essence" in this manner is intended to signify the elements of a contract once it is drafted. This differs from the concept of contract distinguishing traits, which may also be referenced as "essentialism" or "core elements" of a contract. I am highlighting in this section that the contractual terms themselves cause certain components to be the essence of a contract – including the subject matter of the contract.

⁴³¹ See: Merrill & Smith, "Optimal Standardization in the Law of Property: The *Numerus Clausus* Principle", *supra* note 203; Langbein, "Mandatory Rules in the Law of Trusts", *supra* note 209; and Smith, "The Language of Property: Form, Context, and Audience", *supra* note 223.

This is noteworthy as flaws in each party's information regarding the subject of the contract will create similar errors to those that Gordley states will arise if the features that define the object are flawed. The identity, the definition of the object and the critical features of the outcome of a contract will all be affected. The subject of a contract is directly linked to its objective. For example, if the object of a contract is to transfer an entity to another party, if less than all of the core elements of the entity are defined and addressed within the contract, and the remaining core elements are ignored within the contract, this can thwart the attainment of the object of the contract.

2.5.2 Contract Legal Principles: Implied & Implicit Terms, Discretionary Powers and Waivers

All terms of a contract need not be expressly articulated. There is a category of terms which are implied.⁴³² In some cases a conceptualization of the subject of a contract is an implied term of a contract. This suggests that it goes without saying that parties to a contract understand the nature of all the subjects, meaning entities or assets, affected by the contract. Thus, the written text of a contract need not provide guidance regarding the subject because it is understood by the parties.

Smith categorizes implied terms in two camps: “implied-in-fact” (terms are considered by a court to have been implicitly agreed upon by the parties); and “implied-in-law” (terms are those that are based in factors external to the contract, for example regulations, statutory provisions, etc.).⁴³³ Implied terms, although characterized as obvious and naturally occurring in some situations, are not uniformly held to be requisite in all contracts. In fact, some scholars believe

⁴³² Swan, *Canadian Contract Law*, *supra* note 87 at 472-73. Swan notes that an implied term may also be referenced as an innominate term, and notes that this “may mean no more than that the decision is the court’s” (at 473). See also: Waddams, *The Law of Contracts*, *supra* note 104 para 498.

⁴³³ Smith, *Contract Theory*, *supra* note 302 at 280.

that parties should be free to contract out of the latter category of implied terms.⁴³⁴ This is an interesting opinion which raises questions about when and why terms are implied. Do implied terms exist independently? Are they immediately created when the contract is drafted because they are necessary? Or do they get pulled from the air at the whim of the courts? We are left with a chicken-and-egg type riddle.

Some authors want to augment the realm of contractual principles that are not expressed in written contract terms through “implicit understanding”.⁴³⁵ This strategy pulls knowledge, practices and other norms that generally pertain to contract into the contractual relationship. These can include implicit agreements between the parties at the date of contracting, as well as understandings evolving between the parties over time.⁴³⁶ Waivers achieve a similar end, but function in an opposite manner. A party may waive normal course contractual terms and thereby create an exception. However, unlike implied terms waivers are express contractual provisions. Discretionary power, which includes a right to alter the contract, is another realm of non-express potential contractual principles which also must be considered.⁴³⁷

A discussion of these implied and discretionary terms is included in Chapter 4, due to their potential power to affect contract interpretation. As the introduction of implied terms and implicit understanding points out, these concepts can have a wide scope. It is possible to invoke such concepts to provide exceptions to contract legal principles and thereby thwart the binding nature of the contracts and override the intent of the parties. Examples of such terms are found in

⁴³⁴ Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332 at 16.

⁴³⁵ John Wightman, "Beyond Custom: Contract, Contexts, and the Recognition of Implicit Understandings" in et al. David Campbell ed., *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts* (Oxford: Hart Publishing, 2003) at 146.

⁴³⁶ *Ibid.* at 147.

⁴³⁷ Hugh Collins, "Discretionary Powers in Contracts" in et al. David Campbell ed., *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts* (Oxford: Hart Publishing, 2003) at 219-54.

the doctrines of frustration, mistake and breach.⁴³⁸ The utility of these doctrines is that they can introduce opportunism into the realm of contract.⁴³⁹ Moreover, all of these principles are consistent with the theoretical underpinnings of contract. However, they fail to catch the contractual situation which is under investigation in this thesis – these exceptions do not save contracts created by parties with differing understandings of the subject of the transactions.

An additional question raised by the non-explicit terms queries the extent that they can be applied to effectively limit the character of the subject of a contract. For example, can a court imply that a characteristic of an intangible entity which is the subject of a contract is intended to be ignored by the parties? Or can parties expressly waive an aspect of intangible property? These queries will be considered in more depth later in this thesis.

Some authors argue that implied, implicit and discretionary principles of contracts become all the more relevant in commercial contracts.⁴⁴⁰ It is beyond the bounds of this thesis to discuss this idea at length, but it poses some related questions: Are these slippery slopes, or a means of ensuring fairness and justice in the contractual relationship? Moreover, if these principles ensure fairness, do they fill in the gap of a lack of explicit articulation of the effect of subject upon contract theories? Theory may not directly instruct us as to how to approach certain contract subjects, but such instruction may be unnecessary in light of these principles or may be specifically necessary for intangible subjects.

⁴³⁸ Smith, *Contract Theory*, *supra* note 302 at 280.

⁴³⁹ Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332 at 16.

⁴⁴⁰ Paddy Ireland, "Recontractualising the Corporation: Implicit Contract as Ideology" in et al. David Campbell ed., *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts* (Oxford: Hart Publishing, 2003) at 256-58. Corporate contracts are depicted as dominating the contractual realm, but are simultaneously defined as contrary to the original basis of contract. One element unique to corporate contracts is that of personhood. Through statute corporations are granted personhood, but this of course is not identical to the role, understanding, appreciation, action of a human individual. Thus, the legal fiction wants for easy application to original concepts and theories of contracting.

In summary, the fact that contract theory is silent regarding the subject of a contract means that there is no foundation to look to in order to understand how to effect a contract with an under, or over, stated subject. Unfortunately many IP contracts include this type of ill-defined subject. Contract theory in its present state cannot provide a fix for this situation.

2.6 Conclusion

A common aspect of contract theories is that each addresses the question: Why should promises be enforced? This basic question elicits a wide variety of responses by contract theories. However, when the category of contract theories is viewed as a whole, contract theories unanimously promote the contract legal principle that contracts should represent enforceable promises – in other words that contracts are binding.⁴⁴¹ Additionally, the contract legal principle that a contractual promise represents the intent of the contracting parties is broadly supported by contract theories.⁴⁴² The binding nature of contracts and intent of the parties are linked to the nature of promises. Contracts are essentially a form of promise, of which there are varying forms and categories.⁴⁴³

Different types of promises require specific approaches and justifications, as are presented in various streams of contract theory. In no way is this chapter intended to diminish the

⁴⁴¹ Craswell, "Two Economic Theories of Enforcing Promises", *supra* note 312 at 19.

⁴⁴² DiMatteo, *Contract Theory: The Evolution of Contractual Intent*, *supra* note 402 at 1. In the words of DiMatteo, "The intent of a party or the communal consent of the parties as the basis for contractual obligation has spurred a number of different contract theories including contract as a promise, law and economics, and libertarianism. Such consent-based theories have a variety of philosophical underpinnings." See also: S.M. Waddams et al., *Cases and Materials on Contracts* (Toronto: Edmond Montgomery Publications, Ltd., 2005) at 288. Contractual intent is particularly promoted by the will theory, which still influences the teaching of contract law today despite the fact that a new wave of contract theory has since rolled in (See: Smith, *Contract Theory*, *supra* note 302 at 56; and Peter Benson, *The Theory of Contract Law: New Essays* (Cambridge: Cambridge University Press, 2001) at 5). Will theory holds that, "contracts are entered into by the will or consent of the parties...The parties were bound simply to what they willed, not to obligations that followed from the essence or nature of their contract" (Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 8).

⁴⁴³ Fried, *Contract as Promise*, *supra* note 274 at 1. Philosophers, in particular, differentiate between the moral and the legal nature of contractual promises. Other scholars point out that, although parties may self-impose a moral obligation to undertake an action through a promise, this does not necessarily bind the party to fulfill the promise. Only a legal obligation makes a promise binding. The basis for this legal obligation is contract theory.

importance of the differences between theories. As Stephen Smith points out, the aims of contract theories can be utterly diverse.⁴⁴⁴ Promises assume a strong relationship between intention and contractual enforceability, while making a distinct space for each – enforceability of a promise means a party must do what they have promised; whereas, intention sets out what that promise entails, namely the will expressed in an agreement. Thus, the binding nature of contracts is knit to the intention of the parties.

The identification of the intent of the parties is critical to support the binding nature of the contract. Moreover, it is evidence of the culmination of years of contractual evolution.⁴⁴⁵ Promotion of contractual intent is Kantian in nature, as it recognizes a unifying conception of law and acknowledges that obedience to law itself is a laudable good.⁴⁴⁶ Coase likewise considers upholding the intent of the parties as key to ensuring the binding nature of contracts. He states that, “making sure the terms of the contract are being observed” is vital to the performance of a market transaction, which is in turn essential to the free market system.⁴⁴⁷

An additional important aspect of contract theories is the fact that they are substantially devoid of any consideration of the subject of the contract.⁴⁴⁸ Either the terms of the contract, or statutory rules are expected to resolve issues that arise which are specific to the nature of particular contractual subject. The lack of a principle focused upon ascertaining the nature of the subject of a contract is considered in this thesis in the context of its effect upon IP contract interpretation. This is a problem in the present-day world of private-commercial contracts due to the ascendancy of IP assets. Intangible assets are difficult to define and parties may have distinct,

⁴⁴⁴ Smith, *Contract Theory*, *supra* note 302 at 36.

⁴⁴⁵ DiMatteo, *Contract Theory: The Evolution of Contractual Intent*, *supra* note 402 at 82.

⁴⁴⁶ *Ibid.* at 96.

⁴⁴⁷ *Ibid.* at 112. See also: Posner, *Frontiers of Legal Theory*, *supra* note 255 at 99.

⁴⁴⁸ Subject matter means the object or service that the contract is created to transfer or create. For example, the principle governing a contract to assign an IP asset does not differ from that governing a contract for the sale of lumber. This is significant because despite the fact that IP and lumber are vastly different subjects none of contract theory, contract laws, or contract legal principles contemplate or are seemingly even concerned by this dissimilarity.

unrelated understandings of the scope of these assets. Contract theory does not offer clear guidance regarding the implementation of a contract that has unclear subject matter.

In the face of a lack of a unanimously accepted contractual theory some suggest that “the cure is not simply to abandon the search for general theories, but to abandon the notion that law and legal analysis should govern so much of our lives.”⁴⁴⁹ While others, including Gordley, advocate that we continue to search for a “new and correct” theory of contracts.⁴⁵⁰ This thesis is not focused on adding to this search. The contract legal principles identified herein exemplify how, “contracts are always more than the contract document.”⁴⁵¹ Contracts involve the interaction of theories that lie at their foundation and the contract legal principles derived therefrom. Now, having analyzed contract theories and identified some contract legal principles, it is possible to consider the role of these in IP contracts in light of IP contract strain.

⁴⁴⁹ Gordley, *The Philosophical Origins of Modern Contract Doctrine*, *supra* note 116 at 232.

⁴⁵⁰ *Ibid.*

⁴⁵¹ Stewart Macaulay, "The Real and the Paper Deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules" in et. al. David Campbell ed., *Implicit Dimensions of Contract: Discrete, Relational and Network Contracts* (Oxford: Hart Publishing, 2003) at 53.

3 INTELLECTUAL PROPERTY THEORIES & IP DISTINGUISHING TRAITS

3.1 Introduction

Notable similarities exist between the categories of contract theory and IP theory. For example, both lack a dominant unifying theory, and economic theory is often assumed to be the dominant theory in each category. Some authors characterize the theories within the category of IP theories as competing for dominance – each vying for acceptance as the uniform theory for all forms of IP assets.⁴⁵² Without a single unifying theory it is difficult to obtain a clear justification upon which to base a definition of an IP asset. A review of IP theories does however show them to commonly identify IP assets as comprising certain core traits, described in this thesis as IP distinguishing traits. The identification of IP distinguishing traits is a crucial step towards achieving a definition of IP assets. It is also an important factor for IP contract drafting, to ensure a contract reflects the IP asset definition.⁴⁵³ Thus, a review of IP theories aids a definition of IP assets by identifying some IP distinguishing traits that IP assets must include.

Unlike tangible objects, which have clear edges defining where the product begins and ends (e.g. a table, a tool, etc.), no obvious guidelines can be relied upon to pinpoint the exact

⁴⁵² Fisher, "Symposium on the Internet and Legal Theory: Property and Contract on the Internet", *supra* note 98 at 1212. The task of trying to affix a single theory to a host of distinct IP assets may be self-defeating and not feasible. Some commentators express the view that a better option may be to sort through the competing IP theories and apply a separate theory to each individual form of IP assets. (See: Karen Lynne Durell, *Corporations and Intellectual Assets: A Case of Being Blinded by the Economic Value*, (L.L.M, McGill University Faculty of Law, 2004) [unpublished] ; and Lawrence C. Becker, "Deserving to Own Intellectual Property" (1993) 68 Chi.-Kent L. Rev. 609 at 611. Becker points out that very little "philosophical labour has been devoted to making an inventory of the types of things that might be owned" within the class of IP). In the opinion of some authors, the utilitarian theory may be applicable to patent rights, but problematic for trade-mark (Mathaias Strasser, "The Rational Basis of Trademark Protection Revisited: Putting the Dilution Doctrine Into Context" (2000) 10 Fordham Intell. Prop. Media & Ent. L.J. 375 at 421). This line of reasoning suggests that it may be prudent to establish that patents correspond to theory A, whereas copyright is grounded in theory B and trade-marks are justified by theory C. As this topic could be the focus of an entire thesis, it is not evaluated further in this thesis.

⁴⁵³ Viktor Mayer-Schonberger, "In Search of the Story: Narratives of Intellectual Property" (2005) 10 Va. J.L. & Tech. 11 para. 25. As a reflection of IP asset definition difficulties Schonberger says that IP rights are not even "grounded in sound logic". He further states that laws for patent rights are actually developed by backroom negotiations engaging stakeholders.

traits of IP assets.⁴⁵⁴ Some attributes of an IP asset may be determined based on legal rules (e.g., such as the term of protection of the IP asset and the subject matter that can comprise an IP asset). However, other IP asset traits remain elusive (e.g., whether an IP asset must comprise the trait of balance). Moreover, the definition of the traits of an IP asset can be influenced by preference for a particular justification for IP assets (e.g., a preferred IP theory). For example, an economic theory approach to IP assets creates a slightly different interpretation of the scope of a patent asset than will a construction based in other theories, such as personality theory.⁴⁵⁵ Thus, without guidance regarding the dominant theoretical bedrock for IP assets, the definition of these assets can be foggy and variant.

An ambiguous IP asset has several effects for IP contracting. An IP asset holder who does not understand the scope of an IP asset will not know if a contract may enforce stringent exclusive control of the asset or if the contract must facilitate balance (e.g., in the form of access to the asset by the public). Consequently, it will be difficult to draft contractual terms that support the correct level of the traits of balance and control for a particular IP asset. Additionally, society cannot know which activities constitute trespass upon an IP asset.⁴⁵⁶ These are just a couple of examples of the problems an ill-defined IP asset creates, but both illustrate that confusion can occur if traits of an IP asset are unknown.

⁴⁵⁴ The Supreme Court of Canada recognizes the difficulty of establishing the scope of patent rights in particular and has created a specific test for this undertaking, the purposive construction test. See: *Free World Trust v. Électro Santé Inc.*, *supra* note 183; and *Whirlpool Corp. v. Camco Inc.*, *supra* note 183.

⁴⁵⁵ The distinctions between economic IP theory and personality IP theory are described below. Notably, in the words of Hettinger, “focusing on the problems of justifying intellectual property is important not because these institutions lack any sort of justification, but because they are not so obviously or easily justified as many people think” (Edwin C. Hettinger, “Justifying Intellectual Property” in Peter Drahos ed., *Intellectual Property* (Dartmouth: Ashgate, 1999) 117 at 138.)

⁴⁵⁶ Donald H. MacOdrum & Carol V.E. Hitchman, “Don’t Fence Me In: Infringement in Substance in Patent Actions” (1990) 7 C.I.P.R. 167. Trespass can occur when a member of society steps inside the fenceposts defining the boundaries of the IP asset without authorization to tread in that area.

In particular, identification of the core traits of an IP asset can assist IP contracting by establishing a foundational definition and/or understanding of an IP asset. As discussed in the Introduction, the set of core traits can act as a framework guide for contract drafters and interpreters. Unfortunately defining the core traits of IP assets is not an easy task. One means of identifying these core traits which this thesis pursues, is through an analysis of IP theories. As a review of all existing IP theories is beyond the scope of this thesis, four IP theories are presented: bargain theory; utilitarian & economic theory; labour theory; and personality theory. As discussed below, these theories are applicable to a variety of forms of IP assets.

This chapter begins with a discussion of some of the factors that cause IP assets to be difficult to define. Several factors can hinder an endeavour to define IP assets, such as: the fuzziness of IP; “thingness”; terminology; and culture. The effect of these factors highlights the need for further analysis of IP assets and an identification of at least their core traits. Therefore, this first section sets the stage for the second section of this chapter which identifies IP distinguishing traits of IP assets as those traits supported commonly by IP theories.

Three IP distinguishing traits are identified as commonly upheld by IP theories: control; flexibility/evolution; and balance. Moreover, the fact that IP theories collectively identify these traits as requisite traits of IP assets is interpreted as an indication that they represent core traits of IP assets.⁴⁵⁷ Thus, although the IP distinguishing traits identified by this thesis may be said to be broad, general concepts, they help shape the foundation of the definition of IP assets. This requirement that IP assets include these traits has a further implication discussed in Chapter 1 – all of the IP distinguishing traits must be supported by IP contracts in order for the contract to achieve a contractual use of an IP asset. Thus, the identification of IP distinguishing traits is an

⁴⁵⁷ William P. Alford, "How Theory Does - and Does Not - Matter: American Approaches to Intellectual Property Law in East Asia" (1994) 13 UCLA Pac. Basin L.J. 8 at 11.

important step towards establishing a consistent definition of IP assets, and ensuring this definition is respected in IP contracts.

3.2 IP Assets & Hindrances to Defining Core Traits

IP owners, market-place competitors and courts all recognize that defining IP assets is a difficult undertaking.⁴⁵⁸ Several factors contribute to this difficulty. Not only does an IP asset lack clear boundaries, but numerous IP assets may relate to a single product and these rights may belong to more than one owner/holder (e.g. an asset holder or rightsholder). The fact is, ‘there is no simple “one-to-one” mapping of products and property rights.’⁴⁵⁹ In the words of one author, “business people more often than not encounter a tangled, twisted mass of IPRs [intellectual property rights], which criss-cross the established walkways of commerce.”⁴⁶⁰ It can be difficult to define an IP asset in this environment.⁴⁶¹ Some commentators describe the task of defining IP assets as “vexing” and express an opinion that IP is experiencing an “identity crisis”.⁴⁶²

This section considers four specific issues that may affect the definition of an IP asset. First, the popular assumption that a product or work to which IP rights attach reflects the definition of the IP asset is reviewed. This assumption is known as “thingness”. Second, language can pose a hurdle in that consistent definitions are not applied to terms relating to IP assets and terms can have multiple meanings. Third, new innovations, such as biotechnology and nanotechnology, may represent subject-matter that does not fit easily into established boxes of IP assets. Fourth, culture can influence attitudes of individuals and society as well as whole

⁴⁵⁸ Turney, "Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal Innovation", *supra* note 17 para. 69.

⁴⁵⁹ Merges, "Intellectual Property Rights and New Institutional Economics", *supra* note 4 at 1859.

⁴⁶⁰ Robert P. Merges, "Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations" (1996) 84 Cal. L. Rev. 1293 at 1295.

⁴⁶¹ See discussion in Chapter 1.

⁴⁶² Shubha Ghosh, "Exclusivity - The Roadblock to Democracy?" (2006) 50 St. Louis U. L.J. 799 at 801. Ghosh wrote this article to respond to a paper by Carol M. Rose, Carol M. Rose, "Privatization - The Road to Democracy?" (2006) 50 St. Louis U. L.J. 691.

environments and thereby colour the definition of IP assets. This section will explain in greater detail these issues and the hurdle each poses to defining IP assets.

3.2.1 Tangible Embodiments of IP Assets & Mistaken Identity

One reason why confusion arises regarding the scope of IP assets is that the “identity of the abstract object becomes known by the law through the physical object.”⁴⁶³ Thus, a focus on the physical object may be sufficiently pervasive so as to cause the viewer to assume the physical object is synonymous with the IP asset.⁴⁶⁴ In reality, an IP asset does not necessarily match the physical manifestation of a product, work or mark to which it attaches.⁴⁶⁵ The discrepancy between the IP asset(s) and the product can be of several varieties, as described below.

(i) IP Asset is Less Than the Whole Product – As an example, patent rights may be granted for some, but not all elements of a product (e.g., a patent for a self-sharpening skate blade may extend protection solely to the skate blade and not to the skate boot; trade-mark rights may be granted for only the publication of a logo in connection with a particular class of wares or services; and copyright may be granted for only the performer’s performance portion of a movie⁴⁶⁶).

(ii) Many IP Asset holders to One Product – Multiple holders may hold IP assets related to a single product and this can cause confusion. There are two possible scenarios whereby multiple parties may hold IP ownership interests in the same product: (a) multiple owners may jointly hold one IP asset (e.g. a many-to-one relationship); or (b) IP assets relating to different components of a single product may each belong to different holders. For example, an innovative skate may have a blade that is the inventive input of one party and a boot that is the inventive input of another (e.g. two one-to-one relationships). To assemble the whole skate it may be necessary that an agreement be reached between the two asset holders. Many-to-one and two one-to-one relationships can augment the complexity of the task of defining IP assets.

Thus, although, IP contract drafters often address products in a contract and assume that this step simultaneously addresses all relevant IP assets, they may be incorrect. The assumption reflects the “prevailing view of intellectual property as a means to block competitors [that] is

⁴⁶³ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 153.

⁴⁶⁴ Ian Mount, “Be Fast Be Frugal Be Right” *Inc. Magazine* (January 2004) at 69.

⁴⁶⁵ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 153.

⁴⁶⁶ Other copyrights are granted for other aspects of a movie, such as the broadcast rights (See: *Copyright Act*, *supra* note 114 s. 21).

based on the industrial approach of IP rights as a means to protect the production of physical products.”⁴⁶⁷ For example, the terms of IP licenses may be considered the means whereby non-IP owners are permitted to manufacture a physical product. However, the terms of licenses cannot extend such permission if the IP asset protects less than the whole physical product. IP asset holders can only provide permission to manufacture elements of a product over which they hold rights. Such elements often fall short of the whole of the product.

Notably, the model of licensing reflected by such contracts grew out of an era when business-to-business contracting was prevalent. This is no longer the case as business-to-distributor and business-to-consumer models increasingly dominate corporate markets.⁴⁶⁸ Thus, expecting the physical product to be identical to the IP asset is an example of “thingness” and is rooted in outdated assumptions that are no longer valid in today’s marketplace. “Thingness” occurs when an understanding of the scope of an IP asset is sidetracked by a reference to the related product.⁴⁶⁹ A review of an IP asset that is a patent exemplifies thingness.

(i) IP Asset Definition Patent Example – Widget A, for which patent X has been granted, may be assumed to define patent X. This occurs in part because the assumption of a one-to-one relationship between the patent and the product simplifies the task of defining a patent. A product has easily discernable, tangible boundaries that are fixed in time and space and it is tempting to use these boundaries to define the intangible IP asset. Unfortunately defining a patent is rarely so simple.

(ii) Patent Claims & Patent Asset Definitions – The scope of patent X will be dictated in part by the patent claims. Claim-to-product relationships of at least two types may exist. First, all of the aspects of widget A will not necessarily be claimed in patent X. Improvement patents exemplify this situation. The scope of an improvement patent is limited to the claimed alteration in an existing product. By looking at the whole product, the viewer cannot grasp the scope of the IP asset which is limited to the element of the product that is an improvement over a previous product. Second, the inverse may be true and all of the aspects of widget A

⁴⁶⁷ Ulf Petrusson & Bo Helden, "The Ins and Outs of Licensing" *Intellectual Asset Management Magazine* 28 (2008) 42 at 42.

⁴⁶⁸ Ibid.

⁴⁶⁹ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 160.

may comprise only a portion of the claims of patent X. Both claim-to-product relationships produce the same outcome – the definition of patent X cannot be assumed to be reflected in the tangible embodiment of widget A.⁴⁷⁰

(iii) *Patent Claims & Other Patent Asset Traits* – An additional consideration is that, while patent claims define the elements of the invention, the right of the patent owner to keep others from copying the claimed invention must be applied in conformity with certain traits of the patent. For example, the Supreme Court of Canada has stated in recent decisions that copyright and patents must be applied in a manner that respects a “bargain between the inventor and the public.”⁴⁷¹ The judicial decisions upholding balance are discussed in more detail later in this chapter. Such judgements acknowledge a need for balance, which this thesis identifies as an IP distinguishing trait of IP assets. Thus, the definition of IP assets may include determining factors from a variety of sources – patent claims, legal rules and IP distinguishing traits. Notably IP theory provides a foundation for all of these sources.

Despite its error, the perception of an IP asset as matching a physical product remains pervasive within the private sector. This is true for several reasons, not the least of which being that tangible property is a recognizable private sector symbol.⁴⁷² A symbol is powerful because it is “rooted in its apparent reflection of what we would like to believe.”⁴⁷³ It is assumed that by linking IP assets to known symbols it is possible to diminish their “vaporous reality”.⁴⁷⁴ Unfortunately symbols do not define IP assets, but are merely a means of grasping alternative concepts that may be substituted for physical boundaries.⁴⁷⁵ It is for this reason that IP assets have been described as “inherently unascertainable”.⁴⁷⁶ It is no wonder that those attempting to articulate IP assets through contract terms are left with a sense of helplessness as they try to define the practically indefinable.

⁴⁷⁰ Wendy J. Gordon, "An Inquiry in to the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory" (1989) 41 Stan. L. Rev. 1343, *supra* note 77 at 1378-79; and Gordon, "Intellectual Property as Price Discrimination: Implications for Contract", *supra* note 78 at 120-121.

⁴⁷¹ *Free World Trust v. Électro Santé Inc.*, *supra* note 183 para 13.

⁴⁷² Ghosh, "Exclusivity - The Roadblock to Democracy?", *supra* note 462 at 822.

⁴⁷³ Jessica Litman, "The Public Domain" (1990) 39 Emory L.J. 965.

⁴⁷⁴ *Ibid.* at 1007.

⁴⁷⁵ *Ibid.* at 971. See also: Gordon, "An Inquiry in to the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory", *supra* note 77 at 1346.

⁴⁷⁶ Litman, "The Public Domain", *supra* note 473 at 1004. Litman points out that uncertainty of IP scope and even of principles such as originality, as applied in copyright, lead even Courts to ultimately rely upon their gut impressions in infringement cases (at 1005).

An additional reason why symbols and thingness are common reactions to IP assets is the influence of power. Peter Drahos argues that fuzziness is a means of expanding the power of IP assets.⁴⁷⁷ This may be true in one sense, but the fuzzy rights cannot be firmly relied upon because they remain at risk of being challenged, and potentially diminished as the outcome of that challenge. For this reason short-term gains that fuzziness may offer, such as those identified by Drahos, may be discounted in light of the uncertainty that is a long-term effect of fuzziness.

The goal of a consistent, reliable definition of IP assets leads to temptation to interpret IP assets in a manner that dispenses with fuzzy boundaries. Aligning intangible IP assets with tangible products seemingly meets this goal and provides an additional advantage – as tangible assets can be depleted, the alignment of a physical object and an IP asset can bestow an air of exhaustibility upon the IP asset.⁴⁷⁸ Viewing IP assets as akin to traditional assets – as sources of economic power represented by physical objects – is therefore a welcome outcome for IP asset holders.⁴⁷⁹

Consequently, IP asset holders are often willfully blind regarding the definition of their IP assets, choosing to assume a relationship between the IP asset and a tangible product. Rockwell International is an example of a company that did not fully appreciate the inconsistencies between products and IP assets.⁴⁸⁰ The company is best known as a participant in the U.S. space program and a variety of high-tech military programs, but in 1996 Rockwell sold the last of its aerospace and government contractor business to Boeing and shifted its focus to commercial electronics.⁴⁸¹ After the business transformation was complete Rockwell's assets continued to

⁴⁷⁷ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16.

⁴⁷⁸ Richard Kreck, "Developing an Intuitive Understanding of the Behavior and Legal Treatment of Information Assets" (2001) 650 PLI/Pat 771 at 774.

⁴⁷⁹ This focus upon IP assets may be referenced as economic power. See: Durell, *Corporations and Intellectual Assets: A Case of Being Blinded by the Economic Value*, [unpublished], *supra* note 452.

⁴⁸⁰ Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at 130.

⁴⁸¹ *Ibid.*

reflect a prior business model that aligned IP assets with products. In 1994 Rockwell shifted its focus to one that understood its IP assets apart from products.⁴⁸² For example, a database was designed to predict and quantify the value of Rockwell's patent assets and to facilitate recognition of synergies between these that may be exploited to promote the company's goals.⁴⁸³ Consequently, Rockwell's business outlook moved away from a preoccupation with products to a focus on defining its IP assets.

Yet, although a change in business strategy can benefit a company, private sector entities are induced to align intangible and tangible goods because this activity: (i) is easier than undertaking definitions of IP assets; and (ii) condones the characterization of the assets as strong rights.⁴⁸⁴ However, equating IP assets with real property "does not fully capture their complex historical and doctrinal roots."⁴⁸⁵ Therefore, although popular solutions, neither "thingness" nor symbols represent valid means of combating fuzziness to produce accurate definitions of IP assets.

3.2.2 Terminology

Inconsistencies in the IP lexicon represent another reason why it is difficult to generate definitions of IP assets.⁴⁸⁶ The term itself – "intellectual property" or "IP" – is recently coined.⁴⁸⁷

⁴⁸² Ibid. at 131.

⁴⁸³ Ibid. at 131-32.

⁴⁸⁴ Mark A. Lemley, "Property, Intellectual Property, and Free Riding" (2005) 83 Tex. L. Rev. 1031 at 1031-1032. See also: Drahos, *A Philosophy of Intellectual Property*, *supra* note 16. Drahos states that, "there is a lot at stake when property extends its reach to abstract objects. For these reasons at least it seems worth asking whether we can accommodate intellectual property within one or more of the existing general accounts of property or whether we should develop a distinctive theory of intellectual property" (at 1). He further concludes that a new theory is not required and that "privilege-bearing duties...should form the core of intellectual property theory" (at 2).

⁴⁸⁵ Ghosh, "Exclusivity - The Roadblock to Democracy?", *supra* note 462 at 800.

⁴⁸⁶ Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at 19. Sullivan comments that "conversations that begin with apparent understanding can soon become confused and unclear" and that this occurs because the conversation lacks "common definitions for frequently used terms." There is no shared language. Sullivan makes these comments in the context of discussions relating to intellectual capital management, but they are no less true for conversations about IP assets.

⁴⁸⁷ Ghosh, "Exclusivity - The Roadblock to Democracy?", *supra* note 462. See also: Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2 at 5.

Despite its youth, or maybe because of it, “IP” connotes a specific narrative to a person, but not necessarily the same narrative to every person.⁴⁸⁸ As an example, for the purpose of this thesis IP assets are defined to include statute-based rights granted for specific forms of intangibles, as described in Appendix “B”. Other commentators have a different understanding of the meaning of IP assets.⁴⁸⁹ For example, IP assets are defined in the following manner by one author:

There are a certain number of rights which, though to some extent different in detail, all have this essential quality in common, that they do not apply to external, material objects, but to internal, spiritual, or rather intellectual values or products. To my mind no term can be found to characterize the essence of these rights better or more centrally than “intellectual property”.⁴⁹⁰

Another says IP assets “may be thought of as the use of the value of an idea.”⁴⁹¹ These definitions are divergent and express different concepts, yet each is used to define the same term – IP.

Notably, understandings of words and phrases can be influenced by a person’s philosophical and legal background.⁴⁹² For example, as discussed in more detail below, a common law background may cause a scholar to arrive at a different definition of “IP” than an

⁴⁸⁸ See: Mayer-Schonberger, “In Search of the Story: Narratives of Intellectual Property”, *supra* note 453 para. 4; and Jeremy Waldron, “From Authors to Copiers: Individual Rights and Social Values in Intellectual Property” (1993) 68 Chi.-Kent L. Rev. 841 at 885-886. Waldron notes that “lacking direct, telepathic contact, we must address one another using, not only the resources of a common language and vocabulary, but, in a larger sense, whatever images and catch-phrases there are in the world, to provide points of mutual understanding and orientation, and to give as much color and richness as possible to our cultural moves and counter-moves.” See also: Robin Jacob, “The Stephen Stewart Memorial Lecture: Industrial Property - Industry’s Enemy” (1997) 1 I.P.Q. 3 para. 2. The use of the term “IP” is called into question by some commentators. Jacob suggests “To call it “intellectual” is misleading. It takes one’s eye off the ball. “Intellectual” confers a respectability on a monopoly which may well not be deserved. A squirrel is a rat with good P.R.”.

⁴⁸⁹ Hayhurst, “When Sovereignties May Collide - Sovereignties and the Regulation of Business in Relation to Intellectual Property: A Canadian Perspective”, *supra* note 173 at 196.

⁴⁹⁰ Pascal Kamina, “Author’s Right as Property: Old and New Theories” (2001) 48 J. Copyright Soc’y U.S.A. 383 at 383.

⁴⁹¹ Justin Hughes, “The Philosophy of Intellectual Property” (1988) 77 Geo. L.J. 287 at 294.

⁴⁹² H.L.A. Hart, *The Concept of Law*, 2 ed. (Oxford: Oxford University Press, 1994) at 14. Hart makes the following statement about definitions of terms. “It simultaneously provides a code or formula translating the word into other well-understood terms and locates for U.S. the kind of thing to which the word is used to refer, by indicating the features which it shares in common with a wider family of things and those which mark it off from others of that same family. In searching for and finding such definitions we are “looking not merely at words...but also at the realities we use words to talk about. We are using a sharpened awareness of words to sharpen our perception of the phenomena.”” People interpret words in a manner that directly links meaning with culture and environment.

academic from the civil law tradition.⁴⁹³ A problem arises when participants engaged in conversation apply different meanings to the same terminology. This is an all too common occurrence in IP discourse.

Both the terminology applied to IP assets and the meaning perceived to ground those terms can have a direct influence on the contractual uses of IP assets. For example, a shift in terminology whereby IP assets were “coated in the language of private property rights” is cited as a reason why infringement came to be described as “theft”.⁴⁹⁴ In a similar vein, the term “public domain” – meaning access by the public – is used less frequently to describe unprotectable aspects of copyrighted works. Terms such as “uncopyrightable” or “non-protectable” are the present-day replacements. This change overrides the positive rationale for denying copyright protection that “public domain” implies, focusing instead on the negative rationales.⁴⁹⁵

Shifts in IP terminology “represent not simply a struggle over interpreting facts and words, but battle over the very foundations on which they rest.”⁴⁹⁶ In particular, there is a break between legal IP theory and conversation about IP assets. One author comments that,

Our legal theory is premised on the instrumental conception of property rights, but our conversational habits are not. In ordinary conversation, we indulge an instinct that property rights are like other aspects of autonomy – vital, personal, and irreducible....it may be that intellectual property rules do not reflect the ownership presumption because there is something unique about intellectual property itself, that dictates a different set of considerations, but it is also possible that intellectual property rules tend to be different because we lack the guidance (and discipline) of coping with ordinary conversation about intellectual property. There isn’t any ordinary conversation about intellectual property....And because there is no conversational discipline to force us to think of intellectual property in terms of commonsense everyday categories, we tend to think of it in ridiculous categories

⁴⁹³ *Theberge v. Galerie d’Art du Petit Champlain inc.*, *supra* note 14.

⁴⁹⁴ Depoorter, “The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law”, *supra* note 1 at 21 & 23.

⁴⁹⁵ Litman, “The Public Domain”, *supra* note 473 at 995.

⁴⁹⁶ Mayer-Schonberger, “In Search of the Story: Narratives of Intellectual Property”, *supra* note 453 para. 58.

instead. This explains, for example, why courts and commentators constantly refer to intellectual property rights as monopolies – all right, limited monopolies – even though the typical proprietor of intellectual property lacks the market advantage (and often as Edmund Kitch has noted, the incentive) to extract monopoly rents. But fooled by the inadequacy of the language used to describe intellectual property rights, the courts have treated them as presumptively dangerous, to be limited and hemmed at every turn, lest the proprietors of these “monopolies” wreak havoc in the markets.⁴⁹⁷

To some extent, present day conversation regarding IP assets cannot be trusted because it is virtually impossible to ascertain whether all discussants are applying consistent and shared definitions to the terms utilized in the discussion. A commentator’s conceptualization of IP assets will drastically affect his or her speech. When consistent and shared definitions of IP asset terms are not applied two speakers can walk away from the same conversation with very different understandings of what each person said. The discussants may attribute variant results to the same discussion and this outcome can undermine IP activities, including IP contracting.

It is not possible to abandon conversations regarding IP assets. Instead, any productive private sector conversation on this topic occurring in the course of a transaction should commence with a definition of the IP terms to be utilized.⁴⁹⁸ This step forces dialogue consistency, or at the very least brings to light instances of inconsistency in the IP asset lexicons of contracting parties. Otherwise misunderstanding and cross-purpose talk can dominate IP conversations without the participants even being aware of its occurrence.

Another concern in the dialogue of IP assets is the instance of “control-talk”. This language encourages a perception of IP assets as facilitating ruling and domination by an IP asset holder. Such talk is prevalent in the private sector and exhibits the prevailing understanding of IP assets

⁴⁹⁷ Stephen L. Carter, "Does it Matter Whether Intellectual Property is Property?" (1993) 68 Chi.-Kent L. Rev. 715 at 717.

⁴⁹⁸ An Intellectual Property Management Group (IPMG) conference of experts on the topic of *Biotechnology and IP* held in Florence in 2005, offers an example of the importance of IP definitions. Very early in the proceedings it became apparent that various speakers were applying divergent meanings to the term “intellectual property”. Once this was acknowledged participants agreed to define the term so as to enhance the subsequent progress of the meeting and the ability to achieve meaningful outputs.

in that sector. R. Polk Wagner says: ‘Rhetorically, an entire vocabulary has been built to support this line of argument. “Control-talk” is of “the second enclosure movement” the lurking “tragedy of the anticommons,” or the dangers of “patent thickets” – not to mention the phenomenon of litigation efforts sporting their own slogans, such as “Free the Mouse,” “Create Like It’s 1790,” or “When Copyright Attacks.”’⁴⁹⁹ Utilizing such terminology denotes an understanding of ownership of IP assets as tantamount to total control over the asset. As discussed below and in Appendix “B”, although IP rights are “exclusive” they do not necessarily grant complete, impenetrable control. Thus, utilizing the terminologies of control can distort the perception of the breadth of the control that IP assets actually confer.

3.2.3 New Innovations Create Confusion

An additional topic that can hamper attempts to define IP assets is the introduction of new categories of innovation. Confusion arises because “when the technology is truly innovative, the legal status of uses of it will be subject to substantial uncertainty.”⁵⁰⁰ A new category of invention, plant derived vaccines (“PDVs”), illustrates this point.⁵⁰¹

A PDV is, just as its name suggests, a vaccination product derived from plants. PDVs are produced through the cultivation of genetically-modified plant material – such as a leaf, fruit or vegetable – to have a composition that acts as a vaccine upon ingestion by a human.⁵⁰² An example of a PDV is a genetically-modified potato plant that invokes an immune response to

⁴⁹⁹Wagner, “Information Wants to be Free: Intellectual Property and the Mythologies of Control”, *supra* note 20 at 330.

⁵⁰⁰ Depoorter, “The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law”, *supra* note 1 para 50.

⁵⁰¹ David Castle et al., *Access to Innovation & Plant Derived Vaccines* (Chicago: Wiley & Sons, 2008).

⁵⁰² Canadian Patent Application No. 2,321,260, filed October 12, 2000.

hepatitis B surface antigens when the potato is fed to a human or animal.⁵⁰³ PDV products have many benefits. Most notably they offer humans the chance to literally eat their medicine.⁵⁰⁴

PDVs have several other benefits which cause them to be of particular interest for application in developing countries.⁵⁰⁵ Traditional vaccine products must be kept cold, require specialized training to administer, and are derived from microbial fermentation sources including insect and mammalian cell cultures (sources which are expensive to reproduce). Together these attributes raise the price of each vaccine dosage and limit the potential range of distribution for such products. PDVs offer the benefits of low price, easy transportation, long-term storage potential, no cold-chain logistics, and non-technical drug administration.⁵⁰⁶ PDVs therefore overcome hurdles facing traditional vaccines and represent a low-price product that is easy to replicate, transport and administer.

Although the nature of PDVs is generally easily understood, deciding which IP assets may be utilized to protect this innovation can prove troublesome.⁵⁰⁷ Aspects of PDVs fit simultaneously within several existing innovation categories, each of which garners an unique form of IP protection. In basic terms, a PDV is a plant variety, a drug, a biotechnology and a

⁵⁰³ Ibid.

⁵⁰⁴ See: al., *Transgenic Plants and World Agriculture*. In fact, PDVs were originally dubbed “edible vaccines” (at 12). Since their inception research has shown that consistent doses cannot be assured through ingestion of raw plant materials, and thus scientists now focus upon using dried PDV plant materials to create a product for oral administration, such as a pill, capsule or powder (at 12). The use of capsules significantly increases the efficacy of PDVs because the coating can be engineered to dissolve in a particular area of the stomach and thus pinpoint the release of the vaccine compound.

⁵⁰⁵ It can be difficult to pin down the chief benefit of such products – e.g. the health benefits offered by PDVs may become overshadowed by considerations of the product’s commercial-value potential. Notably the commercial value of some new technologies can be considerable, both in the revenues from sales as well as benefits of creating a new market sector. For example, the biotechnology industry is cited as having “created (directly and indirectly) 437,400 U.S. jobs, generated US\$47 billion in revenues, and provided US\$10 billion in taxes for federal, state and local government” (Bryn Williams-Jones, “History of a Gene Patent: Tracing the Development and Application of Commercial BRCA Testing” (2002) 10 Health Law Journal 123 at 126). Williams-Jones further points out that revenues of the biotechnology industry more than doubled between 1993 and 1999, rising from US\$8 billion to US\$20 billion and tripled by 2001, reaching US\$27.6 billion. Market benefits can overshadow the health benefits of some products (at 124-125).

⁵⁰⁶ Royal Society of London et al., *Transgenic Plants and World Agriculture*, *supra* note 234.

⁵⁰⁷ Ibid.

developing nation-focused product, all-in-one.⁵⁰⁸ It is therefore difficult to categorize PDVs as protectable by a singular form of IP asset. For example, PDVs can be protected by both patent and plant breeders' rights. Moreover, legislative and regulatory regimes other than IP systems may claim jurisdiction over PDVs, such as food and drugs laws, biotechnology regulation, and environmental policies.

New categories of technologies, such as PDVs, often do not fit neatly within previously established IP asset categories. Forcing such innovations to be protected by ill-fitting IP assets raises a number of concerns that affect IP asset definitions.⁵⁰⁹ The extension of traditional rights to new innovations is not always justifiable.⁵¹⁰ Information products in particular may, "present difficult conceptual problems that render them unamenable to intellectual property protection under traditional regimes such as copyright, trade-mark, and patent."⁵¹¹ This is a notable point as the economic well-being of many companies and nations relies upon innovation.⁵¹²

It is suggested that the introduction of revolutionary innovations should be "followed by a period of non-applicability of intellectual property law", during which period the new innovation would be examined by an expert group and the applicable IP asset protections would be

⁵⁰⁸ Ibid.

⁵⁰⁹ Litman, "The Public Domain", *supra* note 473 at 995. Litman points out that copyright is a form of IP that has had its boundaries tested by new technologies, stating that "copyright protection, once limited to maps, charts, and books, now extends to an extraordinary variety of products that saturate our society."

⁵¹⁰ Ramello, "Intellectual Property and the Markets of Ideas", *supra* note 155 at 17.

⁵¹¹ Rochelle Cooper Dreyfuss, "Information Products: A Challenge to Intellectual Property Theory" (1988) 20 N.Y.U. J. Int'l L. & Pol. 897 at 898.

⁵¹² See comments by: The Honourable Paul Martin, noted the importance of innovation to Canada's economic growth in a speech given at a Luncheon Event Co-Sponsored by the Canada Club, the Association of Canadian Investment Dealers and the Canada-United Kingdom Chamber of Commerce in London, England on February 15, 2001; the Honourable Tony Blair of the United Kingdom, "*Blair views biotechnology as key to Britain's economic future*" Agence France Press (31 July 2006); and Pope John Paul II, *Centesimus Annus*, 1991.

determined.⁵¹³ However, the effect of this period for private sector businesses may be marketplace nervousness which often accompanies uncertainty.⁵¹⁴

Attempting to push certain technologies into existing IP boxes, as has been done in the past,⁵¹⁵ may hinder the definition of resulting IP assets. Choosing the wrong box may mean the grant of the IP asset cannot be justified. For example, a recent Canadian case evaluated whether a trade-mark could protect the function of an innovation previously protected by a patent asset after the patent asset expired.⁵¹⁶ The Supreme Court of Canada held that a trade-mark is not capable of protecting the function of an invention, as this is uniquely the role of a patent asset.⁵¹⁷ Thus, only certain IP assets can protect particular aspects of an innovation. However, it may not be obvious which IP assets are capable of protecting specific aspects of new innovations. Nonetheless, it is important to get this determination right as the consequence of a mistake may be that the IP asset granted offers inadequate protection for an innovation. This can have market implications as greater access may be granted to the innovation than anticipated due to a lack of IP asset protection. Moreover, a misfit between innovations and IP assets exacerbates the difficulties inherent in defining IP assets.

3.2.4 Culture

As a final factor, culture can augment the fuzziness of IP assets and render them difficult to define.⁵¹⁸ As an example, the role of culture is highlighted by differences between civil and common law perceptions of IP assets. For copyright and patents in particular, civil law regimes

⁵¹³ Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 54.

⁵¹⁴ Moore, "Intellectual Property: Theory, Privilege, and Pragmatism", *supra* note 259 at 200.

⁵¹⁵ Dreyfuss, "Information Products: A Challenge to Intellectual Property Theory", *supra* note 511 at 910. See also: Karen Lynne Durell, "Intellectual property protection for plant derived vaccine technology: here they come are we ready or not?" (2005) 10:3 Lex Electronica; and Durell, "Intellectual Property Protection for Computer Software: How Much and What Form is Effective?", *supra* note 184.

⁵¹⁶ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135.

⁵¹⁷ *Ibid.* paras. 40-61.

⁵¹⁸ Hunter, "Culture War", *supra* note 160. Hunter states that in the IP realm there is not "a war between cultures, but a war over our culture" (at 1117).

perceive of IP assets as closely related to the creator of an invention or work,⁵¹⁹ whereas common law systems do not endorse any continuation of the initial relationship between a creator and an IP asset.⁵²⁰ These distinct legal environments can therefore lead to divergent definitions of IP assets.⁵²¹ Other aspects of culture can have additional effects upon IP assets.⁵²²

Moreover, cultures that are community focused, such as South Africa, have trouble understanding international rules based upon patents as granting rights to individuals, such as those of the *Agreement on Trade-Related Aspects of Intellectual Property Rights*⁵²³ of the World Trade Organization.⁵²⁴ Cultural misalignment of patent use priorities is evident in the AIDS/HIV pharmaceutical discussions in which access to drugs is a point of contention for pharmaceutical manufacturers despite the significant alleviation of suffering that such drugs could offer to societies where AIDS/HIV are rampant, such as Africa.⁵²⁵

These are but two examples of the effects of culture upon the definition of IP assets. Generally, the definition of IP assets can be affected by contextualization induced by particular cultural environments. As another example in the context of trade-marks, cultural differences are

⁵¹⁹ Kamina, "Author's Right as Property: Old and New Theories", *supra* note 490. Civil law offers a moral right which a copyright creator may retain throughout the term of the right. This is also true of Canadian copyright law, and is attributed to the influence of the civil law system of Quebec upon Canadian IP law.

⁵²⁰ Moore, "Intellectual Property: Theory, Privilege, and Pragmatism", *supra* note 259 at 201.

⁵²¹ See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14 para. 28; Kellner, "For RIM: Careful What You Ask For", *supra* note 21; Gross, "BlackBerry Gets a Boost", *supra* note 21; Noguchi, "BlackBerry Users Remain in the Dark", *supra* note 21; and Restive, "U.S. wades into RIM fight", *supra* note 21.

⁵²² Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2 at 13. Vaver points out that economies, states of development, and culture, all affect IP laws and cause IP systems to differ from country to country as these systems develop through time. He says, "there is no single platinum standard IP law." See also: Thomas M. Meshbesh, "The Role of History in Comparative Patent Law" (1996) 78 J. Pat. & Trademark Off. Soc'y 594; and Edward C. Walterscheid, "The Use and Abuse of History: The Supreme Courts Interpretation of Thomas Jefferson's Influence on the Patent Law" (1999) 39 IDEA 195.

⁵²³ *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, 33 I.L.R. 1197 (1993), 33 I.L.R. 1197 (1993).

⁵²⁴ This statement reflects comments presented at a IP & Development Expert Meeting hosted by WIPO at the University of Cape Town, Cape Town, South Africa (3 May 2009).

⁵²⁵ See: L. Nelsen, "The Role of University Technology Transfer Operations in Assuring Access to Medicines and Vaccines in Developing Countries" (2003) 3:2 Yale J. Health Pol'y L. & Ethics 301; and "Integrating Intellectual Property Rights and Development Policy" (2002) United Kingdom Commission on Intellectual Property Rights, London.

evident in the response to famous marks espoused by national trade-mark law. Indian law recognizes famous marks that are not registered or sold within the boundaries of the country, whereas Canadian law considers the fame of a mark as only one of several elements to be weighed when assessing trade-mark infringement.⁵²⁶

To show the wide variety of effects culture can have upon the definition of IP assets, other examples are briefly introduced in this section. These include: the building-block effect; music-downloading; the cultural landscape model; the ability of culture to shape the scope of IP assets; and the role of culture in theory. Each provides a basic overview of ways that culture affects IP assets and vice versa.

3.2.4.1 IP as Building Blocks

Wendy Gordon notes that a new IP asset is not created in a vacuum, but is built upon pre-existing ideas.⁵²⁷ The grant of strong and broad IP rights therefore provides the owner with control over how the “created” reality is interpreted. In other words, “it grants control over what the IP world means.”⁵²⁸ Ultimately, control is exercised in the name of the new IP right over both the new IP asset and the past knowledge used in its creation. As Wendy Gordon points out:

The inventor of the automobile builds on one predecessor's invention of metal-smelting processes, another predecessor's invention of gears, another predecessor's invention of the wheel, and ultimately on the efforts of some Promethean cave-dweller who, in discovering how to make fire, laid the groundwork for the internal combustion engine. The pattern is not limited to the technological culture. Artists learn from predecessors the laws of perspective, the uses of oils, acrylics, and watercolors, and the very traditions that give meaning to their productions. As for music, it is often argued that there is a limited vocabulary available for musical composition, and that composers will inevitably and necessarily work in a received tradition, as well as re-use prior themes. Communication depends on a common

⁵²⁶ See: *Hardie Trading Ltd. v. Addison Paint and Chemicals Ltd.*, 2003(27) PTC 241 (decided on September 12, 2003); and *Mattel, Inc. v. 3894207 Canada Inc.*, [2006] 1 S.C.R. 772.

⁵²⁷ Wendy J. Gordon, "A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property" (1993) 102 Yale L.J. 1533.

⁵²⁸ *Ibid.* at 1556.

language and common experience. Labor itself is guided and organized by anterior ideas.

The present interpretation of a new IP asset can affect the pre-existing IP asset used in the creation of the new IP asset on a go-forward basis. Although culturally acceptable, this ultimately exacerbates confusion regarding the definition of an IP asset because perceptions of new and old IP assets are simultaneously altered.

3.2.4.2 Music Downloading

Acceptable copying behaviour in the context of music downloading provides a clear example of cultural influence. Although copying music was taboo in previous generations, to present day computer users who “have been weaned on the Internet and raised on CD burners and Napster-like technologies,” this attitude is foreign. Present day music downloaders perceive “no ethical problem with the free use and distribution of information.”⁵²⁹

Moreover, this perception has been shown to be partly linked to the type of contract applied to prevent music-downloading. A study of MBA students found that students required to execute form-adhesive contracts⁵³⁰ to access music are ‘likely to agree or strongly agree that “acquiring music, movies or software (sold for a fee) without paying for them is acceptable because [they] don't feel obligated to the organizations that sell these things.”⁵³¹ The students’ perception of a lack of obligation is directly related to the fact that consent is provided by way of a generic contract.⁵³²

⁵²⁹ Brian Fitzgerald, "Theoretical Underpinning of Intellectual Property: “I am a Pragmatist But Theory is my Rhetoric”" (2003) 16 Can. J.L. & Juris. 179 at 184.

⁵³⁰ Zev J. Eigen, "The Devil in the Details: The Interrelationship Among Citizenship, Rule of Law and Form-Adhesive Contracts" (2008) 41 Conn. L. Rev. 381 at 1. Form-adhesive contracts are defined by Eigen as “take-it-or-leave-it contracts drafted by organizations (or more often, lawyers representing the organizations' interests), intended to be signed by numerous individuals.” Eigen describes form adhesive-contracts as “ubiquitous”.

⁵³¹ Ibid. at 403.

⁵³² Ibid. at 382. Eigen describes the consent provided to form-adhesive contracts by parties that do not feel bound by the terms they are consenting to as “malleable consent”.

Notably, the music industry presently routinely characterizes unauthorized downloading as theft.⁵³³ However, this accusation lags behind the present cultural standards that promote, if not expect, free-access to, and sharing of, information. The definition of IP assets are therefore not merely affected by legal rules, but can also be influenced by perceptions of rights to access IP assets attributable to IP asset users. Legal rules may define IP assets as extending control to the IP asset holder, but culture may define IP assets as balancing access rights between holders and users.

3.2.4.3 Cultural Landscape Model

The effect of culture upon the copyright environment and its relationship to the public domain is presented by Julie Cohen as the “cultural landscape model.”⁵³⁴ Cohen comments that “commodification radically alters the public’s relationship with the cultural landscape because it systematically reverses all of the implicit presumptions that individuals have historically brought to their experience of and participation in the development of culture.”⁵³⁵ Commodification, a process that relies heavily upon IP assets, exhibits essential changes to cultural progression. The alteration is a shift to a rights-based presumption from a free-access expectation. This is the opposite of what is occurring in the music downloading sphere, but is nonetheless true for other works, including those involved in knowledge sharing. Pharmaceutical research results, in particular, were once expected to be freely distributed, but now are jealously guarded and often only provided under the governance of a licensing agreement.⁵³⁶ In this manner, IP assets are the basis for limitations on previously enjoyed public freedoms and this uneasy relationship affects the definition attributed to IP assets.

⁵³³ See: Cassavoy, "Music Labels Declare War on File Swappers: RIAA files 261 lawsuits, promises more--and offers limited amnesty for repentant swappers", *supra* note 229.

⁵³⁴ Julie E. Cohen, "Copyright, Commodification, and Culture: Locating the Public Domain" in L. Guibault & P.B. Hugenholtz ed., *The Future of the Public Domain* (Netherlands: Kluwer Law International, 2006) 121 at 157.

⁵³⁵ *Ibid.* at 158.

⁵³⁶ Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94 at 72-75.

3.2.4.4 Shaping IP Scope

Jessica Litman considers the emergence of fan fiction, fan art and fan imitation in her article, “Creative Reading”, and examines how this affects the definition of IP assets.⁵³⁷ She concludes that the traditional boundaries of copyright are challenged by fannish behaviours. Legislative strengthening of IP assets can inhibit the enjoyment of works by “reader, listener, and viewer”.⁵³⁸ Thus, in Litman’s opinion, new boundaries for the fenceposts of IP assets may have to be determined to set a culturally appropriate “line between infringing exploitation and non-infringing enjoyment.”⁵³⁹ Litman argues that this line must be based on a consideration of historical rights extended to authors, readers, listeners and viewers. The roles of all of these parties thereby become integral to the definition of IP assets.

3.2.4.5 Culture in Theories

Paul W. Kahn considers the culture of the rule of law. He notes that creating a distance between theory and practice is difficult because legal scholars can fall into the same category as lawyers – “legal scholars are not studying law, they are doing it.”⁵⁴⁰ The relevance of Kahn’s work to attaining a definition of IP assets is that he points out how IP practice and institutions influence IP asset definitions. He notes that legal academics influence legal reform.⁵⁴¹ As legal scholarship is not held accountable, but allowed to change course freely, “this produces a kind of schizophrenia.”⁵⁴² This state of affairs frustrates the ability of the present culture of law to present a pure view of law as separate from the view of legal practice. In response, Kahn proposes that a new way of considering the rule of law that directs an eye to theoretical

⁵³⁷ Jessica Litman, “Creative Reading” in James Boyle & Lawrence Lessig ed., *Symposium: Cultural Environmentalism @ 10*, vol. 70 (New York: Law & Contemp. Probs 2007) 176.

⁵³⁸ *Ibid.* at 183.

⁵³⁹ *Ibid.*

⁵⁴⁰ Kahn, *The Cultural Study of Law: Reconstructing Legal Scholarship*, *supra* note 254 at 27 & 24.

⁵⁴¹ *Ibid.* at 5. Kahn says “if scholarship elaborates the reason behind law, then it must be making a claim as to what the law is or should become. It must, therefore, be setting forth how decision makers should rule” (at 19).

⁵⁴² *Ibid.* at 29.

justifications be substituted for the old view.⁵⁴³ In the context of defining IP assets Kahn's work can be read to encourage looking to IP theories to find a justification for IP assets.

The aforementioned hurdles exemplify factors that cloud the activity of defining IP assets. The identification of IP distinguishing traits from IP theories can help to dissipate the cloud by establishing core traits that must exist in all IP assets. IP distinguishing traits may not provide a complete definition of IP assets, but they set a consistent foundation for the definition.

3.3 IP Distinguishing Traits & IP Theories

Despite the disparate aspects of IP theories (e.g., justificatory reasoning, origin, original purpose, etc.), upon examination they are shown to collectively support certain IP distinguishing traits. This statement is not intended to downplay either the significance of the differences between the theories, or the effect of the lack of a dominant theory. The fact that there is no single theoretical foundation in particular creates confusion that hinders the determination of the definition of IP assets. For example, without a single unifying theory many justifications are offered for the grant of IP assets. Some of these justifications appear to be inconsistent. Moreover, the differences between IP theories and the lack of a dominant theory is the basis for considerable dissention amongst IP theorists.⁵⁴⁴ Notably, this thesis does not attempt to remedy the discord. Instead its objective is to identify core traits of IP assets commonly recognized by IP theories, namely IP distinguishing traits.

The discussion below first describes each IP distinguishing trait individually. This is critical to ensure the definition of each trait is clear. Next an analysis of the interaction of the

⁵⁴³ Ibid. at 137. Kahn further states that, "once we see that the rule of law is a way of being in the world that must compete with other forms of social and political perception, a range of questions about the actual forms and character of this competition open up. We need to study the places at which conflict emerges and the ways in which law has succeeded or failed in these conflicts" (at 85). Consideration of reform by legal scholars need not be abandoned, according to Kahn. He merely advocates a different approach that will reveal "philosophical possibilities of legal inquiry."

⁵⁴⁴ Cohen, "Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management"", *supra* note 115 at 511-512.

traits and the role of each trait is presented in the context of every theory discussed herein. Ultimately the identification of IP distinguishing traits diminishes the complexity of defining IP assets by causing the core of IP assets to be known. Core traits are crucial as they must exist within the fenceposts of all IP assets.

3.3.1 IP Distinguishing Traits

In particular, three IP distinguishing traits are identified as commonly upheld by the competing IP theories in this thesis. These are: control; flexibility/evolution; and balance. Each is presented below.

3.3.1.1 IP Distinguishing Trait of Control

Of the three IP distinguishing traits discussed in this thesis, control is likely the one that receives the most private sector attention. Besides being commonly upheld by IP theories control finds expression in IP laws – as an embodiment of the “sole right” offered by the *Copyright Act*,⁵⁴⁵ as well as the “exclusive right” granted by both the *Patent Act*⁵⁴⁶ and the *Trade-Marks Act*.⁵⁴⁷ In and of itself the IP distinguishing trait of control is not problematic. Control is routinely equated with power over an IP asset and is sometimes assumed to represent total control. Control may further be interpreted as the ability to effect the contractual use of an IP asset in a manner that is consistent with an asset holder’s goals or whims. Thus, the trait of control can foster negative consequences if it is viewed as the sole or primary trait of an IP asset.

Becker expresses the role of control in the following manner, “[i]f I am entitled to exclude you, I have the power to alter your liberties and duties with respect to the thing. That is, when I exercise my entitlement to possess or manage the thing, you lose the liberty to do so, and you

⁵⁴⁵ *Copyright Act*, *supra* note 114 s. 3(1).

⁵⁴⁶ *Patent Act*, *supra* note 141 s. 42.

⁵⁴⁷ *Trade-Marks Act*, R.S.C. 1985, c. T-13 s. 19.

acquire various duties with respect to me.”⁵⁴⁸ As is discussed in Appendix “B”, sole and exclusive rights are the basis of Canadian IP systems.⁵⁴⁹ These principles, one may assume, have grown from the foundation of IP theories which support the extension of a property-like right to the holder of IP assets. However, amongst IP theories the justifications for granting an IP right and the steps necessary to obtain the right vary. Thus, the scope of the trait of control extended to an IP asset holder is unclear and may vary for types of IP assets (e.g. patents, trade-marks, etc.).

Draho discusses the IP distinguishing trait of control at length.⁵⁵⁰ His work does not expound any particular IP theory. Draho argues that self-interest is a natural part of every person and that it drives the accumulation and proliferation of IP assets within society.⁵⁵¹ Viewed in this context, IP assets are considered to be created for, and exist within, a market context. In this sphere, IP assets create lucrative opportunities and rational self-interested parties naturally take advantage of these. Draho says, “the beneficial effects of the link between property rights and self-interest is, for many, almost a matter of religious faith.”⁵⁵² The problem with this perception of control is that it is circular in nature. The activity of utilizing IP assets to achieve market control leads to opportunistic behaviour, and it can eventually negate the social interest providing the original justification for the creation of the assets.⁵⁵³

Draho holds economic self-interest to be crucial, “because it is a powerful motivator of conduct” which in turn “makes intellectual property a dangerous institution for a society to rely

⁵⁴⁸ Becker, “Deserving to Own Intellectual Property”, *supra* note 452 at 621.

⁵⁴⁹ This is true of the IP laws of most other countries as well. TRIPs (*Agreement on Trade-Related Aspects of Intellectual Property Rights*, *supra* note 523) a WTO treaty, sets out minimum standards of IP laws to be applied by its member states.

⁵⁵⁰ See: Draho, *A Philosophy of Intellectual Property*, *supra* note 16.

⁵⁵¹ *Ibid.* at 119.

⁵⁵² *Ibid.*

⁵⁵³ *Ibid.* at 119 & 122. See also: Adam D. Moore, “A Lockean Theory of Intellectual Property” (1997) 21 *Hamline L. Rev.* 65 at 66. Moore states that “it may be that granting control to authors and inventors over what they produce diminishes overall social utility.”

on too extensively.”⁵⁵⁴ The problem is that opportunism, even in its mild forms, can thwart the just use and application of IP rights because

the creation of property rights in abstract objects, when combined with a strategy of deliberately maintaining the option of high transactions costs in relation to such rights, would allow large players the free-riding option while denying it to small players. Large companies could infringe the intellectual property entitlements of small companies knowing that only a small percentage of actions against them would be brought, let alone succeed. This kind of free-riding strategy by powerful, mildly opportunistic actors is, to some extent, safeguarded by high transaction costs to which intellectual property rights contribute.⁵⁵⁵

Draho characterizes IP as a form of private sovereignty and argues that IP assets are a form of capital.⁵⁵⁶ Thus, as the law continues to expand to encompass new abstract objects stemming from advancing innovation, it in effect creates new forms of capital.⁵⁵⁷ IP assets are a dangerous form of capital in Draho’s opinion because they “can act as an enormous power resource for a select few.”⁵⁵⁸

This power can even be exercised as threat power according to Draho.⁵⁵⁹ The strength of threat power is directly related to the importance of the IP asset and therefore will not be equally distributed amongst all owners of IP assets.⁵⁶⁰ Moreover, “thingness” can further distort the power imbalance and increase threat power. Draho states that assets that are “the subject of considerable or universal object dependency” can affect the distribution of power in two ways: (i) “new kinds of threat power come into being”; or (ii) an asset “creates relationships of person dependency and those relationships create an

⁵⁵⁴ Draho, *A Philosophy of Intellectual Property*, *supra* note 16 at 137.

⁵⁵⁵ *Ibid.* at 125.

⁵⁵⁶ *Ibid.* at 150.

⁵⁵⁷ *Ibid.* at 158.

⁵⁵⁸ *Ibid.*

⁵⁵⁹ *Ibid.* at 161.

⁵⁶⁰ *Ibid.*

essential condition necessary for the exercise of threat power by the owners of those abstract objects.”⁵⁶¹

Despite Drahos’ identification of the present-day conceptualization of IP assets as control-driven, it seems unnecessary that threat power be the result. Indeed, such an outcome would represent a break between IP assets and their theoretical moorings. “Threat” is defined by the Oxford Dictionary generally as “a declaration of intent to punish or hurt” and in law as a “menace” of hurt.⁵⁶² Threat power therefore implies the wielding of an IP asset in a manner that menaces hurt to a third party. This may exemplify an extreme level of the IP distinguishing trait of control. However, exclusive control to restrict third parties from accessing an IP asset does not have to escalate to the level of a menace.

Edwin J. Prindle, like Drahos, does not align his writing with any particular IP theory, but offers comments on the potential breadth of the control granted to an IP asset holder which he references as power. He says, “the power which a patentee has to dictate the conditions under which his monopoly may be exercised has been used to form trade agreements throughout practically entire industries.”⁵⁶³ Notably Prindle’s comments are not part of the recent modern discourse on IP assets. Rather Prindle recognized the role of IP asset power in 1906.⁵⁶⁴ Thus, the IP distinguishing trait of control is not a new discovery, but an entrenched aspect of an IP asset.

This being said, although the word “control” conjures negative connotations for some authors, as exemplified by Drahos’ threat power comments, not everyone characterizes control in a disapproving manner. R. Polk Wagner argues that, although many believe that control reduces

⁵⁶¹ Ibid. at 160.

⁵⁶² *The Oxford English Dictionary*, *supra* note 89 s.v. “threat”.

⁵⁶³ Edwin J. Prindle, “Patents as a Factor in a Manufacturing Business” *Engineering Magazine* (1906).

⁵⁶⁴ Ibid. Prindle argues that employee contracts that include an automatic assignment of IP rights result in unfair confiscation. This viewpoint is directly related to the transfer of control which Prindle considers to accompany the assignment of IP rights. Forcing an employee to assign his or her rights merely augments the imbalance of power between parties. The weaker party is thereby forced to grant additional power to the party who naturally holds the larger amount of power.

availability of information in the public domain, known as the anticommons, as discussed in Chapter 6, this criticism is unfounded.⁵⁶⁵ Indeed Wagner's opinion points out an important aspect of IP assets –they encompass many traits, some of which appear as contradictory on their face. In fact these seemingly opposing IP distinguishing traits can exist harmoniously if no single trait is over or under-expressed. This is achieved by way of tempered relationships between traits.

Tempering of the trait of control is clearly a requirement of IP theories. Control must be weighted in relationship to other IP distinguishing traits so that no core trait overpowers the other traits. Lockean theory offers an example of tempering. It advocates control by permitting a labourer to take rights in the fruits of his labour – what he sows he may reap (the apples he picks from a tree).⁵⁶⁶ However, the theory warns that although control over items procured through labour may be robust, it must be weighed against wrongs.⁵⁶⁷ One such wrong is waste. Thus, Lockean theory does not advocate an unlimited form of control, but a tempered form.

The discussion below provides more detail on the role of control described by Lockean theory as well as other theories. Notably, these theories generally acknowledge control as an IP distinguishing trait.

3.3.1.2 IP Distinguishing Trait of Balance

Balance has a critical role as an IP distinguishing trait due to its consequence for persons other than the IP asset holder. As bargain theory points out, there is a *quid pro quo* relationship

⁵⁶⁵ Wagner, "Information Wants to be Free: Intellectual Property and the Mythologies of Control", *supra* note 20 at 330.

⁵⁶⁶ John Locke, "Second Treatise of Government" in *Two Treatises of Government*, (1698).

⁵⁶⁷ A historical vantage shows that some IP theories are based upon the ultimate model of control – that of God and the Church. A natural rights interpretation of Locke, for example, rests upon an assumption that God is the ruler of the natural state (Ibid.). On a practical level, the Roman Catholic Church for many years controlled knowledge and thereby controlled the basis of IP assets by, "determining what could be known and who could make use of the knowledge" (Renée Marlin-Bennett, *Knowledge Power: Intellectual Property, Information, and Privacy* (Boulder: Lynne Rienner Publishers, 2004) at 23).

whereby society agrees to a grant of a time limited right of protection for an intangible asset to its owner in return for knowledge of the details of the intangible asset. Benefits accrue to the asset holder and society as a result of this bargain.⁵⁶⁸ The Supreme Court of Canada is a strong proponent of balance, although the Court does not describe it as an IP distinguishing trait.⁵⁶⁹ Moreover, similar sentiments are expressed in the U.S.: ‘The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that it is the best way to advance public welfare through the talents of authors and inventors in “Science and useful Arts”’⁵⁷⁰

Unfortunately, the general understanding of IP assets does not always recognize the IP distinguishing trait of balance. One result is that companies try to wield IP assets in a manner that is decidedly unbalanced. One author comments that, “efforts to permit intellectual property owners to fully internalize the benefits of their creativity will inevitably get balance wrong.”⁵⁷¹ Although it may be advantageous to IP asset holders to perpetuate a belief in the limitless power of control in an IP asset, this perception undervalues balance as an IP distinguishing trait and is out of step with IP theories. Even economic theory, considered the touchstone of IP theory, acknowledges that to achieve efficiency IP assets must include balance.⁵⁷²

The Canadian copyright case of *Robertson v. Thompson* considers the role of balance to promote public interest.⁵⁷³ The minority comments that public interest is significant because it

⁵⁶⁸ Xuan-Thao Nguyen & Jeffrey A. Maine, "Giving Intellectual Property" (2006) 39 U.C. Davis L. Rev. 1721 at 1724. The authors of this article suggest that not only should IP assets promote social benefit, but that it should be possible to cause tax and IP laws to work together to benefit society.

⁵⁶⁹ See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14.

⁵⁷⁰ *Mazer v. Stein*, 347 U.S. 201 (1954) quoted in Lemley, "The Economics of Improvement in Intellectual Property Law", *supra* note 15 at 994.

⁵⁷¹ Lemley, "Property, Intellectual Property, and Free Riding", *supra* note 484 at 1032.

⁵⁷² *Ibid.* at 1065. Locke teaches that overlooking social good can lead to waste. Lior Zemer says of Lockean theory in the context of copyright “it is a mistake to ignore [Locke’s] no-spoilation condition when discussing copyright” (Lior Zemer, "The Making of a New Copyright Lockean" (2006) 29 Harv. J.L. & Pub. Pol’y 891 at 919 & 922.) See also: Hughes, "The Philosophy of Intellectual Property", *supra* note 491.

⁵⁷³ *Robertson v. Thomson Corp.*, *supra* note 19.

“hangs in the balance between the competing rights.”⁵⁷⁴ A scholar additionally comments that, the ‘current trend of “proptertization” of information goods strains the natural balance between the public and private right in creativity, which resets on “a calculus of net social benefits”’⁵⁷⁵ The weighing of the interests of society, however these are termed, with the right of the IP holder is a difficult task – but the outcome is recognition of the trait of balance.⁵⁷⁶

The exact means of establishing balance and its precise role is not prescribed by any theory, although the trait is supported by all theories. Academics and courts struggle to define the role of balance.⁵⁷⁷ The discussion below points out that balance can be a justification for the grant of IP rights as well as a means of tempering control. Despite variant definitions balance is an IP distinguishing trait of IP assets commonly supported by IP theories.

3.3.1.3 IP Distinguishing Trait of Flexibility/Evolution

Due to its source (e.g. inventions, works, designs, symbols) an IP asset is immersed in an arena that promotes the forward progression of ideas reduced to practice. The world of innovation is constantly evolving and changing. Previously unthinkable technologies, works and forms of marks are regularly introduced to compete with existing IP assets.⁵⁷⁸ For example: a new patentable technology is the plant derived vaccine discussed previously; a recently adopted new category of copyrightable works is digital works (e.g., sound recordings, pictures, movies,

⁵⁷⁴ Ibid. para. 70. See also: Barbara J. Murchie et al., "Canada's Balancing Act" *Lexpert Guide to the Leading 500 Lawyers in Canada* (2007).

⁵⁷⁵ Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 17.

⁵⁷⁶ While developing his personality theory Hegel notes that rights do not need to be pursued to their full extent, by saying “it is not absolutely necessary that I should pursue my rights, because this is only one aspect of the whole relationship” (T.M. Knox Trans., *Hegel's Philosophy of Right* (Oxford: Oxford University Press, 1952) at 69). Thus personality theory in application to IP assets recognizes a means of ensuring balance is not overridden by competing IP distinguishing traits, such as control, by promoting balance in the application and enjoyment of IP assets.

⁵⁷⁷ Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2 at 3. Vaver notes that “[w]hat is over- or under-compensation or excessive control clearly involves a value judgment, a weighing of costs and benefits, striking a balance, and recognizing that the matter is one on which minds even within the same state – let alone among states – may reasonably differ.”

⁵⁷⁸ See: Porter et al., "The patentability of human embryonic stem cells in Europe", *supra* note 22; and Bill Rogers, "Patently absurd?" *National* 15:2 (March 2006) 26.

etc., which are generally protected in accordance with *Copyright Act* provisions created for non-digitized works); and new forms of trade-marks include distinguishing guises and coloured marks.⁵⁷⁹ Thus, IP protection is now granted to inventions, works and marks that were not conceivable at the inception of IP systems. This progression does not necessarily occur free from reservation or debate, but it inevitably represents a core trait of IP assets.⁵⁸⁰ Because the subject-matter to which IP protection is granted is constantly evolving, IP assets must be flexible and capable of evolution to embrace progression in the realm of inventions, works, designs, and marks.⁵⁸¹

Notably, flexibility is immediate, whereas evolution is gradual. Yet, both are integral aspects of IP assets. They are also sufficiently intertwined and have a significant level of interconnection to stand as a single IP distinguishing trait. Thus, for the purpose of this thesis, flexibility and evolution are treated as a single IP distinguishing trait – flexibility/evolution.

To further clarify the definition of flexibility/evolution it is helpful to draw an analogy between the role of IP and the role of the Canadian constitution. The constitution is likened to a growing tree, ever able to change and adapt to the needs of the society that it serves.⁵⁸² Indeed, constitutional law cannot be staid because such a state would render it stagnant. Society demands

⁵⁷⁹ *Trade-marks Regulations*, R.S.C. 1985, c. T-13 s. 28 and *Trade-Marks Act*, *supra* note 547 s.13. See also, Sunny Handa, *Copyright in Canada* (Markham: Butterworths, 2002) at 10-14; and *WIPO Copyright Treaty*, WO033EN at fn1 that states an “*Agreed statement concerning Article 1(4)*: The reproduction right, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder, fully apply in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention.”

⁵⁸⁰ Patents over signaling pathways are emerging in the area of biotechnology. These raise concerns within academic and public spheres regarding the effect of allowing patent rights over this aspect of biology. See: "Patenting Pathways" *Nature Biotechnology* 24:6 (June 2006) 616.

⁵⁸¹ Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2 at 13.

⁵⁸² Peter W. Hogg, *Constitutional Law of Canada*, 5th ed. (Toronto: Carswell, 1998) at 33.7(a). Hogg identifies the source of the metaphor as *Edwards v. A.-G. Can.*, [1930] A.C. 124, 136.

that it be flexible and able to change.⁵⁸³ A law which applies to a society that is constantly progressing must be capable of evolution itself.

The Supreme Court of Canada says of IP,

The vast and expanding domain of the law of intellectual property is going through a period of major and rapid changes. The pressures of globalization and technological change challenge its institutions, its classifications and sometimes settled doctrines. The state of patent law is evidence enough of the stresses on the process of jurisprudential development in a world where statute law itself struggles to catch up with the life of laboratories and markets.⁵⁸⁴

Undoubtedly the changing world of works, innovations and marks necessitates a flexible and evolutionary IP asset. Moreover, this requirement is supported by IP theories. However, as the quote points out, IP assets must stand upon a foundation that is not overly flexible or evolutionary.

The IP distinguishing trait of flexibility/evolution is not at present as widely acknowledged as are the traits of control and balance. However, this does not alter the fact that flexibility/evolution is embraced by IP theories collectively. As has been pointed out, the very nature of IP subject-matter requires that flexibility/evolution be inherent in IP assets. This is necessary for IP assets to meet the needs of users and asset holders alike, and to keep pace with the present day innovative society. IP theories give the trait of flexibility/evolution a foundation.

3.3.2 IP Theories

Several IP theories are presented in the discussion below. These represent some of the IP theories most commonly referenced in legal literature and they provide a basic overview of

⁵⁸³ Some authors writing about U.S. constitutional law suggest that the doctrine of original intent holds that the U.S. law is not meant to be interpreted as ever-growing, but instead as consistent with the original intent of the framers (Robert J. Reinstein, "The Evolution of Individual Rights from the Constitution's Original Intent" (1988) 61 Temp. L. Rev. 197 at 198). This viewpoint is not consistently held by all authors and several question the doctrine of original intent (See: Terry Brennan, "Natural Rights and the Constitution: The Original "Original Intent"" (1992) 15 Harv. J.L. & Pub. Pol'y 965 at 969; and Leonard W. Levy, *Original Intent and the Framers' Constitution* (New York: Macmillan Publishing Co., 1988)).

⁵⁸⁴ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para 37.

theories in this category. The theories reviewed in this section include: economic IP theories; Lockean theories; bargain theory; and personality theory. The examination of the theories elicits evidence of support for the IP distinguishing traits of control, balance and flexibility/evolution. The fact that each theory supports these traits acknowledges the expectation that IP assets will incorporate such traits. As discussed below, even theories that exhibit a greater alignment with some IP assets than others still support all three IP distinguishing traits.⁵⁸⁵ Thus, as IP theories commonly expect IP assets to incorporate these IP distinguishing traits it may be presumed that each represents a core trait of an IP asset.

3.3.2.1 Economic IP Theory

Several authors and practitioners cite economic or utilitarian theory as the dominant and/or most justifiable IP theory.⁵⁸⁶ They say that ‘the general area of law now called “Intellectual Property” is in the main a law conferring private rights on one party to prevent competition from others. It is fundamentally about industry – an economic law – a law that controls or forms the base for industrial activities’ and these laws are assumed to be grounded in economic IP theory.⁵⁸⁷ Of course, this opinion is not unanimous and other commentators question whether economic theory is a complete IP theory.⁵⁸⁸ Specifically the relationship between economic

⁵⁸⁵ The topic of alignment of particular IP theories with specific IP assets is not examined in depth in this thesis, but is discussed elsewhere. See: Waldron, "From Authors to Copiers: Individual Rights and Social Values in Intellectual Property", *supra* note 488; and Abraham Drassinower, "A Rights Based View of the Idea/Expression Dichotomy in Copyright Law" (2003) 16 Can. J. L. & Jur. 3.

⁵⁸⁶ Mayer-Schonberger, "In Search of the Story: Narratives of Intellectual Property", *supra* note 453 para. 12. See also: Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2 at 6; and Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1 para. 4; Moore, "Intellectual Property: Theory, Privilege, and Pragmatism", *supra* note 259 at 201. Moreover, the economic theory has been long associated with some forms of IP assets, such as patents; see Arnold Plant, "The Economic Theory Concerning Patents for Inventions" *Economica* 1:1 (1934).

⁵⁸⁷ Jacob, "The Stephen Stewart Memorial Lecture: Industrial Property - Industry's Enemy", *supra* note 488 para. 2.

⁵⁸⁸ Alford, "How Theory Does - and Does Not - Matter: American Approaches to Intellectual Property Law in East Asia", *supra* note 457 at 16.

forces and IP assets is questioned to determine: which is driving the other?⁵⁸⁹ Notably, in the context of these queries, practice and institutions represent economic forces.

As Peter Drahos points out, “economic theory is too important a resource to ignore in a philosophical treatment of intellectual property. It is also too big a resource to cover in one work.”⁵⁹⁰ The discipline of economic theory has a wide breadth, encompassing many approaches. For this reason this section does not purport to provide an exhaustive discussion of economic theory. What is offered is an overview of economic and utilitarian theory approaches.

Generally economic IP theory echoes economic contract theory, as discussed in Chapter 2, in that it is concerned with the promotion of efficiency.⁵⁹¹ This supports “the overarching rationale for monopoly rights as a foundation of intellectual property systems: the investments of authors and investors require legal protection because works of intellectual property are so easily reproduced.”⁵⁹² A right of legal monopoly, or more accurately in respect of IP assets an exclusive right, is commonly considered to be synonymous with control.

As such, economic and utilitarian theories clearly promote the IP distinguishing trait of control. Notably economic IP theory does not consistently expressly promote a tempered IP distinguishing trait of control. The rationale as to why control is an IP distinguishing trait of economic theory is directly related to strains of economic theory, such as: the alignment of IP with property rights; levels of IP rights; or utilitarianism. Yet, amongst these rationales hints of the IP distinguishing traits of balance and flexibility/evolution are also perceptible. This section reviews economic IP theory and its support for IP distinguishing traits from three vantages: (i) IP assets as property; (ii) the relationship of traits in IP assets; and (iii) economic utilitarianism.

⁵⁸⁹ Ibid. Alford states that economic analysis leaves “highly significant questions” unanswered including: “is respect for intellectual property rights the result of economic development, a principal cause thereof, or both?”

⁵⁹⁰ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 6.

⁵⁹¹ Moore, “Intellectual Property: Theory, Privilege, and Pragmatism”, *supra* note 259 at 209-212.

⁵⁹² Depoorter, “The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law”, *supra* note 1 para. 4.

3.3.2.1.1 IP Assets as Property

William M. Landes and Richard A. Posner state that the basis of economic IP theory is an alignment of IP assets with tangible property.⁵⁹³ They argue that IP assets share characteristics, and more importantly, a justification with real property.⁵⁹⁴ In their view, it is possible to look to the economics of property rights in tangible property to find “the tools for understanding the essential economic characteristics of intellectual property and for evaluating the pros and cons, the scope and limits, of property rights in intellectual goods.”⁵⁹⁵ Continuity is assumed to exist between IP assets and real property, and economic theory is held to be the basis for this relationship.

The alignment of IP theory and property rights confers two benefits: (i) lower transaction costs, a static benefit; and (ii) incentives created by ownership to invest and exclude, a dynamic benefit.⁵⁹⁶ Landes and Posner illustrate the former as a natural, uncultivated pasture,⁵⁹⁷ and the latter as the incentive offered by possession of the static benefit, such as the right to plant a crop in the pasture⁵⁹⁸. A static economic benefit may be imposed by contract, namely rights to pastureland. The contractual terms have the effect of transforming what may have previously been common property into private property. Viewing the pasture example in an IP asset context, the pastureland represents the intellectual public domain. In IP terms, innovations derived from common knowledge do not become a public good that is part of the intellectual public domain. Instead they are protected as IP assets and are accessible by the public through IP contracts.

⁵⁹³ William M. Landes & Richard A. Posner, *The Economic Structure of Intellectual Property Law* (Cambridge: The Belknap Press of Harvard University Press, 2003) at 11.

⁵⁹⁴ *Ibid.* at 11-36.

⁵⁹⁵ *Ibid.* at 11.

⁵⁹⁶ *Ibid.* at 12-13.

⁵⁹⁷ *Ibid.* at 12.

⁵⁹⁸ *Ibid.* at 13.

Once the static benefit of ownership of the private property is achieved then it is possible to seek dynamic benefits derived from use of that private property. A dynamic benefit is one that allows people to “reap where they have sown.”⁵⁹⁹ It is the dynamic benefit that justifies the investment in IP creation because the investment may be recouped through application of the right of ownership, which is a right of use of the IP asset. For example, investment in the development of an invention may result in ownership of a patent right protecting the invention.

In reference to the static benefit, an IP asset cannot fit neatly within existing economic property theory, because the transaction costs for IP assets can be higher than those of tangible property. This is true due to the difficulty of defining IP assets. In the words of Landes and Posner “transaction costs tend to be high in the case of intellectual property even when there are only a few transactors, actual or potential, in the picture. The reason is the frequent difficulty of identifying such property because by definition it has no unique physical size.”⁶⁰⁰ This difficulty in turn increases a secondary property cost, that of protection.

Knowing where to build the fenceposts around an IP asset to adequately protect what is owned from trespassers is undeniably more difficult than undertaking the same exercise for tangible property.⁶⁰¹ Transaction costs, of both time and money, may be generated due to the significant amount of analysis that must be undertaken to establish the boundaries of IP assets, as well as to draft any contracts required to achieve particular applications of the IP assets. Enforcement costs, necessary to protect an IP asset from unauthorized access or use, may also be high.⁶⁰² Some enforcement costs may be represented as transaction costs, as contractual terms may be one means of enforcing an IP asset.

⁵⁹⁹ Ibid.

⁶⁰⁰ Ibid. at 16.

⁶⁰¹ Ibid. at 18.

⁶⁰² Ibid.

Concepts such as ownership clearly promote the IP distinguishing trait of control over an IP asset. Yet, other aspects of economic theories exhibit support for other traits. For example, the “public-good character” of IP assets has the effect of promoting balance.⁶⁰³ Public-good character represents a further protection cost.⁶⁰⁴ For example, in some circumstances it may be deemed necessary to either deny an IP asset holder the right to either prevent misappropriation, or refuse third-party access to an IP asset. The public-good character of an IP asset may be expressed upon the occurrence of a public emergency, whereby the public needs access to a particular IP asset for survival.⁶⁰⁵ In such a case the asset holder’s exclusionary right over an IP asset is rendered unavailable or withdrawn.⁶⁰⁶ In this manner the trait of balance may thwart some of the applications of an IP asset that may otherwise be permissible if the trait of control existed in isolation.

Moreover, efficiency, a goal of IP economic theory, may be achieved through the grant of legal protection in return for investments in innovations, such as inventions, works, marks, designs or other innovations. This tie between economic theory and the progression of innovation shows support for the trait of flexibility/evolution. Innovation is in constant flux. New technologies, works, marks, designs are constantly emerging. These are both embraced by society and arguably influence the progression of society. For example, green technologies, such as solar panels, are changing the amount of traditional grid electricity some power consumers utilize.⁶⁰⁷ Adoption of solar panel technology, and the IP assets related thereto, consequently creates an evolution in the realm of power generation. Society may embrace new innovations slowly, but the pace of the creation of such innovations may outstrip the societal acceptance

⁶⁰³ Ibid.

⁶⁰⁴ Ibid.

⁶⁰⁵ For example, a pandemic may create a situation whereby access to a particular patented drug may be necessary. This public-good character can be cited as a basis for legal rules, such as compulsory licensing.

⁶⁰⁶ Landes & Posner, *The Economic Structure of Intellectual Property Law*, *supra* note 593 at 19.

⁶⁰⁷ "Duke Energy Tests Solar Panels, Smart Grid Tech" *Solar Feeds* (17 June 2009).

rate.⁶⁰⁸ Nonetheless, as innovations progress, there is a need for IP assets to include the IP distinguishing trait of flexibility/evolution to incorporate protections for emerging innovations.

Landes and Posner are not daunted in their position that IP assets are property by evidence that an IP asset is not easily fit into moulds created for traditional property rights. They assume that IP law will restrain any unwieldy effects of IP rights, such as cost, because law, “to the extent it is guided by a concern with economic efficiency, [will] endeavor to reduce the costs of these rights.”⁶⁰⁹ Thus, contrary views do not shake their belief that IP assets fit within an economic theory founded upon property rights. They consider IP assets to be an “add-on” to traditional property rights.⁶¹⁰ From this perspective it is obvious and necessary that IP assets and traditional property rights fit within the same paradigm. Notably, this expression of IP theory consistently supports IP distinguishing traits of control, balance and flexibility/evolution.

3.3.2.1.2 Levels of IP Distinguishing Traits in IP Assets

Authors writing on the topic of economic IP theory further express the view that IP rights should be granted to have varying breadths. The breadth of an IP right should be granted in accordance with the output that is likely to be produced with and without the recognition of the right.⁶¹¹ For example, only assets that will suffer suboptimal output without IP protection should be granted broad protection.⁶¹² Thus, it is fitting that industrial designs involve weaker levels of control than patent rights, yet include a higher level of balance. The levels of IP distinguishing traits of an IP asset may be set in accordance with how the traits temper each other.

⁶⁰⁸ For example, the rate of patenting in agribiotechnology has soared during the past two decades. This represents an increase in innovation in this field, which is not necessarily matched by an increase in the adoption of agribiotechnology innovation by consumers at the same ratio. See: Paul W. et al. Heisey, "Patterns of Public-Sector and Private-Sector Patenting in Agricultural Biotechnology" (2005) 8:2&3 Journal of Agrobiotechnology Management & Economics 73.

⁶⁰⁹ Landes & Posner, *The Economic Structure of Intellectual Property Law*, *supra* note 593 at 21.

⁶¹⁰ *Ibid.*

⁶¹¹ *Ibid.* at 24.

⁶¹² *Ibid.*

Granting IP rights in an IP asset so as to vary from narrow to broad rights in accordance with the output of the asset, so that the rights include varying levels of IP distinguishing traits, is consistent with economic theory that holds freedom of the market as crucial.⁶¹³ These theories support market participation by IP assets for advantageous ends – to benefit the market and/or the IP asset holder. Emphasizing the levels of the IP distinguishing trait of control in particular in some IP assets is therefore consistent with the popular view of IP economic theory as steeped in efficiency.

Yet, the trait of control in isolation can induce inefficiency.⁶¹⁴ Landes and Posner suggest that “an efficient legal regime of property rights is likely to be a mixed system.”⁶¹⁵ Therefore, balance is necessary to temper control. Additionally, flexibility/evolution ensures the creation of new IP assets to protect future innovations. All of these traits – balance, control and flexibility/evolution – exist at different levels in specific IP assets. This is consistent with the promotion of efficiency and market freedom by economic IP theories.

3.3.2.1.3 Economic Utilitarianism

There are many forms and understandings of utilitarianism. Utilitarian theory as an IP economic theory places IP assets squarely within the market – in a world of economic relationships.⁶¹⁶ A utilitarian outcome is one that satisfies all parties. Mill says, “the happiness

⁶¹³ Posner, *Frontiers of Legal Theory*, *supra* note 255 at 98-99. Posner finds that market freedom is aimed at wealth maximization without the imposition of transaction costs that prevent a market from functioning, such as those imposed by monopoly, externalities or other conditions that limit market freedom.

⁶¹⁴ IP corporate practice places an emphasis upon the trait of control that can translate into the creation of barriers of access to IP assets. The right to grant access and deny access is an aspect of control. Thus barriers are built despite the internal economic theory tenet that IP assets are to be applied to achieve optimal protection. See: Ramello, “Intellectual Property and the Markets of Ideas”, *supra* note 155 at 12. Giovanni B. Ramello points out the problem arising from testing economic theory without empirical data. He says that, “[t]he unruly brawl among these hypothetical economists illustrates a problem endemic to their approach. Their models are most helpful when empirical data is available to test their conclusions. In the absence of empirical data, the result of economic analysis is dictated by the model’s placement of the burden of proof.”

⁶¹⁵ Landes & Posner, *The Economic Structure of Intellectual Property Law*, *supra* note 593 at 25.

⁶¹⁶ Some authors do not place IP utilitarian theory in the marketplace, such as Stavos (Michele Stavos, “Biotechnology and the Utilitarian Argument for Patents” (1996) 13 Social Philosophy and Policy 113). However,

which forms the utilitarian standard of what is right in conduct, is not the agent's own happiness, but that of all concerned. As between his own happiness and that of others, utilitarianism requires him to be as strictly impartial as a disinterested and benevolent spectator.”⁶¹⁷ The full expression of the theory is derived from writings of Jeremy Bentham and John Mill, who are known as founders of “classical utilitarianism”.⁶¹⁸ In the classical form of the theory, each situation of interaction is interpreted and considered individually. This differs from “rule utilitarianism” which was developed later and applies principle-based rules to a host of situations.⁶¹⁹

Utilitarianism is linked by some authors to incentive theory as it is considered to assert that “in the absence of legal protection, the market itself would fail to induce the creation of a sufficient amount of intellectual products....[because] nobody...would find it viable to search for inventions or to create works of art.”⁶²⁰ Economic incentive theory supports the incentive principle for IP assets – creators/owners must receive the rewards of legal monopoly and exclusivity for innovation for a time in order to be induced to create at all.⁶²¹ Offering an inducement to create to innovators can result in the progression of innovation, the fruits of which may be enjoyed by society generally and can lead to the advancement of society.⁶²²

Such rewards may be identified as supporting the IP distinguishing trait of control. In terms of control, two questions must be asked: What level of IP exclusivity needs to be granted to

as it is beyond the scope of this thesis to argue each small point of theoretical discord, this thesis offers this as a general statement while recognizing that it may not be applicable in all cases.

⁶¹⁷ See: John Stuart Mill, *Utilitarianism* (Indianapolis: Hackett Publishing Company, 1979).

⁶¹⁸ James Rachels, *The Elements of Moral Philosophy* (New York: Random House, 1986) at 90.

⁶¹⁹ *Ibid.* at 99.

⁶²⁰ Strasser, "The Rational Basis of Trademark Protection Revisited: Putting the Dilution Doctrine Into Context", *supra* note 452 at 422 & 424.

⁶²¹ Viva R. Moffat, "Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Reform" (2004) 19 Berkeley Tech. L.J. 1473 at 1478-80.

⁶²² Alina Ng, "The Social Contract and Authorship: Allocating Entitlements in the Copyright System" (2009) 19 Fordham Intell. Prop. Media & Ent. L.J. 413 at 419-21.

sustain long-term innovative creation?⁶²³; and What is the role of the market in such a determination? Moreover, incentive theory further supports new innovations and therefore involves the IP distinguishing trait of flexibility/evolution.

In its pure form utilitarianism “leads to an optimal amount of intellectual works being produced and a corresponding optimal amount of social utility.”⁶²⁴ This optimal amount of IP assets supports the trait of flexibility/evolution, whereby new innovations may be protected as IP assets. Moreover, this view links theories of good and theories of right so that moral rules are “determined in reference to the consequences of everyone adopting the rule.”⁶²⁵ It is this result that utilitarianism considers crucial. This goal is considered by some authors to explain the relationship between utilitarianism and the free-market. Some writers assume that a free-market will arrive at an optimal outcome, although not all theorists share this view.⁶²⁶ The variance in viewpoints has an effect on the role of balance in utilitarian economic theory. Notably, the trait of balance is apparent in an off-shoot theory – the incentive theory (discussed below) – as: the rewards offered by the public; boundaries set on the rewards; and ultimate benefits of the innovation to society.

Additionally, forms of economic utilitarianism that accept the requirement of social utility provide the IP distinguishing trait of balance with a critical role. Establishing balance, whereby IP assets are available to promote social good versus social loss, is a goal of utilitarianism in that

⁶²³ Strasser, "The Rational Basis of Trademark Protection Revisited: Putting the Dilution Doctrine Into Context", *supra* note 452 at 424. Strasser poses the dilemma as follows: “patents and copyright are hence similar to alcohol: while they can do wonders when applied in small quantities, large dosages may have the opposite effect.” He further argues that although patents and copyright may fit well within utilitarian theory, trade-mark is not easily conceived of in utilitarian terms (at 424-425).

⁶²⁴ Moore, "A Lockean Theory of Intellectual Property", *supra* note 553 at 68.

⁶²⁵ *Ibid.* at 70.

⁶²⁶ Gordon, "A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property", *supra* note 527 at 1576. Gordon notes that, “markets are less expensive to administer, more sensitive to varying preferences, and more conducive to incentives than are governmental substitutes.” Each of these attributes are raised to exemplify why markets are a good fit for the goals of IP utilitarian theory.

it is related to the achievement of happiness.⁶²⁷ For example, authors point to the fair use doctrine of U.S. copyright law as an example of utilitarian balance.⁶²⁸ The doctrine of fair use is utilized to define the boundary between commerce and free expression for copyright.⁶²⁹ This is seen as consistent with the utilitarian goal of striking “an appropriate balance between control by inventors and creators and the baseline norm of competition.”⁶³⁰ Another author notes that utilitarianism supports the extension of IP assets only “insofar as they contribute to societal development”.⁶³¹ This is evidence of the trait of balance tempering the trait of control.

The result of the examination of economic IP theories is that they provide support for IP distinguishing traits. The trait of control is easily identified. However, support for the traits of flexibility/evolution and balance are also evident.

3.3.2.2 Lockean Theories

John Locke is credited with the articulation of both labour theory⁶³² and desert theory⁶³³. Thus, Locke’s theory of property is subject to two interpretations: “[o]ne interpretation is that society rewards labor with property purely on the instrumental grounds that we must provide rewards to get labor. In contrast, a normative interpretation of this labor theory says that labor should be rewarded.”⁶³⁴ The former interpretation supports the incentive-based view of IP, or the

⁶²⁷ Robert J. Tomkowicz & Elizabeth F. Judge, "The Right of Exclusive Access: Misusing Copyright to Expand the Patent Monopoly" (2006) 19 I.P.J. 351 at 366.

⁶²⁸ See: Sonia Katyal et al., "Panel III: Fair Use: Its Application, Limitations and Future" (2007) 17 Fordham Intell. Prop. Media & Ent. L.J. 1017 at 1018; and Susanna Monseu, "'Fit for Purpose': Why the European Union Should Not Extend the Term of Related Rights Protection in Europe" (2009) 19 Fordham Intell. Prop. Media & Ent. L.J. 629 at 634-35.

⁶²⁹ Katyal et al., "Panel III: Fair Use: Its Application, Limitations and Future", *supra* note 628 at 1022.

⁶³⁰ Lemley, "Property, Intellectual Property, and Free Riding", *supra* note 484 at 1032.

⁶³¹ Viktor Mayer-Schonberger, "Demystifying Lessig" (2008) Wis. L. Rev. 713 at 731.

⁶³² Ginsburg & Merges, *Foundations of Intellectual Property*, *supra* note 3 at 1.

⁶³³ Hettinger, "Justifying Intellectual Property", *supra* note 455 at 129.

⁶³⁴ Hughes, "The Philosophy of Intellectual Property", *supra* note 491 at 296. See also: Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 44. Drahos states that some of the interpretations of Locke’s writings are so diverse that it seems impossible that the authors have read the same text.

desert theory, and the latter is the basis of the labour theory. Locke's theory is based in real property, but can be applied to IP assets.⁶³⁵

Notably, the bases of these theories offer two different justifications for control. Labour theory holds that control is granted over an asset due to the work that was expended to achieve the asset. Desert theory considers control to be commensurate with the value of the property the labourer can create. The former type of control may be aligned with outright ownership, whereas the latter form of control is linked to the type of work expended.

Generally, Locke's theories are said to be ones that espouse the adage "no harm, no foul".⁶³⁶ Locke views the commons as existing in a natural state, devoid of property relationships.⁶³⁷ Thus, when people take from the commons through labour, they are justified in doing so and in fact must do so for the goods to be converted to private property.⁶³⁸ The limit on the labourer is that their actions must not cause another person to be worse off. If the labour does not harm anyone else, then there is no cause for complaint regarding his activity.⁶³⁹ "Enough and as good" must be left for others to ensure no prejudice occurs.⁶⁴⁰

Built upon this foundation, labour theory grants property rights to the person who acquires property through labour, but limits the property right to items that are acquired in a manner that

⁶³⁵ Richard T. Jackson, "A Lockean Approach to the Compulsory Patent Licensing Controversy" (2004) 9 J. Tech. L. & Pol'y 117 at 124. Locke does not reference IP assets directly while discussing labour theory and may not have intended his theory to be applied to IP assets. All of his examples reflect real property activity. Jackson points out that it is subsequent scholars who have identified Locke's labour theory as applicable to IP assets. In the opinion of Richard A. Epstein, the exercise of applying Locke's theory to IP assets is problematic because it creates a necessity to "recast" the labour theory in "consequentialist terms" (Richard A. Epstein, "Liberty Versus Property? Cracks in the Foundation of Copyright Law" (2005) 42 San Diego L. Rev. 1 at 4).

⁶³⁶ Moore, "A Lockean Theory of Intellectual Property", *supra* note 553 at 78.

⁶³⁷ Gordon, "A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property", *supra* note 527 at 1541. Gordon paraphrases Locke's view of the state of nature in the following manner: "Locke tells us that in the state of nature there is no positive law parceling out ownership or giving any particular person the right to command anyone else. There are, however, moral duties that constrain persons' behavior toward each other." She goes on to state that "since all humanity is equal in the state of nature, the duties we owe others are also the duties they owe us, and the rights I have against others they have against me" (at 1541-1542).

⁶³⁸ Jackson, "A Lockean Approach to the Compulsory Patent Licensing Controversy", *supra* note 635 at 123.

⁶³⁹ Locke, "Second Treatise of Government", *supra* note 566 para. 34.

⁶⁴⁰ *Ibid.* para 25.

does not unnecessarily harm others. For example, a person who collects apples has ownership over the apples, but is not permitted to collect more apples than she needs. Consequently, she cannot collect so many apples that others will be left without access to apples. A second proviso is also relevant to this example – apples may not go to waste.⁶⁴¹ Waste is essentially a second form of social harm. By incorporating these two principles, labour theory advocates a trait of control and also accounts for social good through the trait of balance. Applied to IP assets, the IP distinguishing trait of balance in particular, is given the task of tempering the IP distinguishing trait of control. However, the tempering effect is directed to the scope of the IP asset, as the scope cannot be larger than non-wasteful labour can produce.

However, it should not be forgotten that the main thrust of labour theory is a focus on the individual and his actions. The theory has merely a peripheral interest in societal welfare.⁶⁴² The “no harm, no foul” aspect of Locke’s labour theory causes the activity of labour upon elements in a state of nature to generate grounds for a labourer to claim rights against others. The labourer can prohibit others from taking elements to which her labour is applied. In the words of Wendy Gordon, this principle works as follows: “If you take the objects I have gathered you have also taken my labor, since I have attached my labor to the objects in question. This harms me, and you should not harm me. You therefore have a duty to leave these objects alone.”⁶⁴³ As an extension of this right of ownership, it is interesting to note that the sole harm that Locke considers permissible is punishment inflicted upon someone who violates the law of nature.⁶⁴⁴ From this vantage control is limited solely by an invisible line that once crossed induces harm.

⁶⁴¹ Ibid. para 37.

⁶⁴² Jackson, "A Lockean Approach to the Compulsory Patent Licensing Controversy", *supra* note 635 at 124. Jackson argues that this view is consistent with the application of Locke’s theory to IP assets, as in his opinion, an IP system that chooses to focus on societal welfare will treat the IP creator unfairly (at 125).

⁶⁴³ Gordon, "A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property", *supra* note 527 at 1545.

⁶⁴⁴ Locke, "Second Treatise of Government", *supra* note 566 at book II, para 8.

Thus, IP assets do not meet the definition ascribed to them by the private sector. For example, the normative activity of IP asset holders is to rely upon exclusive rights as a rationalization for offering the IP asset for sale at a price that is as high as the market will bear. It is not surprising therefore, that IP assets are accused of being morally objectionable due to interference with individual liberty. Such interference occurs when IP assets place limitations upon activities of society, even in private spheres, such as within a home.⁶⁴⁵ IP asset owners point to limits imposed upon IP assets, such as the restricted period of time of IP protection, as evidence that the invasion of individual liberty is justified.⁶⁴⁶ However, this is contrary to labour theory. Such activity does not consistently comply with the proviso “no harm, no foul”. Compliance with this proviso invokes both the IP distinguishing traits of control and balance.

Generally, labour theory holds that ownership should be granted over what we labour to achieve. This theory is consistent with other theories, such as economic theory, in that both require property rights to exist in IP assets, and that such rights be related to the labour activities of the creator of the assets. Yet the focus of Locke’s labour theory differs from economic theory. Locke is concerned with the nature of the labour, whereas the economic theory limits its focus to the outcome of the labour and the ownership thereof.

Conversely, the desert theory does not mesh well with economic theory.⁶⁴⁷ In the words of one author “surely it would be odd to accept a desert basis for one person that precluded other

⁶⁴⁵ Moore, "A Lockean Theory of Intellectual Property", *supra* note 553 at 84. For example, IP rights limit the public from copying movies, music, computer content, including software, even if they undertake these activities within the confines of their own homes (See: *Copyright Act*, *supra* note 114 s. 3). Moreover, inventions built by individuals within the confines of a home, including those that will never be used outside the walls of the home, may be cause for patent infringement, should the invention have been built after the date the patent application was filed in the country where the home exists (See: *Patent Act*, *supra* note 141 s. 42).

⁶⁴⁶ Moore, "A Lockean Theory of Intellectual Property", *supra* note 553 at 85.

⁶⁴⁷ Becker, "Deserving to Own Intellectual Property", *supra* note 452 at 620. Becker states that all private property justifications cannot readily be applied to IP assets as despite an upstream fit, downstream their connectivity unravels. See also: Gordon, "A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property", *supra* note 527 at 1544.

equally deserving people from getting a similar reward.”⁶⁴⁸ Desert theory is grounded in the value of the IP asset – a labourer is deserving of rights in the value of the property created by his or her labour. Thus, Lockean theory is interpreted as overlooking issues of the excellence of the labour to produce the IP asset, as well as need for the award of an IP asset.⁶⁴⁹ Value can be determined by either the labourer himself, or society.⁶⁵⁰ Society may determine value in accordance with the benefit afforded society by the IP asset, or the sacrifice society perceives the labourer to have endured to create the IP asset.⁶⁵¹ These options are both difficult values to accurately assess.

Such value can be defined as value accrued through control of an IP asset. However, it is notable that labour theory and desert theory further support the IP distinguishing trait of flexibility/evolution. Support for this trait is evident in the breadth of the products of labour encompassed by each theory – there is no limitation upon what may constitute labour or products. As classes of labour and the products of labour can change, this suggests that the theories embrace emerging work products. Thus, each supports flexibility/evolution, whereby an IP asset can be derived from new inventions, marks, designs, works, etc.

Labour theory and desert theory each represent a foundation for IP assets and support for the IP distinguishing traits of control, balance and flexibility/evolution. Each theory has both supporters and critics. In the words of Richard A. Epstein, “the only choice we have is to pick the lesser of two evils.”⁶⁵² For example Hettinger notes that some IP assets come into being without the involvement of labour.⁶⁵³ Such assets ostensibly are not applicable to Locke’s labour

⁶⁴⁸ Becker, "Deserving to Own Intellectual Property", *supra* note 452 at 623.

⁶⁴⁹ *Ibid.* at 623 & 626.

⁶⁵⁰ Michael Martin, "The Systems Theory of IP Valuation" *Intellectual Asset Management* 37 (September/October 2009) at 37. Critics state that traditional economic theory is “blind to much of the value of IP.”

⁶⁵¹ Becker, "Deserving to Own Intellectual Property", *supra* note 452 at 625.

⁶⁵² Epstein, "Liberty Versus Property? Cracks in the Foundation of Copyright Law", *supra* note 635 at 28.

⁶⁵³ Hettinger, "Justifying Intellectual Property", *supra* note 455 at 41-42.

theory. Yet, what labour and desert theories clearly exhibit is support for IP distinguishing traits and an indication of the tempered relationships these traits should enjoy.

3.3.2.3 Bargain Theory

Bargain theory emphasizes the ability of the IP distinguishing trait of balance to temper the trait of control. Canadian jurisprudence is a great proponent of the bargain theory.⁶⁵⁴ The Supreme Court of Canada, in particular, identifies the ultimate goal of IP assets to be the achievement of a balance of rights between a creator of an intangible asset and the public.⁶⁵⁵ The court states that IP assets rest, “on the concept of a bargain between the inventor and the public...It was ever thus.”⁶⁵⁶ Balance in the realm of patent law is described by Hughes and Woodley as follows:

The “bargain” theory lies at the heart of patent protection. A patent is a statutory monopoly which is given in exchange for a full and complete disclosure by the patentee of his or her invention. The disclosure is the essence of the bargain between the patentee, who obtains a monopoly for the relevant period on exploiting the invention, and the public, which obtains open access to all of the information necessary to practice the invention.⁶⁵⁷

IP protection is therefore granted as a result of an agreement between a creator of an IP asset and society. The IP asset creator agrees to disclose details of his creation in exchange for a legal monopoly right over the creation.⁶⁵⁸ This bargain achieves a balance of rights and ensures the optimum circumstance for society and IP asset creators.

Balance can be viewed as a scale that must not tip in favour of either society or the public, because once it tips a creator of an IP asset could be either overcompensated or under-

⁶⁵⁴ It is possible to identify Bargain Theory as a form of utilitarian theory. Yet, due to its dominance in Canadian patent law justification, it is defined in isolation from utilitarian theory in this thesis work. Bargain Theory is arguably more a justificatory expression of patent rights than a pure IP theory.

⁶⁵⁵ See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14; and *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14.

⁶⁵⁶ *Free World Trust v. Électro Santé Inc.*, *supra* note 183 para 13.

⁶⁵⁷ Robert T. Hughes & John H. Woodley, *Hughes and Woodley on Patents* (Markham: Butterworths, 1984) at §1.

⁶⁵⁸ For example, information regarding an invention is disclosed in a patent application, rather than being held as a trade secret.

compensated for his work.⁶⁵⁹ In the context of copyright, “excessive control by holders of copyrights and other forms of intellectual property may unduly limit the ability of the public domain to incorporate and embellish creative innovation in the long-term interests of society as a whole, or create practical obstacles to proper utilization.”⁶⁶⁰ “Practical obstacles” and “undue limitations” are examples of a tilt in balance. When balance is truly achieved, IP asset creators are inspired to continue to create, while the public receives disclosure of, and access to, innovation.

Furthermore, the bargain theory ensures that creators do not demand public compensation for IP assets that is prohibitively high. Unbalanced rights can impose limitations on access to IP asset. A balanced IP regime ensures that any restrictions imposed are outweighed by incentives.⁶⁶¹ This is the goal, but scholars are critical that it exists at present, or is even attainable, saying, “balance in intellectual property seems over for now.”⁶⁶² Statements such as this indicate that, despite the Court’s emphasis on balance, private sector IP practice and institutions do not act in accordance with bargain theory.

In the context of bargain theory, granting control to a creator of an IP asset is part of the *quid pro quo* agreement between creators and society. However, this is not the same as saying a creator may do anything he pleases with his IP asset. An IP distinguishing trait of balance is also part of the agreement whereby a controlled, meaning limited, use of an IP asset is permitted. This is a use that does not impinge the rights of users so as to cause the bargain power attributed to creators and society to be unduly limited or over-expressed. Thus, balance and control are IP

⁶⁵⁹ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14 para 23.

⁶⁶⁰ *Theberge v. Galerie d’Art du Petit Champlain inc.*, *supra* note 14 para 28.

⁶⁶¹ Stavos, “Biotechnology and the Utilitarian Argument for Patents”, *supra* note 616 at 114.

⁶⁶² Depoorter, “The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law”, *supra* note 1 para. 14.

distinguishing traits supported in a tension-ridden or mutually tempering relationship by the bargain theory.

Bargain theory assumes adjustments of IP theory to address the interaction of society with IP assets, and recognizes that IP assets must be created with consideration to society's interests. This is necessary to ensure balance, a goal that recognizes that IP assets are not uniform across all forms of IP assets or time periods. The rights must be flexible enough to address the differences between works and technologies and evolutionary so as to reflect changes in society and its needs or aims.⁶⁶³ This evolution of works and technologies acknowledges the trait of flexibility/evolution to meet the needs of society and IP creators alike. Bargain theory therefore supports the IP distinguishing traits of flexibility/evolution, balance and control.

3.3.2.4 Personality Theory

Hegel's works are applied by some theorists as the basis for personality theory.⁶⁶⁴ One such author is Margaret Radin who states that personhood is an integral aspect of Hegel's writings.⁶⁶⁵ Jeremy Waldron says that, 'Hegel gives an account of the importance of property to individuals and that he takes its importance for each individual as the basis for articulating a demand of justice "that everyone must have property."'⁶⁶⁶ It is not always easy to fit Hegel's work into the category of IP theory, due in part to the fact that Hegel clearly did not anticipate the application of his theory to IP assets. (Of course the same may be said of Locke.) Hegel's work draws a range of interpretations when thrust into the role of IP theory.

⁶⁶³ See: Durell, "Intellectual property protection for plant derived vaccine technology: here they come are we ready or not ?", *supra* note 515.

⁶⁶⁴ See: Jeanne L. Schroeder, "Unnatural Rights: Hegel and Intellectual Property" (2006) 60 U. Miami L. Rev. 453.

⁶⁶⁵ Margaret Radin, *Reinterpreting Property* (Chicago: University of Chicago Press, 1993). See also: Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 455; and Margaret Radin, "Imagery of Personal Property as the Inviolable Feminine Body" (1994) 79:55 Minn. L. Rev. at 114.

⁶⁶⁶ Waldron, *The Right to Private Property*, *supra* note 96 at 343-44.

Hegel's work denotes a relationship between property and personhood. Property is a necessary component of personhood. Jeanne Schroeder argues that it is Hegel's line of reasoning that property is not a natural right.⁶⁶⁷ Drahos further argues that Hegel was in fact not defending a property right in the same manner as other philosophers.⁶⁶⁸ In Drahos' opinion Hegel's approach was to conceptualize of property as part of a metaphysical system.⁶⁶⁹ Thus, Hegel's interest is in broad concepts – "his aim is to reveal the role that community plays in the evolution of individual freedom."⁶⁷⁰ The individual aspires to personhood within society. Personhood for Hegel is "an intermediate step above autonomous individuality".⁶⁷¹ The act of applying Hegel's work to IP theory draws highly interpretive commentary from several theorists.

Jeanne L. Schroeder refers to personhood as "legal subjectivity" and describes it as the capacity to respect the rule of law.⁶⁷² She says, "by engaging in commercial relationships of property and contract, the individual subjects herself to legal duties and learns to recognize other people as bearers of legal rights."⁶⁷³ The reciprocal acknowledgement of one's rights by others means that both property owners and the other people, each having and respecting other's rights, raise the status of persons involved to subjects. Not all scholars agree with this interpretation of Hegel.⁶⁷⁴ However, in this approach, IP assets are accepted as property, meaning true property and not merely analogous to property.⁶⁷⁵ Consequently, interaction with IP assets is integrated with the legal subjectivity of persons.

⁶⁶⁷ Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 454.

⁶⁶⁸ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 75. Drahos interprets the difference between Locke and Hegel's approaches to property in the following manner: "Property for Locke serves personality. For Hegel, 'property is the embodiment of personality'."

⁶⁶⁹ *Ibid.* Drahos suggests that the application of property to accord with the metaphysical scheme of Locke and Hegel is the main difference between the theories of each philosopher.

⁶⁷⁰ *Ibid.* at 73.

⁶⁷¹ Radin, "Imagery of Personal Property as the Inviolable Feminine Body", *supra* note 665.

⁶⁷² Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 455.

⁶⁷³ *Ibid.*

⁶⁷⁴ Radin, *Reinterpreting Property*, *supra* note 665.

⁶⁷⁵ Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 454.

In the words of Becker,

Hegel was correct to suppose that there is a necessary connection between the full development of individual human personality and the act of appropriating things (successfully) as one's "own," and if he was correct to assert that this could be the basis for a right to property, then it seems natural to suppose that this might be a particularly strong basis for intellectual property. Where, after all, could it be more important to secure the appropriative powers of a personality than for its unique intellectual property?⁶⁷⁶

Complex interrelations amongst people of moral integrity cause rights and ethics to be internalized. In turn, in Schroeder's opinion, "content is added to personality" as the "subjectivity of morality is reconciled with the external objectivity of obligations to others."⁶⁷⁷ The actions of the subject must conform to the law. The focus of this obligation is not a belief that the law is right, but a realization that obedience achieves the desired result.

There is confusion amongst philosophers as to whether personality theory supports a close relationship between IP assets and the creator thereof. Some argue that moral rights are grounded in personality theory. After all, "some intellectual products are identified in part by reference to their authors. Paintings by the masters, for example, are so identified, and most of their value (both aesthetically and monetarily) depends on this identification."⁶⁷⁸ Schroeder argues that to identify the relationship between an IP asset and its creator as the basis for the justification of a grant of IP rights is a misinterpretation of personality theory. She says moral rights are based in the content of the IP asset, not upon the role of an IP asset as property.⁶⁷⁹ Consequently claims that say, "we know that intelligence, industriousness, health, motivation and opportunity are all crucial determinants of what we produce", must be closely reviewed as they do not necessarily support a personality theory justification for IP assets.⁶⁸⁰

⁶⁷⁶ Becker, "Deserving to Own Intellectual Property", *supra* note 452 at 610.

⁶⁷⁷ Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 456.

⁶⁷⁸ Becker, "Deserving to Own Intellectual Property", *supra* note 452 at 613.

⁶⁷⁹ Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 457.

⁶⁸⁰ Becker, "Deserving to Own Intellectual Property", *supra* note 452 at 611.

Personality theory is said to argue that property in isolation is a mere abstract right – it is only when content is added to the empty form (meaning regimes of morality and ethics) that we move from subjectivity to object (meaning property).⁶⁸¹ Schroeder explains this concept in the following manner: “Metaphorically, if abstract right forms the individual into a vase-like subject, then it is only the form of the vase that is important at this stage. Property is a potter, not a florist. Morality and ethics – not law – will add the flowers of personality later.”⁶⁸²

In Hegel’s works he questions the role of law.⁶⁸³ For example, in the realm of criminal law he notes that the existence of clear criminal acts may be a questionable proposition due to the potential goodness of an actor’s convictions.⁶⁸⁴ Thus, according to Hegel, law is not necessarily omnipotent, as the authority of law must be weighed against an actor’s convictions. This is not to say that an actor’s convictions can outweigh the law necessarily, but the “embodiment of freedom which was (α) first of all immediate as right, is (β) characterized in the reflection of self-consciousness as good. (γ) The third stage...in its transition from (β) to ethical life, as the truth of good and subjectivity, is therefore the truth both of subjectivity and right.”⁶⁸⁵ This understanding of rightness of law affects property transactions and rights in property, in that these may only be granted and supported to the same extent that they are supported by ethical life.⁶⁸⁶ In the words of T.M. Knox, this means that,

the principle of rightness passes over in civil society into law. My individual rights, whose embodiment has hitherto been immediate and abstract, now similarly becomes embodied in the existent will and knowledge of everyone, in the sense that it becomes

⁶⁸¹ Schroeder, “Unnatural Rights: Hegel and Intellectual Property”, *supra* note 664 at 464-467.

⁶⁸² *Ibid.* at 467.

⁶⁸³ Knox Trans., *Hegel's Philosophy of Right*, *supra* note 576 at 100.

⁶⁸⁴ *Ibid.* at 99. Hegel states that “there is no longer anything absolutely vicious or criminal; and instead of the above-mentioned fraud and free, hardened and unperturbed sinner, we have the man who is conscious of being fully justified by intention and conviction. My good intention in my action and my conviction of its goodness make it good.”

⁶⁸⁵ *Ibid.* at 104.

⁶⁸⁶ *Ibid.* at 140.

recognized. Hence property acquisitions and transfer must now be undertaken and concluded only in the form which that embodiment gives to them.⁶⁸⁷

Thus, Hegel suggests that rights in property must be linked to the tenets of the embodiment of freedom.⁶⁸⁸ Neither subjective self-determinism nor the written law can support property rights on their own, although both are important factors in the determination of property rights. Moving these ideas to provide a theoretical basis for IP assets, IP personality theory must recognize that although IP assets are defined by statute the grant of IP assets must further be supported by subjectivity. According to Hegel subjectivity is an embodiment of freedom, which is the ultimate good.⁶⁸⁹ In this interpretation support for the IP distinguishing traits of control and balance is apparent. Control is necessary in order to have the authority to utilize an IP asset upon the grant of such an asset. Balance lies in aspects of subjectivity.

Moreover, the fact that relationships between persons and property are not one-size-fits-all has implications for both the individual and IP assets. It is the flexibility and ability to evolve inherent in IP assets which allows protection to be provided to an ever expanding collection of innovations, works and marks. The IP distinguishing trait of flexibility/evolution is therefore expressed as subjectivity in personhood theory.

Schroeder argues that Hegel holds that there are a number of activities which create subjectivity, or inter-subjective recognition amongst subjects of IP assets, namely: possession,⁶⁹⁰ enjoyment (or use)⁶⁹¹ and alienation.⁶⁹² The latter activity involves contract, which facilitates

⁶⁸⁷ Ibid. at 139.

⁶⁸⁸ Ibid. at 104.

⁶⁸⁹ Ibid.

⁶⁹⁰ Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 472. Possession is a claim that must be recognizable by other subjects.

⁶⁹¹ Ibid. at 473-474. Enjoyment is the use of an object for a subject's own ends, which will take on a form unique to the object being enjoyed, and encompasses a use value.

⁶⁹² Ibid. at 477. Alienation, is the ability to transfer the object to another subject, and the recognition by other subjects of the effect of this ability.

inter-subjective recognition by other subjects through the facilitation of object relations.⁶⁹³ Hegel says that,

[contract] contains the implication that each party, in accordance with his own and the other party's will, ceases to be an owner of property, remains one, and becomes one. This is the mediation of the will to give up a property (an individual property) and the will to accept such a property (and hence the property of someone else). The context of this mediation is one of identity, in that the one volition comes to a decision only in so far as the other volition is present.⁶⁹⁴

Thus, a unilateral declaration of rights is ineffective. To obtain rights the obtainment must be recognized by others. Contract is considered an ideal medium for such recognition. Furthermore, the act of obtaining and transferring rights exhibits the IP distinguishing trait of control.

An alternate interpretation of Hegel, expressed by Drahos, holds that the nature of IP assets lends itself to a close relation between IP assets and contract. In this view the nature of IP assets causes them to increase the pressure imposed on the political state by civil society. This occurs because individuals recognize the “strategic business advantages which a proprietary control over abstract objects gives them.”⁶⁹⁵ This realization has several consequences. One is a race to secure property rights in abstract objects, which fuels an IP asset consciousness within civil society.⁶⁹⁶ Contracts are a means of ensuring control that is directly within the purview of individuals. Moreover, pressure to influence the government to support strong rights is exerted by individuals.⁶⁹⁷ We can assume that this lobbying is for both strong IP assets and strong contract rights which support the IP distinguishing trait of control.

Although the views of scholars regarding the fit of Hegel's personality theory with IP assets are somewhat inconsistent, IP distinguishing traits can be identified in his work. Each author expressing an opinion on personality theory assumes an IP owner may wield a form of

⁶⁹³ Ibid. at 478.

⁶⁹⁴ Knox Trans., *Hegel's Philosophy of Right*, *supra* note 576 at 105.

⁶⁹⁵ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 85.

⁶⁹⁶ Ibid.

⁶⁹⁷ Ibid.

control tempered by balance over an ever-increasing variety of IP assets. Thus, personality theory supports the IP distinguishing traits of control, balance and flexibility/evolution.

3.3.3 IP Distinguishing Traits Commonly Identified in IP Theories

The foregoing discussion highlights the relationship between IP theories and the IP distinguishing traits of control, balance and flexibility/evolution. It may be possible that future research may identify more IP distinguishing traits. However, for the purpose of this thesis these three IP distinguishing traits will be relied upon to probe IP contract strain.

Notably, authors continue to introduce new IP theories, to modify existing theories and to characterize known theories in a new manner. Examples of such activities include social planning theory, commercialization theory and stealth libertarianism. Each of these supports IP distinguishing traits of balance, control and flexibility/evolution.

3.3.3.1 Social Planning Theory

Social planning theory is attributed to a variety of thinkers, including Marx, Jefferson and Legal Realists. The base tenet of this theory is that “property rights can and should be shaped so as to help foster the achievement of a just and attractive culture.”⁶⁹⁸ Looking to the IP distinguishing traits it espouses, social planning theory clearly supports control and balance. These IP distinguishing traits are linked to the roles of society (balance) and the creator (control).

Social planning theory assumes adjustments of IP theory for the interaction of society with IP assets, and recognizes that these assets must be granted with consideration to society’s interests. This is necessary to foster a just and attractive culture. The attempt to achieve optimum

⁶⁹⁸ Fisher, "Symposium on the Internet and Legal Theory: Property and Contract on the Internet", *supra* note 98 at 1214-1215. A hurdle to adopting social planning theory is inherent in its definition – the components of a “just and attractive culture” are entirely unclear and arguably subjective. William W. Fisher, a proponent of the social planning theory, suggests the theory advocates the following societal components: consumer welfare; a cornucopia of information and ideas; a rich artistic tradition; distributive justice; semiotic democracy; sociability; and respect (at 1216-1218). Undoubtedly these are laudable IP principles, but as Fisher points out the principles themselves are caught in a contentious relationship (at 1218).

relations between society and creators evidences support for flexibility/evolution. Society and innovations must progress and thus the optimum levels will require protection for new innovations.

3.3.3.2 Commercialization Theory

As an example of a new theoretical approach commercialization theory is expanded by F. Scott Kieff in the context of IP systems.⁶⁹⁹ Specifically Kieff's work looks to the application of commercialization theory as an IP theory applied by other theorists. He moulds this theory to form what can be characterized as an updated commercialization theory which provides the basis for a new IP system.⁷⁰⁰

Kieff directs his pursuit to patent rights specifically, stating that the foundation of the American patent system is economic.⁷⁰¹ This is the cornerstone upon which he builds his commercialization theory. In a nutshell his theory holds that "the treatment of patents as property rights is necessary to facilitate investment in the complex, costly, and risky commercialization activities required to turn nascent inventions into new goods and services."⁷⁰² Kieff finds that patents facilitate commercialization through the provision of a means for patentees and other

⁶⁹⁹ F. Scott Kieff, "Property Rights and Property Rules for Commercializing Inventions" (2001) 85 Minn. L. Rev. 697. Kieff's theory exemplifies the movement to narrow the scope of IP theories from addressing the whole class of IP forms to addressing specific IP forms. Moreover, he defends his theory based upon U.S. patent laws: the length of the patent term, which he states is seventeen years under U.S. patent law (this term has since been expanded to twenty years), is compared to the longer terms granted to copyright and trade-marks (at 736); the rules for establishing validity created by U.S. courts are reviewed (at 739); and the prior art rules are examined to consider the scope of printed publications that should fall within this category for the purpose of establishing novelty (F. Scott Kieff, "The Case for Registering Patents and the Law of Economics of Present Patent-Obtaining Rules" (2003) 45 B.C. Law Rev. 55 at 28). Kieff's work further highlights another phenomenon in the world of IP theory, namely the loose use of the term "theory". When discussing his registration system proposal Kieff references it as "regulation theory" (2003, at 20). It is not clear that this truly constitutes a theory *per se*. It is not a seminal foundation upon which the grant of IP assets may be based or justified. Instead it is a new idea in the realm of patents, that constitutes an amended patent regime. This loose application of the term "theory" is a common error in the world of IP theory, particularly in the sphere of recent IP philosophical thinking.

⁷⁰⁰ Commercialization theory is based upon the work of Demsetz, Harold Demsetz, "Toward a Theory of Property Rights" (1967) 57 The American Economic Rev. 2.

⁷⁰¹ Kieff, "Property Rights and Property Rules for Commercializing Inventions", *supra* note 699 at 697.

⁷⁰² *Ibid.* at 703.

parties involved in relationships with the patent rights to “internalize full benefits of the subject matter claimed.”⁷⁰³

Kieff’s work is further notable because it represents a popular activity in IP literature – the updating of theories to reflect the present state of IP activities. This trend promotes the direct links within new theories to existing IP laws, such as patent laws in Kieff’s case. This flips the relationship of laws and theories so that theory is no longer the base that laws are grounded upon. Instead theory is moulded to reflect laws. This being said, commercialization theory remains consistent with traditional IP theories in that it upholds IP distinguishing traits of control, balance and flexibility/evolution.

Kieff expects a third party to have recourse to counter the exertion of the IP distinguishing trait of control by an IP asset owner by way of litigation. Thus, a level of balance, implemented by the courts to temper control, is implied. Notably, the theory also supports flexibility/evolution in that Kieff advocates for the application of a “soft look” patent registration system.⁷⁰⁴ This is essentially a registration system like that of South Africa, whereby registration is all that is necessary to grant patent rights.⁷⁰⁵ This supports an IP distinguishing trait of flexibility/evolution by permitting the expansion of patentable subject matter without limitation imposed by an initial examination of patentable subject matter.

3.3.3.3 Stealth Libertarianism

Richard Gold further exposes a move afoot in the U.S. to recharacterize known theories. He points to an attempt to invoke libertarianism cloaked as utilitarianism.⁷⁰⁶ Gold terms this

⁷⁰³ Kieff, "The Case for Registering Patents and the Law of Economics of Present Patent-Obtaining Rules", *supra* note 699 at 12.

⁷⁰⁴ Ibid. at 14.

⁷⁰⁵ Ibid. at 20.

⁷⁰⁶ Gold, "The Reach of Patent Law and Institutional Competence", *supra* note 117 at 266.

movement as “stealth libertarianism”.⁷⁰⁷ A libertarian view differs significantly from that of a utilitarian because it is ‘not premised on attaining the “social good” but on protecting an individual’s natural right to appropriate goods, including those of an intellectual variety.’⁷⁰⁸ Ultimately, “the utilitarian concern for the social good is artificially made to coincide with the libertarian belief in natural rights in property.”⁷⁰⁹

Recognition of stealth libertarianism is important because it has the effect of deepening the divide between theory and IP assets. It treats theory as a malleable tool, and emphasizes the utilization of theory rather than the roots of theory.⁷¹⁰ Stealth libertarianism exemplifies that the labels given to IP theories are not sufficient in isolation to permit a verifiable characterization of the theory. It is necessary to scratch the surface, reach beneath the name of the theory, and consider the revealed attributes, in order to characterize the theory and determine its IP distinguishing traits.

In the case of stealth libertarianism, its aim may be to promote the IP distinguishing trait of control as dominant. However, its cloak of utilitarian theory requires support of an IP distinguishing trait of balance that reflects the rights of society in an IP asset. So the aims of what libertarian hopes to achieve and what utilitarian theory requires must clash. This can cause confusion regarding the levels of IP distinguishing traits the theory supports.

Despite the issues raised by some new activities in the realm of IP theories, the prior discussion evidences common support amongst IP theories for IP distinguishing traits. Each theory acknowledges that control, balance and flexibility/evolution must exist in IP assets. The levels of these traits and their tempering relationships may differ as between assets or

⁷⁰⁷ Ibid. at 276. Gold states that “stealth libertarians have turned [the] utilitarian calculus on its head. Instead of viewing patent rights as a tool to promote social welfare, stealth libertarians depict intellectual property as an end in itself” (at 277).

⁷⁰⁸ Ibid.

⁷⁰⁹ Ibid. at 283.

⁷¹⁰ Ibid.

theories, yet all three traits must exist in all IP assets as supported by all IP theories discussed. For this reason these traits are identified as core traits of IP assets. Additionally, these traits are relied upon in subsequent chapters to probe IP contract strain.

3.4 Conclusion

IP theories assist in the task of defining IP assets by providing legal bedrock that identifies IP distinguishing traits as core traits of IP assets. Notably, IP theories commonly support IP distinguishing traits of control, flexibility/evolution and balance. These traits may be utilized to generate the base for a definition of an IP asset and therefore can avert the creation of contracts affected by IP contract strain.

The role of these traits in IP contracts is reviewed in subsequent chapters. In particular the traits are examined in Chapters 4-6 in light of IP practice norms, jurisprudence, and private sector institution activities. Thus, IP distinguishing traits are applied, along with contract legal principles, as tools to probe the causes and effects of IP contract strain in the chapters that follow.

4 ANALYSIS OF IP CONTRACT STRAIN

4.1 Introduction

Ideally IP contracts should be drafted to facilitate peaceable co-existence of contract legal principles and IP distinguishing traits of IP assets. In reality this is rarely the outcome. An examination of IP contracts shows that frequently IP contract terms either: omit, distort or alter IP distinguishing traits of an IP asset; or create conflict between contract legal principles and IP distinguishing traits. As discussed in Chapter 1, these outcomes are causes of IP contract strain. Consequently a review of the role of contract legal principles and IP distinguishing traits of an IP asset provides a means of identifying contracts affected by IP contract strain. This type of analysis is missing at present from IP contract interpretation. The result is a dearth of means for detecting IP contracts affected by IP contract strain. This chapter discusses IP contract creation, application and interpretation and shows how these are all affected by the lack of a means to detect or address IP contract strain.

The analysis of IP contract strain in this chapter reflects upon three topics, each of which highlight aspects of IP contract strain. A consideration of factors that produce non-IP contracts begins the discussion. Judicial decisions involving IP contract interpretations are next reviewed. These highlight the difficulties the judiciary face in addressing IP contracts and why the traditional contract interpretation methods do not detect IP contract strain. Lastly, the potential for particular contract doctrines to address IP contract strain, and why these fail, is examined.

4.2 Non-IP Contracts

IP contracts provide the cross-roads where IP assets and contract legal principles intersect. As discussed in Chapter 1, there are significant pressures upon contract drafters to produce terms

that achieve market advantage for the IP asset holder.⁷¹¹ These influences can affect the creation of IP contracts. This section briefly considers factors that may result in IP contract strain and in the creation of non-IP contracts in particular, including: lack of contract drafter IP asset expertise; indiscriminate use of boilerplate IP contract language; IP contract complexity; market advantage pressures; using contract terms to mould IP asset; perceived similarities between IP assets and tangible assets; and willful misunderstanding. Each factor is presented individually in this section and links between these are drawn.

4.2.1 IP Contract Expertise

A lack of knowledge and understanding of IP assets by contract drafters is a fundamental reason why non-IP contracts are drafted.⁷¹² Oftentimes this shortcoming is due to gaps in IP education.⁷¹³ This lack of IP knowledge is further exacerbated by the common private sector organization practice of assigning to independent departments the responsibilities of: (i) managing a company's IP asset portfolio; and (ii) negotiating its IP transactions.⁷¹⁴ The outcome is that in many organizations, "while on paper the [IP] department seems firmly attached to the corporate hierarchy, it has at some point in fact detached itself from the orbit of the firm".⁷¹⁵

⁷¹¹ Ideally, IP contractual terms should straddle the divide between corporate "strategic considerations of self-interest, secrecy, and the logic of mutually beneficial exchange" and concerns of some IP users encompassing "openness, sharing and access" (Reichman & Uhler, "A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment", *supra* note 66 at 323). Many issues collide when an IP contract is drafted.

⁷¹² Wild, "The Phillips Formula", *supra* note 253 at 29. A lack of IP asset expertise can have several causes: (i) the contract drafters have never been involved in the creation of an IP asset; (ii) the contract drafters have never studied IP law; or (iii) the contract drafters have no contracting or business experience with respect to IP assets. The general result is that the contract drafters do not have an understanding of the definition of an IP asset and therefore do not understand how to produce a contract that has terms capable of facilitating a particular contractual use of an IP asset.

⁷¹³ *Ibid.*

⁷¹⁴ See: Ulf Petrusson & Bo Helden, "Making Patent Strategy Strategic" *Intellectual Asset Management Magazine* 30 (2008) 38 at 38; and Wild, "The Phillips Formula", *supra* note 253.

⁷¹⁵ Ulf Petrusson & Helden, "Making Patent Strategy Strategic", *supra* note 714 at 38.

Routinely in the private sector employees who have knowledge of IP assets are not involved in drafting IP contracts.⁷¹⁶

The strategy of distancing employees who generate IP assets from those who draft contracts for IP asset use is an organizational choice that produces negative consequences for IP contracting. Managing an IP asset portfolio involves seeking IP protection for works, inventions, marks or designs to produce IP assets and tracking their progress. Consequently, the employees of such a department must have some knowledge of IP assets, whereas the employees charged with the task of negotiating IP contracts are likely the same employees who negotiate other company contracts.⁷¹⁷ Their expertise lies in contracting generally, not in IP assets specifically.⁷¹⁸ Many IP contract drafters have likely never considered whether IP assets have core traits, much less whether the terms they draft support these traits. (Although it is possible some have considered the existence of the trait of control, as this trait is routinely exploited by the private sector.⁷¹⁹) Therefore, while executing their task, contract drafters focus exclusively on the aims of the parties.⁷²⁰

The result is that contracts are drafted in virtual ignorance of the definition of the IP asset and may be driven by assumptions regarding the asset.⁷²¹ As the complexity of an IP contract is generally commensurate with the complexity of the IP asset that is the subject matter of the contract, a complex IP asset requires IP contract terms that support its complexities, including its

⁷¹⁶ Kenan Patrick Jarboe, "Building a Capital Market for Intangibles" *Intellectual Asset Management Magazine* 30 (2008) 41 (2008) at 41. See also: Douglas R. Elliott, "Beer, Bucks and brands" *Intellectual Asset Management Magazine* 31 (2008) 15 at 15.

⁷¹⁷ Petrusson & Helden, "Making Patent Strategy Strategic", *supra* note 714 at 38.

⁷¹⁸ This lack of IP expertise is expressed in a 2003 Accenture survey undertaken by senior managers across a variety of industries, that provides results showing that 49% hold intangible assets to be "their primary focus for delivering long-term shareholder value." Yet this commitment to intangible assets must be tempered by the fact that only 5% of the respondents said they have implemented a system to track the performance of intangible assets. The aims of managers may not be achieved due to a lack of IP knowledge. Kenan Patrick Jarboe, "Building a Capital Market for Intangibles", *supra* note 716 at 41. See also: Elliott, "Beer, Bucks and brands", *supra* note 716 at 15.

⁷¹⁹ Millied & Laurie, "Meet the Middlemen", *supra* note 18 at 53.

⁷²⁰ Petrusson & Helden, "Making Patent Strategy Strategic", *supra* note 714 at 38.

⁷²¹ Kenan Patrick Jarboe, "Building a Capital Market for Intangibles", *supra* note 716 at 42.

IP distinguishing traits.⁷²² A non-IP contract frequently is the unwitting result of an IP contract negotiation, due to a lack of IP asset expertise on the part of the contract drafters.

4.2.2 Boilerplate Language & IP Contracts

An additional reason why non-IP contracts are drafted in the private sector is a tendency to adopt prior contract terms as boilerplate language for subsequent contracts.⁷²³ This practice can cause the spread of non-IP contracts if the boilerplate language does not support the IP distinguishing traits of the IP asset. One reason for the reliance upon boilerplate language is that contract terms relating to IP assets are often technical. It is therefore easier to copy IP technical terms from prior contracts than to draft such terms from scratch.⁷²⁴

In particular, through this practice contract terms that do not support IP distinguishing traits are adopted as standard, boilerplate contract terms. The lack of an understanding of IP assets (which may be related to a lack of IP asset expertise on the part of the contract drafters) causes the flaws in the boilerplate contract terms to go unnoticed. Since the wording was adopted in prior IP contracts it is assumed that it is applicable to subsequent IP contracts. Boilerplate language can therefore both facilitate the creation of non-IP contracts and ensure the perpetuations of this practice.

4.2.3 Complexity & Purpose of Private Sector IP Transaction Contracts

The complexity and purpose of a private sector transaction affects the terms contract drafters produce.⁷²⁵ The biotech market offers an example of this outcome – reverse mergers are currently employed by biotech companies unable to undertake an IPO (initial placement

⁷²² Ibid.

⁷²³ Boilerplate contracts do not necessarily signify contracts that are exactly the same. A boilerplate contract can offer a base from which a particular contract may be produced. For example, some terms, such as sale price, term of agreement, etc., can be modified while more technical terms remain untouched. The benefit of this practice to law firms in particular is evident in the significant time, money and effort that is devoted to creating and maintaining precedent systems.

⁷²⁴ Ramsay, *Ramsay on Technology Transfers and Licensing*, *supra* note 161 at 163.

⁷²⁵ Editorial, "The Death Spiral" *Nature Biotechnology* 24:6 (June 2006) 594.

offering) but in need of funding.⁷²⁶ A reverse merger is a transaction whereby a private company merges with an already listed public entity that is in fact a shell company and does not hold any assets or liabilities.⁷²⁷ Through this merger strategy the private company becomes a publicly listed company.

IP asset value often lies at the root of these contract-based transactions, influencing the companies to merge and thereby undertake activities to generate corporate wealth from the IP asset.⁷²⁸ Due to the merger structure the goal of the transaction may not be apparent upon its face.⁷²⁹ For example, biotech companies may pay lip-service to the promotion of public health as their *raison d'être*. However, their wish to be a publicly traded company is prompted by an intention to utilize their IP assets and public status as a means to gain corporate economic benefits.⁷³⁰ The result is that in the course of contract drafting the role of an IP asset may be submerged beneath complex transactional considerations.

The complexity of the contract drafting process is deepened in some instances by the fact that increasingly IP contracts must address a portfolio of IP assets, rather than single IP assets.⁷³¹ This augments the problems contract drafters face. Drafters may want to create contractual terms that accurately represent IP assets. However, the drafters may end up being swayed by their

⁷²⁶ See: Stacy Lawrence, "Reverse mergers attract top-tier biotechs in sluggish IPO market" *Nature Biotechnology* 24:6 (June 2006) 598.

⁷²⁷ See: <http://www.reversemergers.com/index.php?page=whatis>.

⁷²⁸ See: Marcia H. Anderegg et. al., "Trendspotting: A shift in intellectual property focus" *Nature Biotechnology* 24:6 (June 2006) 609

⁷²⁹ Christopher J. Betti, "Diagnostic Genetic Technologies Left Stranded on First Base: A Need to Unwind the Protection Afforded Gene Patents" (2005) 17 DCBABR 22 at 23.

⁷³⁰ Divergent motivations may be another issue that affects the terms that constitute IP contracts. For example, the biotechnology sector exemplifies two such motivations: (i) an interest in developing health benefits for society; and (ii) 'the conviction that developing a strong biotechnology industry is essential for stimulating economic growth and building a "knowledge-based" economy' (Williams-Jones, "History of a Gene Patent: Tracing the Development and Application of Commercial BRCA Testing", *supra* note 505 at 124-125). These have different effects on the contracts produced for the application of biotechnology related IP assets. It may not be clear on the face which motivation is driving the contract terms.

⁷³¹ Merges, "Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations", *supra* note 460.

personal understanding regarding what certain IP assets represent, and may lack the time to examine the assets to confirm their assumption. They may also be influenced to misrepresent IP assets in a contract as a result of confusion arising from the number of IP assets being addressed in a single contract. A myriad of factors can therefore cause complex transactions to result in non-IP contracts.

4.2.4 Market Advantage & IP Contracts

Of the many factors that affect IP contracting perhaps the most significant is the pressure contract drafters experience to create terms that characterize IP assets in a manner that attains market advantage.⁷³² Notably, market advantage is distinguishable from total monopoly of a market. Total market monopoly leaves no room for competitors to impinge on the market territory.⁷³³ This type of impenetrable monopoly is achieved by few IP assets. This is so because

⁷³² *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para 37. For example, exclusivity offered by IP assets can provide a means of achieving market advantage by providing leverage or bargaining power to an IP asset holder.

⁷³³ Landes & Posner, *The Economic Structure of Intellectual Property Law*, *supra* note 593 at 374. Notably, whether capable of total monopoly or a lesser amount of market advantage, the view of IP assets as representing monopoly power is widespread. A quick look at media reports shows the popularity of a belief that IP assets are equivalent to power. Often media reports that characterize IP assets as representing market monopoly power relate to patent rights as exemplified by a survey of patent power (Harry Goldstein, "Patent Power" *IEEE Spectrum* (2007)). However, increasingly copyright and trade-mark assets are also characterized as offering substantial market control. See: Reuters, "Scientists closer to making synthetic life" *The Toronto Star* (June 28, 2007); David Friend, "Biovail fights to protect antidepressant drug" *The Toronto Star* (December 21, 2006); James Love, "Experts comment on Senate bill that replaces monopolies for medicines with system of prizes" *Knowledge Economy International* (October 19, 2007); and Jesse Greenspan, "Stage set for tussle over 'Octomom' trademark" *Law 360* (April 17, 2009). Media reports not only highlight the beliefs of business-persons that IP asset ownership facilitates market monopoly (e.g. David Engel, the president of Innovative Graphics Group talks about the importance of patent rights in a strategy for securing a market monopoly for eco-friendly loyalty cards Kathryn Maloney, "Eavid Engel on 'green' brand boosting" *Globe and Mail: Report on Business* (April 10, 2009)), but also have the effect of convincing non-business persons that this belief is factual (e.g. A mother of octuplets dubbed "Octomom" by the media recognized the financial gain represented by exclusive rights to use the name and she filed a trade-mark application for "Octomom" even though a prior filing existed See: Greenspan). Business persons then act upon a belief in IP asset monopoly as if it were factual. For example, due to their power, IP assets are at present perceived to be tightly tied to the value and market success of a company and it is not uncommon to find that IP assets affect the share price of a corporation (See: Sam Cage, "Roche wins Genetech for \$46.8-billion" *National Post* (March 12, 2009); and Barry Critchley, "Fun and games at GCG" *Financial Post* (May 15, 2009). This tie between IP assets and corporate value is interesting in that there is no IP valuation standard and currently more than 50 IP valuation methods are applied arriving at widely disparate values for IP assets. Patrick H. Sullivan, "Standardising IP Valuations: Whether, What and How" *Intellectual Asset Management Magazine* 34 (March/April 2009) 31 at 31). As IP contracts can be tools to solidify market advantage, for example IP contract terms may be drafted to push competitors out and/or keep consumers within a tight corral of behaviour, it is not difficult to understand why a willful misunderstanding regarding IP assets is a sustained business practice (e.g. J.K. Rowling is accused of pushing her copyright to its

in most cases it is possible to access non-infringing substitutes and/or improvements to an IP asset. However, although complete market monopoly by IP assets is rare, it is not unprecedented.⁷³⁴ As an example of a non-infringing substitute, the introduction of the iPod by Apple Inc. (a device for storing files in a particular format) may not be infringed by a device that stores files in another format. Mere IP asset holdings therefore may not preclude the introduction of assets based on a substitutes or improvements to an original IP asset within a market sector.

Total market monopoly is also averted by limitations imposed on the selling price of IP assets.⁷³⁵ Generally the price of a product protected by at least one IP asset must be commensurate with the ability of consumers to purchase a substitute or improved product. If the price is too high consumers will not purchase the product because they will be able to get a product that is almost as good from a competitor for a lesser price. Although incapable of achieving total monopoly, IP assets that achieve market advantage represent marketplace influence which is still a critical success measure for private sector companies.

limits when she challenged a fan who created and tried to publish a “Harry Potter Lexicon”. This activity was described as a move that would deny “well-meaning fans permission to pursue legitimate creative activities”, Larry Neumeister, “Rowling crisis foul over Potter book” *The Toronto Star* (February 29, 2008)).

⁷³⁴ Disruptive technologies are a category of IP assets that represent more than mere increments of innovation – representing previously unknown categories of works, inventions, marks or designs. Disruptive technologies have no immediate competitors because they represent a distinct technology without any equivalent (Clayton M. Christensen & Stuart L. Hart, “The Great Leap: Driving Innovation from the Base of the Pyramid” (2002) 44:1 *MIT Sloan Management Review* 51 at 52) and may therefore achieve market monopoly. They are capable of revolutionizing an industry and can produce significant new market growth because competitors require time to catch-up to the plane of innovation that the disruptive technology represents. An example of a disruptive technology is the first personal computer (See: IBM, “IBM Personal Computer: Before the Beginning: Ancestors of the IBM Personal Computer” (Archives) online: <http://www-03.ibm.com/ibm/history/exhibits/pc/pc_1.html>). The ability to have a computer in one’s home, without requiring a whole room to store the processor hardware, was a disruptive technology. It changed the computer market. Notably, the creators of the first personal computer did not patent their invention, so competitors could copy and improve upon this invention without infringing a patent right. However, creators of other disruptive technologies do seek patent protection, or other IP assets, to permit the asset holders to keep competitors from using and copying the technology.

⁷³⁵ Notably, due to their nature, disruptive technologies may defy the limitations generally imposed on the selling price of IP assets. Disruptive technologies are the only product available in a market, so the price of the product will not need to be set in relation to any other substitute or improved products that share the market space. This being said, some disruptive technologies allow, “less-skilled and less-affluent people to do things previously done only by expensive specialists in centralized, inconvenient locations...they offer consumers products and services that are cheaper, better and more convenient than before” (Clayton Christensen et al., “The Great Disruption” (2001) 80:2 *Foreign Affairs* at 81). Consequently, the price of disruptive technologies may purposely be set low, as the ability to produce the technology at a lower price is an advantage of the technology.

While market advantage is generally positive for companies, its downside is that while striving for market advantage contract drafters may create contract terms that produce non-IP contracts. For example, the quest for market advantage may lead to the production of contracts with terms imposing obligations that are beyond the scope of the patent asset, yet are characterized as part of the IP asset. Such terms can effectively dig a wide trench of market security around the IP asset by keeping competitors from successfully introducing substitute products. Thus, the non-IP contract results from an intention to stretch the scope of the IP asset. As discussed below, often it is the control trait that is over-emphasized.

4.2.5 Using IP Contract Terms to Mould IP Assets

A related step to the previous factor is the activity of drafting contract terms to shape and mould IP assets for the purpose of IP contract aims, which is a private-sector practice that has evolved into a norm, as discussed in Chapter 1.⁷³⁶ In general this activity involves defining an IP asset through contract terms, whereby the contract terms become the primary, and potentially sole, source to determine the characteristics of an IP asset. This activity can promote market advantage, but it also raises particular considerations in light of recent legislation and jurisprudence.⁷³⁷

The assumption that IP contract terms may be used to mould IP assets finds a mixture of support and opposition in proposed legislative amendments and jurisprudence, respectively. For example, proposed amendments to the *Copyright Act* advocate additions that specifically grant

⁷³⁶ See: Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 830; and Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 85.

⁷³⁷ Cohen, "Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management"", *supra* note 115 at 486. Cohen comments that 'courts and commentators attempting to decide whether copyright law preempts inconsistent contract terms have characterized legitimate contract restrictions as involving an "extra element" of breach of promise or a "special relationship" between copyright owner and consumer that is distinct from the copyright owner's rights against the world.'

contractual dominance over the *Act*.⁷³⁸ In particular Bill C-61 of 2008, *An Act to amend the Copyright Act*,⁷³⁹ is instructive to this thesis. Notably Bill C-61 was withdrawn from Parliamentary consideration in anticipation of a federal election. It is not currently before Parliament and has never been enacted as law. However, experts predict that future proposed amendments to the *Copyright Act* will be similar to Bill C-61.⁷⁴⁰

An example of an amendment proposed by Bill C-61 is subsection 29.21(2) which states that if a person who downloads music is bound by a contract setting terms relating to the download that “the contract prevails over” the *Act* “to the extent that any inconsistency between them exists.”⁷⁴¹ This example, as well as other amendment proposals included in Bill C-61, do not expressly allow contractual terms to define copyright *per se*. However, Bill C-61 advocates for an IP contract, in some instances, to be the dominant source of copyright protection over the *Copyright Act*.

⁷³⁸ Modifications to Canada’s *Copyright Act* have been presented in the form of various proposed bills over the past few years. None have progressed far beyond an initial introduction to Parliament. The most recent suggested amendments were presented in the form of Bill C-61 (*Bill C-61, An Act to amend the Copyright Act*, House of Commons of Canada 2008, House of Commons of Canada 2008). Initially introduced on June 12, 2008, Bill C-61 proposes significant changes to the copyright statute. Some of these changes, such as ss.29.21(1), codify jurisprudence, such as *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14, and *Theberge v. Galerie d’Art du Petit Champlain inc.*, *supra* note 14, while others draw copyright into new territories either by introducing new subject matter, such as “lessons” Bill C-61 ss. 14(2.1), or alternatively by strengthening the role of copyright in already protected works, such as performers’ performances (at Part II).

⁷³⁹ *Bill C-61, An Act to amend the Copyright Act*, *supra* note 738.

⁷⁴⁰ Sheldon Burshtein, *13th Annual Intellectual Property Law The Year in Review of the Law Society of Upper Canada, Licensing & Intellectual Property Transaction Presentation*, Donald Lamont Learning Centre (15 January 2009). Whether expert opinion will prove to be accurate is uncertain in light of Industry Canada’s announcement that a consultation period would occur to gather information for the purpose of guiding future endeavours to amend copyright law in Canada ending September 13, 2009. This process involves submissions from the public that answer five questions regarding the type of copyright law the public favours, at copyright.econsultation.ca, as well as town hall meetings. See: Industry Canada, “Government of Canada Launches National Consultations on Copyright Modernization” *Press Release* (July 20, 2009), online: <<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/04840.html>>. The anticipated subsequent proposed amended copyright legislation, Bill C-32, *An Act to amend the Copyright Act*, was introduced to the House of Commons for a first reading on June 3, 2010. The wording suggesting contractual dominance included in Bill C-61 of 2008 is not included in Bill C-32 of 2010, although Bill C-32 does extend rights to copy works to parties based upon a person or entity being a party to a licence for a work. For example, a party to a licence is now granted rights to copy that were previously extended by the Copyright Act solely to owners of the work, or those authorized to use the work by the owner of the work (see s.30.61).

⁷⁴¹ *Bill C-61, An Act to amend the Copyright Act*, *supra* note 738. Other amendments proposed by Bill C-61 expressly permit contract terms to override aspects of the *Copyright Act* as well. These sections of Bill C-61 relate to a variety of works, such as sound recordings, photos and other works. See: Bill C-61 ss. 29.22(2) & 32.2(1)(f).

Notably, in the same time-frame efforts have been made by Canadian courts to tie IP assets to some IP distinguishing traits.⁷⁴² These are not necessarily occurring in the context of IP contracts, but they are remarkable and relevant to this thesis nonetheless as examples of limits to IP asset moulding. For example, two Canadian Supreme Court decisions address the correct scope of IP rights – *Kirkbi AG v. Ritvik Holdings*⁷⁴³ (commonly known as the “LEGO case”) and *CCH Canada Ltd. v. Law Society of Upper Canada*⁷⁴⁴ (“CCH”).

The *LEGO* case addresses an attempt by a holder of an expired patent to rely on trade-mark rights to function in the same manner as patent rights. The Court comments that trade-mark rights “may not be used to perpetuate monopoly rights enjoyed under now-expired patents.”⁷⁴⁵ The Court acknowledges differences between forms of IP assets, namely trade-marks and patents, by distinguishing the scope of each asset. Moreover, in its judgment the Court’s comments indicate appreciation for the economic value of IP assets. By refusing to allow trade-mark assets to keep alive expired patent assets, the Court acknowledges that, “the market for these products is now open, free and competitive”.⁷⁴⁶ Furthermore, IP assets are to be applied to prevent “abuses of monopoly positions in respect of products and processes.”⁷⁴⁷ Although these statements are directed to litigation arguments, they are equally instructive to IP contract drafters as they articulate the legitimate role of IP assets in the marketplace.

As a final example, the Supreme Court of Canada speaks directly to the world of contract in *CCH*. The Court states that “if a copyright owner were allowed to license people to use its

⁷⁴² Notably Bill C-61 is introduced as potential Canadian legislation to the government at a point in time where recent decisions rendered by the highest court in the land have said that balance must be an element of copyright. See: *Society of Composers, Authors and Music Publishers of Canada v. Canadian Association of Internet Providers*, *supra* note 143; *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14; and *Theberge v. Galerie d’Art du Petit Champlain inc.*, *supra* note 14. It is debatable whether Bill C-61 achieves this end.

⁷⁴³ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135.

⁷⁴⁴ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14.

⁷⁴⁵ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para. 3.

⁷⁴⁶ *Ibid.*

⁷⁴⁷ *Ibid.* para. 44.

work and then point to a person's decision not to obtain a license as proof that his or her dealings were not fair, this would extend the scope of the owner's monopoly over the use of his or her work in a manner that would not be consistent with the *Copyright Act's* balance between owner's rights and user's interests.”⁷⁴⁸ This statement highlights the importance of drafting IP contract terms to support all IP distinguishing traits of an IP asset. Not only the trait of control is important, but balance and flexibility/evolution must also be supported by contract terms. Ultimately contract terms drafted to mould IP assets, and thereby subjugate or omit IP distinguishing traits, result in non-IP contracts.

4.2.6 A View of Contractual Similarities of IP Assets & Tangible Property

Yet another consideration is the temptation contract drafters experience to treat IP assets in the same manner as tangible property. The application of the same contract approaches to both IP assets and tangible assets is the common result of such temptation. This view sees IP assets and tangible property as more similar than different.⁷⁴⁹ A problem arises from this practice because contractual uses designed for tangible property are not always applicable to IP assets.⁷⁵⁰ Moreover, this assumed similarity can lead to a conviction that a product reflects an IP asset.⁷⁵¹ This concept of “thingness” is discussed in Chapter 3.

Confusion arises because generally the scope of corporate tangible property is ascertainable and all of its elements are knowable at the point of contracting,⁷⁵² whereas the scope of IP assets

⁷⁴⁸ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14 para 70.

⁷⁴⁹ Durell, *Corporations and Intellectual Assets: A Case of Being Blinded by the Economic Value*, [unpublished], *supra* note 452.

⁷⁵⁰ Gordon, "An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent and Encouragement Theory", *supra* note 77 at 1379. As Wendy Gordon points out, “in the law of real property, physical boundaries are essential to organizing transactions. To have a market, the objects to be bought, sold, and licensed must be clearly identified...physical boundaries give notice as to what constitutes a trespass.”

⁷⁵¹ Durell, *Corporations and Intellectual Assets: A Case of Being Blinded by the Economic Value*, [unpublished], *supra* note 452.

⁷⁵² Some real property, such as mineral rights, arguably also have unclear boundaries. This being said, a mineral right is based upon a staked claim. The claim is related to a specific territory. Within that territory there will exist a finite amount of mineral. In the oil and gas business, for example, the quantity of mineral within a claim can be

and their IP distinguishing traits are not as easily identified. Drawing an analogy to tangible property, omitting, altering or distorting an IP distinguishing trait from an IP contract is like drafting contract terms that omit the leg of a table, or a section of land from a contract, or else treat a wooded section of a plot of land as bare, or a rectangular table as round. Such contract terms have negative consequences for the fulfillment of the contract.

In particular, the asset described by the contract terms will not match the actual tangible property asset. This raises questions for contract interpretation and application: Since the contract terms reference only 3 legs of the table, should the whole table be transferred?; Can issues relating to the trees on the section of land be addressed in accordance with the contract, or will the trees frustrate the contract? Parties may want to rely upon the true tangible property asset, but they have not drafted a contract that supports this asset.

Merges considers the link between property and contract in the context of a new branch of economics that he attributes to Oliver Hart, Sanford J. Grossman and John Moore and gives the name “new property rights” (NPR).⁷⁵³ Merges states that, ‘NPR takes as its starting point that many contracts are difficult to enforce’ due to information gaps in contract terms that he dubs “contractual incompleteness.” In real-world transactions there are multiple examples wherein it is difficult for a court to assess “contractual compliance” due to contractual incompleteness.⁷⁵⁴ NPR advocates the application of property rights as “contractual safeguards”, because it considers them to be “uniquely valuable in solving some problems of contractual incompleteness.”⁷⁵⁵

difficult to determine, but this is due to the lack of technological ability to measure the oil or gas deposit, not the lack of the existence of a specific amount of fluid within a claim at a particular period of time. Thus, the amount of mineral represented by a right is not entirely unknowable or lacking tangible boundaries.

⁷⁵³ Merges, "A Transactional View of Property Rights", *supra* note 393 at 1486.

⁷⁵⁴ *Ibid.*

⁷⁵⁵ *Ibid.* at 1504. There is an interesting relationship between IP litigation and IP contracting. Merges notes that the facts of patent infringement cases indicate that this measure is only undertaken as a subsequent step to attempting to

In the context of IP assets, the NPR view can be coupled with IP distinguishing traits, whereby the traits can be used as contractual safeguards to fill in blanks left in IP contracts. For example, where the definition of an IP asset is unclear, the IP distinguishing traits of that asset may be accepted as the base of the definition to overcome contractual incompleteness. However, perhaps this idea needs to be approached from the opposite direction. Knowledge of IP distinguishing traits prior to contracting for an IP asset represents the ultimate “contractual safeguard”. In practice, ascertaining the exact form or levels of IP distinguishing traits that exist in an IP asset can involve several steps that may be arduous and time-consuming.⁷⁵⁶ However, not following these steps can result in contractual terms that do not read on an IP asset and a non-IP contract.

4.2.7 Willful Misunderstanding

In some cases, non-IP contracts are drafted unwittingly, but in other instances they are produced willfully. Non-IP contracts drafted due to willful misunderstanding of the IP asset on the part of the business community will likely either omit the IP distinguishing trait of balance, or alter the trait of control by augmenting its magnitude. In each situation the right of the IP asset holder is enlarged and the right of third parties to access the IP asset is diminished.⁷⁵⁷ For

license (at 1488). Of course some parties resort to patent infringement accusations due to the expected financial benefits expected from a successful allegation – “a patentee can collect up to treble damages if there is proof that the infringement was willful” (at 1506). Thus the fact that the number of patent infringement suits is much higher than contract suits does not indicate that IP contracts are not flawed. It shows a tactical preference grounded in damage laws.

⁷⁵⁶ These steps can include an IP theory analysis to identify IP distinguishing traits; due diligence to establish other elements of the scope of an IP asset, such as the claims of a patent; a chain of title search; etc.

⁷⁵⁷ See: Chapter 3; and Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 119. Generally, if an IP asset owner augments the trait of control, then this means that an IP asset holder has the right to cause a third party to submit to obligations beyond those granted by the exclusivity rights of an IP asset prior to accessing the IP asset. Thus, control is wielded to impose additional obligations on a third party. If a third party is unable to submit to these obligations then the third party may be denied access to the IP asset entirely. For example, in the Monsanto TUA, the obligation that a third party purchaser may not retain harvested seed for planting, but must purchase new seed for planting each year imposes a financial obligation upon the third party purchaser that is greater than the initial cost of the seed. The obligation is an annual requirement to purchase seed in order to grow a crop. This ongoing obligation may be too costly for a third party purchaser and may cause the third party purchaser to be unable to plant a crop of Monsanto’s Round Up Ready Canola.

example, either a lack of balance or augmented control permits an IP asset holder to block access to the asset and utilize it as a sword against third parties at will. Willful misunderstanding is often driven by the goal of market advantage,⁷⁵⁸ and/or the belief that IP contract terms can mould IP assets. This is a significant problem, and at least one author calls for standards of commercial morality to be imposed upon companies to avert such behaviour.⁷⁵⁹

Anti-trust law in the U.S., competition law in Canada, and the counterparts of this legislation in other countries, each function to suppress market monopoly and promote competition, but generally IP assets constitute an exception to anti-trust and competition laws.⁷⁶⁰ The Canadian *Competition Act* states outright in section 79(5) that, “an act engaged in pursuant only to the exercise of any right or enjoyment of any interest derived under the *Copyright Act*, *Industrial Design Act*, *Integrated Circuit Topography Act*, *Patent Act*, *Trade-marks Act* or any other Act of Parliament pertaining to intellectual or industrial property is not an anti-competitive act.”⁷⁶¹ Thus, IP assets are, to an extent, a permitted monopoly or market advantage.⁷⁶²

⁷⁵⁸ Drahos states that self-interest is “a powerful motivator of conduct” which can turn IP assets into a dangerous tool (Ibid. at 137). In fact, IP assets become a sword turned against society in the hands of some IP owners. Prindle further comments that trade agreements dictate conditions based on perceived monopolies grounded in IP asset ownership, and that these agreements pervade entire industries (Prindle, “Patents as a Factor in a Manufacturing Business”, *supra* note 563).

⁷⁵⁹ Pamela Samuelson, “Privacy as Intellectual Property?” (2000) 52 Stan. L. Rev. 1125 at 1125. Samuelson points out that the urge that influences corporations to push the limits to attain market advantage also affects the use of personal information.

⁷⁶⁰ This form of legislation sets up rules which prevent any single company from controlling a market, and is intended to facilitate competition within industry sectors. Various countries have national competition legislation: *Competition Act*, R.S.C. 1985, c. C-34 (Canada); *Sherman Act*, 15 U.S.C., 15 U.S.C. (United States).

⁷⁶¹ *Competition Act*, R.S.C. 1985, c. C-34 ss. 79(5).

⁷⁶² Although IP assets may be a permitted monopoly by competition laws there is no consensus as to what this means. Notably, Merges believes that strong IP assets and private institutions is the combination necessary to create transactions (Merges, “Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations”, *supra* note 460 at 1031) and that the “peculiar nature” of IP assets means that identifying them as property entitlements is the “only way to get parties truly to bargain over the valuation” of IP assets (at 1305-1306). Julie Cohen criticizes Merges, finding that he fails to address issues of substitutability or elasticity in his consideration of IP assets, and consequently fails to understand the concept of market advantage in the antitrust sense (Cohen, “Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management””, *supra* note 115 at 522). Moreover, there is a clash between IP monopoly and European anti-trust law, as exemplified in the ruling of the EU Court of first instance against Microsoft Corp., rendered in 2007. See: *Commission Decision of 23.04.2004 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37.792 Microsoft)*; and appeal denied *Microsoft Corp. v. Commission of the European Communities*, [2007] T-210/04 (Court of First Instance). The Court

Notably, the scope of subsection 79(5) of the *Competition Act* can be limited by section 32 which curtails the ability of an IP asset holder to use the exclusive rights granted in a patent, copyright, trade-mark or circuit topography to:

a) limit unduly the facilities for transporting, producing, manufacturing, supplying, storing or dealing in any article or commodity that may be a subject of trade or commerce, (b) restrain or injure, unduly, trade or commerce in relation to any such article or commodity, (c) prevent, limit or lessen, unduly, the manufacture or production of any such article or commodity or unreasonably enhance the price thereof, or (d) prevent or lessen, unduly, competition in the production, manufacture, purchase, barter, sale, transportation or supply of any such article or commodity

to “prevent such use”. Section 32 has been identified by the Canadian Federal Court of Appeal as evidence that “Parliament did not intend to exclude the exercise of [IP] rights from the reach of the *Competition Act* altogether”.⁷⁶³ Yet, the Court further states that the limitations of section 32 are applicable only if something more than the “mere exercise” of an IP asset affects competition in the relevant market.⁷⁶⁴ This can pose a hurdle in the context of the present view of IP contract drafters that holds contractual uses defined by contract terms which alter or distort the actual IP asset to constitute a “mere exercise” of an IP asset.

It is true that non-IP contracts, drafted based upon a willful misunderstanding of IP assets, will not always be upheld under scrutiny.⁷⁶⁵ However, the number of IP contracts that are reviewed for the flaw of willful misunderstanding is limited. Additionally, contract drafters may assume that a contract interpretation will emphasize contract legal principles, such as intent of

found Microsoft guilty of monopoly abuse. Specifically Microsoft was accused of using its desktop computer sector power to gain a monopoly in server software. Microsoft was obliged to pay a USD\$613 million fine, to share its communications code with rivals and to sell a copy of Windows that does not include Media Player. See: Matt Moore, "Microsoft \$613M fine upheld" *The Toronto Star* (September 17, 2007).

⁷⁶³ *Eli Lilly and Co. v. Apotex Inc.*, [2005] 2 F.C.R. 477 para. 28.

⁷⁶⁴ *Ibid.* para. 34. The Court quotes the *Intellectual Property Enforcement Guidelines* to support this comment. Additionally, the Court further holds that it is necessary to prove loss or damage to be eligible for a grant of damages under section 36 of the *Competition Act*, *supra* note 761 (para. 58). See also: *Volkswagen Canada Inc. v. Access International Automotive Ltd.*, [2001] 3 F.C. 311.

⁷⁶⁵ See: William New, "US Supreme Court Limits Patent Owners' Control Over Downstream Use of Their Inventions" *Intellectual Property Watch* (June 25, 2008).

the parties over IP assets. Consequently, the corporate benefit of gaining market advantage through IP assets is often so great an influence that it is deemed to far outweigh the potential, virtually negligible, risk of contract invalidation. Thus, willful misunderstandings of IP assets persist and induce the production of non-IP contracts.

4.2.8 Non-IP Contract Issues Generally

As a general comment, non-IP contracts may be created as the result of several influences and factors. Some of these are interrelated, such as the goal of market advantage, moulding IP assets through contract terms, and applying a willful misunderstanding of IP assets to the contract drafting process. An acceptance of IP distinguishing traits as constituting the basis of a definition of an IP asset can provide a means of distinguishing IP contracts from non-IP contracts.

Accepting this basis for IP assets may result in a requirement that an IP contract include terms that define an IP asset to include IP distinguishing traits of control, balance and flexibility/evolution. Such a requirement is presently lacking from both IP contract drafting and IP contract interpretation. The recognition of IP distinguishing traits as the core traits of IP assets, and a requirement that these traits not be omitted, distorted or altered by IP contract terms, may constitute the foundation for a standard applicable by legislators and the judiciary to address IP contract strain. The discussion below reviews the result of not having such a standard.

4.3 IP Contract Strain: Judiciary & Contract Legal Principles Reactions

Courts routinely address issues that affect contractual uses of IP assets and IP contract terms. This section probes IP contract interpretations undertaken by courts and considers whether present methods can address IP contract strain. This undertaking shows that even the judiciary experiences difficulties when required to interpret IP contracts. Notably, their decisions do not address IP contract strain and are insufficient to effectively acknowledge its causes.

4.3.1 Case Law & IP Contract Interpretation

In general, U.S. and Canadian judicial decisions based on IP contract issues are adjudications that ignore the intersection of IP distinguishing traits of IP assets and contract legal principles in IP contracts, and consequently are incapable of addressing IP contract strain.⁷⁶⁶ This may not be a willful fault of the courts, as they are merely addressing the issues raised at bar, which is their rightful role. A review shows that the choice courts make between IP assets and contract legal principles often depends upon the characterization of an issue pertaining to an IP contract raised at bar. However, it is notable that jurisprudence does not offer meaningful guidance as to how IP assets should be balanced with contract legal principles in the context of IP contracts. Case law presents decisions that choose to focus upon either IP assets or contract legal principles and thereby suggests that: (i) there is no interaction of assets and principles in IP contracts; or (ii) such interaction is not conflict-ridden. A review of IP contracts shows that each of these conclusions is a fallacy.

The Canadian and U.S. cases examined in this section provide examples of judicial approaches to IP contract interpretations and the dilemma courts face when asked to interpret an IP contract.⁷⁶⁷ Such approaches unanimously fail to accommodate both considerations of all relevant IP distinguishing traits and contract legal principles simultaneously. In the U.S., where IP contract decisions are more numerous, the division between the application of IP law and contract law is pronounced. In fact, a standard of IP contract interpretation is applied to separate these categories of law.

⁷⁶⁶ The inability of court decisions to address IP contract strain is troublesome, as Reichman and Franklin point out, not addressing the source of tension between IP and contract laws at the legislative and policy level means related cases will arrive in the lap of a court later on (Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9 at 924).

⁷⁶⁷ Notably, it is not always possible in this section to provide explicit details regarding how contract terms omit, alter or distort IP distinguishing traits because either: (a) information regarding the terms of the contract at issue are not provided in the decision; or (b) the court record does not offer sufficient information to construe the scope of the IP asset.

In this section Canadian and U.S. cases are addressed as individual categories. The cases generally evidence the prevalence of non-IP contracts and the inability of the legal thinkers of the judiciary to address the resulting IP contract strain.

4.3.1.1 Canadian Case Law

Three Canadian court decisions offer examples of IP contract strain and the difficulty courts face in addressing this strain. These include: *Monsanto v. Schmeiser*; *CCH v. Butterworths*; and *Robertson v. Thomson*. Consistently, in these examples, courts choose to focus upon either an IP asset, as in *Monsanto*, or contract legal principles, as in *CCH* and *Robertson*. In none of the examples provided does the court even attempt to interpret an IP contract in accordance with both the relevant IP distinguishing traits of an IP asset and contract legal principles simultaneously.

4.3.1.1.1 *Monsanto v. Schmeiser*

Monsanto is the owner of a patent for Round-up Ready Canola. When Monsanto first sold its patented canola product to consumers it required that each sale be made in accordance with a Technology Users Agreement (“TUA”). This contract is presented in Chapter 1.

In the case of *Monsanto v. Schmeiser*⁷⁶⁸ the Supreme Court of Canada references the TUA as a requirement preceding a purchaser being entitled to grow Round-Up Ready Canola plants.⁷⁶⁹ Notably, the TUA is not the prime issue at bar. Specifically the Court, and courts of prior instance, were asked to consider the ramifications of the existence of Round-up Ready Canola plants found growing on the property of a non-purchaser, Mr. Schmeiser.

In setting a context for use of Monsanto’s patent right, whether contractually or otherwise, the Court finds that a patent holder is granted “rights to the full enjoyment of the monopoly

⁷⁶⁸ *Monsanto Canada Inc. v. Schmeiser*, *supra* note 243.

⁷⁶⁹ *Ibid.* para. 11.

granted by [its] patent right”, in accordance with section 42 of the *Patent Act* which defines “use” of the patent.⁷⁷⁰ The Court further deems the granted monopoly use of the patent an acceptable standard of protection for Monsanto’s business interests.⁷⁷¹ Any limitation posed by a third party to the “full enjoyment” of the patent monopoly is identified by the majority decision as a form of patent infringement.⁷⁷² Use that promotes a third party’s commercial interests is noted to be particularly likely to constitute infringement.⁷⁷³ In this manner the majority aligns the right of “use” granted by section 42 of *Patent Act* to a right to protect Monsanto’s business interests.⁷⁷⁴

The TUA is introduced by the Court as a requirement imposed by Monsanto for any farmer to be entitled to purchase Monsanto’s seed.⁷⁷⁵ Thus, there is an inference in the judgement that the TUA may be characterized as a means of enforcing the protection of Monsanto’s business interests. Yet, what is not clear is whether the TUA terms represent “full enjoyment” of Monsanto’s patent monopoly.

As the TUA is not the focus of the case the Court does not undertake any specific analysis of the contract. However, the decisions of the dissent and the majority of the Court show the effect that the definition of what constitutes “use” of the patent has upon the deemed scope of protection for Monsanto’s business interests. Specifically, the definitions of use show that the TUA in the view of the majority enforces the patent right, whereas in the view of the dissent it enforces “contractual obligations” that are beyond the scope of the patent right.⁷⁷⁶

⁷⁷⁰ Ibid. para. 34.

⁷⁷¹ Ibid. para. 36.

⁷⁷² Ibid. para 34.

⁷⁷³ Ibid. paras 37 & 38.

⁷⁷⁴ Ibid. para. 34.

⁷⁷⁵ Ibid. para. 11.

⁷⁷⁶ Ibid. para. 163.

Thus, any examination of the consistency of the TUA terms and Monsanto's patent by the Court may have arrived at two different results due to the divergent reasoning of the majority and dissenting decisions. Such an examination did not occur because Schmeiser was not a purchaser of Monsanto's product, and therefore he was not a party to a TUA. Yet, the Court is mindful of the TUA, as indicated by its references to this contract. Additionally, the commercial role of Monsanto's patent right, as usually facilitated by contracts such as the TUA, is at issue in the decision.

For example, the dissent points out that, although the majority undertakes a process of claims construction to determine the scope of Monsanto's patent right, they do so with any eye to the patent asset's commercial value.

Purposive construction delineates the scope of the invention. It identifies what the inventor considered to be the essential elements of the invention: *Whirlpool, supra*, at para. 45. My colleagues emphasize the commercial value of the exclusive rights to the patentee as the primary consideration in distilling the "essential elements" of the patent claims. However, commercial interests are not the only considerations. There are three further themes to purposive construction of patent claims. I will address each of these in turn.⁷⁷⁷

Thus, if the TUA is to be deemed to support the "full enjoyment" of the patent asset this is synonymous with deeming the patent asset equivalent to Monsanto's commercial interests in the asset.⁷⁷⁸ However, it is not entirely clear that the patent asset is actually comparable to the commercial interests defined by the TUA.

The lack of a review of the TUA terms means that there is no judicial evaluation as to whether the terms stretch Monsanto's patent right beyond its fenceposts. For example, TUA terms: prohibit a consumer from replanting cultivated seed; require a right of inspection; and require sale of harvested crop to an authorized purchaser. These place obligations upon the

⁷⁷⁷ Ibid. paras 120-121.

⁷⁷⁸ Ibid. paras 37 & 72-73.

purchaser that potentially have the effect of diminishing the IP distinguishing trait of balance in Monsanto's IP asset and augmenting the trait of control. Without an assessment of the TUA it is unclear if the contract terms truly support the traits of the IP asset.

4.3.1.1.1 Possible IP Contract Interpretation Process to Detect IP Contract Strain

A comprehensive interpretation of the TUA may have included several steps. First, such an interpretation could have involved an analysis of the IP distinguishing traits of the IP asset. In this manner the IP distinguishing traits are utilized as a set that provides a framework whereby the IP contract interpreter can determine a base definition and/or understanding of an IP asset. This base definition may be utilized to analyze the IP contract terms.

In accordance with the discussion of this thesis, this step involves more than a mere review of IP legal rules. IP theories commonly require IP assets to comprise at least the IP distinguishing traits of control, balance and flexibility/evolution. Moreover, purposive construction, which determines the scope of the patented claims, should be applied in light of the IP distinguishing traits. Construction of the patented claims helps to establish the content of the IP asset to which the IP distinguishing traits relate and therefore indicate the magnitude of each trait in the asset.

Once the IP asset is examined it would then be possible to review the IP contract terms to establish if these support the IP distinguishing traits of the IP asset. As such, the Court could have undertaken an analysis of the TUA itself, to move beyond an assumption that the monopoly it entails is synonymous with the IP asset. In the case of the TUA such an interpretation may have led to the recognition that the terms distort the IP distinguishing trait of control beyond the "full enjoyment" of the monopoly granted by the patent.

For example, the IP distinguishing trait of control of the patent may not extend to preventing purchasers from planting seed harvested from a crop grown from Monsanto Round-up Ready canola seed, or allowing Monsanto to inspect the planted crops. These are activities that are beyond the bounds of the right to use, make and sell the glyphosate-resistant genes and cells that the patent protects.⁷⁷⁹ Therefore, in accordance with a review of the IP asset, the TUA terms may be identified as not protecting the rightful monopoly of use granted to Monsanto as a patent holder, but instead extending Monsanto's control over the invention beyond the monopoly permitted by a patent holder. Consequently, the TUA may be deemed a non-IP contract because it alters the IP distinguishing trait of control by augmenting its level beyond that of the patent right over the glyphosate-resistant genes and cells.

The review of the TUA could furthermore have caused the Court to consider the role of the relevant contract legal principles in the context of the IP asset. For example, such an analysis may be directed to the contract legal principle of the intent of the parties. The intent may have been either: (i) to achieve a contractual use of the IP asset; or (ii) to undertake the application of an asset that includes a higher magnitude of control. The former may be consistent with the IP asset, whereas the latter may indicate intent to distort an IP distinguishing trait of the IP asset. In the course of this step it should be remembered that the paper deal does not always reflect the intended deal.⁷⁸⁰ Both contract legal principles identified in this thesis (e.g., respect for the intent of the parties and bindingness) should be reviewed in this manner.

Ultimately, a process of contract interpretation of the TUA as described herein would recognize the augmentation of the trait of control in the IP asset. Consequently, the TUA terms do not facilitate a contractual use of the IP asset, because the terms support an asset other than

⁷⁷⁹ Ibid. para. 16.

⁷⁸⁰ Macaulay, "The Real and the Paper Deal: Empirical Pictures of Relationships, Complexity and the Urge for Transparent Simple Rules", *supra* note 451 at 37.

the patent. Notably, it may not be necessary to declare a non-IP contract unenforceable in all circumstances. A purchaser may still agree to these the contract terms, but should do so upon the understanding that the terms are not part of the “full enjoyment” of Monsanto’s patent right. Alternatively, offending terms may be removed or severed from the contract.⁷⁸¹

Generally a review of the TUA in light of the IP distinguishing traits of the IP asset and contract legal principles, as described herein, would have the effect of ensuring that contract terms must recognize and support all IP distinguishing traits. However, the Court did not apply such a process of contract interpretation. This can be understood to reflect correct judicial procedure based on the issues at bar. Yet, the result is that an accurate interpretation of the TUA is not available to the Court. Moreover, the discussion of commercial interests in the decision may be less robust as a consequence.

4.3.1.1.2 CCH Canadian Ltd. v. Butterworths Canada Ltd.

The *CCH v. Butterworths*⁷⁸² case considers an agreement between CCH, a publisher, and the providers of a tax law service, Dacfo and Desy. The agreement supports a relationship whereby Dacfo and Desy created a tax law service and CCH published this service. The service was given the title “ACCESS” and it is this title that is the focus of the issue brought before the Federal Court Trial Division in 1992.

The agreement between the parties addresses copyright in the tax law service, but upon the termination of the agreement the parties each claimed ownership of the title “ACCESS”. Dacfo

⁷⁸¹ Severance is an option whereby a contract term that is deemed unenforceable may be detached from the contract with the result that the whole of the contract is not rendered unenforceable on account of a single term (Waddams, *The Law of Contracts*, *supra* note 104 paras. 49 & 51). Canadian jurisprudence holds that severance is permissible “where the agreement can be divided into separate parts, or where the matter on which agreement was not reached is a minor one” (para. 49). It is a standard practice of contract drafters to include a term in the contract that states that “illegal or unenforceable parts may be severed from the rest” of the contract. Whether one or more contract terms that do not support the IP asset may be deemed unenforceable, and whether these are severable, is a determination that must be based upon the facts pertaining to a specific contract (Swan, *Canadian Contract Law*, *supra* note 87 at 733).

⁷⁸² *CCH Canadian Ltd. v. Butterworths Canada Ltd.*, [1992] 1 F.C. 3.

and Desy sought ownership for the purpose of continuing to publish law services using the title. CCH did not wish to continue to publish under the title, but merely wanted to prevent Dacfo and Desy from doing so in partnership with another publisher. All parties claimed the title as a trade-mark, which means they essentially divorced the title from the copyright protected work to which it was attached. They thereby created a new IP right.

Both the argument brought before the Court and the adjudication thereof, are presented by the Court as based in pure economic interest. The Court holds that as a trade-mark the title would play the role of providing notice to CCH publication subscribers that the publication is of a particular brand of tax law service.⁷⁸³ The Court looks to the contractual intent of the parties and finds an “implied understanding between the parties” that Dacfo and Desy owned the title, whereas CCH was merely granted a license thereto. This interpretation is gleaned from contractual clauses of the IP contract executed between CCH and Dacfo and Desy, relating to copyright.⁷⁸⁴

As such, in its interpretation of the IP contract the Court considers both the IP asset and the contractual terms, but it does not necessarily do so in a manner that supports IP distinguishing traits of the IP asset and contract legal principles simultaneously. For example, the Court applies the contract legal principle of intent of the parties, but does so in a manner consistent with contract terms that relate to a different form of IP asset than that which is at issue before the Court. A trade-mark is at issue, but the Court interprets the intent of the parties in relation to contractual terms drafted to effect the application of a copyright asset. Moreover, it is evident from the judgement that the foremost issue in the consciousness of the Court is the economic

⁷⁸³ Ibid. para. 30. The Court further considers an attempt to register the title as a trade-mark by Dacfo and Desy (para. 22).

⁷⁸⁴ Ibid. para. 32.

interests of each party. As described in the Introduction, IP assets can represent more than mere economic interests.

The *CCH v. Butterworths* case highlights the occasion of a court becoming side-tracked with issues of economic effect. First, the Court fails to consider IP distinguishing traits of the IP asset, such as balance. Second, the Court stretches the contract legal principle of intent so as to encompass two IP assets – the intent of the parties regarding copyright, as expressly included in the IP contract, and the subsequent intention of the parties to claim trade-mark rights. The fact that trade-mark rights were not even contemplated when the IP contract was created is not factored into the Court’s interpretation.

The failure of the Court to apply all of the relevant IP distinguishing traits and contract legal principles in its IP contract interpretation is significant. The Court may have reached a different decision if a comprehensive interpretation process was applied. Such a process is described above in relation to the Monsanto case. For example, a review of the IP assets – trade-mark in the title “ACCESS” and the copyright literary work – should result in the identification of two unique IP assets having specific levels of IP distinguishing traits.⁷⁸⁵ Moreover, the recognition of the bounds of each IP asset must affect the consideration of the intent of the parties to achieve contractual uses of each type of asset. In particular, identification of the IP distinguishing traits of the trade-mark will aid the adjudication as to whether an “implied understanding between the parties” that Dacfo and Desy owned the title, and that CCH was merely granted a license thereto, did exist.

⁷⁸⁵ The IP distinguishing traits of balance, flexibility/evolution and control must exist in both copyright and trade-mark, but at different levels – the level of flexibility/evolution may be at a greater level in copyright than in trade-mark because the types of assets that may be trade-marks are less prone to broadening (i.e. logos and trade-names are granted trade-mark rights). Copyright is constantly expanding to include new assets. Digital recordings, lessons, power-point presentations – these are just a few examples of assets that are assumed to be granted copyright protection which in earlier days were not granted such protection. The trait of control may also be at a different level in copyright and trade-mark, as copyright is not required to be registered and therefore may require a greater level of proof of ownership before the asset may be relied upon and enforced.

In the rendered judgement, the Court makes this determination without defining the trademark in the title. Thus, the Court renders its decision in a void. It lacks an assessment of: the IP assets; its distinguishing traits; and of the support of the IP contract for these. The result is a decision that does not address IP contract strain in the IP contract before the Court.

4.3.1.1.3 *Robertson v. Thomson Corp.*

The Supreme Court of Canada offers interesting commentary regarding the intersection of IP assets and contract legal principles in *Robertson v. Thomson Corp.*⁷⁸⁶ The facts of the case involve an agreement between a freelance author, Robertson, and Thomson Corp., the owner of *The Globe & Mail*. Robertson published two articles in *The Globe & Mail*. Thomson Corp. reproduced these articles in other formats at a later date including a CD-ROM and two online databases, without seeking the prior express consent of Robertson.⁷⁸⁷ The issue the Court focuses upon at trial is whether Thomson Corp. had the right to reproduce the articles. The Court states that “agreements are not at issue in this case.”⁷⁸⁸

In light of the Court’s comment, it may not be obvious why this case is raised in this thesis. Despite its holding that the agreements are superfluous to its decision, the Court makes two critical statements regarding IP contracts. First, it states that only exclusive copyright licenses must be in writing.⁷⁸⁹ The basis for this statement is that section 13 of the Canadian *Copyright Act* does not expressly require any type of license other than an exclusive license to be in writing. Thus, the Court assumes that non-exclusive licenses may be formed orally or by other non-written means, and may include implied terms.

⁷⁸⁶ *Robertson v. Thomson Corp.*, *supra* note 19.

⁷⁸⁷ *Ibid.* para. 13.

⁷⁸⁸ *Ibid.* para 11.

⁷⁸⁹ *Ibid.* para. 56.

The second statement of note made by the Court in the *Robertson* case is offered as a follow-on comment from the first. The Court says that:

If it is determined that freelance authors have in fact impliedly licensed the *Globe* the right to republish their articles in the electronic databases, this decision will, of course, be of less practical significance. Parties are, have been, and will continue to be, free to alter by contract the rights established by the *Copyright Act*.⁷⁹⁰

This statement is not supported by any further judicial discussion.

There are two possible interpretations of the Court's statement: (1) rights established in section 13 of the *Copyright Act* are freely alterable by contract; or (2) all rights established by any section of the *Copyright Act* are freely alterable by contract.

It is unclear whether the Court makes this comment in relation to the scope of section 13 of the *Copyright Act* in isolation. Subsection 13(1) states that an author is the first owner of copyright. Exceptions to this rule are also set out: copyright in engravings, photographs or portraits are first owned by the person who orders the work (s. 13(2)); and works made in the course of employment are first owned by the employer (s. 13(3)).⁷⁹¹ So if the comments of the Court are made in reference to section 13, an interpretation may be that parties are able to alter rights of ownership of copyright by way of contractual terms.

However, this seems an unlikely interpretation of the Court's statement for two reasons. First, the discussion directly preceding the comment relates to "scope of such an alleged implied license", as it is suggested to the Court was extended by Robertson to Thomson.⁷⁹² Thus, in light of this, it is the scope of a license that appears to be at issue. Second, the Court does not state that parties can alter rights established specifically and/or uniquely by section 13 of the *Copyright Act*

⁷⁹⁰ Ibid. para. 58.

⁷⁹¹ The section goes on to discuss assignments and licenses (s. 13(4)), ownership of partial assignments (s. 13(5)), the assignment of a right of action (s. 13(6)) and exclusive licenses (s. 13(7)).

⁷⁹² *Robertson v. Thomson Corp.*, *supra* note 19 para. 57.

by contract, but rather that parties are “free to alter by contract the rights established by the *Copyright Act*.”⁷⁹³

Therefore it is possible that the Court may be making a reference to the entire *Act* and all of the rights therein, as freely alterable by contract. This interpretation would result in the Court choosing not to limit the rights that may be freely altered by contract to the rights expressed in a particular section of the *Act*, namely section 13, but rather to allow free alteration of any rights established in the *Copyright Act* by contract.

In the latter interpretation the scope of the freedom is unclear. It can be assumed that limitations upon copyright, such as fair dealing exceptions, as described in Appendix “B”, may not be altered by contract because these limitations are “rights established by the *Copyright Act*”. However, such a restriction is not expressly articulated.

The Court’s comment is significant because it offers, at the very least, lip-service to the concept that contract legal principles may trump IP distinguishing traits of IP assets in IP contract interpretation. Thus, even though the statement is made in the context of a copyright case, and its wording is limited to copyright,⁷⁹⁴ it may have several implications for the interpretation of the role of IP distinguishing traits in an IP contract. For example, the comment may be interpreted as follows: (i) the scope of the IP asset may be set by contract; (ii) there is a potential to open floodgates whereby other types of IP assets may also be altered by contract; and (iii) it suggests that such floodgates have always stood open. If contractual terms have the power to alter IP assets then the role of IP distinguishing traits is thrown into a state of flux and the

⁷⁹³ Ibid. para. 58.

⁷⁹⁴ Giuseppina D’Agostino, “Copyright Treatment of Freelance Work in the Digital Era” (2002) 19 Santa Clara Computer & High Tech. L.J. 37 at 81; and Giuseppina D’Agostino, “Canada’s Robertson Ruling: Any Practical Significance for Copyright Treatment of Freelance Authors?” (2007) 3:2 CLPE Research Papers 1 at 8.

definition of IP assets may be rendered malleable. Notably, this outcome is consistent with the private sector view of IP assets described in Chapter 1.

Moreover, the suggestion that copyright may be altered by contract has several possible outcomes. One is that strict protection of certain aspects of the asset may be enforced by contract, such as copying by the public, while other aspects of the right, such as the term of the right or moral rights, may be limited, or waived, by contractual terms. Another is that IP distinguishing traits may be altered, distorted or omitted and the result will still be considered an IP asset. The latter outcome involves an alteration of copyright from its IP theory roots, as well as its legislative and jurisprudential definitions. For example, contractual terms may extend the term of protection from 50 years to 65 years thereby expanding the IP distinguishing trait of control, or allow a non-creator to apply moral rights over a work thereby altering the trait of balance. It is possible that in such a contract the intent of the parties may wholly control the definition of the IP asset.

Furthermore, if the correct interpretation of the comment of the Court in *Robertson* is that copyright can be altered by contract terms without limitation, the effect of this decision is to proffer a dominant position to contract legal principles in IP contract interpretation. A secondary effect is that the impulse of the Court to protect the economic aspects of IP assets through contractual terms is now sanctioned. For example, alteration of IP assets by contract terms can create a stronger asset capable of attaining greater levels of market advantage than the original IP asset. It may even be possible that new rights created by contractual terms alone may be deemed IP asset rights.

Thus, although the Court's comments in *Robertson* may not be unquestionably interpreted as permitting contractual terms to define IP assets, the fact that it even hints at such an outcome

is significant. Essentially, the *Robertson* case exemplifies an integral issue of IP contract strain. It highlights the uncertainty surrounding where the emphasis in contractual interpretation should lie – in upholding contract legal principles, in the support of IP distinguishing traits of an IP asset, or in effecting both these outcomes simultaneously. Courts at present resort to the first or the second options. Yet, IP contract strain can only be addressed when the third option is applied and both contract legal principles and IP distinguishing traits are simultaneously respected in IP contracts.

4.3.1.2 United States Case Law

As IP contract strain is not solely an issue in Canada, U.S. case law is instructive. This is an important addition to this thesis as U.S. IP contract jurisprudence is more substantial than that of other jurisdictions. Moreover, the U.S. is often the first jurisdiction to consider certain IP contract issues. Consequently, U.S. cases are cited as precedent examples in many jurisdictions. A review of U.S. case law shows that the choice of the U.S. courts in IP contract interpretation is to focus upon either defining an IP asset or applying contract legal principles. Both undertakings are rarely undertaken simultaneously. The result is that IP contract strain is not effectively addressed by U.S. courts.

Five groups of U.S. cases are presented: (i) two cases provide a look at the background of U.S. IP contract case law; (ii) one case identifies the cardinal rule of contract interpretation; (iii) three cases stand for the rule that IP contracts can be interpreted solely based upon contract legal principles; (iv) two cases exemplify that the choice of argument presented by the parties at bar has a great effect upon the conflict between legal principles, and tends to favour a contract legal principle-based interpretation; and (v) one case holds that remedies for IP contracts should not be

limited to a consideration of a breach of contract alone as there is a right in the IP asset and that right must be addressed.

4.3.1.2.1 *Vault v. Quaid & Pro CD v. Zeidenberg*

The two cases discussed in this section provide background information and a context for the IP contract interpretation approach currently adopted by the U.S. courts.

*Vault v. Quaid*⁷⁹⁵ is a 1988 decision rendered by the Court of Appeals, Fifth Circuit, wherein the issue at bar is a diskette created by Vault which incorporates a program “designed to prevent the unauthorized duplication of programs placed on them by software computer companies”.⁷⁹⁶ Quaid, a competitor of Vault, created a diskette to circumvent the Vault technology. Quaid’s product included a copy of the Vault computer code in its software.⁷⁹⁷ Vault brought a copyright infringement action against Quaid. To address this action the Court initially examined copyright law and held that the Quaid product did not constitute an infringement of the copyright law enforced at the time.⁷⁹⁸

The Court next turned its attention to the following issues of contract: (i) an allegation of breach of contract based upon decompiling and disassembling Vault’s program; and (ii) an allegation of misappropriation of the program in violation of the Louisiana *Uniform Trade Secrets Act*.⁷⁹⁹ The Court held the former allegation to be based in the Louisiana *License Act* that, “permits a software producer to impose a number of contractual terms upon software purchasers provided that the terms are set forth in a license agreement...and that this license agreement accompanies the producer’s software.”⁸⁰⁰ The Court, therefore, did not discuss the contractual

⁷⁹⁵ *Vault Corporation v. Quaid Software Limited*, (1988) 847 F.2d 255.

⁷⁹⁶ *Ibid.* at 256.

⁷⁹⁷ *Ibid.* at 257.

⁷⁹⁸ Three separate claims based in infringement allegations were raised and each was denied by the Court. See: *Ibid.* at 258, 261, 262, 266 & 268.

⁷⁹⁹ *Ibid.* at 258.

⁸⁰⁰ *Ibid.* at 268.

terms, but rather focused upon the “numerous conflicts between Louisiana’s *Licence Act* and the *Copyright Act*.”⁸⁰¹ Consequently, the judgement turned upon the right of a federal statute to trump a state statute in the face of a conflict between the two pieces of legislation. The Court ultimately deemed the Vault license agreement to be unenforceable.⁸⁰²

The *Vault* case offers a look at an attempt to review both IP and contract laws. It is notable that early in the decision the Court finds that the Quaid product without Vault’s software feature included therein “would have no commercial value.”⁸⁰³ Thus, the case is coloured, to some extent, by an interest in economic value (in a manner similar to the Canadian cases discussed earlier). However, the commercial importance of the product does not cause the Court to decide in favour of the creator of the IP asset. Of course, this is partly due to the state of copyright law at the time.

Notably, the Court begins its analysis from the point of understanding the application of copyright law to the issues at bar. It considers the scope of copyright to prevent copying, and places great reliance upon legislation and jurisprudence in this assessment. Once having completed this task, the Court moves on to considerations of contract law. This endeavour never gets past the point of reviewing conflicting federal and state statutes. Therefore, while the decision does address both the IP law and contract law, it does not attempt to address these as intersecting. For example, it would have been helpful for the Court to conduct a detailed review of the contract terms and to examine these in light of copyright distinguishing traits, as well as contract legal principles. However, the Court avoids such a step by its finding that the federal *Copyright Act* preempts any application of state legislation that conflicts therewith.

⁸⁰¹ Ibid. at 269.

⁸⁰² Ibid. at 270.

⁸⁰³ Ibid. at 258.

Looking now to the *ProCD v. Zeidenberg*⁸⁰⁴ decision, rendered by the Court of Appeals, Seventh Circuit in 1996, it is directed to the enforceability of a shrinkwrap license. According to the facts of the case ProCD had sold a consumer version of a data and computer application product to Zeidenberg. The shrinkwrap license is enclosed with the product and is encoded on CD-ROM disks, as well as printed in the manual.⁸⁰⁵ The license “limits the use of the application program and listings to non-commercial purposes.”⁸⁰⁶ Although Zeidenberg had purchased a consumer version of ProCD’s product, he “makes the database available on the Internet to anyone willing to pay its price – which, needless to say, is less than ProCD charges its commercial customers.”⁸⁰⁷ In response to Zeidenberg’s actions, ProCD seeks “an injunction against further dissemination that exceeds the rights specified in the licenses.”⁸⁰⁸

The Court holds that “shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contract in general (for example, if they violate a rule of positive law, or if they are unconscionable).”⁸⁰⁹ To reach this decision the Court considers the enforceability of the contract under contract law and copyright law. The license is held to be a contract, just like any other agreement for a transaction, and the fact that it is provided inside the packaging for the product does not defeat its enforceability.⁸¹⁰

When the Court considers copyright it does not analyze the scope of the copyright asset, but rather considers whether the license promotes “legal or equitable rights [under state law] that

⁸⁰⁴ *ProCD, Inc. v. Zeidenberg*, *supra* note 46.

⁸⁰⁵ *Ibid.* at 1450.

⁸⁰⁶ *Ibid.*

⁸⁰⁷ *Ibid.* Wendy J. Gordon considers the price discrimination implications of ProCD for contracts (Gordon, "Intellectual Property as Price Discrimination: Implications for Contract", *supra* note 78).

⁸⁰⁸ *ProCD, Inc. v. Zeidenberg*, *supra* note 46 at 1450.

⁸⁰⁹ *Ibid.* at 1449.

⁸¹⁰ The Court discusses the widening means of providing agreement terms to purchasers, including ordering software over the Internet by buyers that receive the product without ever putting their hands on a physical boxed product (*Ibid.* at 1451). Through this discussion the Court shows itself reluctant to limit the form of contracts in light of the myriad of means of purchasing products which are opened by emerging technologies.

are equivalent to any of the exclusive rights within the general scope of copyright.”⁸¹¹ The Court’s rationale is that if the license is deemed to meet this description it cannot be enforceable. The Court ultimately finds that “copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please” and as a consequence the license cannot create “exclusive rights” to rival copyright.⁸¹² The Court determines that the shrinkwrap license is enforceable.

The Court engages in a discussion of preemption and begins this by pointing out that, “[a]lthough Congress possesses power to preempt even the enforcement of contracts about intellectual property...courts usually read preemption clauses to leave private contracts unaffected.”⁸¹³ This is due to a respect for private choice and a will to retain consistency with laws, such as 17 U.S.C.A. §301(a), that support a reluctance to allow states to substitute their own regulations for those of a national government.⁸¹⁴ For example, in accordance with 17 U.S.C.A. §301(a) “a state cause of action is preempted if: (1) the work at issue is within the subject matter of copyright as defined in §§ 102 and 103 of the *Copyright Act*, and (2) the state law created right is equivalent to any of the exclusive rights within the general scope of copyright as specified.”⁸¹⁵

Preemption is held by the Court to be applicable when rights equivalent to copyright are created by contractual terms, and the application of the contract terms interferes with the attainment of national objectives. Imposition of state law to uphold these contractual terms when

⁸¹¹ Ibid. at 1453.

⁸¹² Ibid. at 1454.

⁸¹³ Ibid. at 1455.

⁸¹⁴ Ibid. 17 U.S.C.A §301(a) is a section of U.S. law titled “Preemption with respect to other laws”. It holds that all legal or equitable rights equivalent to those expressed by the Copyright Act as works of authorship in a fixed tangible medium of expression are deemed to be governed by copyright. Consequently, no other person will be entitled to the same right in the same work under common law or State statutes.

⁸¹⁵ *National Car Rental System, Inc. v. Computer Associates International Inc.*, *supra* note 47 at 428.

such terms interfere with Federal law, such as copyright law, is problematic and therefore can invoke preemption. The Court states that:

Rights “equivalent to any of the exclusive rights within the general scope of copyright” are rights established *by law*—rights that restrict the options of persons who are strangers to the author. Copyright law forbids duplication, public performance, and so on, unless the person wishing to copy or perform the work gets permission; silence means a ban on copying. A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create “exclusive rights.”⁸¹⁶

The Court explicitly refrains from establishing a rule that ‘anything with the label “contract” is necessarily outside the preemption clause’ and states that it does not take this step because “the variations and possibilities are too numerous to foresee”; and “some applications of the law of contract could interfere with the attainment of national objectives and therefore come within the domain of” pre-emption.⁸¹⁷ Yet, ultimately the Court holds that shrinkwrap licenses do not cause interference requiring the implementation of preemption. It comes to this conclusion because this form of IP contract does not withdraw any information from the public domain.⁸¹⁸ The Court deems the shrinkwrap contract terms incapable of representing exclusive rights as granted by copyright. Notably, this is the extent of the Court’s analysis of copyright.

Thus, the ProCD decision is another example wherein a court purports to consider both IP law and contract law, but in fact remains mired in one of these considerations – in this case contract law. Additionally, there is an indication in the decision that the Court is influenced by market considerations in arriving at its judgment. The Court holds that contractual terms “reflect private ordering” and this private ordering is “essential to the efficient functioning of markets.”⁸¹⁹ The collective result of preoccupation with contract laws and economic value of the

⁸¹⁶ *ProCD, Inc. v. Zeidenberg*, *supra* note 46 at 1454.

⁸¹⁷ *Ibid.*

⁸¹⁸ *Ibid.*

⁸¹⁹ *ProCD, Inc. v. Zeidenberg*, *supra* note 46 at 1455.

IP asset is that these override considerations of the relationship between the IP asset, its IP distinguishing traits and contract legal principles in the contract terms. These cases represent the beginnings of IP contract interpretations in the U.S. It is therefore significant that such an evaluation is lacking as it is necessary to detect and address IP contract strain.

4.3.1.2.2 *Sullivan v. Author Solutions, Inc.*

*Sullivan v. Author Solutions, Inc.*⁸²⁰ presents the “cardinal rule of contract interpretation”.⁸²¹ The IP contract at issue in the *Sullivan* case is between an author and a publisher. The author alleges that copies of her book were printed and distributed by the publisher without permission in violation of copyright. During the negotiation the parties signed a Settlement Agreement, and it is this agreement that was before the Court.

In the course of its decision the Court states that: “The cardinal rule of contract interpretation is to ascertain the intent of the parties, as expressed in the language used, and to give effect to that intention, if it can be done consistent with legal principles.”⁸²² The legal principles referenced in this statement include recognition that: (i) the contract must be read as a whole; and (ii) individual clauses should not be picked out of the contract in isolation.⁸²³

The Court renders its interpretation of the intent of the contracting parties in the Settlement Agreement based upon this “cardinal rule”. In its judgement the Court considers neither the scope of the copyright, nor whether this scope permits the publication and distribution of the copies of the book.⁸²⁴ Instead, the Court bases its interpretation strictly upon contract legal principles, and particularly upon the intention of the parties.

⁸²⁰ *Sullivan v. Author Solutions, Inc.*, 2008 WL 2937786 (E.D.Wis.).

⁸²¹ *Ibid.* at 10.

⁸²² *Ibid.*

⁸²³ *Ibid.* at 11.

⁸²⁴ This is true, despite the fact that the Court’s interpretation of the IP contract includes a pronouncement regarding an allegation of copyright infringement (*Ibid.* at 2).

This decision is applied as a precedent in later cases. Notably this precedent is incapable of addressing IP contract strain. The “cardinal rule” is troublesome because it negates the role of IP distinguishing traits. This is disappointing since the structure of the cardinal rule has promise as a means of addressing IP contract strain, due to its reliance upon the contract as a whole. If the Court had followed this statement to a logical conclusion, it could have held that the elements of the IP asset and contract legal principles of the IP contract must be considered in the course of an analysis of the contract as a whole. This is a rule that would address IP contract strain. However, this is not the decision of the Court. As a consequence in reliance upon this precedent present day courts routinely ignore IP distinguishing traits of an IP asset in the course of IP contract interpretation. The cases that follow exemplify the effect of the cardinal rule.

4.3.1.2.3 *Boggild v. Kenner Products; Pandey v. Sharma; and Rustevader Corp. v. Cowatch*

The acceptance by U.S. courts of the dominance of contract legal principles over the IP distinguishing traits of an IP asset in IP contract interpretation is exemplified in three cases: *Boggild v. Kenner Products*;⁸²⁵ *Pandey v. Sharma*;⁸²⁶ and *Rustevader Corp. v. Cowatch*.⁸²⁷ Each of these cases espouses the “cardinal rule” that contracts involving patent rights can be interpreted based solely upon contract legal principles. As each case builds upon prior judgements, these cases are presented in the order in which they were rendered.

The first case in the series is *Boggild v. Kenner Products*, a 1988 decision of the U.S. Appeals Court, Sixth Circuit. The IP contract at issue prescribed royalty payments for a patented invention, namely a Fun Factory Jr. designed to mould Play-Doh.⁸²⁸ At the time when the contract was drafted no patent had been sought for the invention, and thus the terms of the

⁸²⁵ *Boggild v. Kenner Products, Div. of CPG Products Corp.*, (1988) 7 U.S.P.Q.2d 1642.

⁸²⁶ *Pandey v. Sharma*, 2008 WL 3008232 (S.D.Ohio).

⁸²⁷ *Rustevader Corp. v. Cowatch*, [1993] 29 U.S.P.Q.2d 1076.

⁸²⁸ *Boggild v. Kenner Products, Div. of CPG Products Corp.*, *supra* note 825 at 3.

agreement stated that royalty payments would be owed for a term of 25 years.⁸²⁹ This period of time turned out to be four years longer than the term of the patent that was eventually granted for the invention. The Court was asked to interpret the contract and determine whether the royalty payments were: (i) owed for the whole of the 25 year period stated in the agreement; or (ii) no longer required after the patent rights expired.⁸³⁰

What is of interest in this case, for the purposes of this thesis, is not the ultimate decision of the Court, but the means of arriving at the judgement. The Court stated that: “A case does not arise under the patent laws merely because questions of patent law may arise in the course of interpreting a contract.”⁸³¹ The effect of this comment is that an IP asset need not be examined in all instances of IP contract interpretation.⁸³² It is sometimes enough to interpret an IP contract solely in accordance with contract legal principles.

This statement provides the foundation for what this thesis recognizes as a “standard of IP contract interpretation”. This standard is followed in subsequent cases. A strict division between IP issues and contract issues is drawn by this judgment. It further assumes that it is sufficient that an IP contract comply with contract legal principles.

The Court may have rendered a better judgment had it identified the IP distinguishing traits of the patent asset. It could have incorporated these into its interpretation of the contract terms along with contract legal principles, in the manner described in the discussion of the Monsanto case. However, the Court did not choose this action. The legacy of the case is an influential precedential standard.

⁸²⁹ Ibid.

⁸³⁰ Ibid.

⁸³¹ Ibid. at 6.

⁸³² See: *Lauren International, Inc. v. Reichert* (2008) 62 C.P.R. (4th) 98. Notably, this Canadian decision is based on similar facts. The respondents argue that a royalty payment payable in relation to patented products should be paid until all of the patent for the products in all jurisdictions have expired. The Ontario Superior Court of Justice based its decision in contract legal principles and listed “general rules of contract interpretation” paras 31-35 and states that “intention of the parties is the paramount test” to be applied to the IP contract interpretation.

In 2008 the Court in *Pandey v. Sharma* expanded upon the *Boggild* standard. The *Pandey* case involves an IP contract for an issued wireless camera technology patent. Sharma and Pandey entered an oral agreement for a term of one year whereby Sharma agreed to pay \$1,000 per month to Pandey for work to commercialize the invention.⁸³³ The agreement broke down before the one year term ended and Sharma stopped paying Pandey at the point of termination.⁸³⁴ A dispute regarding control of the technology broke out after the demise of the agreement⁸³⁵ and was brought before the Court.

In its IP contract interpretation the District Court, S.D. Ohio notes that patent ownership and inventorship are not always synonymous.⁸³⁶ On its face, this comment may suggest that the Court considers a review of the IP asset to be a necessary tool for IP contract interpretation. However, such a reading of the Court's statement is misleading. The Court goes on to state that: "an action to enforce or set aside a contract concerning patent rights arises under contract law, not patent law."⁸³⁷ The Court relies upon the *Boggild* decision to justify its conclusion that an applicable standard of IP contract interpretation is one that focuses solely upon contract legal principles.

A more recent case that exemplifies the acceptance of the standard of divorcing consideration of IP assets from contract legal principles in the interpretation of IP contracts is that of *Rustevader Corp. v. Cowatch*, a 2008 decision rendered by the U.S. District Court, W.D. Pennsylvania. The facts at bar involve an action brought by an employer against a former employee, alleging that the employee breached obligations of confidentiality, assignment and

⁸³³ *Pandey v. Sharma*, *supra* note 826 at 1.

⁸³⁴ *Ibid.* at 2.

⁸³⁵ *Ibid.*

⁸³⁶ *Ibid.* at 6.

⁸³⁷ *Ibid.* at 7.

non-competition.⁸³⁸ The former employee and the former employee's father were joint inventors of a filed patent. The employer claimed the patent was based upon trade secrets the employee gleaned from his position.⁸³⁹ To determine the validity of this claim the Court was required to interpret the IP related terms of the employment agreement between the employer and the employee. The employer sought an assignment of the patent rights.⁸⁴⁰ Judicial jurisdiction was also at issue, the employer brought a motion to remand.

In the course of its decision, the Court draws a distinction between the competencies of District courts to address federal patent law, finding that to be adjudicated under federal patent law “the plaintiff must set up some right, title, or interest under the patent laws, or at least make it appear that some right or privilege will be defeated by one construction, or sustained by the opposite construction, of these laws.”⁸⁴¹ The Court goes on to say that ‘a case raising a federal patent-law defense does not, for that reason alone, “arise under” patent law, “even if the defense is anticipated in the plaintiff's complaint, and even if both parties admit the defense is the only question truly at issue in the case.”’⁸⁴² The Court admits that the line between federal cases that arise under patent law and those that do not is subtle.⁸⁴³ However, the Court ultimately states that: “[i]t is well settled that an action based on a contract, which involves underlying patent rights, does not arise under the patent law.”⁸⁴⁴

Although the Court does not expressly raise the issue of preemption, the discussion broaches a related topic. The doctrine of preemption is based upon the Supremacy Clause relating to federal law, whereby a state law of contract may be preempted by a federal law, such

⁸³⁸ *Rustevader Corp. v. Cowatch*, *supra* note 827 at 3.

⁸³⁹ *Ibid.* at 4.

⁸⁴⁰ *Ibid.* at 3.

⁸⁴¹ *Ibid.* at 4.

⁸⁴² *Ibid.*

⁸⁴³ *Ibid.* at 5.

⁸⁴⁴ *Ibid.* at 6.

as IP laws. In the view of one author, in accordance with U.S. law, the doctrine of preemption can be applied to render unenforceable contractual clauses that disrupt balance that an IP right is intended to enforce between a user and an IP owner.⁸⁴⁵ Thus, it is perceivable that the preemption doctrine may be held to be applicable in the instance that the IP distinguishing trait of balance is omitted from an IP contract. However, without an IP contract interpretation norm that involves explicitly identifying the IP distinguishing traits of an IP asset (either individually or as a set) it is impossible to apply the doctrine in a reliable manner that ensures that contract terms that omit, alter or distort an IP distinguishing trait will be preempted. Thus, the doctrine of preemption in its present form offers limited assistance to address IP contract strain.

Moreover, as far as preemption is considered in the context of this case, it is utilized to determine whether Federal patent laws will be utilized in the adjudication. Thus, the Court acknowledges that patent law can have a role in the interpretation of an IP contract. Yet, the Court does not engage in this determination *per se*, but instead holds that an analysis of Federal patent law is beyond the scope of the jurisdiction of the Court in this instance.

Thus, the *Rustevader* decision arrives at the same conclusion as that of the *Boggild* and *Pandey* cases, namely that an IP asset, along with its IP distinguishing traits, may be ignored in IP contract interpretation. This is so, even if a purely patent-law issue forms the basis of the case brought before the court. This reasoning is now accepted as entrenched U.S. law and has a significant effect upon judicial IP contract interpretation.

Collectively these decisions support the formation of jurisprudence that sustains IP contract strain. Without a determination of the IP distinguishing traits it is impossible to ascertain if the IP asset is supported by IP contract terms. One result of this is that there is no way of distinguishing IP contracts from non-IP contracts. Presumably courts assume that the contract drafters will have

⁸⁴⁵ Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37 at 137-138.

included terms in the contract that accurately define the IP asset. Yet, for the reasons discussed previously in this thesis, this can be an unfounded and mistaken assumption.

The reasons provided for not undertaking an interpretation that identifies whether IP distinguishing traits are supported by IP contract terms, and both traits and contract legal principles are respected, are coated in justifications of judicial competency. In fact, the relevant issue may be that simultaneously addressing IP distinguishing traits of IP assets, as well as the intersection of traits and contract legal principles, is difficult. The U.S. decisions are influenced by the opinion that it is wise to avoid forcing courts to address issues that they are not trained to interpret. For example, contract legal principles are the set of legal principles best understood by the largest number of judges, whereas judicial IP asset knowledge and competency is limited. Thus, adopting contract legal principles as the basis of IP contract interpretation builds on the strengths of the majority of the U.S. judiciary. Nonetheless, this choice does not produce better jurisprudence as both the cardinal rule and the standard of IP contract interpretation have the potential to exacerbate IP contract strain.

4.3.1.2.4 Arizona Cartridge Remanufacturers Ass'n, Inc. v. Lexmark Intern., Inc.; and Quanta Computer Inc. v. LG Electronics Inc.

The U.S. standard of IP contract interpretation is also applied in the next two cases. Each case exemplifies the role that the choice of argument a party decides to bring before a court bears upon IP contract interpretation. Generally, this choice affects whether a robust or a simplified IP contract interpretation is undertaken. This premise is supported by the following cases: *Arizona Cartridge Remanufacturers Ass'n, Inc. v. Lexmark Intern., Inc.*,⁸⁴⁶ and *Quanta Computer Inc. v. LG Electronics Inc.*⁸⁴⁷

⁸⁴⁶ *Arizona Cartridge Remanufacturers Ass'n, Inc. v. Lexmark Intern., Inc.*, (2005) 77 U.S.P.Q.2d 1995.

⁸⁴⁷ *Quanta Computer Inc. v. LG Electronics Inc.*, *supra* note 247.

Arizona v. Lexmark is a 2005 case that involves a consumer agreement similar to Monsanto's TUA. The IP contract at issue in *Arizona* includes terms that distort a patent right so as to inflate it beyond the scope of the patent. Consequently, the contract terms do not comply with the IP distinguishing traits of the patent. However, the Court does not take this into consideration in the course of its judgment.

The facts of the case are that Lexmark holds patent rights over a printer cartridge. It offers purchasers an upfront discount in exchange for their agreement to return empty cartridges to Lexmark for remanufacturing.⁸⁴⁸ Advertising and promotional materials distributed by Lexmark suggest to its customers that the post-sale restrictions on remanufacturing imposed by the agreement are enforceable and are based upon rights of Lexmark over its product (e.g. patent rights).⁸⁴⁹ Thus, the consumer is led to believe that the obligations he or she assumes in accordance with the contract are consistent with Lexmark's patent rights. Although the terms of the contract are not as stringent as the Monsanto TUA, in that Lexmark cannot actively force the consumer to return the cartridge to the company for remanufacturing, the effect of the contract is similar. The Lexmark agreement augments the IP distinguishing trait of control of the patent right and diminishes the trait of balance.

The case is brought before the Court due to the fact that the Arizona Cartridge Remanufacturers Association ("ACRA") objects to the Lexmark contract. ACRA chooses to voice its objection as a challenge based in contract law and accuses Lexmark of deceptive and unfair business practices.⁸⁵⁰ ACRA's choice to argue deceptive and unfair business practice, on the basis of contract law, has a great effect upon the interpretation the Court applies to the IP contract at issue.

⁸⁴⁸ *Arizona Cartridge Remanufacturers Ass'n, Inc. v. Lexmark Intern., Inc.*, *supra* note 846 at 7.

⁸⁴⁹ *Ibid.* at 8.

⁸⁵⁰ *Ibid.* at 7.

For example, the lower Court relies upon *Mallinckrodt, Inc. v. Medipart, Inc.*, to support its choice to interpret the IP contract as enforceable. According to the facts, Lexmark’s patent rights are not exhausted.⁸⁵¹ *Mallinckrodt* holds that ‘a restriction on a patented good is permissible as long as it is “found to be reasonably within the patent grant, *i.e.*, that it relates to subject matter within the scope of the patent claims.”’⁸⁵² ACRA could have challenged the Court’s reliance upon *Mallinckrodt* and argued that the terms of the IP contract are not “within the scope of the patent claims”, but because ACRA focused its efforts upon the contract argument it consequently failed to avail itself of this opportunity.

Instead ACRA argued that in order for Lexmark to have unfettered use of its product there must be a valid contract. Thus, the contract interpretation applied by the Court was concerned with establishing whether the contract was valid. This endeavour engaged contract legal principles in isolation. The IP asset and its IP distinguishing traits were not referenced by the Court. As described above, it is possible that, had ACRA made a different choice in the argument it raised before the Court, the outcome could have been very different. In response to a different argument the Court may have been required to apply both contract legal principles and IP distinguishing traits to its IP contract interpretation.

Quanta v. LG, a 2008 case represents a similar decision. The case involves two IP contracts whereby patent rights were licensed by LG to Intel. The first IP contract, the license agreement, authorized Intel to manufacture and sell microprocessors and chip sets created in accordance with LG’s patent rights.⁸⁵³ The second IP contract, the master agreement, stated that Intel must give customers written notice that its license does not extend to products made by combining

⁸⁵¹ Ibid. at 13.

⁸⁵² Ibid.

⁸⁵³ *Quanta Computer Inc. v. LG Electronics Inc.*, *supra* note 247 at 1.

Intel Product with non-Intel Product.⁸⁵⁴ Quanta manufactured computers having a combination of Intel Products and non-Intel Products and did not provide written notification to the customers about the mixture. The arguments before the Court as to whether Quanta infringed LG's patent rights were raised in the context of the patent exhaustion doctrine.

As discussed briefly in Chapter 1, the patent exhaustion doctrine is an aspect of U.S. patent law which states that an initial authorized sale of a patented item terminates the patent rights in the item. This doctrine was created and introduced for the purpose of countering instances wherein the owner of a patent limits the use of patented products to secure market control of unpatented items.⁸⁵⁵ The Court states that, 'the primary purpose of our patent laws is not the creation of private fortunes for the owners of patents but is to promote the "progress of science and useful arts".'⁸⁵⁶ In its discussion of the patent exhaustion doctrine the Court expands the purview of the doctrine to include method claims and this is the aspect of the decision that has drawn significant comment.⁸⁵⁷

However, for the purpose of this thesis another comment of the Court is notable – specifically the statement that it will not consider the issue of implied license.⁸⁵⁸ The Court suggests that such an issue may have been a possible argument, but that it is rendered irrelevant by Quanta's choice to assert its rights based on the patent exhaustion doctrine.⁸⁵⁹ Thus, Quanta's choice of argument limits the scope of the IP contract interpretation that the Court applies. In fact, the Court's comments suggest that it considers itself restricted by the arguments the parties

⁸⁵⁴ Ibid.

⁸⁵⁵ Ibid. at 10.

⁸⁵⁶ Ibid.

⁸⁵⁷ Ibid. at 18.

⁸⁵⁸ Ibid. at 21.

⁸⁵⁹ The Quanta case has created a significant amount of confusion amongst IP legal practitioners. Notably some of the resulting commentary looks to legal rules enforced over IP contractual terms for resolution. For example, one commentator suggests that an explicit rule agreement must be implemented to overcome this confusion to "promote certainty" for those parties to whom patent rights are transferred (Bruce Berman, "Restless Natives" *Intellectual Asset Management Magazine* 28 (2008) 20 at 24).

have raised before it. Therefore, it is limited to addressing solely the argument of patent exhaustion in its decision.

It may be assumed that had Quanta raised an argument invoking determinations of IP distinguishing traits and contract legal principles, the Court would have been bound to consider such issues. The *Quanta* case is educational because it points out the inertia of the Court to consider IP distinguishing traits and contract legal principles of its own accord. It may technically be consistent with the role of a court to limit its judgement to issues at bar, but judicial decisions can address issues not raised by the parties to the litigation at the discretion of the court.⁸⁶⁰ Therefore it is not necessarily beyond the competency of a court to move beyond the arguments raised by the parties at bar. However, the decision is not surprising in light of the “cardinal rule” and standard of IP contract interpretation precedents – both limit the scope of judicial IP contract review.

The result is that courts are not compelled in a case wherein the facts suggest that the IP contract attempts to distort the IP distinguishing traits of an IP asset to consider this occurrence. Courts in these cases explicitly state that they are guided by the choice of argument raised by the parties at bar. In light of this premise, it is unlikely that IP contract interpretation jurisprudence will move forward to a point where it encompasses a determination as to whether contractual terms support IP distinguishing traits of an IP asset unless the parties build their arguments in a manner that requires such a determination.

4.3.1.2.5 *Jacobsen v. Katzer*

There does appear to be some judicial progress towards an IP contract interpretation that encompasses consideration of both IP distinguishing traits of an IP asset and contract legal

⁸⁶⁰ See: *Harvard College v. Canada (Commissioner of Patents)*, *supra* note 14. Arguably the Supreme Court of Canada exercised its discretion to address issues that were not explicitly raised by the litigants due to the foreseeable policy implications of its decision.

principles. *Jacobsen v. Katzer*,⁸⁶¹ a 2009 case, provides an example. This case specifically addresses the enforceability of an open source copyright license. As a starting point the parties agreed to certain facts: (i) that Jacobsen owns copyright for materials that he distributes through his website, including DecoderPro software; and (ii) that Katzer/Kamind copied portions of the DecoderPro software and incorporated these in the Decoder Commander software that Katzer/Kamind then distributed to the public.⁸⁶² The issue at bar in light of the fact that “copyright law does not recognize a cause of action for non-economic rights”, is whether Jacobsen’s copyright provides any economic rights since he offers access to his computer code to the public at no charge.⁸⁶³

Jacobsen makes his computer code available to the public, but requires that an Artistic License be agreed to by each user of his computer code. Thus, any member of the public who downloads Jacobsen’s ‘copyrighted materials is authorized to make modifications and to distribute the materials “provided that” the user follows the restrictive terms of the Artistic License.’⁸⁶⁴ The restrictive terms state that, prior to distribution of any new product incorporating original code or modified code, a user must provide copyright notices and track modifications from the original computer code.⁸⁶⁵ Jacobsen argues that the copyright is infringed because Katzer/Kamind failed to comply with the Artistic License.

To address the economic rights issue, the Court holds that “the lack of money changing hands in open source licensing should not be presumed to mean that there is no economic consideration.”⁸⁶⁶ The court identifies contractual consideration as being the benefits of an open source license, including collaboration of programmers to write and debug code at a lower cost

⁸⁶¹ *Robert Jacobsen v. Matthew Katzer and Kamind Associates Inc.*, [2008] 535 F.3d 1373.

⁸⁶² *Ibid.* at 1379.

⁸⁶³ *Ibid.* at 1381.

⁸⁶⁴ *Ibid.* at 1382.

⁸⁶⁵ *Ibid.* at 1380 & 1382.

⁸⁶⁶ *Ibid.* at 1379 & 1381.

than is possible through independent work.⁸⁶⁷ The Court then goes on to find that the agreed-upon facts actually provide a “*prima facie* case of copyright infringement” on behalf of Jacobsen and consequently “the Court must evaluate whether the use by Katzer/Kamind was outside the scope of the license”.⁸⁶⁸

Focusing its attention on copyright law, the Court relies upon a general rule that a copyright owner who grants a non-exclusive license waives the right to sue for copyright infringement and is limited to a suit for breach of contract, unless the license is limited in scope.⁸⁶⁹ To be deemed limited the Artistic License must include conditions that the Court states may be denoted by the use of the words “provided that”.⁸⁷⁰ As this wording is found to be present in the Artistic License the license is deemed to be limited in scope. As a result activities outside the scope of the license represent copyright infringement.⁸⁷¹

This case comes closer than any of the other prior cases to engaging in an analysis that encompasses both the definition of an IP asset and application of contract legal principles simultaneously. However, in its review of copyright, the Court does not engage in an evaluation of the copyright asset in the contract, but instead assumes copyright exists in the computer code. Thus, it does not get to a step whereby the IP distinguishing traits of the copyright asset may be identified. Without this step it is impossible to determine whether these traits are supported by the terms of the Artistic License. Consequently, the Court essentially still treats the copyright asset and contract legal principles as isolated issues.

⁸⁶⁷ Ibid. at 1379.

⁸⁶⁸ Ibid. at 1379.

⁸⁶⁹ Ibid. at 1380. The Court cites as the basis for the rule *Sun Microsystems, Inc., v. Microsoft Corp.*, 188 F.3d 1115, 1121 (9th Cir. 1999); *Graham v. James*, 144 F.3d 229, 236 (2nd Cir. 1998); and *S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081, 1087 (9th Cir. 1989).

⁸⁷⁰ Ibid. at 1381.

⁸⁷¹ Ibid. at 1383.

However, it is a step forward that the Court does not immediately determine that the IP contract at issue, namely the Artistic License, should be addressed by way of contract legal principles in isolation. In fact, this case is included as a break-through case in notable compilations, such as the 2008 IP Year in Review, endorsed by the Law Society of Upper Canada,⁸⁷² because the Court determines that remedies for IP contracts are not limited to those applied for breach of contract. Generally, the determination that an IP asset is involved in the contract and that there a remedy of infringement identifies this case as establishing a legal precedent. This is not exactly a means of addressing IP contract strain, but the recognition of the role of both IP assets and contract legal principles in contract interpretation is a step forward towards such an outcome.

4.4 IP Contract Interpretation & the Contract Doctrines

The prior case law review shows that courts do not routinely embrace both IP distinguishing traits and contract legal principles in IP contract interpretation.⁸⁷³ Certain contract doctrines are invoked in the context of the reviewed cases. However, other contract doctrines not addressed in these example cases may further provide a means of addressing IP contract strain. As, “we cannot merely decide not to contract in the IP realm”⁸⁷⁴ we must seek a means of recognizing and responding to IP contract strain. One option is to consider whether contract doctrines may be applicable to future cases to resolve issues that jurisprudence currently fails to address.

⁸⁷² Burshtein, *13th Annual Intellectual Property Law The Year in Review of the Law Society of Upper Canada, Licensing & Intellectual Property Transaction Presentation*, *supra* note 740 at 22-23.

⁸⁷³ As is addressed in detail in Chapter 2, in part because contract legal principles are silent regarding the subject-matter of a contract, there is no natural impetus to invoke any principles other than contract legal principles in IP contract interpretation. Contract legal principles are assumed not to be affected by any variance in the subject which the contract will govern. Consequently, courts assume there is no difference to the contract legal principle if the contract is for a toothbrush or a trade-mark. While this assumption persists courts are generally relieved of the duty to consider whether the terms of a contract support the IP distinguishing traits of an IP asset.

⁸⁷⁴ Cohen, “Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management””, *supra* note 115 at 486.

Thus, the examination of this section reviews certain contract doctrines to discover if these could address IP distinguishing traits of IP assets and contract legal principles in a manner that detects and addresses IP contract strain. If this is found to be a viable possibility, then it may be prudent to adopt these doctrines in the course of future judicial IP contract interpretation activities. Specifically, this section considers three contract doctrines: efficiency; waivers; and implied terms. However, the ultimate result of the review is a finding that none of these doctrines is capable of addressing IP contract strain.

4.4.1 The Efficiency Doctrine

The efficiency contract doctrine aims at ensuring a balanced contract – meaning a binding, enforceable contract that upholds the intent of the parties while meeting all legal requirements.⁸⁷⁵ In the context of this doctrine, efficiency of a contract may be measured in terms of social wealth.⁸⁷⁶ An inefficient contract is one that diminishes social wealth.⁸⁷⁷ Such a contract may even be deemed unenforceable. The theories underpinning this doctrine are discussed in Chapter 2. Due to the stated aim of this doctrine, an analysis of the applicability of this doctrine to IP contract interpretation would be remiss if it did not consider the ability of the efficiency doctrine to address IP contract strain.

Under this contract doctrine, granting parties to an IP contract freedom to draft terms that alter or create an IP asset is said to invoke both an efficient contract and an efficient IP asset.⁸⁷⁸ In this vein, an argument for allowing efficiency to dictate IP contract terms is that allowing parties to negotiate contracts with fewer constraints placed on the process leads to maximum

⁸⁷⁵ Trebilcock, *The Limits of Freedom of Contract*, *supra* note 332 at 16-17.

⁸⁷⁶ Posner, *Frontiers of Legal Theory*, *supra* note 255 at 98-101. Social wealth is not merely monetary wealth, rather the concept encompasses a “summation of all the valued objects, both tangible and intangible, in society, weighted by the prices they would command if they were to be traded in markets” (at 98).

⁸⁷⁷ *Ibid.* at 98-102.

⁸⁷⁸ Landes & Posner, *The Economic Structure of Intellectual Property Law*, *supra* note 593 at 14.

flexibility. This can be important in the IP sector as it is often necessary to draft IP contracts to achieve innovative and novel contractual uses of IP assets.⁸⁷⁹

However, it should be stated that full contractual freedom is not necessarily required to achieve the outcome of novel contractual uses of IP assets. Parties may comply with certain guidelines, such as support for IP distinguishing traits in contract terms, and still achieve innovative IP contracts. To produce contracts that achieve novel contractual uses, the parties may need to increase either one, or both, of: (i) the level of planning applied to draft a contract; and (ii) the time input into implementing a contract.⁸⁸⁰ Notably, whereas freedom of contract is not necessary to this endeavour, contracting ingenuity is essential.

Furthermore, if contract terms are used to shape an IP asset to ensure an efficient relationship between the parties, the resulting asset can be the cause of inefficient subsequent contracts. This can occur due to a lack of clarity as to whether parties to subsequent contracts can re-shape the IP asset further. The outcome of latitude to mould IP assets in IP contracts can be wide and varied. For example, there may be confusion regarding the chain of title of the asset, as discussed in Chapter 5. Overall inefficiencies may result from a failure to tie contract terms for an IP asset to IP distinguishing traits. The efficiency doctrine is therefore not sufficient in isolation to address IP contract strain.

4.4.2 The Implied Terms Doctrine

Another contract doctrine to be considered is that of implied terms. Implied terms are defined as “terms that form a part of a contract even though they are not expressly included in the parties’ written or oral agreement.”⁸⁸¹ This doctrine seemingly has promise to rectify the

⁸⁷⁹ Merrill & Smith, "Optimal Standardization in the Law of Property: The Numerus Clausus Principle", *supra* note 203 at 35.

⁸⁸⁰ Ibid.

⁸⁸¹ Smith, *Contract Theory*, *supra* note 302 at 280.

deficiencies of non-IP contracts. For example, a court may imply that the parties agreed to recognize an IP asset as including all IP distinguishing traits, despite contractual terms that omit, distort or alter a particular trait. Such a pronouncement may be a means of addressing IP contract strain.

Despite seeming adequate on its face, the doctrine of implied terms may be ill-suited to the environment of IP assets due to its role as an equitable principle. It is argued by some scholars that equitable principles “prohibit a party to a contract from taking legal actions that would interfere with the expected consideration and rights of the other party to the contract.”⁸⁸² By this reasoning, the rights of an IP asset holder could not be diminished by contractual terms, implied or otherwise. However, it is possible that rights conferred upon an IP asset holder that omit, alter or distort a trait of the IP asset for the holder’s benefit could form the basis for an equitable argument.

Alternatively, the equitable principle may be utilized to argue that the rights of a party who is not an IP asset owner, including third parties, should not be interfered with by alteration of IP assets through contractual terms.⁸⁸³ This challenge remains untested. This may be due to the fact that courts seldom consider the rights of parties that are not IP asset holders.

The role of third parties before courts raises unique questions for IP contract interpretation. The rights of contracting parties to argue their case before a court are clear – they are bound by contractual terms and are engaged in a legal relationship. For parties who are not parties to the contract there is a burden beyond merely the cost of judicial proceedings. Third parties need to prove they have standing in order to attain a voice in the courtroom. Additionally, parties to the

⁸⁸² Dennis P. O’Reilley & Brian G. Brunsvold, "Implied Licenses (Annual Meeting of the Licensing Executives Society (U.S.A. and Canada), October, 1993) [unpublished]" in John T. Ramsay ed., *Ramsay on Technology Transfers and Licensing*, 2 ed. (Markham: Butterworths, 2002) at 170.

⁸⁸³ Ramsay, *Ramsay on Technology Transfers and Licensing*, *supra* note 161 at 171.

contract that are not IP asset holders may try to negotiate a more favourable arrangement with the IP asset holder outside of a courtroom. For this reason courts would rarely need to address equitable arguments raised by parties who are IP asset holders.

Thus, it is possible that the contract doctrine of implied terms may allow parties to rectify a contract that does not expressly include all IP distinguishing traits of an IP asset, by reading in any omitted, altered or distorted traits. However, this would be a novel application of the doctrine. The efficacy of the doctrine of implied terms is at present uncertain for the purpose of addressing IP contract strain. However, it may have potential as a tool that could be applied to address IP contract strain in the future.

4.4.3 The Waiver of Rights Doctrine

The question as to whether it is permissible for contract terms to ignore certain IP distinguishing traits may be answered by a review of the waiver of rights doctrine. This contract doctrine permits parties to expressly bypass certain rights by explicit contract terms, or in some cases, by way of an implied term. Canadian law applies a general principle that, ‘any party may waive a condition that is for its benefit; a party may not, however, waive a condition that is “a true condition precedent.”’⁸⁸⁴

The waiver of certain IP distinguishing traits of an IP asset, by way of contract terms, may appear at first glance to be a satisfactory means of avoiding the inclusion of traits that are difficult to ascertain or curb private sector goals. In other words, waiving IP distinguishing traits may provide a means of shaping the scope of the IP asset to match the understanding and whims of one or more contracting parties. This sounds like a workable idea in theory, but in reality it is not practicable.

⁸⁸⁴ Swan, *Canadian Contract Law*, *supra* note 87 at 459. See also: Waddams, *The Law of Contracts*, *supra* note 104 para. 606.

In accordance with IP law some rights pertaining to IP assets can be waived. The *Canadian Copyright Act*⁸⁸⁵ sets out in sections 14.1(2)-(4) the means of waiving moral rights belonging to the creator of a work. Jointly these sections state that, although a moral right cannot be assigned to a subsequent owner of a work, it can be waived. However, the *Act* also points out that a mere assignment of copyright in a work is not a waiver and should not be understood to represent such an act. A waiver must be explicit. Once a waiver is granted, either to a holder or licensee of a copyrighted work, the waiver may be invoked by any person to whom the owner or licensee grants a right of use in the work. Thus, once invoked, a waiver has a wide scope of application.

The question that must now be asked is: What is the effect of section 14.1 of the *Act*? Does it have any implication beyond moral rights? If so, does it indicate that if legislation does not expressly state that an IP right may be waived that it cannot be waived? Or does it indicate that it is possible to waive all IP distinguishing traits of an IP asset? The answer is unclear at present.⁸⁸⁶

As discussed in Chapter 3, IP distinguishing traits are identified as commonly supported by IP theories and therefore as forming the core of IP assets. Due to the fact that IP distinguishing traits constitute the core of IP assets it seems unlikely that these would be deemed waiveable. Recalling the examples of the book and the apple pie, the result of omitting, altering or distorting

⁸⁸⁵ *Copyright Act*, *supra* note 114.

⁸⁸⁶ Section 14.1 is provided as an example of an IP right which legislation expressly sets out as waiveable. Other IP legislation provides for other rights that may be waived. Parliament offers these as statutory default rules, whereby contracting parties may contract out of certain aspects of legislated IP rights. Another contract doctrine that falls into a similar category is that of preemption. Under U.S. law the doctrine of preemption can be applied to render unenforceable contractual clauses that disrupt the IP distinguishing traits, such as balance, that an IP right is intended to enforce between a user and an IP owner (See: Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37). The doctrine of preemption is based upon the Supremacy Clause relating to federal law, whereby a state law of contract will be preempted by a federal law, such as IP laws (at 137-138). Thus, rather than waiving away IP distinguishing traits or other IP rights, or even reading in new terms under the doctrine of implied terms, preemption permits reading out terms from an IP contract. The acceptance of federal law as trumping state law is exemplified in another form in *Vault v. Quaid*, as discussed previously in this chapter. However, without an IP contract interpretation norm that involves identifying specifically the IP distinguishing traits of an IP asset that is the subject of an IP contract, it is impossible to apply the doctrine in a manner that ensures that contract terms that omit, alter or distort an IP distinguishing trait will be preempted. Thus, the doctrine of preemption offers limited assistance to addressing IP contract strain.

an IP distinguishing trait of an IP asset is the production of an asset that differs from the IP asset. Thus, it may be inferred that IP distinguishing traits cannot be waived because the result of doing so is to permit the creation of an asset that is distinct from the IP asset. Therefore, waiving an IP distinguishing trait by way of a contractual term can cause the contract to no longer support the IP asset. This is a cause of IP contract strain.

Notably, the list of waiveable statutory rights is limited. This may indicate a negative answer to the question of whether an IP right may be waived if legislation does not specifically indicate that it can be waived. If this is the case then without an express legislative directive to waive balance, control or flexibility/evolution, it may not be possible to waive IP distinguishing traits of an IP asset.

Furthermore, the Supreme Court of Canada states in the context of a fair dealing determination that, “although the effect of the dealing on the market of the copyright owner is an important factor, it is neither the only factor nor the most important factor that a court must consider in deciding if the dealing is fair.”⁸⁸⁷ Thus, the decision to waive any IP distinguishing trait must be supported by a motive that deems the waiver an appropriate measure. At present there is no clear directive as to which motives may be deemed appropriate. This may be an evaluation that the courts should undertake. Nonetheless, there will likely be a minimal number of situations when a waiver of any IP distinguishing trait of an IP asset will be acceptable.

As such, the contract waiver doctrine is not an adequate basis for declaring that an IP distinguishing trait is waived by a contract. Consequently, it cannot be invoked to correct IP contract strain by granting permission for the omission, alteration or distortion of an IP distinguishing trait of an IP asset from IP contract terms.

⁸⁸⁷ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14 para 59.

4.5 Conclusion

IP contract strain can have multiple factors affecting its causes. These may have the outcome of rendering IP contract strain prevalent in private sector IP contracts. Collectively these factors create a need for IP contract interpretation to be capable of acknowledging and addressing IP contract strain. However, in the case that contracts affected by IP contract strain are brought to a court's attention at present, the response is often an assumption that the contract terms adequately support the IP asset.

There is no IP contract interpretation test applied at present to identify the IP distinguishing traits of an IP asset and consider whether these traits are supported by contract terms. Additionally, there is no requirement to interpret IP contracts to apply IP distinguishing traits and contract legal principles simultaneously. Courts choose to apply either a review of an IP asset, or contract legal principles in isolation. Moreover, the cases reviewed in this chapter show a marked preference for contract legal principles when this choice arises. Contract doctrines are likewise inadequate to address IP contract strain. Thus, neither jurisprudence nor doctrines offer a means of recognizing and/or addressing IP contract strain. The effects of this state of IP contract interpretation and of IP contract strain generally are considered in the next chapter.

5 EFFECTS OF IP CONTRACT STRAIN & LEGAL RULE SOLUTIONS

5.1 Introduction

The prior chapters present information pertinent to the causes of IP contract strain and describe how existing jurisprudence and contract doctrines are inadequate to address IP contract strain. In light of the fact that the present private sector IP contracting environment is prone to creating IP contracts affected by IP contract strain, as discussed in Chapter 1, and the inability of the judiciary or doctrines to address these contracts, as discussed in Chapter 4, the effects of the strain become an important consideration. In particular, the scope of IP contract strain is made apparent through an analysis of its effects.

The discussion of the effects of IP contract strain in this chapter is divided into two sections. First, attention is directed to a review of three specific effects of strain including: (i) dominance of contract legal principles or IP distinguishing traits in IP contracts; (ii) distortion of the chain of title of IP assets; and (iii) the systemic spread of IP contract strain. Moreover, a number of factors are highlighted in this analysis: the ever-growing number of IP contracts (and likely non-IP contracts); the reliance placed upon IP contracts to meet private sector goals; and the potential for IP contract strain to diminish private sector confidence in IP contracts and IP assets.

Second, as prior literature points to legal rules as a means of resolving tension in IP contracts, the effectiveness of this suggestion is addressed in light of the causes and effects of IP contract strain. The result is a finding that legal rules are inadequate to address IP contract strain because it is not strictly a legal rule problem, but is influenced by practice and institutions as well as legal rules. While it is not necessarily impossible to develop a legal rule to address IP contract

strain (as considered in Chapter 7), present methods of legislative reform render this an unlikely means of achieving a resolution to IP contract strain.

5.2 Effects of IP Contract Strain

IP contract strain has the potential to produce multiple effects if left unchecked. Individually and collectively these effects exemplify the possible breadth of IP contract strain. Furthermore, although some of these effects may be fixable, applying a fix does not necessarily result in a resolution to the cause of the strain. The analysis in this section shows that the effects of IP contract strain may be significant for individual IP contracts as well as IP transactions and market sectors. In particular three effects of IP contract strain are examined: (i) promoting dominance of IP distinguishing traits or contract legal principles; (ii) divided or orphaned IP distinguishing traits of IP assets; and (iii) the systemic effect.

5.2.1 IP Distinguishing Traits or Contract Legal Principles as Dominant in IP Contracts

As the case law reviewed in the previous chapter illustrates, an effect of IP contract strain is the need to find a workable means of interpreting contracts affected by the strain. For example, strain can affect a contract through terms that fail to support the IP distinguishing traits of an IP asset, or by way of conflict between IP distinguishing traits and contract legal principles. These outcomes cause difficulties to occur when an IP contract must be interpreted, which inhibit contractual uses of IP assets. It can be particularly difficult to apply both contract legal principles and IP distinguishing traits of IP assets simultaneously to contracts affected by IP contract strain. A popular approach to IP contract interpretation, therefore, is to choose either IP distinguishing traits or contract legal principles as the governing consideration.⁸⁸⁸ Prior jurisprudence tends to

⁸⁸⁸ Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37 at 136-137. Lemley considers whether preemption resolves the tension between contract and IP elements of IP contracts and finds that it does not produce an effective resolution. He says that there are two options of approaching the tension between contract and IP elements of IP contracts: "First, one might simply say that state enforcement of any contractual provision that is at odds with an intellectual property rule is preempted by intellectual property law.

allow contract legal principles to dominate IP contract interpretation.⁸⁸⁹ This is not just a modern approach. Hegel comments that in “civil society” the interaction between contract and property rights is such that “property rests on contract”.⁸⁹⁰

Notably, not all academic commentators see tension in IP contracts. Raymond Nimmer states that IP law and contract law exist “peacefully” in IP contracts because each of these laws interacts in “mutually supportive fields”.⁸⁹¹ Nimmer grounds his argument in legal rules and argues that there is no basis for IP laws to trump contract laws. He finds that the two areas of law deal with different issues.⁸⁹² This may be true, but weaknesses of Nimmer’s argument include that he avoids any consideration beyond the context of legal rules specifically, and his comments are limited to one form of IP contract – commercialization agreements.⁸⁹³ He denies that we are “facing an impending big bang” as IP assets “and contract head toward some unclearly defined, but cataclysmic conflict,” an opinion he attributes to his contemporaries.⁸⁹⁴

Furthermore, Nimmer provides a classic example of the thought process behind an argument for contract legal principle supremacy in IP contract interpretation. He states that “in any given transaction...non-rights-related issues move towards the front.”⁸⁹⁵ Thus, his logic is as follows: if non rights-related issues are at the forefront, only these need to be addressed and this may be achieved by way of reliance upon contract legal principles.⁸⁹⁶ Thus, there is no need to bring fuzzy IP assets into an interpretation process because contract legal principles take

Alternatively, one might say that contracts are not affected by intellectual property policy, and that parties are therefore free to alter intellectual property rules at will. Neither approach is particularly satisfactory” (at 136).

⁸⁸⁹ See Chapter 4.

⁸⁹⁰ Knox Trans., *Hegel's Philosophy of Right*, *supra* note 576 at 139.

⁸⁹¹ Nimmer, “Breaking Barriers: The Relation Between Contract and Intellectual Property Law”, *supra* note 16 at 829.

⁸⁹² *Ibid.*

⁸⁹³ *Ibid.* at 835-36.

⁸⁹⁴ *Ibid.* at 828. Nimmer makes this comment in the course of a discussion of Article 2B, which is addressed in the Introduction and Appendix “A”.

⁸⁹⁵ *Ibid.* at 835-36.

⁸⁹⁶ See Chapter 4.

precedence. This is a narrow view of the intersection of contract legal principles and IP distinguishing traits of an IP asset inherent in an IP contract, yet it is commonly applied to IP contract interpretation.

The discussion of this section reviews two possible approaches to IP contract interpretation: (i) the potential outcome of choosing contract legal principles as dominant forces in IP contracts; and (ii) the outcome of choosing IP distinguishing traits of IP assets to fill this role. These approaches are perceived of as necessitated by IP contract strain. However, this section further examines the ramifications of these choices and how each represents a negative effect of IP contract strain.

5.2.1.1 Contract Legal Principles as Dominant in IP Contracts

As discussed in Chapter 4, the dominance of contract legal principles over IP distinguishing traits of IP assets in IP contract interpretation is accepted in part due to the ease it offers – it promotes the application of well-established, known contract legal principles. It is a contracting goal of the private sector to seek to derive the greatest economic value possible from their assets to ensure corporate growth and success. Pamela Samuelson points out that the corporate purpose of IP assets is now to “maximize revenues for the benefit of rights holders”, which is a shift from the prior purpose of providing “just enough protection to create incentives for investments in creative endeavors”.⁸⁹⁷ This shift poses, “the risk of discarding basic and necessary distinctions between different forms of intellectual property and their legal and economic functions.”⁸⁹⁸ In other words, IP assets come to be viewed as non-descript wealth generators and the breadth of the assets is assumed to be sufficient to achieve this end.

⁸⁹⁷ Pamela Samuelson, "Copyright and Freedom of Expression in Historical Perspective" (2003) 10 J. Intell. Prop. L. 319 at 328.

⁸⁹⁸ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para. 37.

IP contract interpretation that is governed by contract legal principles of respect for the intent of the parties and bindingness is perceived of as ensuring the reliability of IP contract terms to fulfill business purposes.⁸⁹⁹ There is no need to delve into a definition of IP assets if contract legal principles are dominant. Yet, despite evident gains for the private sector, the benefit for society of declaring contract legal principles as dominant over IP distinguishing traits is dubious.

The view of IP assets as wealth generators presents a danger because “there are a number of costs to granting overbroad intellectual property rights.”⁹⁰⁰ As discussed in Chapter 3, IP theories describe IP assets as incapable of granting unbounded control, intended instead to grant control that is tempered by interaction between IP distinguishing traits of IP assets. Failing to respect this description of an IP asset may cause the asset to become “illusory”.⁹⁰¹ Moreover, declaring contract legal principles as dominant in IP contract interpretation can negate the role of IP distinguishing traits of an IP asset altogether. A practical implication of declaring contract legal principles as dominant is that contracting parties may be permitted to mould IP assets by way of contract terms.⁹⁰² In such a case the principles of bindingness and respect for intent of the parties can be utilized to legitimize IP assets moulded by contract terms. The outcome is that the definition of an IP asset is entirely and uniquely tied to the contract terms.

Moreover, although contracting parties may assume that deeming contract legal principles dominant promotes contractual certainty, the outcome may in fact be considerable uncertainty and confusion regarding IP assets. For example, the understanding of one contracting party of an

⁸⁹⁹ Cohen, "Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management”", *supra* note 115 at 533.

⁹⁰⁰ Lemley, "Property, Intellectual Property, and Free Riding", *supra* note 484 at 1058.

⁹⁰¹ Turney, "Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal Innovation", *supra* note 17 para. 68.

⁹⁰² See: Chapters 1 and 4.

IP asset may not match that of their contracting counterparts.⁹⁰³ In such a circumstance there is no source of guidance, such as IP theory, legal rules, or IP distinguishing traits to be relied upon to assist in a definition of the asset. In this environment contractual use of the IP asset, as well as avoidance of infringement of the IP asset, can become akin to a minefield – it is unclear which steps are safe. Additionally, IP distinguishing traits of IP assets may be orphaned and rendered difficult to apply in future contracts, as discussed below. Thus, the contractual interpretative certainty assumed to be represented by the activity of deeming contract legal principles as dominant may result in untenable uncertainty and sanctioning of non-IP contracts.

5.2.1.2 IP Distinguishing Traits as Dominant in IP Contracts

An alternative choice is to name IP distinguishing traits of IP assets dominant for purposes of IP contract interpretation. At first glance declaring IP distinguishing traits to be a primary concern in IP contracts may appear to overcome many issues. Such a declaration could mean that contract legal principles must always give way to IP distinguishing trait concerns. For example, if contracting parties willfully over-express the control trait of an IP asset this activity may be prohibited by an interpretation of the contract that expects IP distinguishing traits to govern the understanding of the terms. The imposition of IP distinguishing traits may require that an IP asset described in contract terms comprise balance, control and flexibility/evolution. (Notably, this may also be the outcome of acknowledging IP assets as standardized property forms.⁹⁰⁴)

However, merely declaring IP distinguishing traits to be dominant, without establishing equilibrium with contract legal principles and basic rules for an IP asset's scope, may produce negative results for IP contract interpretation.⁹⁰⁵ Afterall, there is an inherent link between IP

⁹⁰³ See: Chapter 3.

⁹⁰⁴ See: Chapter 1.

⁹⁰⁵ International IP contracts exemplify this point. Increasingly corporations do not function solely within a single jurisdiction. Contracts for IP assets span international borders. This creates contractual complexities (Andrew R.

assets and contracts which may cause difficulties for an attempt to isolate IP assets from considerations of contract legal principles in the context of IP contracts.⁹⁰⁶

Some critics argue that understanding the nature of an IP asset applied in an IP contract is an unimportant and unrealistic goal.⁹⁰⁷ They consider a buyer of an IP asset naïve to believe that he or she can ever know the scope of the asset referenced in an IP contract.⁹⁰⁸ Others argue that any uncertainty about the nature of an IP asset can be offset by the sale price, in the same manner that unknown factors in a real estate deal are reflected in a reduced selling price.⁹⁰⁹ This opinion is problematic because the value of an IP asset is neither solely economic, nor fully representable in economic terms.⁹¹⁰ Moreover, the loss of any benefit of an IP right cannot be wholly recalibrated through the application of an economic payment. Yet, a misinterpretation of an IP asset can impact: (i) an owner by diminishing his monopoly; or (ii) third parties by blocking their access to a right they should otherwise enjoy. The outcome of either of these situations can cause the impacted party to be adversely affected.

Sommer, "Trouble on the Commons: A Lockean Justification for Patent Law Harmonization" (2005) 87 J. Pat. & Trademark Off. Soc'y 141 at 157). For example, Sommer says, "Looking at protection of intellectual property from an international perspective, however, the matter becomes increasingly complicated...the various patent laws of the world can be thought of as a plethora of intangible commons" (at 157). He further argues that a Lockean-influenced view of the world as representing multiple intangible commons is a first step towards a global patent law. Moreover, not only do the many states impose divergent IP laws, they also have variant interests in IP assets (Wendy A. Adams, "Intellectual Property Infringement in Global Networks: The Implications of Protection Ahead of the Curve" (2002) 10 Int'l J.L. & Info. Tech. 71). As an example, copyright worldwide must include the IP distinguishing trait of balance. Yet, in Canada copyright balance includes moral rights, whereas in the U.S. it does not. This difference in the trait of balance affects the levels of that trait in Canadian copyright versus U.S. copyright. Thus, understanding an IP asset in a cross-border context is an involved process that can create difficulties. IP asset interests are grounded in unique national histories, experiences and goals and may affect interpretation of the magnitude of IP distinguishing traits in particular IP assets (Kamina, "Author's Right as Property: Old and New Theories", *supra* note 490). For example, Kamina looks at IP theory from the perspective of France. Theories and doctrines identified and discussed are different from those raised in North American/British literature.

⁹⁰⁶ Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 830. Raymond Nimmer says "only the most naïve observer, or one with a clear political agenda, can look at the intellectual property laws and their history and suggest that policy in the property sphere trumps or precludes the influence of contract."

⁹⁰⁷ Henderson & Pierantozzi, "Increasing transparency in the IP transaction markets", *supra* note 7 at 69.

⁹⁰⁸ *Ibid.*

⁹⁰⁹ *Ibid.* In fact an industry initiative lauded as a means of reducing uncertainty in IP transaction is to publish pricing data and to develop standard documents (at 70).

⁹¹⁰ Non-economic values of IP assets may include organizational or infrastructural value (Durell, *Corporations and Intellectual Assets: A Case of Being Blinded by the Economic Value*, [unpublished], *supra* note 452).

The fact is that IP distinguishing traits of an IP asset are important to an IP contract, yet within the context of the contract these traits must interact with contract legal principles. To declare IP distinguishing traits as the dominant concern in IP contracts is to potentially override the intent of the parties and thus render uncertain the bindingness of the contract. This does not produce a more tenable state of IP contracting than the option of declaring contract legal principles as dominant. The effect of choosing IP distinguishing traits of an IP asset or contract legal principles as dominant for the purposes of an IP contract interpretation therefore represents a significant negative effect of IP contract strain. What is needed is an approach to IP contract drafting and interpretation that respects contract legal principles and IP distinguishing traits of an IP asset simultaneously. Such an approach is outlined in Chapter 4, but it does not presently exist as a settled standard of IP contract interpretation. Moreover, a more robust approach may be an outcome of future research aimed at creating a resolution to IP contract strain.

5.2.2 Divided Assets, Orphaned IP Distinguishing Traits & Burst Bubble Effects

Another significant effect of IP contract strain is a division of IP distinguishing traits from IP assets and a consequent change in the asset. For example, IP distinguishing traits omitted by contract terms may be retained by the original IP asset holder at the time of contracting. This scenario is presented briefly in Chapter 1. In other words, if less than all of the IP distinguishing traits are transferred to a new holder by way of contract terms, the original holder may continue to hold the non-transferred trait(s). (Returning to the book example of the Introduction, if only the binder and pages are transferred by contract terms to a subsequent owner, the original book owner retains ownership of the book cover.) Two effects may result from such a contract: (i) defects in the chain of title to the IP asset; and (ii) orphaned IP distinguishing traits. Both of these outcomes can diminish the value of an IP asset (particularly its economic value). Moreover, such an effect may have the potential to generate a lack of confidence in IP assets and to thereby

undermine incentives to innovate, to the detriment of users who “benefit tremendously from innovation”.⁹¹¹

5.2.2.1 Chain of Title to an IP Asset

The chain of title to an IP asset is the chain of IP asset holding, or other rights to use the asset. Asset holdings, or rights of use, are initially granted over the IP asset as a whole. (A whole IP asset is defined for the purposes of this section as including all of the IP distinguishing traits of the IP asset.) The asset may be transferred from an initial holder to subsequent holders. For example, rights in a patent asset may be assigned from Company A to Company B. Such an assignment creates a link in the chain of title whereby the title to the patent transfers from Company A to Company B. Moreover, a portion of a patent, such as rights to use the patent in the City of Toronto for one month, may be granted by Company B to Company C. In this case, Company B remains the holder of the patent, but a link in the chain of title is extended to Company C. The link admits that Company C may use the patent in a limited territory (Toronto) for a specific period of time (one month). (Such a grant of partial patent rights may be undertaken, for example, by a license agreement that is offered to provide use of the patent to aid in a research project.) The effect of both assignments and licenses is to create a link in the chain of title relating to the IP asset.

Notably, Canadian patent legislation supports the transfer of either “the whole interest or as to any part thereof” of a patent by assignment to a subsequent patent holder.⁹¹² Similar laws exist for other IP assets as well.⁹¹³ Yet, none of these suggest that the traits of an asset may be divided. What may be apportioned is “interest” in the IP asset. Therefore, legislation admits of granting partial interests to the whole of the IP asset to multiple parties.

⁹¹¹ Kuester & Bartel, “Evolution of the IP Market”, *supra* note 5 at 30.

⁹¹² *Patent Act*, *supra* note 141 ss. 50(1).

⁹¹³ See: *Ibid.* ss. 49(2); and *Copyright Act*, *supra* note 114 ss. 13(4).

Thus, upon the grant of a right of use by way of a license, a part of the interest in the IP asset is extended to a third party by the original asset holder. Therefore, when such an agreement is drafted the parties likely realize that the whole IP asset ultimately remains with the asset holder. However, in other agreements, such as an assignment transferring the holding of an IP asset affected by IP contract strain, the contracting parties may be unaware that one or more of the IP distinguishing traits of the IP asset can continue to be held by the original IP asset holder. In this manner an IP distinguishing trait can become orphaned. This occurs because the trait is disconnected from the IP asset. As a result the chain of title of the asset becomes distorted.

In particular, difficulties are created when all IP distinguishing traits of an IP asset are not transferred to a new holder by an IP contract and these can be augmented as additional transactions occur based upon the same IP asset. For example, if Company B transfers a part of IP asset X to Company D, by way of a contract that causes only the IP distinguishing traits of balance and flexibility/evolution to be transferred to Company D, then Company B remains the holder of the trait of control. Should Company D subsequently want to transfer the IP asset to Company E, even if the contract for this transfer states that the whole of the IP asset will be transferred, Company D is unable to undertake such a transfer because the whole of the IP asset was never held by Company D. Consequently, Company D can only transfer to Company E as much of the IP asset as Company D holds. The residual IP distinguishing trait will continue to be held by Company B.

Moreover, if the IP contract between Company B and Company D is used as a template when drafting the contract between Company D and Company E, the subsequent contract may also be affected by IP contract strain. (It may be possible that less than the traits of the IP asset that Company B holds may be transferred to Company C.) The result may be that Company E

becomes the holder of less than the whole of the IP asset, Company D continues to hold at least one trait of the IP asset, and Company B continues to hold at least one trait of the IP asset.

The more contracts that are drafted relating to the same IP asset the more convoluted the chain of title may become. Moreover, depending on the type of IP asset, contractual uses of the asset may be routinely achieved by way of multiple contracts. A chain of title search undertaken as part of a due diligence search may require that all of the preceding agreements involving the IP asset be mined and reviewed. This undertaking may reveal multiple defects in the chain of title, and may require significant time and resources to achieve.

Notably, a holder who retains an IP distinguishing trait of an IP asset, due to a failure of an IP contract to transfer that trait, may be unable to assert the trait in isolation. For example, if a holder retains the trait of control, he cannot assert that control on its own, because the trait of control must exist in a tempered relationship with other IP distinguishing traits. Control derives its very definition and nature in relation to other traits. Therefore, there is likely no benefit to be derived from holding an orphaned trait, but there is a detriment to the subsequent holder who fails to take possession of the whole of an IP asset.

The role that IP contracts play amongst private sector companies engaged in supply chain environments, exemplifies the effects of contracts whereby a prior holder retains ownership of an IP distinguishing trait.⁹¹⁴ IP assets may be passed routinely amongst entities involved in supply chain relationships. As such, this environment requires “joined-up decision making between the commercial, technical and delivery areas.”⁹¹⁵ Contract terms must “be informed by an overarching commercial strategy which identifies the technical and business areas where flexibility can be shown to subcontractors” and these goals must extend to the application of IP

⁹¹⁴ Stephen Manton, "IP Management Within Complex Supply Chain Environments" *Intellectual Asset Management* 37 (September/October 2009) at 86.

⁹¹⁵ *Ibid.*

assets by IP contracts.⁹¹⁶ It may even be necessary for a subcontractor who creates an improvement to a technology to transfer the right to hold ensuing IP assets to the primary private sector entity by way of a contract.⁹¹⁷ To leave the IP asset as held by the subcontractor can “reduce competitive pressures and even enable subcontractors to compete with their customers”.⁹¹⁸

Thus, a subcontractor who creates an improvement to a technology, such as an improved plug that can be utilized in a pipeline innovation, may seek IP asset protection for the plug, such as a patent and/or industrial design. Although, the subcontractor may undertake the innovation and initial protection steps on his own, once an IP asset is granted it may be transferred to a primary entity by way of an IP contract. The primary entity is likely to be the entity that instigates the supply chain.

If while fulfilling this duty the parties should utilize an IP contract that includes terms that support merely the IP distinguishing traits of control and flexibility/evolution, only those traits of the IP asset will pass from the subcontractor to the primary entity. The IP distinguishing trait of balance will ostensibly continue to be held by the subcontractor. Of course, the subcontractor cannot assert the trait of balance in isolation. (Notably, the trait of balance is not necessarily equivalent to a right of balance.⁹¹⁹) The trait of balance draws its definition from its relationship

⁹¹⁶ Ibid.

⁹¹⁷ Ibid. at 88. A requirement that a subcontractor transfer an IP asset that is an improvement in an existing technology to a primary entity should not be applied in a manner that creates a disincentive for subcontractors to innovate. Rather, financial compensation, or other forms of innovation incentives should be provided to subcontractors, both to encourage them to innovate, as well as in consideration of the transfer of IP assets representing subcontractor innovations to the primary entity.

⁹¹⁸ Ibid. at 87.

⁹¹⁹ It is important in the context of this undertaking to resist the urge to align an IP distinguishing trait with an IP right. IP rights make-up a bundle of rights existing in an IP asset. To view each IP distinguishing trait as an individual IP right is to distort the relationship of IP distinguishing traits with an IP asset. For example, an IP right may be expected to be assertible by its owner, even if it is held in isolation from other rights in the bundle of rights. However, the owner of an IP distinguishing trait cannot assert that trait in isolation. The trait solely has meaning in relation to the other traits of an IP asset. Thus, IP distinguishing traits are not rights in and of themselves. Instead they can be categorized as something akin to duties or obligations. Each trait represents a duty that the IP asset must

with other traits. Moreover, should the primary entity be the holder of an asset that includes only control and flexibility/evolution it does not hold an IP asset either. (See the discussion of IP assets and IP distinguishing traits in Chapter 1.) In order to be the holder of an IP asset the primary entity must obtain the IP distinguishing trait of balance and thereby hold all of the IP distinguishing traits of the IP asset.

There are several results that may occur if a single contracting party cannot claim to hold the whole of an IP asset and no contractual terms are granted dictating the use and rights to part of the IP asset: (i) no party is able to rightfully claim to be the IP asset holder; (ii) no party is able to rightfully exploit the IP asset as a whole or to enforce it against another party because they are not the holders of the IP asset as a whole; and (iii) there may be no clear right to any revenue generated from exploitation or enforcement of the IP asset. Technically two parties hold parts of what constitutes the whole of the IP asset. Notably, both parties may have a claim to a share of the revenue value derived therefrom. These are just a few of the conundrums presented by what amounts to split holdings of traits of an IP asset. Perhaps the more significant difficulty is that should the purported holder sell his business and consequently transfer the traits of the IP asset he holds to a purchaser, the purchaser may not recognize that a holding of the whole of the IP asset is not transferred.

As another example of the effect of a defective IP asset chain of title, it is possible to consider *Quanta v. LG*, as discussed in Chapter 4. In that case LG entered an agreement with Intel. Specifically LG agreed to authorize use of its patent assets by Intel, and in exchange Intel agreed to give customers written notice that its license rights from LG did not extend to products

uphold, namely to provide an asset that exerts control, balance and flexibility/evolution in a manner whereby each trait tempers, and is tempered by, the other traits.

made by combining Intel Product with Non-Intel Product.⁹²⁰ Ultimately Intel sold product to Quanta, who then manufactured computers having a combination of Intel Product and Non-Intel Product. Quanta did not provide written notice to its customers of the mixture of products in its computers. LG sued Quanta, claiming in particular that Quanta violated its obligation to provide notice of a mixture of Intel Product and Non-Intel Product to consumers.

LG thereby essentially claimed that the terms of its contract with Intel extended to Quanta, a customer of Intel, because Quanta was informed of the need to mark mixed products. Quanta argued that on the basis of the patent exhaustion doctrine they were not bound by any requirement to provide their customers with notice of mixed products. Ultimately the Court agreed that the initial sale of a patented item terminates the patent right. Therefore, Quanta was found to have no obligation to perform the notice action imposed by LG as this obligation was grounded upon LG's patent right.

The term of the IP contract between LG and Intel requiring notice of mixed products raises particular questions: what is the scope of the LG's patent asset?; and how does this contract term affect the chain of title of LG's patent asset. It is possible that the notice obligation, as it was expressed in the contract terms, was actually beyond the scope of the patent asset. The obligation was two-fold: to provide notice to customers; and for notice to be provided by customers utilizing the product to create further saleable products. The effect of the notice obligations, jointly and severally, may in fact be to augment the level of control exercised over the patent asset by LG and to ultimately omit the trait of balance. In this light it is discernable that the LG/Intel agreement may have included terms that provided for a contractual use of an asset that was not the IP asset (e.g. an asset that did not include all of the patent's IP distinguishing traits).

⁹²⁰ *Quanta Computer Inc. v. LG Electronics Inc.*, *supra* note 247.

If the asset that is the subject matter of the LG/Intel agreement is not the whole patent asset, but is another asset that does not include the trait of balance, then the LG/Intel agreement creates a defect in the chain of title for the patent asset. Based upon this assessment of the LG/Intel agreement, the following question arises: What asset could be the subject matter of any sub-license between Intel and other third parties? The defective chain of title of the patent asset would limit the scope of the asset that could be the subject of subsequent Intel agreements.

Defects in a chain of title may be fixed by way of supplemental agreements. Such agreements may ultimately cause the orphaned traits of the IP asset to be transferred to a party so as to facilitate holding of the whole of the IP asset by one party. The costs in terms of time and money involved in tracing the chain of title and drafting supplemental contracts to repair the defects can be significant. Moreover, this process must be undertaken on an asset-by-asset basis. As discussed below, such a fix does not resolve IP contract strain.

5.2.2.2 Effects of Chain of Title Defects

IP asset chain of title defects can have significant effects. One such effect may be a drop in confidence in IP asset ownership. This is a legitimate concern as past experience teaches that confidence in IP assets can fluctuate for even trivial reasons. For example, the reaction of shareholders to passing comments, by the former U.S. President, Bill Clinton, and British Prime Minister, Tony Blair, regarding the Human Genome Project made on March 14, 2000 exemplifies a situation of a diminishment of IP asset confidence. Although neither speaker said outright that gene patents would be abolished, that was the investor interpretation of a suggestion that researchers should provide “unencumbered access” to human gene sequence data.⁹²¹

⁹²¹ Justin Gillis, "Clinton, Blair Urge Open Access to Gene Data; President, Briton Step into Controversy on Code" *The Washington Post* (15 March 2000) E01

Immediately following the comments by the heads of state the value of biotechnology stocks fell dramatically as investors unloaded their holdings.⁹²²

A defective chain of title for an IP asset may be a greater cause for alarm than unsubstantiated speculation regarding future patent legislation. If there is a strong likelihood that the chains of title to IP assets may be defective, parties claiming to be IP asset holders may be required to take measures to prove this claim to other members of the private sector, such as purchasers or investors. If such a process were required for each IP asset that is tied to a contractual use, companies and/or investors may shy away from IP contracts due to the extra time and expense such contracts require be incurred.

The possible effects of a lack of investor and private sector confidence in IP assets is exemplified by the IT bubble burst, as described in the Introduction. Additionally, the 2008-2009 recession offers a more recent example of such an effect. In the face of the market fluctuations of late 2008 that began a global recession, the value of IP assets was placed under scrutiny by the

⁹²² See: Editorial, "The Patent Problem" *St-Louis Post Dispatch* (16 March 2000) B6; "Gene Patent Minefield Requires Extra Caution" *Australian Financial Review* (18 March 2000); Robert Langreth, "Debate Questions Gene-Patent Criteria -- Controversy Centers on How Much Must Be Known About Function" *The Asian Wall Street Journal* (17 March 2000) Technology & Health; and Betti, "Diagnostic Genetic Technologies Left Stranded on First Base: A Need to Unwind the Protection Afforded Gene Patents", *supra* note 729 at 24. This situation further highlights the close ties between critical research sectors and the public sphere. This relationship is two-fold: (i) research provides public benefits, such as health benefits; and (ii) it is almost always developed in public institutions and supported by public funding (Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94 at 61). Thus, the public have a genuine interest in innovation. However, the public interest is not always uppermost in the minds of companies when they choose how to utilize their IP assets. This is evident in the ethical issues raised by present-day private sector IP contracts, such as contracts for the distribution of HIV/AIDs pharmaceuticals. For example, in 2000 Human Genome Sciences Inc. ("HGS") obtained a patent from the U.S. Patent and Trademark Office over the gene (found in humans) that codes for the CCR5 receptor as well as on all of the medical applications of CCR5. HGS was able to demand royalties by way of license agreements from parties that chose to utilize the CCR5 gene. This significantly hindered further research on a class of HIV/AIDs pharmaceutical and increased the cost of creating such pharmaceuticals, which had a downstream effect of increasing the cost of the medicine for consumers. This in turn creates access barriers for patients who are affected by poverty. See: *Intellectual Property Rights, Integrating Intellectual Property Rights and Development Policy* (London: UK Commission, 2002), online:<http://www.iprcommission.org/papers/pdfs/final_report/CIPRfullfinal.pdf>, *supra* note 525; and Louise Bernier & Karen L. Durell & E. Richard Gold, "WHO Literature Review on the Impact of Gene Patents on Access to Genetic Technologies and Services: View from Developing Countries" (2004) Background Paper for "Genetics, Genomics and the Patenting of DNA" (2005) LC/NLM QU 33.1, World Health Organization, Geneva at 19.

private sector. IP assets had been previously relied upon as a virtually unquestioned source of private sector value.⁹²³ The recession diminished the perceived reliability of this value source. As an example, in mid-2008 (pre-recession) Ocean Tomo refused an offer estimated to be between USD\$30-\$50 million for its IP transaction business including its IP auction operation.⁹²⁴ Only twelve months later (post-recession), Ocean Tomo was sold to British online brokerage ICAP for USD\$10 million.⁹²⁵

The recession was not instigated by any issue relating to IP assets, but rather due to lending practices that instigated a credit crisis.⁹²⁶ However, once the recession started the value of IP assets began to decline, as attested to by headlines: “Stock markets wiped \$22 trillion off intangible asset values in 2008”⁹²⁷; “IBM, Sun Micro talks collapse over price”⁹²⁸; “Intangible values collapse – the old 70% to 80% claim is now officially dead and buried”⁹²⁹. A correlation may be seen between IP asset value and confidence in such value. As the value of IP assets dropped so did the confidence of the private sector in the capability of such assets to continue to provide an ongoing source of business capital.⁹³⁰

Moreover, it is notable that the effects of IP contract strain may merely augment the reasons for diminishing confidence in IP assets. In the words of one author “[o]ver recent years, a powerful anti-IP lobby has developed – one which now has the ears of powerful people in

⁹²³ See: Vaver, "Need Intellectual Property be Everywhere? Against Ubiquity and Uniformity", *supra* note 2; Walterscheid, "The Nature of the Intellectual Property Clause: A Study in Historical Perspective", *supra* note 3; and Ginsburg & Merges, *Foundations of Intellectual Property*, *supra* note 3.

⁹²⁴ Industry Insight, "The Faltering IP Auctions Market Means Hard Choices of both ICAP and Ocean Tomo" *Intellectual Asset Management* 37 (September/October 2009) at 5.

⁹²⁵ *Ibid.*

⁹²⁶ Eamonn K. Moran, "Wall Street Meets Main Street: Understanding the Financial Crisis" (2009) 13 N.C. Banking Inst. 5 at 7.

⁹²⁷ Joff Wild, "Stock Markets Wiped \$22 Trillion Off Intangible Asset Values in 2008" *Intellectual Asset Management Magazine* (4 April 2009).

⁹²⁸ Ritsuko Ando, "IBM, Sun Micro Talks Collapse Over Price" *Reuters, UK* (6 April 2009).

⁹²⁹ Joff Wild, "Intangible Values Collapse - The Old 70% to 80% Claim is Now Officially Dead and Buried" *Intellectual Asset Management Magazine* (24 January 2009).

⁹³⁰ *Ibid.*

government and in the media.”⁹³¹ This is significant because “the IP community has proved itself unable to engage successfully with its critics.”⁹³²

Furthermore, as questions are raised regarding the value of IP assets, inconsistent IP valuation methods merely exacerbate the situation and represent a further impetus for the weakening of confidence in IP assets. IP valuation is a critical step in the process of private sector IP contracting activities and can be “a gate for investors to make an investment” in a company.⁹³³ A review shows that more than fifty variant IP valuation methodologies are applied by professional valuers.⁹³⁴ The application of so many different IP valuation methods raises questions regarding the relative values of IP assets.⁹³⁵ Two IP valuation methods applied to an IP asset can ascribe different values to the same asset. There is at present no standard whereby it is possible to ascertain which value is accurate.⁹³⁶ This fact prompts the question: What is the value of an IP asset? The confusion in IP valuation is tied to IP contracting because whether an IP contract reflects a fair-market value of an IP asset is questionable in light of IP valuation inconsistencies. As the private sector intensifies its scrutiny of IP assets, questions regarding the reliability of IP valuation may further lower confidence in the ability of IP assets to attain market advantage for a company.

Thus, there are several reasons for private sector entities and investors to be less confident about continuing to place significant reliance upon IP assets as generators of corporate wealth. For example, “transparency in the marketplace” is lacking.⁹³⁷ This is necessary because “better

⁹³¹ Joff Wild, "Editorial" *Intellectual Asset Management* 37 (September/October 2009) at 3.

⁹³² *Ibid.*

⁹³³ Kuester & Bartel, "Evolution of the IP Market" *Intellectual Asset Management*, *supra* note 5 at 31.

⁹³⁴ Sullivan, "Standardising IP Valuations: Whether, What and How" at 31.

⁹³⁵ *Ibid.* at 33.

⁹³⁶ *Ibid.* at 31.

⁹³⁷ *Ibid.*

information about the actual selling price, the actual licensing price of intellectual property” would overcome the present “fictional construct” of IP value as reflected in IP contracts.⁹³⁸

Diminishing private sector confidence in IP assets and IP contracts can have broad effects upon innovation in general. A lack of confidence in existing IP assets may cause: diminishing investment and interest in generating new innovations; and a drop in the production of IP assets, because the need for these diminishes when innovation slows. If inventions, designs, works and marks are not produced there is no need for the generation of IP assets to protect these. Furthermore, the need to seek ownership of IP assets diminishes if IP assets are no longer perceived to represent a viable source of private sector wealth generation. This was the outcome after the IT bubble burst.⁹³⁹ Investors lost interest in supporting IT R&D initiatives or start-up companies.⁹⁴⁰ Due to a lack of capital to undertake technology creation and development, it is conceivable that a number of innovations remained at the idea stage and were never brought to fruition, much less to market. It is impossible to calculate the IT innovations that may have been lost due to this state of affairs.

These lessons from history exemplify the dangers that diminishing private sector confidence in IP assets can create. The IP contract strain effect of orphaned IP distinguishing traits and defective chains of title may instigate lowered confidence in IP assets. Thus, this effect has the potential to lead to significant negative outcomes if left unchecked.

5.2.2.3 Fixes vs. Resolutions of IP Contract Strain

As mentioned previously, defective chains of title may not be an insurmountable problem. It is possible to undertake due diligence and trace the chain of title of an IP asset. This involves following the chain of asset holding of either the whole or portions of the IP asset. IP lawyers

⁹³⁸ Kuester & Bartel, "Evolution of the IP Market", *supra* note 5 at 34.

⁹³⁹ See: Introduction.

⁹⁴⁰ Kobayashi, "Private Contracting and Business Models of Electronic Commerce", *supra* note 124 at 163.

undertake this type of work regularly. It can be time-consuming and costly to uncover, interpret and follow the chain of title of an IP asset to a point where its holdings can be accurately reported, but it can be done.

Moreover, it may be possible to rectify intended contractual uses of IP assets and correct the occurrence that an asset other than the IP asset was transferred, due to the IP distinguishing traits of the IP asset being altered, distorted or omitted in the contract terms. Subsequent additional contracts may be drafted for this purpose. This procedure may also require significant input of time and cost. Notably, the monetary and time costs of the process of due diligence and drafting subsequent contracts to rectify an IP asset transfer are significant factors as companies engaging in IP contracting are motivated to speed-up the rate of transactions and to reduce the costs of producing contracts.⁹⁴¹

Furthermore, these types of fixes can ameliorate the effects of IP contract strain for IP assets applied in contracts, on a contract-by-contract or an asset-by-asset basis. However, these steps do not resolve IP contract strain in affected contracts generally. In particular, taking these steps will not have any consequence upon the creation of future non-IP contracts. Therefore, although these steps offer a “fix” to individual contracts, they do not offer a resolution to IP contract strain.

Other fixes are likewise limited in their ability to resolve IP contract strain. For example, the proliferation of private sector IP contracts is identified as requiring specific considerations. As a response it is suggested that a contract compliance program be implemented to “verify and clarify” relationships between contracting parties.⁹⁴² Advocates of the IP contract compliance initiative tout the problem in IP contracts as relationship-based (e.g. the relationship between

⁹⁴¹ Henderson & Pierantozzi, "Increasing transparency in the IP transaction markets", *supra* note 7 at 67.

⁹⁴² KPMG, "Contract Compliance in High Technology Industry" *KPMG International* (2006) at 4-5.

contracting parties) and attempt to address this with legal rules.⁹⁴³ So far this initiative has been neither enthusiastically nor widely implemented.⁹⁴⁴

A review of the progression of new technologies indicates that the effects of IP contract strain may worsen in the future if left unacknowledged. For example, in the digital environment in particular, parties no longer negotiate contract terms that “respond to their actual needs.”⁹⁴⁵ One author notes that “cumulative harm” may result from this practice which may exceed any perceived potential benefits therefrom.⁹⁴⁶ Of course authors do not identify the IP contract problems as IP contract strain, yet the problem contracts they discuss may be identified as those affected by IP contract strain.

Before a resolution to IP contract strain can be developed its causes and effects must be identified. This is necessary to uncover the scope of the strain. Any resolution will only be workable if it is capable of addressing the full scope of IP contract strain. It is not a purpose of this contract to produce a resolution to IP contract strain. Yet, it is important that a fix for a non-IP contract is not misinterpreted as a resolution for IP contract strain.

5.2.3 The Systemic Effect of IP Contract Strain

A further effect of IP contract strain that merits examination is the fact that it is a systemic problem. The systemic nature of IP contract strain is apparent in: (i) the daily increasing number of IP contracts; and (ii) the simultaneous growth of the number of IP contracts and the reliance

⁹⁴³ Ibid.

⁹⁴⁴ Ibid. Notably, this viewpoint of contract compliance advocates regarding the prevailing problem in IP contracts differs from the focus of this thesis. The program characterizes the problem as based in the relationship between the parties (e.g. large vs. small entity parties, parties from different markets, etc.). This thesis looks to the effect of the terms of the IP contracts created, rather than the relationship between the parties who create the contracts. Albeit possible that characteristics of the parties may influence the resulting contractual terms, this thesis does not engage in an analysis of the nature of this relationship. Therefore, it does not focus specifically on inequities between parties (e.g., size, sophistication, revenue, etc.). Undoubtedly these exist, as is evidenced by other research, but the focus of this thesis is the IP contract problem relating to the application of IP assets.

⁹⁴⁵ Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9 at 929.

⁹⁴⁶ Ibid.

upon IP contracts as a tool to effect corporate purposes. As one author points out, “most resources today are controlled by legal entities organized around a nexus of contracts, such as trusts, partnership, and corporation.”⁹⁴⁷ Consequently the discussion of IP contract strain does not reference a problem that affects one contract, or even a handful of contracts. IP contracts are drafted on a regular basis and the number of existing IP contracts is significant and ever-growing.⁹⁴⁸ Therefore, it is a discussion of a problem that affects whole market sectors.⁹⁴⁹

Examples of problems that expand to systemic proportions are identified in several academic disciplines. Gender issues,⁹⁵⁰ environmental effects,⁹⁵¹ violence against women,⁹⁵² and

⁹⁴⁷ Merrill & Smith, "Optimal Standardization in the Law of Property: The Numerus Clausus Principle", *supra* note 203 at 54.

⁹⁴⁸ See: Merges, "A Transactional View of Property Rights", *supra* note 393 at 1514. The exact number of IP contracts is unknowable because there is no requirement for private sector entities to register such contracts. IP contracts are entered at will, however, if the work this process garners for the corporate IP lawyers is used as a measure of the rate of such contracting, it may be assumed that the number of existing IP contracts is in the millions.

⁹⁴⁹ *The Oxford English Dictionary*, *supra* note 89 s.v. “systemic”. “Systemic” is defined by the Oxford dictionary in biological terms “of the bodily system as a whole, not confined to a particular part” and “(of insecticide, fungicide, etc.) entering the plant via roots or shoots and passing through the tissues”. A systemic problem is one that gains access to an entity through an entry-point and works its way through an entity until it affects the entity as a whole. What starts as a small, isolated, event therefore grows in significance and becomes an overt problem.

⁹⁵⁰ For example: sexist quotations generate and perpetuate gender stereotypes and female discrimination (Robin Morgan, "Knowing Your Enemy: A Sampling of Sexist Quotes" in E.D. Salamon & B.W. Robinson ed., *Gender Roles: Doing What Comes Naturally?* (Toronto: Methuen, 1987) at 39-43.); permitted male dominance in classrooms results in inferior education of girls (Myra Sadker & David Sadker, "Sexism in the Schoolroom of the '80s" in E.D. Salamon & B.W. Robinson eds., *Gender Roles: Doing What Comes Naturally?* (Toronto: Methuen, 1987) at 141-147.); and belief in the psychopath rapists keep female victims from reporting incidents rape by males they know which keeps the cycle of date rape alive (Stuart L. Hills, "Rape and the Masculine Mystique" in E.D. Salamon & B.W. Robinson ed., *Gender Roles: Doing What Comes Naturally?* (Toronto: Methuen, 1987) at 296-307).

⁹⁵¹ Carson begins her book “Silent Spring” with a fable of a town filled with birdlife that falls silent as “a strange blight crept over the area and everything began to change” (Rachel Carson, *Silent Spring* (New York: Houghton Mifflin Company, 1962) at 2). Carson goes on to point out that activities like the importation of plants without quarantine can lead to the introduction of “major insect enemies of plants” which without natural enemies increase to become “enormously abundant”, and in the case of the pine beetle can wipe out forests (at 12).

⁹⁵² Andrews, ““Democracy Stops at my Front Door”: Obstacles to Gender Equality in South Africa”, *supra* note 120 at 17. Andrews questions how the violence against women can be allowed to exist and become a systemic problem in a country with a constitution that comprehensively embraces gender equality (at 17). She identifies a “peculiar flavour of South African patriarchy” as the reason why violence against women prevails over gender equality supportive laws (at 26). The three “interlinked political and cultural origins” that Andrews points to are “first, a masculine culture emanating from an authoritarian and militaristic apartheid state; second, the masculinist cultural remnants of a violent anti-apartheid struggle; and third, aspects of indigenous customary law that continue to subordinate women” (at 26).

migration of the poor,⁹⁵³ are recognized examples of systemic effects. Authors in these spheres of study comment that once systemic proportions are reached problems can seem overwhelming.⁹⁵⁴ Yet, although systemic effects can grow into crises authors argue that there is no need to remain frozen in a state of inability to cope with the ensuing predicament.⁹⁵⁵

Bringing the systemic problem to light can be a first step towards eradication.⁹⁵⁶ Thus, not only changes in laws can affect the spread of systemic effects, but legitimization also helps.⁹⁵⁷

⁹⁵³ Neacsu, "The Red Booklet on Feminist Equality: Instead of a Manifesto", *supra* note 119 at 128. Neacsu discusses how migration of the poor is a problem that grows gradually in a host state to the point where states are no longer able to cope with poverty issues within their borders. She points out that if the migration is ignored in the host state the population sector in poverty may swell until "states are too depleted of resources to properly take care of their poor" and "international organizations cannot cope with them as long as they need individual states' commitments". Neacsu finds that globalization – which is in her estimation the "brainchild of neo-liberalism" and "created by the systemic postmodern disparaging of class politics" – produces some of these "disastrous disparities in income and welfare" that create the populations of poor which international governments, aid organizations and multi-nationals are incapable of addressing today (at 131).

⁹⁵⁴ Carson, *Silent Spring*, *supra* note 951 at 12. Carson comments that we act like we are helpless in the face of environmental concerns once they grow into serious problems, whereas "our ingenuity could soon discover many" alternatives "if given opportunity."

⁹⁵⁵ Bender, "Teaching Torts as if Gender Matters: Intentional Torts", *supra* note 119 at 115. In her discussion of an attempt to uphold "genderless" law, Bender finds that "gender-neutrality just masks systemic oppression" in torts jurisprudence. Bender points out that "every person in every torts case has a gender, race, sexual orientation, ethnicity, age, economic/social class and a range of physical and mental abilities...In many legal cases, torts parties' claims are interpreted differently, their perspectives are valued differently, and the law responds to their harms differently based in part on these aspects of identity" (at 116). Therefore, the concept of genderless torts law is a myth. She encourages legal academics and practitioners alike to "begin to teach, learn, and practice tort law as if gender matters" because by recognizing the effect of gender it may be possible to unmask the systemic oppression (at 163).

⁹⁵⁶ Greene, "Intellectual Property at the Intersection of Race and Gender: Lady Sings the Blues", *supra* note 119 at 385. As an example of chaing a systemic issue, Greene points out that blacks and women were routinely overlooked as owners of IP assets and this state is only rectified through a re-engineering of IP law "to bring about results of distributive justice and to foster norms of racial and gender equality". Greene notes that U.S. Congress only started enacting laws that effectively protect IP rights of blacks in recent times (at 366). Previously, Greene argues blacks in the IP system experienced routine appropriation and divestiture of their works (at 370). For example, the early music industry can be seen as built upon a foundation of black slave songs, spirituals, blues, rag time – which were "borrowed" by white composers who reaped financial gains therefrom to the exclusion of the black originators (at 372-373). Blacks were also affected by protected copyright and trade-mark symbols that "promoted derogatory racial stereotypes that facilitate racial subordination" (at 370). The stereotyping had a detrimental effect upon the personality rights of black artists, who were often deprived of moral rights of integrity and attribution (at 373). Greene states that "in the case of black women, the contributions to art and culture have been titantic" (at 380), and notes that a woman's point of view provides the basis for more than three-quarters of formal blues (at 381). Yet he points out that black women are virtually left out of historical accounts of jazz and "disappeared from sight in the emergence of ragtime" (at 381).

⁹⁵⁷ Acceptance of evidence proving a systemic problem as a significant harm is an aspect of the hallmark case *EEOC v. Sears, Roebuck & Co.* (*EEOC v. Sears, Roebuck & Co.*, 628 F. Supp. 1264 (N.D. Ill. 1986), *aff'd* 839 F.2d 302 (7th Cir. 1988)). A U.S. court accepted statistical proof as evidence that the defendant (Sears) had engaged in

Moreover, direct engagement with social reality can spark change that challenges systemic problems.⁹⁵⁸ Such engagement can occur on many levels of society – the judiciary, neighbour-to-neighbour, academia, private business, etc. Exposure may therefore be a step towards eradication.

Through the lens of systemic growth, IP contracting is more than an exercise that engages, and affects merely the contracting parties. Contractual terms in some instances may affect third parties.⁹⁵⁹ Furthermore, an IP contract that is drafted in a manner that creates IP contract strain has greater implications than the creation of a single, isolated non-IP contract. Such contracts are likely created routinely. This occurs due to many factors, including the following:

- (a) the contracting parties: (i) do not understand the IP asset and its IP distinguishing traits; and/or (ii) draft contract terms that are the basis for tension between IP distinguishing traits and contract legal principles when the IP contract is interpreted;
- (b) contracting parties rely upon previous IP contracts as models, and the previous IP contract was drafted in a manner described in point (a);
- (c) the creation of a plethora of IP contracts in a particular industry sector in accordance with a particular model, as discussed in point (b), leads to the creation of an IP contract standard for that sector, so that now all the IP contracts in the sector are drafted in a manner described in point (a); and
- (d) the standard of IP contract for a particular industry sector is accepted as a standard for IP contracts in a wider sphere...and so on...Due to flaws therein, the original contracts of point (a) were difficult to interpret, or were non-IP contracts. Dependence upon these contracts results in whole private sector markets being inundated by IP contracts with IP contract strain.

systemic nationwide discrimination against women” (Brodin, "Behavioural Science Evidence in the Age of Daubert: Reflections of a Skeptic", *supra* note 119 at 937).

⁹⁵⁸ MacKinnon, "Points Against Postmodernism", *supra* note 119 at 688. MacKinnon states that exposure of “regularities and widespread extent and trauma of sexual abuse in childhood, the pervasiveness of rape and other sexual assault, the torture and shame of battering, the routine existence of sexual harassment at work, in school and on the street, and the endemic abuse constituted by pornography and prostitution” beginning in the early 1970s, caused “the extent and nature of these practices and their place in sexual politics, hence politics” to be “uncovered and examined” (at 688). She further notes that “once this genealogy and its continuity with sexuality more generally was established, nothing from the state to interest groups to culture to intimate relations looked as it had. One implication was that both knowing and the known had to be remade to contend with the role of male power in constructing them” (at 688).

⁹⁵⁹ See: Chapter 1.

Considering the growth in the number of IP contracts that are drafted by businesses,⁹⁶⁰ the problem of IP contract strain may be growing from a single-contract issue, into a systemic private sector obstacle. Moreover, there is evidence that the private sector places great reliance upon IP contracts.⁹⁶¹ These contracts are expected to protect the IP asset value of companies and industries. The identification of one non-IP contract, which is drafted in a manner similar to all other purported IP contracts in a sector, will not just mean one transaction may either fail or require subsequent measures to achieve the contractual use of an IP asset; it may jeopardize IP asset transactions of an entire sector.

It is necessary to expose its systemic effect in order for IP contract strain to be addressed. This is consistent with an aim of this thesis. Exposure of the systemic problem requires examination of its root. This necessitates probing of the causes and effects of IP contract strain. Thus, recognition of IP contract strain due to its systemic effect may diminish some of its other potential effects.

5.3 Why Legal Rules Cannot Solve IP Contract Strain

As discussed in the Introduction, legal rule solutions are considered an obvious starting point for a resolution of IP contract tension by many authors. This view is heavily influenced by perceptions of tension in IP contracts as being grounded in conflict between IP laws and contract laws. As this thesis presents, IP contract strain is a wider problem than merely the interaction of IP laws with contract laws. Thus, it is true that it may be possible to address IP contract strain by way of legal rules, as discussed in Chapter 7. However, generally legal rules produced by present

⁹⁶⁰ Kuester & Bartel, "Evolution of the IP Market", *supra* note 5 at 32.

⁹⁶¹ See: Bryer & Simensky, ed. *The New Role of Intellectual Property in Commercial Transactions*, *supra* note 130 at xvii; Knopf, "Security Interests in Intellectual Property: An International Comparative Approach", *supra* note 130 at 4; Birenbaum & Hughes, "Insuring Intellectual Property Risks: Creative Solutions on the Cutting Edge", *supra* note 130 at 203; Field Jr., "Book Review: Edison in the Boardroom: How Leading Companies Realize Value from their Intellectual Assets", *supra* note 130 at 147; and Melnitzer, "Executive Knowledge Wars", *supra* note 94 at 66.

methods of legislative or judicial processes are likely to be inadequate in isolation to address IP contract strain.

The approach of presenting new legal rules to address IP contract strain has several critical limitations. Foremost amongst these is the fact that the legal rules approach often results in legislation or jurisprudence specifically crafted to address one particular IP contract issue. Such narrow rules have a limited application to IP contract strain.

Notably, a legal rule solution can fail to encompass all of the causes of IP contract strain. As depicted in Figure 1, practices and institutions influence the creation of IP contracts along with legal rules. A reason for this is that practices and institutions can precede legal rules. In some cases legal rules are drafted to codify norms stemming from institutions and practice.⁹⁶² These norms can be given weight equal to legal rules. For example, drafting contract terms to shape and mould IP assets for the purpose of IP contract aims is a private sector practice that has evolved into a norm that is not codified.⁹⁶³ It further affects the drafting and interpretation of IP contracts and influences causes of IP contract strain. To ignore the source of such a norm, namely practices and institutions, in any attempt to address IP contract strain would be tantamount to ignoring a driving force behind IP contract drafting. If that driving force is not acknowledged it cannot be addressed and consequently will continue to persist despite a new legal rule.

The difficulty of relying upon legal rules to address IP contract strain is further exemplified by judicial decisions relating to IP contracts. Judges opt to apply either IP laws or contract laws

⁹⁶² See: Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 830; Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at 111; and Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 85).

⁹⁶³ See: Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 830; and Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 85.

to IP contracts and generally choose contract laws.⁹⁶⁴ This creates common law that fails to generate legal rules that: address both IP distinguishing traits of IP assets and contract legal principles; or review contract terms for support for IP distinguishing traits. There are two conclusions that can be drawn in light of the present state of judicial decisions: (i) either judges are wrong in applying the chosen method; or (ii) we need policy change to address IP contract strain. This thesis supports the latter option as the better solution to address IP contract strain, as discussed in Chapter 7.

Notably, law makers apply a similar approach to legal issues as the courts. Law makers are not bound to solely address specific issues in the same manner as courts. However, they limit themselves to the activity of creating rules that narrowly address an issue. This can occur for many reasons, not the least of which are lobbyist pressures and legislative debate. IP contract strain is a problem that affects a wide variety of types of IP contracts. These contracts address a myriad of corporate transactions (e.g., sales, assignments, waivers, licenses, etc.) as well as all types of IP assets (e.g., patents, copyrights, trade-marks, etc.). Narrow legal rules are most often incapable of addressing IP contract strain.

It is of further note that authors suggest that IP laws will be replaced by attenuated forms of IP protection, such as encryption or privacy measures.⁹⁶⁵ This step is assumed to be imminent

⁹⁶⁴ See: Chapter 4.

⁹⁶⁵ McManis, "Intellectual Property and International Mergers and Acquisitions", *supra* note 72 at 1300. McManis predicts that encryption "may be more than sufficient to protect rights in digital information", and opines that 'competitive conditions in the electronic marketplace may render it largely irrelevant, for in the new economic environment of cyberspace, it is predicted that a new set of economic rules will apply, chief of which is that "content is free".' In a "content free" realm present day forms of legal rules of IP protection will be overturned and reward will be granted for "personal effort-process and service rather than mere ownership of assets". Samuelson further suggests that privacy policies should be developed to "impose minimum standards of commercial morality on firms" (Samuelson, "Privacy as Intellectual Property?", *supra* note 759 at 1125).

because present day IP laws are incapable of protecting cyberspace IP assets.⁹⁶⁶ From this viewpoint legal solutions are not only insufficient, they may become obsolete in some sectors.

As stated at the beginning of this section, it is not necessarily impossible for a legal rule to be formulated to address IP contract strain. However, such a rule would have to break the mould of current legal rules. The rule would have to be flexible enough to apply to a variety of IP contracts, yet have a non-modifiable core that would address IP contract strain. It would have to be broadly conceived of, so as not to be limited to a particular justification. Lastly, it would need to be influential enough to be a law that influences institutions and practices. Only a rule that meets these criteria can address IP contract strain.

5.4 Conclusion

In light of the potential effects of IP contract strain, allowing the strain to persist poses certain risks to the private sector. The results can include confusion in IP contract interpretation, diminishing confidence in IP assets as private sector tools, and overwhelming systemic problems. At present there is no easy means to address these or to resolve IP contract strain. Legal rules are the choice of some authors for this purpose, but legal rules have limitations that reduce their effectiveness. The next chapter presents examples of grass-roots IP contracting initiatives and analyzes the influence of legal rules, practices and institutions in these in light of the causes and effects of IP contract strain.

⁹⁶⁶ McManis, "Intellectual Property and International Mergers and Acquisitions", *supra* note 72 at 1300.

6 PRACTICES & INSTITUTIONS & IP CONTRACT STRAIN

6.1 Introduction

Grass-roots IP contract strategies exemplify the causes and effects of IP contract strain in the context of private sector activities. The initiatives that foster such strategies include intellectual asset management (“IAM”) and open source. In particular these initiatives highlight the influence of practices and institutions upon emerging IP contract strategies, and the need for such strategies to adapt quickly to new forms of IP assets and novel uses of IP assets.⁹⁶⁷ These are notable benefits that can facilitate both the achievement and sustainment of private sector competitiveness. Specifically this chapter reviews the relationship between IAM and open source IP contract strategies and IP contract strain.

Both IAM and open source involve organic IP practices.⁹⁶⁸ Each employs IP contracting strategies that are both: relatively un-constricted by pre-existing legal rules; and able to recognize IP assets as applicable to a myriad of contractual uses.⁹⁶⁹ These strategies are quickly becoming a common component of private sector IP transactions and have the potential to evolve into IP contracting norms.⁹⁷⁰ Increasingly IAM and open source set the pace and character of IP contracting.

⁹⁶⁷ Litman, "Information Privacy/Information Property", *supra* note 56 at 1313.

⁹⁶⁸ Initially IAM was developed as a strategy for commercializing a technology. In 1988 David Teece produced an article entitled “Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy” which was the first to outline the steps for commercialization. Previously this type of knowledge was closely-held by companies. But the article sparked thinkers, such as Patrick Sullivan, a founder of IAM, to consider the implications of companies working together to understand how best to commercialize a technology and to develop methods of improving this process. This was the spark for IAM. See: Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at xiv.

⁹⁶⁹ Potter argues that companies no longer control brands, but power has shifted to the public. This is one example of the effect of the trend of grass-roots strategies upon IP asset perceptions (Andrew Potter, "My logo: are we the new brand bullies?" *Toronto Star* (10 July 2005) D1).

⁹⁷⁰ The Intellectual Property Management Group examines the interaction of laws, practices and institutions in the IP realm. Each of these is identified as an important aspect of IP assets affecting their use and application (See: Gold et al., *Towards a New Era of Intellectual Property: From Confrontation to Negotiation: A Report from the International Expert Group on Biotechnology Innovation and Intellectual Property*, *supra* note 26). Laws are identified as legal rules that affect how IP assets function and are a first aspect of IP assets, not the only aspect (at

IAM and open source are organic responses to IP contracting that are growing in prevalence and importance. They exemplify the role of rules, practices and institutions that influence IP contract drafting. IAM and open source initiatives highlight instances whereby communities instigate changes to IP contracting methods from the ground-up. A review of both IAM and open source illuminates the direction where IP contracting is heading and how IP contract strain may affect this progression.

This chapter is divided into two sections. The first section discusses IAM which can have particular problem-solving benefits for companies by promoting strategies that are intentionally flexible and evolving. A definition of IAM is provided to contextualize its place in the legal realm. The second section of this chapter defines open source and highlights some of its forms. Traditionally viewed as a public sphere initiative, the advance of open source into the private sector is increasingly blurring the lines between the private and public spheres.⁹⁷¹ An underlying concentration through the discussion in both sections of this chapter is whether new IP contracting strategies may address IP contract strain.

Although neither IAM nor open-source intentionally addresses IP contract strain, a review of these initiatives suggests that each has the potential to do so inadvertently. This means that it is possible to draft IP contracts in a manner that is consistent with an IAM or open source strategy and thereby address causes of IP contract strain. Notably, this result is unintentional. In

22). Institutions are groups of actors that utilize IP assets in a particular way (at 22), contracts are one of the tools institutions apply for this purpose. Practices are how people and institutions behave in relation to their IP assets (at 22), and therefore practices affect the types of clauses that are included in IP contracts. See also: Mayer-Schonberger, "In Search of the Story: Narratives of Intellectual Property", *supra* note 453 para. 24. Laws, practices and institutions are three domains of IP assets, and they mutually confirm one another (para. 22).

⁹⁷¹ Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94. Bok notes that university knowledge is increasingly applied to commercial projects and that this is most prevalent in areas of science traditionally dedicated to the academic tower model – "within the traditional disciplines, no faculty members feel a stronger sense of mission than the scientists, yet it is there – not in the humanities – that commercialization has taken hold most firmly...[scientists] are most deeply involved in lucrative consulting and entrepreneurial activity" (at 5-6). Some blame this blurring on the influence of the lawyers and businessmen who currently sit in positions on the boards of universities (at 6).

order to be effective, a means for addressing IP contract strain must be consistent and reliable. These are not characteristics of an inadvertent means. Thus, neither IAM nor open source initiatives offer a consistent or reliable means of addressing IP contract strain, but they do show that it is possible to produce a means of addressing IP contract strain.

6.2 Intellectual Asset Management (“IAM”)

IAM has evolved in the private sector over the past decade as companies seek to derive maximum value from the IP assets that they own.⁹⁷² Corporations increasingly realize that the most effective means of managing these assets is through an interactive and coordinated approach. This realization has led to the development of focused strategies. Essentially, IAM is a means of utilizing intellectual assets – those derived from private sector knowledge and innovation – to support and further the goals of an institution through practice activities. Its primary aim is to achieve maximum value for intellectual assets and these may be of a wide range, but this chapter will consider its application in the context of IP assets specifically.

IAM is gaining momentum amongst the private sector as IP assets are increasingly expected to provide a significant source of private sector competitive advantage.⁹⁷³ A popular corporate view holds that, “few variables are more likely to dictate short and long-term commercial success than a firm’s ability to convert intellectual assets into intellectual property. The smaller the firm, the bigger the need, and the need only grows.”⁹⁷⁴ However, IAM recognizes that mere ownership of individual IP assets is not enough, or even necessary, to

⁹⁷² Patrick H. Sullivan, *Value-Driven Intellectual Capital: How to convert Intangible Corporate Assets Into Market Value* (New York: John Wiley & Sons, Inc., 2000)

⁹⁷³ Intellectual Property Net for intellectual assets and knowledge management, online: <<http://www.intellectualpropertynet.co.uk>>.

⁹⁷⁴ Field Jr., "Book Review: Edison in the Boardroom: How Leading Companies Realize Value from their Intellectual Assets", *supra* note 130 at 147.

produce value for a company.⁹⁷⁵ Driven by business input from experts, such as IAM pioneer Patrick Sullivan, it is now applied by numerous Fortune 500 companies.⁹⁷⁶ This section reviews the relationship between IP contract strain and IAM.

6.2.1 What is IAM?

Prior to engaging in an analysis of IAM it is critical that the term be defined. Present-day business wisdom endorses a focus upon gaining market advantage and means of deriving the greatest value from private sector IP assets to attain this advantage. IAM strategies represent methods of promoting the specific goals of a private sector participant and generating value from IP assets in accordance with the goals. This being said, it is important to recognize that IAM does not assume economic value to be the sole value of IP assets. Although economic value may be the goal of one firm, know-how value (e.g., knowledge gained through learning-by-doing which is held by individuals and rarely written down),⁹⁷⁷ or other values, may be the goal pursued other firms.⁹⁷⁸

The adoption of successful value-augmenting strategies is important in IAM because “a firm’s repository” of IP assets “often functions as a signal of the firm’s financial prospects, among other things. Consequently, the firm has a strong desire to control its repository for optimum return.”⁹⁷⁹ IAM transfuses its recognition of a wider range of IP values into strategies involving IP asset contractual uses to further private sector goals. In fact, IAM is described as a

⁹⁷⁵ See: Karl Albrecht, *The Power of Minds at Work: Organizational Intelligence in Action* (New York: AMACOM, 2003) at 202. Albrecht offers the example of Avon Products, a company that chose to purchase a portfolio of medical patents with the intention that these would generate wealth for the company. In the end Avon ultimately, “ran the medical business into the ground, eventually dismantling it and taking huge write-offs.”

⁹⁷⁶ Sullivan, *Value-Driven Intellectual Capital: How to convert Intangible Corporate Assets Into Market Value*, *supra* note 972. ICM Gatherings is an example of a group dedicated to the progress of IAM. ICM Gatherings hosts an annual multi-corporation meeting for the purpose of discussing IAM methodologies and policies.

⁹⁷⁷ Joseph J. Daniele, "Understanding and Managing Knowledge Assets for Competitive Advantage in Innovation and Product Development" in Patrick H. Sullivan ed., *Profiting from Intellectual Capital: Extracting Value from Innovation* (New York: John Wiley & Sons Inc., 1998) 305 at 306.

⁹⁷⁸ Examples of the multiple functions of the value of IP assets include: Appropriation Function; Adjustive Function; Self-defence Function; Planning Function. Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 125-130.

⁹⁷⁹ Maine & Nguyen, "Giving Intellectual Property", *supra* note 133 at 1723.

“Gordian knot” due to the ever increasing “challenges, choices, risks and rewards in managing IP assets.”⁹⁸⁰ Several elements contribute to a definition of IAM including: recognizing IP assets; planning and strategizing; evolving and flexible strategies; identifying IP asset relationships and synergies; and strategies extending beyond a single firm.

6.2.1.1 Recognize IAM Assets

In order to achieve successful IAM, a company must identify its IP assets and potential IP assets. Only then can it decide how best to utilize what it owns. Informed decisions – as to which assets should seek IP protection, which should be sold, which should be licensed to third parties, etc. – involve strategic choices, integral to the success of a business. These choices are the essence of IAM.⁹⁸¹ Generally IAM explores strategic uses of IP assets to achieve previously unknown results. IAM therefore introduces directed strategies crafted to realize optimum IP asset value for a company. The range of IAM strategies is wide and varied.

6.2.1.2 Plans & Strategies

Strategizing is a key element of IAM practice. In the words of one author, “rational actors plan...[Plans] are an inescapable part of social and economic life.”⁹⁸² Planning is crucial in the IP realm where uncertainty must be managed on an ongoing basis, as IP assets “offer individual traders the possibility of developing preventive strategies to protect their interests within markets.”⁹⁸³ Such protection can be achieved through the application of IP assets as bargaining chips to induce other traders to undertake actions they would otherwise decline to pursue.⁹⁸⁴ The creation of truly effective protection can mean more than merely utilizing IP assets as a shield to

⁹⁸⁰ Marc Sandy Block, "Working where IP, technical standards and competition meet" *Intellectual Asset Management Magazine* 31 (2008) 18 at 18.

⁹⁸¹ Margaret Llewelyn, "Schrodinger's Cat: An Observation on Modern Patent Law" in Peter Drahos ed., *Death of Patents* (London: Lawtext Publishing Limited and Queen Mary Intellectual Property Research Institute, 2005) 11 at 57.

⁹⁸² Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 128.

⁹⁸³ *Ibid.* at 135.

⁹⁸⁴ *Ibid.*

block certain competitor actions, or even using it as a sword. Corporations that practice IAM recognize that a myriad of strategies of IP asset contractual use are possible.

6.2.1.3 Constant Evolution & Flexibility

A complimentary element of IAM is that its strategies are constantly evolving and are therefore flexible. This fosters an environment wherein better solutions for achieving goals and deriving value from IP assets can be sought and applied. The ultimate goal of IAM is not necessarily to produce a perfect strategy, but rather one that addresses a company's goals at a point in time.⁹⁸⁵ In this manner, IAM facilitates strategies that are responsive to the constantly changing needs of companies and consumers by being capable of evolving to address those needs.⁹⁸⁶ For example, consumers may seek a lower price for a basic product (e.g. a cell phone) during a recession, whereas they are willing to pay more for a product with greater substance (e.g. a cell phone with more applications) during non-recessionary times. The innovation focus of a company and its chosen contractual uses for its IP assets may be altered to reflect customer needs and thereby optimize IP asset value generation for the company.

6.2.1.4 Recognizing IP Asset Relationships & Synergies

IAM may involve linking IP assets because, due to fluctuating value of IP assets, linking assets may derive a greater value therefrom over a longer period of time. For example, a patent may represent significant value when society needs a particular product that the patent protects – e.g., a particular pharmaceutical drug during a flu pandemic. However, the patent may be of less value when the pandemic is over and the product is no longer in demand. Yet, after the pandemic the trade-mark of the company may be of greater value than prior to the pandemic. Moreover, the trade-mark may represent greater value than the drug patent because the mark may be used to

⁹⁸⁵ Block, "Working where IP, technical standards and competition meet", *supra* note 980 at 18.

⁹⁸⁶ *Ibid.*

promote other products produced by the company. Thus, a company could promote a drug for allergies under the same trade-mark brand name as the pharmaceutical earlier sold to persons affected by the flu. If the flu medicine worked, a consumer may be led to believe the allergy medication will be just as effective as a consequence of both products being sold under the same brand name. In this manner the linking of IP assets allows a company to capitalize upon goodwill and reputation generated by one IP asset to derive value from other IP assets. The allegiance to a brand can ultimately sell several products due to links created between IP assets.

Linking may take other forms as well. IP assets may be linked simultaneously, such as a patented gaming console and a copyright protected electronic game playable on the console. The products protected by these IP assets may be sold together as a promotion. Additionally, another IP asset, such as a trade-mark representing a brand name, may be linked to both the console and the game. Linking may promote existing interrelated characteristics of IP assets, or may be initiated to create new relationships between IP assets. There is a wide variety of linking possibilities.

6.2.1.5 Non Firm-Bounded Strategies

Furthermore, IAM strategies can look beyond the boundaries of a firm to explore value-increasing tactics.⁹⁸⁷ After all, “multiple, overlapping property rights often lie behind economic markets. Especially where rights are held by different firms, this entails some coordination among rightsholders before a product can be sold on a market.”⁹⁸⁸ As inter-company co-operation increases and the web of IP assets grows more complex, IAM’s integration of inter-

⁹⁸⁷ Laura Gaze, "Capitalising on your intellectual assets through in and out licensing" Ibid. 7 at 7.

⁹⁸⁸ Merges, "Intellectual Property Rights and New Institutional Economics", *supra* note 4 at 1859.

firm activities within its strategies is a significant IP practice development. Co-operation becomes a useful tool.⁹⁸⁹

Through the use of the above-referenced elements persons involved in IAM strategizing can create new IAM strategies as shifts in IP asset value or corporate goals occur. Thus, the flexibility of IAM strategies offers a company the potential to continuously apply strategies that reflect current business considerations. This increases the effectiveness of IAM to realize optimum value from IP assets over time and achieve company goals. Stagnant business strategies may not experience the same level of success of maximizing IP asset value.

The strategies may express a variety of methodologies. Four of these are presented below. These represent the traditional, formative methodologies of IAM.

6.2.2 Four Primary IAM Methodologies

To date there is no static definition of IAM. However, in very basic terms IAM involves two activities: (i) the recognition of core and non-core IP assets and an evaluation of which are capable of generating value; and (ii) the determination of how to achieve such value.⁹⁹⁰ All IP assets owned by a company, or which the company is capable of producing, are considered possible tools for IAM strategies.⁹⁹¹

The nuts and bolts of IAM strategies will vary in accordance with the goals of particular companies. Each form of IAM differs in its motivation. This shapes the steps required by an IAM strategy as well as the level of external participation. For example, IAM can involve

⁹⁸⁹ Ibid. at 1862. Merges points out that, “the focus on inter-firm input transactions also fits well with contemporary theorizing about property rights. We have begun to see in other settings that sensitivity to the life of a property right after it is initially granted – the pattern of transaction in which it is exchanged, and the institutions that may grow up to facilitate this exchange – reveal much about the optimal nature of the right.”

⁹⁹⁰ Shelley Irvine & Brian Napper, "Managing Intellectual Assets for Shareholder Value" in Bob H. Sotiriadis & Francois Painchaud ed., *Complex Legal Transaction II: Trade Secrets & Technology Transfers* (Montreal: McGill University - Faculty of Law, 2004) 226 at 228.

⁹⁹¹ Corporate relationships with external parties generally fall into the category of intellectual capital. See Sean Irvine, "Strategy and Intellectual Capital in LES" in Bob H. Sotiriadis & Francois Painchaud ed., *Complex Legal Transaction II: Trade Secrets & Technology Transfers* (Montreal: McGill University - Faculty of Law, 2004) 226 at 360.

cooperation with other companies to share assets and information, but it can also remain internally focused.⁹⁹² This section will outline four of the originating IAM methodologies that reflect the base from which future strategies evolved. The original IAM strategies include: a General Methodology; Competitive Intelligence; an Intellectual Capital focus; and Knowledge Management.

6.2.2.1 General IAM Methodology

The first example is typical of all IAM methodologies and illustrates the basic steps included in any IAM initiative. First, a mining process seeks to identify the intangible assets held by a company. Not only well-known IP assets are identified, but also unused or underutilized assets. Unused or underutilized assets can be important because they may have the potential to either contribute to the development of new products and services, or generate additional IP assets. Mining therefore involves taking a close look at the workings and holdings of a company to recognize all of the intangible assets held by the company, as well as the company's ability to produce other intangible assets. The resulting list is a complete inventory of a company's IP assets.⁹⁹³

The second step is to make a record of the inventory results. The preferred means of recording the inventory is by way of an electronic database as assets can be easily categorized and ranked in this format.⁹⁹⁴ The records may be ranked to indicate whether assets are crucial to a company or of limited import.

⁹⁹² See: Sullivan, *Value-Driven Intellectual Capital: How to convert Intangible Corporate Assets Into Market Value*, *supra* note 972 at 3. IAM involving external cooperation is termed a "wider asset view" while internally focused IAM is called a "fortress approach" (at 130).

⁹⁹³ Irvine & Napper, "Managing Intellectual Assets for Shareholder Value", *supra* note 990 at 229.

⁹⁹⁴ A number of products are at present being marketed for the express purpose of IAM. See: John Janes & Brian Napper, "Safeguarding Intellectual Assets" *Optimize* 22 (2004) 1, online:<<http://www.optimize.com/article/showArticle.jhtml?articleID=1770104>>; and Jeff Conklin, "Designing Organizational Memory: Preserving Intellectual Assets in a Knowledge Economy" *CogNexus Institute* (2001), online:<www.cognexus.org/dom.pdf> at 1.

An IP asset that is critical to a company is one that the company relies upon either to function or to derive value. For example, a patent over a drug formulation may be critical to a pharmaceutical company that produces that drug as the patent permits the company to lawfully manufacture the drug. If the pharmaceutical company does not hold the patent for the drug it will require authorization from the patent holder to manufacture the drug. (Authorization may be provided by a patent holder to the company in the form of a license, but this will likely extend weaker manufacturing rights than are attained by holding a patent outright.)

An IP asset of limited importance is one which the company holds, but does not use or derive any value from. For example, a patent for a substance that was discovered in the course of drug formulation research, such as a sticking substance, may be held by a pharmaceutical company. The substance is inventive and due to its market-potential the company may have decided it merits the expense and effort of patenting. However, if the company does not manufacture the product or license the patent right to another company, the patent may be of limited import to the company.

Ranking IP assets facilitates a review of all assets and the role of each within the company. This process can alert a company to the fact that even assets that are not of significant worth to the company can be used to derive corporate value. For example, divesting itself of IP assets by selling these assets to other companies that value them, is a means for a company to raise economic value from a right that otherwise generates no value. In this manner the pharmaceutical company holding the patent to the sticky substance may assign or license its patent asset to an adhesive company (e.g., 3M) for whom the patent asset represents great value.

To this end due diligence and negotiation teams are essential aspects of IAM. They identify potential targets for licensing agreements, joint ventures, or strategic alliances.⁹⁹⁵ The IAM team further detects occasions to link assets, as discussed above, and in particular means of causing assets of low value to increase in worth when teamed or linked with other assets. An analogy is a fruit basket. The value of an apple as an individual item may differ from the value of the apple as part of a fruit basket. Thus, reviewing the inventory for interconnections between IP assets is crucial.

The final step of any IAM methodology is to regularly repeat the IAM steps. An annual, biannual or more regular review is diarized. This ensures that monitoring of corporate IP assets occurs on an ongoing basis. Moreover, continuous review allows IP assets to be used in a manner that causes value to be extracted therefrom expeditiously.

6.2.2.2 Competitive Intelligence IAM

A second IAM methodology that is frequently adopted by the private sector is competitive intelligence.⁹⁹⁶ At its core the objective of competitive intelligence IAM is to ensure that a company outperforms its competitors. Proactive tactics arising from the augmentation of informed decision-making are the foundation of this method. The strategy focuses on business intelligence and involves the implementation of data gathering, study and analysis of the operating environment of a company.⁹⁹⁷ Its intent is to promote the development of systematic

⁹⁹⁵ See: Ruud Peters, "Taking IP into the boardroom" *Intellectual Asset Management* 39 (January/February 2010) at 19. Companies recognize that a variety of potential contractual uses of IP assets (e.g., cross-licensing, licensing out, etc.). See also: UNIDO, *United Nations Manual on Technology Transfer Negotiation*, Cat. No. UNIDO-ID/SER. 0/18 UNIDO-95.2 (Vienna: UNIDO, 1996). The United Nations has commented that negotiations involving intellectual assets should consider, "fundamental differences in each party's rights and liabilities" and noted that these attributes can affect the negotiation itself.

⁹⁹⁶ Daryl-Lynn Calson, "Law I.Q.: More Firms are Using Competitive Intelligence to Grow Their Business" *National* 18:5 (July-August 2009) 8. U.S. and Canadian law firms are applying competitive intelligence strategies to derive value from the firm by building its business through its the lawyers, staff and targeting of new recruits.

⁹⁹⁷ Ron Simmer, "I.P. Information as a Research Tool for Competitive Intelligence in LES" in Bob H. Sotiriadis & Francois Painchaud ed., *Complex Legal Transaction II: Trade Secrets & Technology Transfers* (Montreal: McGill University - Faculty of Law, 2004) at 269.

processes which can transform information into knowledge and support effective corporate decision-making.⁹⁹⁸ Competitive intelligence IAM demonstrates the adage that “knowledge is power”.

The elements of competitive intelligence are represented by the “Six R’s”, namely Right information; at the Right time; in the Right place; delivered in the Right way; by the Right contact; to the Right person.⁹⁹⁹ To ensure that each R is met, it is necessary to gather a wide range of information – press releases, financial reports, corporate speeches, journal articles, government statistics, etc.¹⁰⁰⁰ Analysis of the collected data involves a consideration of means of utilizing all available assets to achieve an edge, or advantage, over competitors.

Two components distinguish competitive intelligence from the General IAM methodology. First, the scope of the information gathered for competitive intelligence is broader than that which is strictly required for the General IAM methodology. Second, the analysis is undertaken with a distinct objective.

6.2.2.3 Intellectual Capital IAM

A different focus drives Intellectual Capital IAM. This strategy takes account of a wide variety of types of value-generation capable corporate knowledge. For example, corporate knowledge defined as Intellectual Capital includes: knowledge and know-how of individuals (human capital); customer relationships (customer capital); relationships with stakeholders (stakeholder capital); organizational environment, values and vision (cultural capital); essence or positive spirit of the organization (spiritual capital); the set-up of employees to best take

⁹⁹⁸ Ibid.

⁹⁹⁹ Ibid.

¹⁰⁰⁰ Ibid. at 270.

advantage of market conditions (organizational capital); etc.¹⁰⁰¹ These knowledge sources raise capital within and for the company.

Intellectual capital IAM utilizes a balanced scoreboard approach to manage identified IP assets.¹⁰⁰² The balanced scoreboard aids in understanding the forms of intellectual capital within a company's control. Once assets are understood it is possible to apply them to the daily operations of a company.¹⁰⁰³ Ultimately intellectual capital IAM aspires to achieve optimum use of all IP assets.

Generally, the analysis of intellectual capital assets considers four distinct views of the corporation:¹⁰⁰⁴ 1) To succeed financially how must the corporation appear to its shareholders?; 2) To achieve the corporate vision how must the corporation appear to its customers?; 3) To achieve the corporate vision how must the corporation sustain its ability to change and improve to facilitate learning and growth?; 4) To satisfy its shareholders and customers what business must the corporation excel at? The overall result of the intellectual capital IAM strategy is the foundation of a clear set of objectives, measurable targets and corporate initiatives.

As an example, the value of cultural capital is reflected in the unique corporate culture of IDEO. This company was formed in 1991 and functions as a design and innovation consultant firm.¹⁰⁰⁵ IDEO's aim is to design products, services, environments and digital experiences for its clients, who include major companies, such as Pepsi Cola, Apple and Microsoft. Over time the

¹⁰⁰¹ Sean Irvine, "Strategy and Intellectual Capital in LES", *supra* note 991 at 360.

¹⁰⁰² Russell Radford & Roger Bean, *The Business of Innovation: Managing the Corporate Imagination for Maximum Results* (New York: AMACOM, 2002) at 206-07.

¹⁰⁰³ Sean Irvine, "Strategy and Intellectual Capital in LES", *supra* note 991 at 359.

¹⁰⁰⁴ *Ibid.*

¹⁰⁰⁵ See: <http://www.ideo.com/work/re.asp?x=12304>. IDEO's headquarters is in Palo Alto, California and it has additional offices in locations such as San Francisco, Chicago, New York, Boston, London, Munich and Shanghai.

company has also become involved in management consulting.¹⁰⁰⁶ It is this aspect of the company that highlights its IAM strategizing capabilities.

IDEO services its clients through the generation of ideas. The company accepts product innovation projects for a wide variety of clients in many industries and market sectors.¹⁰⁰⁷ IDEO's approximately 500 employees are divided into sectors including: human factors; mechanical, electrical and software engineering; industrial design; and interaction.¹⁰⁰⁸ Employees from each of these sectors work together on projects, such as computer, medical, furniture, toy and automotive innovations.¹⁰⁰⁹ These products are generally based on previously known products and given an innovative twist.

To promote idea generation amongst its employees the company has a policy of allowing employees to design their own work areas.¹⁰¹⁰ This freedom within the work-space is part of the corporate culture of IDEO. The theory is that allowing employees to be free to innovate in all aspects of their company experience stimulates greater innovation. Thus, freedom to innovate generates value for the company. IDEO's success is evidenced by both the awards it has won¹⁰¹¹ and the fact that several other companies have adopted the culture of IDEO as a means of improving employee innovative output. Due to this pursuit by other companies IDEO has been able to create value through sharing its cultural intellectual capital with other companies.

¹⁰⁰⁶ Bruce Nussbaum, "The Power of Design" *Business Week* (2004).

¹⁰⁰⁷ See: <http://www.ideo.com/work/re.asp?x=12304>.

¹⁰⁰⁸ See: <http://www.ideo.com/work/re.asp?x=12304>.

¹⁰⁰⁹ See: <http://www.ideo.com/work/re.asp?x=12304>. Some examples of projects IDEO has worked on are Apple's first mouse, Microsoft's second mouse, the Palm V PDA, and Steelcase's Leap chair. IDEO has also generated: a new shopping cart configuration; an upright toothpaste tube; and a clean whisk.

¹⁰¹⁰ Ryan Jacoby & Diego Rodriguez, "Innovation, Growth and Getting to Where You Want to Go" *Design Management Review* 18:1 (2007) 9.

¹⁰¹¹ For example, IDEO won eight of Business Week Magazine's 2009 IDEA awards (See: <http://www.idsa.org/IDEA2009/gallery/>). Fast Company ranked IDEO as one of the Top 10 Most Innovative Companies in 2009, the German Design Council awarded IDEO a gold and silver award in 2009. A full list of the awards IDEO has won are listed on IDEO's website at <http://www.ideo.com/news/awards/>.

If IDEO was to adopt an Intellectual Capital IAM strategy it may offer the following responses to the four questions of this methodology:

Question 1 – IDEO must represent itself to its shareholders as a company that generates profits based upon the products it creates;

Question 2 – IDEO must establish itself as a company that creates innovative products through ideas generated amongst IDEO employees. This facilitates brand reliance upon IDEO products as superior and more innovative than the products of other companies. Brand reliance inspires customer loyalty and goodwill, both of which generate long-term value for the company;

Question 3 – IDEO must continue to be open to new ideas and to generate innovation. A means of doing this is to embrace new concepts and the promotion of learning amongst its employees. One intellectual capital initiative applied by IDEO to facilitate these goals is employee listening training. Employees are taught how to hear ideas of other employees in a non-judgmental manner, so that ideas will not be rejected out of hand, but be allowed to flourish¹⁰¹²; and

Question 4 – IDEO must excel at being ahead of the innovative curve. It must remain current on the state of technology and be able to envision the next steps of technology.

6.2.2.4 Knowledge Management IAM

Knowledge management is the fourth example of an IAM strategy.¹⁰¹³ The goal of this methodology is to facilitate improved extraction of value from the knowledge of persons inside and outside an organization. This IAM form moves beyond the boundaries of IP assets and is more complex than it appears on its face. Knowledge is often non-codified (e.g. existing solely in the minds of employees or other persons). Knowledge mining must tap into a source of intangible assets that is often difficult to obtain, and that can be lost quickly and without warning. Knowledge management involves four types of mining:¹⁰¹⁴ knowledge creation,¹⁰¹⁵

¹⁰¹² See: <http://www.ideo.com/work/re.asp?x=12304>.

¹⁰¹³ Jay L. Chatzkel, *Knowledge Capital* (Oxford: Oxford University Press, 2003) at 4.

¹⁰¹⁴ Irvine, "Strategy and Intellectual Capital in LES", *supra* note 991 at 355-56.

¹⁰¹⁵ A strategy to promote the creation of corporate knowledge is implemented. Examples of effective means include stock option programs, incentives for innovation and other employee benefit programs.

knowledge dissemination;¹⁰¹⁶ knowledge integration;¹⁰¹⁷ and knowledge control¹⁰¹⁸. Collaboratively the information gleaned from these may be used to promote and protect corporate knowledge, as well as all corporate IP assets related thereto, or derived therefrom.¹⁰¹⁹

Promotion and protection of corporate knowledge through Knowledge Management is exemplified by the implementation of electronic precedent systems within law firms. Precedent systems store precedent legal documents created in the course of past transactions. A precedent document may be used as the basis from which a similar document is created in the future. It creates value for the firm because it offers the benefit of allowing a lawyer to create a document: (i) faster; and (ii) to encompass the knowledge of another lawyer who has already undertaken a similar task. If the firm charges a set fee for the creation of the document, then creating the second document faster means that more profit may be gained by the firm (e.g., the charge for the document may exceed the billable time expended by the lawyer to create the second document). Moreover, corporate knowledge ensures the creation of a quality document, because the lawyer creating the second document has more time to work on the details of the document than afforded to the lawyer who drafted the document from scratch. Furthermore, protection of the corporate knowledge is achieved by limiting access to the precedent system to lawyers within a specific firm.

¹⁰¹⁶ Knowledge that exists solely in someone's head is not as effective as knowledge that is shared with others. Knowledge dissemination is the delivery of knowledge to those who require it. Timeliness is a key aspect of dissemination in order for information to be available when it is needed.

¹⁰¹⁷ Knowledge is integrated with product and services. Integration between thinking and a company's actual products can trigger new perceptions about how things work and what it is possible to achieve in the future. Innovation is the result.

¹⁰¹⁸ Knowledge ownership and control are linked. As knowledge is the focus of this form of IAM it is important to ascertain and confirm it is clearly the property of the organization. Steps relevant to the fourth form of mining can occur prior to the knowledge creation. For example, employment agreements incorporating clauses either granting or assigning knowledge produced by the employee to the corporation assure ownership.

¹⁰¹⁹ Albrecht, *The Power of Minds at Work: Organizational Intelligence in Action*, *supra* note 975 at 178. Albrecht is wary of the adoption of a database approach in conjunction with knowledge management. In his opinion, "it tends to view human beings as merely elements of the information machinery in the organization, and assumes they can be programmed and instructed just like elements of data."

Moreover, corporate knowledge can be reviewed and enhanced once collected. An example of a review of corporate knowledge to increase the value of the knowledge is the decision to include lawyer comments in the precedent documents. Initially precedent systems solely collected copies of documents. Modifications to the systems implemented the collection of commentary detailing knowledge of the lawyer gleaned during the drafting and research process relating to a particular document. Such comments permit the inclusion of knowledge not reflected in the text of the document itself. This knowledge can be relied upon by lawyers using that precedent document in the future.

A Knowledge Management IAM strategy recognizes the value of knowledge assets. Additionally, to enhance the value derived from such an asset, the IAM strategy will encourage the company to consider ways of developing the asset further. In this manner the knowledge of the employees is promoted, it is disseminated amongst the firm, and it is protected from outsiders, so that the most value possible may be derived from the asset.

6.2.3 Benefits of IAM for IP Contracting

IAM may have several potential benefits. These benefits may be derived from the flexible and immediate nature of IAM,¹⁰²⁰ and may influence industry members to work collectively to create collaborative IAM strategies to broaden the scope of the benefits of IAM.¹⁰²¹ IAM further

¹⁰²⁰ For example, IAM has benefits over legislative reform in particular and can provide an option to waiting for legislative reform to provide new rules for IP contracting. Legislative reform is a long process that can take years to complete. IAM offers immediate results. For these reasons many companies recognize the benefit of directing their energies to developing IAM strategies rather than lobbying for legislative reform. See: Karen L. Durell, "IAM & Stakeholder Rights: Can We Tame the 'Wild West'?" in B.M. Knoppers & E.R. Gold ed., *Biotechnology IP & Ethics* (Toronto: LexisNexis Canada, 2009).

¹⁰²¹ ICM Gathering is an example of such a collaboration that involves seven companies (Dow, DuPont, Hewlett-Packard, Huges Space and Communications, Hoffman LaRoche, Skandia, and the Law & Economics Consulting Group) who meet to pool their experience of intellectual capital management strategies. See: Harrison & Sullivan Sr., *Einstein in the Boardroom: Moving Beyond Intellectual Capital to I-Stuff*, *supra* note 99.

exemplifies the fact that the common perception that IP assets represent a predetermined IP contractual use is simply untrue.¹⁰²²

Looking to patent rights as an example, we see that the law extends an exclusive right over a claimed invention to the patent-holder. Yet, the person or entity in control of the right is not required to apply it in an exclusive manner. Patents in particular are described as a “negative right”.¹⁰²³ This label connotes the fact that a patent holder has the right to prevent others from selling, manufacturing, importing or making the patented invention. However, there is no law that requires a patent holder to prevent activities that constitute infringement. In fact, patent holders are at liberty to make a patented invention freely available to the public and thereby abdicate their rights. The level of protective activity undertaken to defend a patent right is entirely at the discretion of the rightsholder. This flexibility is exploited by IAM to produce results that generate corporate value.

IP assets therefore may be likened to a hammer. When it is swung towards a surface with a measured degree of force this tool drives a nail into a wall without damaging the wall’s surface. Whereas, when the same hammer is driven towards a wall with a sizeable degree of force it smashes a hole in the wall. Handling a tool with reckless force can create damage rather than creating value. The lesson is that there is no point in swinging a hammer as hard as possible in all situations. The same is true for IP assets. Wielding IP assets with a heavy hand, so as to protect the full extent of a granted exclusionary right, is not the best strategy in every situation. Such a

¹⁰²² The basis of every IAM methodology is a belief that IP assets can act as tools or agents to develop and further business goals. Each strategy involves an unique identification and evaluation of IP assets. The perceptions and options comprising each form of IAM are tailored to particular contractual uses of IP assets. This is proof that although IP assets have specific characteristics – e.g. patents are different from trade-marks, but all patents share certain characteristics as do all trade-marks – assets can be applied in a variety of ways. For example, because the knowledge aspects of a patent are paramount for a company utilizing knowledge management IAM, this will lead to a different use of the patent asset than is likely to be made by a company applying competitive intelligence IAM.

¹⁰²³ See: Sean B. Seymore, "My Patent, Your Patent, or Our Patent? Inventorship Disputes Within Academic Research Groups" (2005) 16 Alb. L.J. Sci. & Tech. 125 at 134; and Michael A. Carrier, "Cabining Intellectual Property Through a Property Paradigm" (2004) 54 Duke L.J. 1 at 44-45 n.181.

use may actually detract IP asset value rather than increase it. A considered and measured application of IP assets is a critical factor of IAM strategies.

Traditionally in the course of IP contracting companies excuse their exclusivity-centric treatment of IP assets by arguing that it fulfils their responsibility to their shareholders. Corporations are obliged to act so as to benefit the company, which means increasing the value of the company for shareholder profit.¹⁰²⁴ This duty is equated with getting the highest price for a product, as well as carving-out and protecting a market niche. IAM offers new strategies for deriving value from IP assets that move beyond traditional contracting approaches and the limitations these impose on contractual uses of IP assets. Particular benefits of IAM include a capability to: incorporate stakeholders; produce licensing models; and create additional intangible assets. Notably, each of these benefits produces an effect relevant to IP contract strain.

6.2.3.1 IAM & Incorporating Stakeholders

Recent progress in IAM strategies addresses the imbalance between IP asset holders and users by altering the corporate focus from “shareholders” to “stakeholders”. Whereas “shareholders” includes solely those persons owning shares in a company, and thus having a purely financial interest in the business, “stakeholders” encompasses all people who have an interest in the business (financial and otherwise). For example, in the software realm, stakeholders are identified as, “developers, development managers, legal counsel, auditors, and product and program managers.”¹⁰²⁵ IAM may even move beyond the boundaries of firms to involve and consider the interests of entire industry sectors, policy makers and government

¹⁰²⁴ See: Bakan, *The Corporation: The Pathological Pursuit of Profit and Power*, *supra* note 90 at 34-35; and *Canada Business Corporations Act*, *supra* note 113 ss. 122(1)(a).

¹⁰²⁵ Karen Faulds Copenhaver, "Open Source Playbook for Software Developers" (2005) 846 PLI/Pat 207 at 245.

participants.¹⁰²⁶ This new vision of the group of persons whose benefit a company influences shapes IAM strategies and the contractual uses of IP assets these incorporate.

In the sphere of innovation the recognition of society/users' rights and the acceptance of the public as stakeholders has great consequence. For example, a significant portion of research is developed through the use of public resources, such as government financial investment or university scientists.¹⁰²⁷ Thus, the public are arguably stakeholders in innovation and therefore merit consideration in IAM. This is true even if commercialization of the IP protected product is eventually undertaken by a private company. Moreover, as many scientific innovations offer significant public health benefits, the recognition of a society/users' right and the necessity for balance can affect the determination of access issues, such as price and availability.¹⁰²⁸

The importance of the role of the public in balancing IP assets is growing in recognition and this is expressed in some cases in the terminology of stakeholders. For example, the U.S. Federal Government became involved in the patent infringement suit that NTP Inc. leveled at Research In Motion, and spoke on the behalf of the users of the BlackBerry technology.¹⁰²⁹ Moreover, national public interest in the patents of Nortel Network Corp. was at issue when the

¹⁰²⁶ E. Richard Gold & Karen L. Durell, "Looking Beyond the Firm: Intellectual Asset Management and Biotechnology" in David Castle ed., *The Role of Intellectual Property Rights in Biotechnology Innovation* (Chicago: Wiley & Sons, 2008).

¹⁰²⁷ Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94 at 60.

¹⁰²⁸ *Ibid.*

¹⁰²⁹ An increase of interest in the users' right in IP is evidenced in recent case law as well as the U.S. government intervenor argument in the *Research In Motion v. NTP Inc.* case, whereby the government stated that the BlackBerry technology should not be shut-down, despite the outcome of the infringement suit based on IP principles, due to the importance of this innovation to the public and its wide-spread use. It is possible that the effect of users' rights to accentuate the trait of balance in an IP asset may differ between types of IP rights as well as by country. For example, civil and common law patent rights have more similarities than do *droit d'auteur* of the civil law system and copyright of common law. See: *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14 para. 28; Kellner, "For RIM: Careful What You Ask For", *supra* note 21; Gross, "BlackBerry Gets a Boost", *supra* note 21; Noguchi, "BlackBerry Users Remain in the Dark", *supra* note 21; and Restive, "U.S. wades into RIM fight", *supra* note 21.

company declared bankruptcy and a foreign company, Ericsson AB of Sweden, subsequently bid to purchase Nortel Network Corp.'s assets.¹⁰³⁰

Technology stakeholders can be adversely affected by private sector IP transactions. The sentiment that users should be contemplated and protected in IP transactions and any related litigation is rising.¹⁰³¹ In the context of IP contracts, contemplation of stakeholders can lead to terms that support IP distinguishing traits generally, and in particular the trait of balance. Yet, despite this growing awareness, corporate IP asset holders predominantly draft contracts to effect contractual uses of their assets in a manner that supports the attainment of market advantage.

Thus, IAM is poised to provide an effective forum to resolve the present tug-of-war between public and private interests. It may also address the clash of financial gain and ethics. Additionally, it is well placed to encompass considerations of IP asset contractual uses through the recognition of stakeholder interests in IP contracts. Notably, integrating stakeholder interest with IAM has a null effect for IP contract strain because the mere consideration of stakeholder interests does not necessitate the support of IP distinguishing traits of an IP asset in an IP contract. It is possible that contracts that aim to strike a balance between IP asset holders and users may incorporate diminished strain. This may occur because such contracts may be less likely to omit the IP distinguishing trait of balance, yet the creation of IP contracts that support the IP distinguishing traits is not a conscious goal of IAM strategies.

¹⁰³⁰ See: Chris et al. Sorensen, "Courts OK Ericsson Bid: Ottawa could halt sale to Swedish company if purchase not of 'net benefit' to Canada" *Toronto Star* (29 July 2009) B1; John Ivison, "Nortel a Test for Tory Policy" *National Post* (29 July 2009) A1; David Olive, "Top 10 Reasons to Block Nortel-Ericsson Deal" *Toronto Star* (28 July 2009) B7; Jamie Sturgeon & Matt Hartley, "Foreign Control of Nortel Wireless R&D Raises Worries" *National Post* (28 July 2009) Financial Post; Wojtek Dabrowski, "Nortel and RIM Held Discussions Over Next-Gen Wireless Patents" *National Post* (28 July 2009) Financial Post; and Shawn McCarthy et al., "Keep Nortel Assets in Canada, Ontario Urges PM" *The Globe and Mail* (28 July 2009) B1.

¹⁰³¹ See: Kellner, "For RIM: Careful What You Ask For", *supra* note 21; Gross, "BlackBerry Gets a Boost", *supra* note 21; Noguchi, "BlackBerry Users Remain in the Dark", *supra* note 21; and Restive, "U.S. wades into RIM fight", *supra* note 21.

6.2.3.2 Licensing Models

Licensing agreements are a common IAM tool. It is possible to create licenses that support a variety of commercial relationships. It is also possible to set the boundaries of the contractual use of an IP asset through the inclusion of certain terms in a license agreement. Basically there are two types of licenses applied to IP assets, exclusive and non-exclusive. Exclusive licenses transfer specific rights in an IP asset to a single party, which may represent all of the rights of an IP asset, or less than all of the rights of an IP asset.¹⁰³² Thus, a company has more options than merely transferring the entirety of the rights of an IP asset into the hands of a sole party, which means creativity can play a role in designing the licensee's contractual use of the IP asset.

A licensor can also ensure that several companies end-up having to cooperate as a consequence of the license terms. Evidence shows that companies can attain higher profits when cooperation occurs within an industry than when a single firm controls the marketplace.¹⁰³³ Cooperation amongst companies also leads to increased innovation. Not only companies need to learn this lesson, but the public-sector as well. There is evidence that non-profit organizations are twice as likely to exclusively license their innovations.¹⁰³⁴ One means of cooperation is achieved through cross-licensing, whereby patentees holding rights over complementary inventions license rights to each other for mutual benefit. IAM is an ideal environment for industry cooperation, and licensing offers a vehicle to achieve this end. A first step towards inducing sectors to adopt this strategy within IAM is the introduction of model licensing agreements. Models may promote cooperation particularly through cross-licensing initiatives.

¹⁰³² See: *Patent Act*, *supra* note 141 ss. 50(2); and *Copyright Act*, *supra* note 114 s. 2.7.

¹⁰³³ Edward Weck, "Note: Exclusive Licensing of DNA Diagnostics: Is There a Negative Effect on Quantity and Quality of Healthcare Delivery that Compels NIH Rulemaking?" (2005) 31 Wm. Mitchell L. Rev. 1057 at 1071.

¹⁰³⁴ *Ibid.* at 1070.

Moreover, it is possible for an IAM license to be one that is free of IP contract strain due to the fact that IAM draws on a wider consideration of the possible role for an IP asset than is applied in the course of traditional IP contract drafting. A review of the ways that an IP asset may be used to generate value for a company necessarily involves a review of the asset during the mining step. Furthermore, the potential for an IP asset to derive value that is not economic value is explored in the course of IAM. For example, IAM recognizes that an IP asset can be used to increase the knowledge of employees and provide information sources, such as copyrighted in-house manuals. This means that IP distinguishing traits of IP assets other than control, such as balance and flexibility/evolution, may be inadvertently considered in an IAM initiative.

Thus, the outcome may be an IP contract that supports IP distinguishing traits of IP assets as well as contract legal principles. For example, a shoe company that not only sells shoes, but gives away a pair of shoes to a child in need for every pair of shoes it sells, such as TOMS shoe company, may apply such an IAM strategy.¹⁰³⁵ Distributor contracts of TOMS shoe company may include terms that accomplish a contractual use of the industrial design for the shoe that prohibits the distributor from copying the shoe. Such terms support the control distinguishing trait of the IP asset. The contract terms may further recognize that shoes will be given away to other parties and therefore recognizes a balance between society and the IP asset owner. Additionally, the distributor may not be granted an exclusive right to distribute shoes in an area, as the company may want to maintain an ability to provide shoes free of charge to needy children in all areas of the world. It should also be noted that a company with a mandate to provide shoes

¹⁰³⁵ Melissa Biggs Bradley, "If the Shoe Fits: Blake Mycoskie " *Indagare* (July 1, 2009), online:<<http://www.indagare.com/passions/5/departments/171/8059>>.

to the needy may be less inclined to enforce its rights in an IP asset against persons who violate those rights, if the person who commits the offence does so due to a non-commercial need.

In this case, stretching the IP distinguishing trait of control, or omitting the trait of balance through contractual terms may be deemed unlikely to serve the company's aims. A goal of the company may be to sell its IP protected product, namely shoes, but also to simultaneously use the shoes to achieve philanthropic ends, which will ultimately generate goodwill for the company. Therefore, the IP asset may be used in a contract to generate some value through sale as well as goodwill value by being given away.

As mentioned above, licensing models may be created to reflect contractual uses of IAM strategies. These models may incorporate terms to facilitate cooperation of assets/companies, consideration of shareholder/society interests, and goodwill. This application of IAM can have critical results in the promotion of corporate responsibility and reputation.¹⁰³⁶ Moreover, such models may even address IP contract strain without necessarily expressly considering IP distinguishing traits. There are no specific guidelines or requirements for IAM beyond supporting the goals of a company and utilizing IP assets to meet this goal. Thus, even though IAM does not deliberately invoke considerations of contract legal principles, IP distinguishing traits or IP theories, should an IP contract model that is free of IP contract strain be drafted such an outcome may be employed by all future IAM contracts drafted based upon the model.

Of course, the contract model may be drafted to cause this effect inadvertently, so subsequent contracts or models may not also be free of IP contract strain. Yet, it is still a

¹⁰³⁶ Todd Miller & Nir Kossovsky, "Reputation is the new IP" *Intellectual Asset Management* 37 (September/October 2009) at 56. According to a 2009 Harris Interactive Poll, corporate reputation in the U.S. private sector hit at a 10-year low. The authors comment that 88% of the participants in the survey rated corporate reputation as "not good" or "terrible". They also found that IP assets can "create conditions under which corporate reputation can be developed in ways that will significantly enhance shareholder value." The application of IAM licensing models created to specifically address the interests of society and promote goodwill may aid in fighting any decrease in corporate reputation.

possibility. (The issue of inadvertently drafting IP contracts that are unaffected by IP contract strain is addressed in more detail below.)

6.2.3.3 The Creation of Additional Intangible Assets

As it is generally acknowledged in the present market that intangible assets are of particular benefit to corporations, the creation of new intangibles is a constant goal of many companies. In particular, two types of intangibles can be derived from successful IAM strategies: (i) goodwill; and (ii) customer/client relationships. Goodwill is recognized as an intangible asset that represents significant value to companies.¹⁰³⁷ Customer/client relationships are likewise a source of corporate economic value.¹⁰³⁸ These are linked, but distinct concepts. Goodwill is the overall perception of the company in the marketplace, including its activities with other companies, its activities with customers, the quality of its product, etc. Customer/client relationships reflect the interaction between representatives of the company and either customers or clients. Notably, both goodwill and customer/client relationships are recognized as intangible assets by the Financial Accounting Standards Board and are referenced by its generally accepted accounting principles as elements to be included on a company's balance sheet.¹⁰³⁹

IP asset holdings can attract venture capital for a company,¹⁰⁴⁰ but the manner by which the holder wields its rights can garner goodwill or ill-will among consumers and the public.¹⁰⁴¹ For example, a business' reputation can be essential to its success. A dissatisfied public can equal bad customer/client relationships and a diminution of reputation and consequently of goodwill.

¹⁰³⁷ Darian M. Ibrahim, "The Unique Benefits of Treating Personal Goodwill as Property in Corporate Acquisitions" (2005) 30 Del. J. Corp. L. 1 at 8.

¹⁰³⁸ Robert F. Reilly, "Valuation of Goodwill and Other Intangible Assets" (2002) 21:5 ABIJ 30 at 33.

¹⁰³⁹ *Ibid.* at 30.

¹⁰⁴⁰ Betti, "Diagnostic Genetic Technologies Left Stranded on First Base: A Need to Unwind the Protection Afforded Gene Patents", *supra* note 729 at 23.

¹⁰⁴¹ An example of a use of an IP asset so as to garner ill-will is that made by Myriad Genetics of its BRCA 1 and BRCA 2 patents. Myriad utilized these patents so as to prohibit access to testing for the BRCA 1 and BRCA 2 genes through any source other than Myriad's own testing service providers. See: "The Ethics of Patenting DNA, A discussion paper" (July 2002) United Kingdom Nuffield Council on Bioethics, London para. 4.6.

Thus, the choice to strictly control a product, in a manner that is detrimental to the public, can reduce the value of a company's intangibles, or inhibit certain intangibles from being created at all.

The integration of stakeholder interests within IAM can create and increase the value of both goodwill and customer/client relationships for a company. But, as discussed above, merely applying an IAM strategy aimed at creating or promoting stakeholder interest does not promise to create IP contracts free of IP contract strain. The same reasoning is applicable to contracts that generate or promote other intangible assets.

6.2.4 IAM & IP Contract Strain

IP contract strain has variant interrelations with aspects of IAM strategies. Yet, as a whole the strategies appear on their face to provide a means of addressing IP contract strain. This is true in part due to the fact that IAM encourages a wider understanding of the definition of IP assets than is otherwise routinely embraced by the private sector. As has been discussed, this understanding is necessary for the purpose of identifying the possible strategic uses of IP assets, which is critical for the ultimate aim of IAM, namely the attainment of the goal of the company through contractual uses. The understanding of IP assets that IAM necessitates further has the potential to incorporate an acknowledgement of: IP distinguishing traits; the weight that each bears; the relationship between the traits; and the relationship of IP assets and contract legal principles.

Generally IP contracts used to facilitate IAM strategies (in this section "IAM contracts") should be expected to reflect a superior level of understanding of IP distinguishing traits than traditional IP contracts. IAM contract terms may test the role of the IP distinguishing trait of control. In some cases, applying the IP assets to achieve maximum control can defeat the

company's contracting aims. Thus, limits on control must be recognized as well as the IP distinguishing trait of balance.

IAM strategies, such as are exemplified by the strategies of Philips IP&S, may be developed so that the "IP portfolio should be the result of the strategy, not the other way around."¹⁰⁴² This means that the company will seek IP assets that are capable of contractual use to achieve the company's goals. This in turn involves an examination and consequent understanding of IP assets. Such an understanding is critical to the step of determining how to create value from the IP portfolio through: "licensing out; a strong defence of exclusive futures of [company] products; input in joint ventures or start-ups; cross-licensing agreements that guarantee [a company] room to move in an important market; and so on."¹⁰⁴³

At the IAM contractual level, terms may be drafted to license a patent asset to another company. The terms may support the IP distinguishing trait of control by allowing the patent holder to retain ownership of the patent while extending rights of use of this asset to a licensee company. However, an aspect of balance may further be recognized in the terms, whereby the licensee company may gather feedback regarding the software product. While the patent holder has the expertise required to develop the initial patented invention, the licensee company may contribute additional knowledge capable of directing future improvements of the invention. Thus, the contract may include terms that allow for future joint innovation, collaboration, disclosing of information or other means of expressing the trait of balance in the patent asset and the creation of future IP assets, as a result of the cooperation between the contracting parties. As Philips' IAM strategy recognizes, while products were created in the past to serve and be used by

¹⁰⁴² Peters, "Taking IP into the boardroom", *supra* note 995 at 19.

¹⁰⁴³ *Ibid.*

Philips “[n]ow that is no longer the case”.¹⁰⁴⁴ Sharing and collaboration based on IP asset exchange invariably lead to recognition that IP assets are more than simply tools for control. Although the realization may not be expressed as such, this is an acceptance of IP assets as expressing more IP distinguishing traits than merely control.

The analysis of contract legal principles in IAM contracts is simple – IAM relies upon the fact that contracts will be enforced. As such the principles of bindingness and respect for the intent of the parties are key aspects of IAM contracts. In particular the intent of the parties is significant as the contract drafted to apply IAM strategies may involve terms that are beyond private sector IP contract norms.¹⁰⁴⁵ Thus, it is crucial that the intent of the parties be respected in an interpretation of IAM contracts. It is additionally critical that the intent be enforced. This is achieved through the principle of bindingness. Without the contract legal principles IAM strategies would be vulnerable to second-guessing by interpreters which in turn may cause the goal of the company to fail to be achieved.

Yet, although IAM contracts may appear to be more enlightened regarding IP distinguishing traits and contract legal principles than traditional IP contracts, the drafters of such contracts likely do not consciously act to respect IP distinguishing traits of IP assets. The purpose of IAM contracts is to provide tailored strategies for corporate ends. If IAM contracts developed to meet these ends recognize IP distinguishing traits and thereby address IP contract strain this is likely purely accidental. As such, IP contract strain may be addressed, but this occurs because that result is aligned with the company’s interests, not because the contract drafters expressly intend to draft an IP contract that addresses IP contract strain. Thus, should a contract unaffected by IP contract strain be drafted it is a side-effect of IAM. (Nonetheless, even though the ability

¹⁰⁴⁴ Ibid. at 21.

¹⁰⁴⁵ Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at 111.

of IAM to address IP contract strain may be inadvertent it is significant. IAM shows that a means of addressing IP contract strain is possible.)

To consistently draft IP contracts free of IP contract strain requires engaged business and legal professionals to have a conscious understanding of IP distinguishing traits of IP assets. This means that contract drafters would need to recognize that IP distinguishing traits are core elements of IP assets that cannot be omitted, altered or distorted by contract terms. Additionally, the contract drafters would need to recognize the interaction of IP distinguishing traits with contract legal principles and to consciously draft IP contracts that reconcile these. These steps must be done wittingly on the part of IP contract drafters because if the aspect of an IAM strategy that addresses IP contract strain is not a conscious part of the strategy it may be lost in future embodiments of that IAM strategy as new strategies replace prior strategies.

It is a fact of IAM that new strategies are constantly emerging to ensure that IAM continuously meets the goals of a company. This quality causes IAM to represent an inconsistent means of addressing IP contract strain. For example, should IAM Strategy A address IP contract strain, this may be an unconscious outcome of the strategy. Therefore, when market conditions change, or other factors affect a company and its goals, further strategizing occurs, resulting in Strategy B. The purpose of Strategy B will be to promote the goals of the company in light of the altered environment. Strategy B may not result in IP contracts that support IP distinguishing traits, and if the outcome of Strategy A was unconscious then there will be nothing to cause Strategy B to replicate the aspects of Strategy A that rendered it capable of addressing IP contract strain. Consequently, once Strategy B replaces Strategy A the effect of addressing IP contract strain will be lost. Therefore, consciously implementing an IAM strategy that addresses IP contract strain is critical to creating IAM strategies that consistently address IP contract strain.

As has been suggested, due to the flexibility of IAM contracts, there is no reason that an IP contract model could not be produced that addresses IP contract strain. However, it must be remembered that there is no loyalty to models in IAM. The flexible nature of IAM contracts thwarts the long-term use of a model contract. Moreover, no single model is imposed by all IAM contracts. It is not a one-size-fits-all realm. Therefore, to say that all IAM contracts must comply with a particular contract model because that model is designed specifically to address IP contract strain would defeat the character of IAM strategy. IAM does not require that either IP distinguishing traits or contract legal principles be engaged as explicit considerations in the process of drafting IAM contracts.

IAM offers an encouraging step towards IP contracts that address IP contract strain – it shows this outcome is possible. However, in the instance that present IAM contracts attain the result of addressing IP contract strain the downside is that IAM cannot be relied upon to consistently achieve this end. Existing IAM contracts that address IP contract strain are examples of happenstance and the nature of IAM is to continuously develop new strategies of IP asset use. Consequently, the outcome of one IAM contract is not a reliable prediction of the outcome of another. Yet, the fact that an IP contract that addresses IP contract strain can be produced is instructive for future initiatives that seek a resolution to strain.

6.3 Open Source

Looking now to a second grass-roots initiative, open source, a necessary first step is to define this term as it is applied in this thesis. For example, open source for the purposes of this thesis is not limited to open source software, although this is the foundation for open source generally. Open source software is an initiative in the information technology (“IT”) sector

whereby collaborative efforts are applied to develop particular software products.¹⁰⁴⁶ To facilitate the IT version of open source a license contract is entered into by participants to stipulate rules of access and collaboration. In many cases a General Public License is utilized.¹⁰⁴⁷ Notably, open source software license agreements can take many forms, and they do not always support shareware or freeware.¹⁰⁴⁸ Some open source software licensing terms prohibit a participant from utilizing any part of the software, including his or her contribution, for commercial purposes or financial gain.¹⁰⁴⁹ Other open source software licenses do permit commercial use of the base software, but only in accordance with specific guidelines.¹⁰⁵⁰ Copyright is not necessarily waived in open source software, and such rights can be enforced against those who violate the license agreement.¹⁰⁵¹

This thesis considers open source in a wider context than merely software. It encompasses initiatives that involve collaborative efforts and/or facilitate accessibility to products. This includes open source initiatives in many markets, such as pharmaceuticals and scientific projects. These may be characterized as derivatives of the concept of open source software and they have been initiated in several sectors, such as open access and open science.¹⁰⁵² There are similarities

¹⁰⁴⁶ Information technology systems such as Linux are examples of IT-specific open source, which is also known as “open code”. See: Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World* (New York: Vintage Books, 2001) at 52-66.

¹⁰⁴⁷ Brad Frazer, “Open Source is not Public Domain: Evolving Licensing Philosophies” (2009) 45 Idaho L. Rev. 349 at 358.

¹⁰⁴⁸ Ibid. at 350.

¹⁰⁴⁹ Ibid.

¹⁰⁵⁰ Greg. R. Vetter, “Commercial Free and Open Source Software: Knowledge Production, Hybrid Appropriability and Patents” (2009) 77 Fordham L. Rev. 2087 at 2091. As Vetter points out “MetaCarta’s narrative is that of open source software development within a for-profit company. It applies an attribution-only license to the projects it stewards, meaning that others can deploy or use the software however they wish so long as such later deployment gives attribution to the software’s originators.”

¹⁰⁵¹ Frazer, “Open Source is not Public Domain: Evolving Licensing Philosophies”, *supra* note 1047 at 357. See also: *Robert Jacobsen v. Matthew Katzer and Kamind Associates Inc.*, *supra* note 861, as discussed in Chapter 4.

¹⁰⁵² Several different tag names are utilized to describe “open source” initiatives. This thesis will apply the term open source, but this is not intended to limit the initiatives encompassed by the term itself. The variety of terms utilized to reference open source IP initiatives is indicative of the lack of consistency in the language of IP, a topic addressed at more length in Chapter 3. One reason this thesis does not engage in a more detailed explanation of the forms of open source initiatives, such as open science and open access, is that the forms of open source are

and differences amongst open source initiatives. This thesis reviews the realm of these schemes generally and identifies them collectively as “open source”.

Open source is a related concept to IAM, and potentially even a form of IAM.¹⁰⁵³ In this context it is a non-firm form of IAM, meaning the firm is not the centre of interest, but IP assets may be used to address shared goals within a community that is outside of a firm.¹⁰⁵⁴ This may be an industry, such as the software industry, or the scientific community, or within a public sector organization, such as a university. Non-firm IAM may take into account cross-industry and cross-sectorial synergies arising from the sharing of IP assets. Open source fits into this category as it is a means of strategizing to produce a form of IP asset management.

Unlike general IAM, open source is not primarily interested in promoting private sector goals. Instead, its aim is to surmount the hurdle that IP assets pose to the development and accessibility of technologies which provide a particular social or economic good. For example, technologies may be vaccines and other drugs which stem the threat of tropical diseases¹⁰⁵⁵ and preventable diseases.¹⁰⁵⁶ Open source initiatives may further look to solve hurdles to IP asset access, such as are posed by the anticommons effect and patent thickets.

constantly evolving. Thus, even the most detailed description of open source forms would soon be obsolete. Some examples of open source initiatives are provided later in the discussion to give an indication of the beginnings of the movement and its progression.

¹⁰⁵³ See: Gold & Durell, "Looking Beyond the Firm: Intellectual Asset Management and Biotechnology", *supra* note 1026.

¹⁰⁵⁴ See: *Ibid*.

¹⁰⁵⁵ Stephen M. Maurer et al., "Finding Cures for Tropical Diseases: Is Open Source and Answer?" (2004) 6 Minn. J.L. Sci. & Tech. 169 at 169. It is estimated that tropical diseases affect more than 500 million people, or 1/10 of the global population, while only 1% of new drugs are developed to treat these diseases.

¹⁰⁵⁶ Amy Kapczynski et al., "Addressing Global Health Inequities: An Open Licensing Approach for University Innovations" (2005) 20 Berkley Tech. L.J. 1031 at 1031 & 1057-1069. The number of people dying in middle and low income countries from preventable diseases is in the millions. For example, HIV/AIDs killed over 3 million people in 2004.

The anticommons problem arises when scarce resources are under-utilized as a result of too many owners blocking each other's use.¹⁰⁵⁷ For example, Rightsholder A can prohibit Researcher B from developing his test by refusing to grant him permission to utilize Gene1 which is protected by a patent asset held by Rightsholder A. The fear is that, "patents over upstream gene sequences may block further downstream research and, consequently adversely impact drug discovery, as many diseases today are known to have genetic origins."¹⁰⁵⁸ Notably not all authors unanimously share concerns about the anticommons.¹⁰⁵⁹

The patent thicket references the effect of granting a plethora of patent assets claiming various aspects of an innovation – the concern is that conducting research without utilizing a patented gene or research tool is impossible.¹⁰⁶⁰ The result is too many owners controlling pieces of a field of innovation. For example, Rightsholder A has a patent over Gene1, whereas Rightsholder B holds a patent over a test for Gene1. Rightsholder B cannot utilize his test

¹⁰⁵⁷ Brian Gargano, "The Quagmire of DNA Patents: Are DNA Sequences More than Chemical Compositions of Matter?" (2005) Syracuse Sci. & Tech. L. Rep. 3 at 25. See also: Rebecca S. Eisenberg & Michael A. Heller, "Can patents Deter Innovation? The Anticommons in Biomedical Research" *Science* 280 (1998) 698 at 698; and Weck, "Note: Exclusive Licensing of DNA Diagnostics: Is There a Negative Effect on Quantity and Quality of Healthcare Delivery that Compels NIH Rulemaking?", *supra* note 1033 at 1071-1072.

¹⁰⁵⁸ Shamnad Basheer, "Block me Not: How "Essential" are Patented Genes?" (2005) U. Ill. J.L. Tech. & Pol'y 55 at 55. See also: Richard R. Nelson & Robert P. Merges, "On the Complex Economics of Patent Scope" (1990) 90 Colum. L. Rev. 839 at 860-868.

¹⁰⁵⁹ Kieff argues that patents do not have the negative effect upon research that is suggested by other authors. He further counters the view that patents are contrary to scientific norms. See: F. Scott Kieff, "Facilitating Scientific Research: Intellectual Property Rights and the Norms of Science - A Response to Rai and Eisenberg" (2001) 95 Northwestern U. L. Rev. 691

¹⁰⁶⁰ See: Carl Shapiro, "Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting" (2001), online:<<http://faculty.haas.berkeley.edu/shapiro/thicket.pdf>> A research exemption is one means of overcoming this patent thicket, but thus far this is an imperfect means, as much debate surrounds the nature and boundaries of the exemption. This is affected particularly by the close relationship between industry and public research. For example, it is no longer feasible to grant a research exemption that is defined as solely applicable to non-commercial research. Public research that begins as a non-commercial initiative may end up having a commercial aspect. Universities are quick to accept the commercial elements of research because this is a source of revenue for institutions that are grossly underfunded. See: Chris Dent et. al., "Research Use of Patented Knowledge: A Review" (2006) STI Working Paper 2006/2 prepared for the Organisation for Economic Co-operation and Development Directorate for Science, Technology and Industry; and Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94.

without the permission of Rightsholder A because testing involves the use of Gene1.¹⁰⁶¹ When numerous rightsholders are added to the mix it can be extremely difficult to tally-up all of the patentees who must grant authorization relating to all of the research tools and resources required to conduct a single research project.

Each of these issues present problems that have effects for IP contracting. Open source initiatives offer potential solutions thereto, such as patent pools.¹⁰⁶² This solution involves patent owners forming a group and agreeing to commonly grant other members of the group access to their patented technologies. In some cases non-patent owners may also join the group and thereby gain access to patented technologies which they will use in research. Research based on patents in the patent pool may produce future IP assets that can also be shared amongst the group. Patent pool sharing is governed by specific IP contracts drafted to facilitate access to the IP assets.

Notably, as is exemplified by open source software, the goals of open source may not necessarily be characterized as a global vision (e.g. promoting wide sharing of IP assets and free access thereto). Some open source initiatives involve contained, exclusive groups that do not open their doors to embrace newcomers, but instead are selective about their participants. This is evident from the examples of open source initiatives presented later in this thesis. A description of open source, as the term is applied in this thesis, characterizes it as an agreement by members

¹⁰⁶¹ The accumulation of at least one important patent for a therapeutic technology and subsequent exclusive licensing of that patent is a strategy now adopted in the biotech sector. This is evidenced by the activities of Ariad Pharmaceuticals who obtained rights in U.S. Patent No. 6,410,516 granted for "methods of treating human disease by regulating nuclear factor (NF)- κ B." See: Editorial, "A license to print money?" *Nature Biotechnology* 24:6 (2006) at 593. A means of combating this type of activity, and restoring the commons, is patent pooling, where by access to a pool means access to a collection of patents. This lessens the need for multiple licensing agreements, and consequently reduces the time and cost necessary to obtain patent rights required to conduct research and product development. See: Jeanne Clark et. al., "Patent Pools: A Solution to the Problem of Access in Biotechnology Patents?" (5 Dec 2000) Report of the United States Patent and Trademark Office.

¹⁰⁶² See: Clark et. al., "Patent Pools: A Solution to the Problem of Access in Biotechnology Patents?", *supra* note 1061.

of a community to “use any exclusive right granted by intellectual property law to exclude exclusivity itself.”¹⁰⁶³ As such, open source provides an example of IP contracting rules, practices and institutions.¹⁰⁶⁴

Several topics relevant to open source are discussed in this section. To begin a description of open source is offered. This is further supported by present day examples of open source. Additionally, the grass-roots origin of open source is considered in light of IP contract strain – in particular the reliance of open source upon IP contracts. Moreover, this section considers how open source exemplifies the increasingly blurred line between public and private sectors. Although originally intended to service the public sector, open source is continually drawn into the private sector.¹⁰⁶⁵

The review of open source in this section shows that it is a practice that influences IP contracts. Open source encourages institutions to become the instigator of new legal rules and the generator of IP contracting norms. Although open source does not enforce a consistent means of addressing IP contract strain, it exemplifies the influence that practices and institutions wield in IP contracts. This further indicates a need for these practices and institutions to be incorporated into the development of any means to address IP contract strain.

6.3.1 What is Open Source?

Open source initiatives aim to ensure that IP assets relating to in an innovation will not be wielded to produce a marketplace monopoly or excessive amounts of market advantage. As an example, the purpose of open source in biotechnology projects is described as counteracting the “phenomenon in certain research areas in which progress is hampered by the rights structure

¹⁰⁶³ Reichman & Uhler, "A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment", *supra* note 66 at 431.

¹⁰⁶⁴ See: Andrew Pollack, "Open-Source Practices for Biotechnology" *The New York Times* (10 February 2005).

¹⁰⁶⁵ See: Executive Summary, "Open Source Intelligence: Private Sector Capabilities to Support DoD Policy, Acquisitions, and Operations" *Defence Daily Network Special Report* (5 May 1998).

surrounding basic investigative tools.”¹⁰⁶⁶ Another objective of open source is to provide access to IP assets relating to final product inventions. In an idyllic light, open source may be seen as an attempt to return to earlier perceptions of scientific R&D, viewing innovation as belonging to the scientific community as a whole, and endorsing freely-available information.¹⁰⁶⁷ As there are multiple modes of achieving these goals open source does not conform to a single model, but encompasses a variety of strategies. The link between open source strategies is that they all have a common purpose – to restrict monopolistic and abusive use of IP assets that inflict a detriment for society and/or communities.

Open source is often linked to the Lockean concept of intellectual commons. In this context it is defined in the following manner:

...one way in which to think about it is to say that it consists of that part of the objective world of knowledge which is not subject to any of the following: property rights or some other conventional bar (contract, for instance); technological bars (for example, encryption) or a physical bar (hidden manuscripts)...[it is] an independently existing resource which is open to use. Open to use does not mean, however, that abstract objects in the intellectual commons are necessarily accessible. Moreover, the fact that an abstract object is not in the intellectual commons and therefore not open to use does not mean that it is inaccessible.¹⁰⁶⁸

Open source initiatives are to provide public access to innovation, works and information relevant thereto.¹⁰⁶⁹ As occurs in private sector IAM, this involves developing a strategy of IP

¹⁰⁶⁶ Robin Feldman, "The Open Source Biotechnology Movement: Is it Patent Misuse?" (2004) 6 Minn. J.L. Sci. & Tech. 117 at 123.

¹⁰⁶⁷ David W. Opderbeck, "The Penguin's Genome, or Coase and Open Source Biotechnology" (2004) 18 Harv. J. Law & Tec. 167. Opderbeck points out that "where the law once supported the norm of disclosure, it now encourages a norm of strategic behaviour" (at 186).

¹⁰⁶⁸ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 54-55.

¹⁰⁶⁹ It must be noted that not all authors agree that the commons argument has strength in the context of fueling strategies for IP use. R. Polk Wagner argues that complete control over IP is not possible, which is contrary to the beliefs of other writers, some of whom are particularly alarmist in the expression of their views. For this reason Wagner counters the argument that the commons must be protected by way of initiatives such as open source. He believes the commons argument is weak and should not be relied upon as a justification for commons-protective management of IP. See: Wagner, "Information Wants to be Free: Intellectual Property and the Mythologies of Control", *supra* note 20. Julie Cohen points out that the cultural understanding of a commons is rooted in the history of the use of the term "public domain" as well of public land law (Cohen, "Copyright, Commodification, and Culture: Locating the Public Domain", *supra* note 534 at 124). Alterations of IP assets can alter this understanding

asset management to invoke a desired outcome. Open source shows the power of grass-roots movements to influence society's perception of IP assets, their appropriate uses and the state of the environment encompassing the assets.

The origin of open source is based in copyright wherein the IP asset is granted immediately without any formal application or registration process.¹⁰⁷⁰ This has particular implications for open source. The goal of open source non-exclusive license contracts is to establish, as well as sustain, free-access to the code. Drawing from the copyright experience, some open source patent initiatives build a free-flow of information upon the foundation of a granted patent asset.¹⁰⁷¹ Patent assets differ from copyright assets (e.g., patents are not granted automatically, etc., as discussed in Appendix "B".) therefore the form of open source differs from case-to-case. Thus, open source involves the development of diverse strategies of IP asset use, created primarily for the public sector.

(An example of augmentation of the scope of IP rights is the extension of the term of U.S. copyright from 50 to 70 years as was influenced in the aging of Mickey Mouse. Depoorter, "The Several Lives of Mickey Mouse: The Expanding Boundaries of Intellectual Property Law", *supra* note 1; and Cohen at 158.) This happens because a "presumption of ongoing private control" eclipses the "richly uncontrolled opportunism of creative license" (Cohen at 124). Open source initiatives thwart these changes by supporting a culture of sharing, whether globally or within a community.

¹⁰⁷⁰ A description of the attributes of copyright is provided in Appendix "B" of this thesis. See also: Feldman, "The Open Source Biotechnology Movement: Is it Patent Misuse?", *supra* note 1066 at 117; and Opderbeck, "The Penguin's Genome, or Coase and Open Source Biotechnology", *supra* note 1067. Opderbeck tries to draw a clear relation between software open source and biotechnology open source by analogizing the layers of software machine and program code to the layers of DNA. Due to the fact that a right is automatically granted for copyright, open source in the software realm functions as a type of non-exclusive license agreement that provides public access to protected materials. In this manner access may be given freely, and if the access evokes any limitations, these are minimal. For example, open source copyright may freely permit access to software code for the purposes of modification of that code, and it may simultaneously prohibit a person from restricting access to the modifications she makes to the code herself. (The discussion of *Jacobson v. Katzer*, *supra* note 861, in Chapter 4 exemplifies an open source contract.)

¹⁰⁷¹ "Open Source Genomics" 8 Symposium on Bioinformatics and Intellectual Property Law, April 27, 2001, Boston, Massachusetts, B.U. J. Sci. & Tech. L. 254 at 255-56. Dan Burke comments that "free" in this context does not mean no cost. Rather, free information means information that may be used at the discretion of the person who accesses it – this may mean manipulating the innovation described to improve upon it or to create a new invention, or it may mean using the information for specific purposes to further another project. The information is not controlled by proprietary rights, but can be used by those who need such information in any manner that is required.

The formative non-IT open source initiatives are fairly narrow in their focus and goals. As the descriptions below point out, not all open source initiatives involve IP assets. Some open source initiatives consider it unnecessary, and a violation of the aim of free-access to knowledge and products, for innovations to be protected by IP assets.¹⁰⁷² The following are five examples of open source initiatives.

6.3.1.1 Biological Innovation for Open Society

The Biological Innovation for Open Society (“BIOS”), originating in 1992 with the introduction of Cambia, facilitates the collection of patented technologies. However, its undertaking is more focused upon research tools than final products.¹⁰⁷³ Its goal is to “assemble groups of enabling technologies that together provide the pieces necessary for a particular form of research investigation.”¹⁰⁷⁴ The approach recognizes that the monopolization of research tools can be just as detrimental to innovation as exclusive rights over a final product.

The concept is generally to collect patented, open access or public domain technologies, and to make these available to its members. The technologies are accessible under license terms which are agreed to by all members. Membership is provided generally to persons who wish to participate and are willing to agree to the terms of participation. The outcome is that the participants are granted access to results of prior research undertaken by other members. These research results are included in a pool of research. Any member can utilize research from the pool in accordance with the BIOS agreement terms. The terms specifically state that the members will not enforce IP rights against use of the pooled research, whether this is used for

¹⁰⁷² See: Ben Adida, "Rights Expression vs. Rights Enforcement: Clarifying the Associated Press Story" *Creative Commons* (1 August 2009), online:<<http://creativecommons.org/weblog/entry/16380>>.

¹⁰⁷³ At: www.bios.net.

¹⁰⁷⁴ Feldman, "The Open Source Biotechnology Movement: Is it Patent Misuse?", *supra* note 1066 at 126.

research projects or to create for-profit or public good products.¹⁰⁷⁵ The benefits of the BIOS approach are that it makes research results available to its members and it protects the freedom to operate of members utilizing the research.

6.3.1.2 Public Patent Foundation

The Public Patent Foundation (“PUBPat”), originating in 2003, is an open source project aimed at the creation of a commons wherein patent assets may be pooled and made freely available to other participants.¹⁰⁷⁶ In basic terms, PUBPat grants a non-exclusive and payment-free license to all participants. PUBPat and BIOS both require participants to execute a license agreement, however the terms of the agreement created by each group differ.¹⁰⁷⁷

Since its outset PUBPat has shifted its purpose. Its webpage states that it opposes “undeserved patents and unsound patent policy” believing this can “harm the public ... by making things more expensive, if not impossible to afford; ... by preventing scientists from advancing technology; ... by unfairly prejudicing small businesses; and ... by restraining civil liberties and individual freedoms.”¹⁰⁷⁸ It is the aim of PUBPat to represent the interests of the public to thwart undeserved patents and unsound patent policy. To this end the non-profit organization speaks out on behalf of non-patentees in judicial proceedings and governmental forums. In the past the focus of the PUBPat has been upon pharmaceutical patents, but the group is not strictly limited to this area of innovation. For example, PUBPat has undertaken monitoring of Microsoft.¹⁰⁷⁹

¹⁰⁷⁵ At: <http://www.bios.net/daisy/bios/mta.html>.

¹⁰⁷⁶ Feldman, "The Open Source Biotechnology Movement: Is it Patent Misuse?", *supra* note 1066.

¹⁰⁷⁷ Ibid. at 128. BIOS allows its licensees to seek patents on any inventions created, but it also requires them to “grant back any improvements in the core technology and to make such improvements freely available to all others on the same terms that BIOS provided for the original technology.”

¹⁰⁷⁸ At: <http://www.pubpat.org/>.

¹⁰⁷⁹ Susan Kuchinskas, "PUBPAT to Microsoft: Not on Our Watch: The non-profit widens scope on giant's intellectual property." *internetnews.com* (July 13, 2004), online:<<http://www.internetnews.com/bus-news/article.php/3380181>>.

6.3.1.3 Tropical Disease Initiative

The Tropical Disease Initiative (“TDI”), created in 2004 focuses upon creating a website to provide database access to a collection of information, such as “searching for new targets, finding chemicals to attack known targets, and posting data from related chemistry and biological experiments.”¹⁰⁸⁰ An added benefit of TDI’s format is that the information is easily accessible by researchers in developing nations. TDI believes that their form of open source will aid virtual-pharmas in particular. (Virtual-pharmas include organizations that are not engaged in in-house development, but utilize a grouping of commercial and academic partnerships to create a portfolio of promising drug innovations.)¹⁰⁸¹

6.3.1.4 Public Intellectual Property Resource for Agriculture

The Public Intellectual Property Resource for Agriculture (“PIPRA”), started in 2005, provides an example of the expansion of open source from its earlier forms.¹⁰⁸² Not-for-profit enterprises and universities are welcome to join PIPRA and to commit patents and patent applications for agricultural technologies to a commons. PIPRA undertakes several initiatives on the basis of the information provided by members. It has a database of non-confidential information that provides notice of agricultural innovations. Furthermore, model licenses are drafted to support the transfer of information and IP assets between PIPRA and its members. Additionally, PIPRA seeks to bundle technologies and create partnerships between members for research, commercial and humanitarian purposes. These activities are undertaken for the purpose of aiding the creation of staple and specialty crops, as well as to promote management of agricultural patents. Thus, PIPRA exemplifies an advance in the scope of open source initiatives.

¹⁰⁸⁰ Maurer et al., “Finding Cures for Tropical Diseases: Is Open Source the Answer?”, *supra* note 1055 at 171.

¹⁰⁸¹ *Ibid.* at 170.

¹⁰⁸² At: www.pipra.org.

6.3.1.5 Science Commons

Open source has become even more ambitious since the inception of PIPRA, with the advent of the Science Commons in 2005. On its website the group states that its purpose is to “identify unnecessary barriers to research, craft policy guidelines and legal agreements to lower those barriers, and develop technology to make research, data and materials easier to find and use. Our goal is to speed the translation of data into discovery — unlocking the value of research so more people can benefit from the work scientists are doing.”¹⁰⁸³ Science Commons therefore works not only to create a license agreement whereby access to certain IP assets within its purview may be granted, but also to create legal rules, or at least guidelines, for IP asset contracts, as well as IP contract models.

Science Commons invites scientists, research granting agencies, libraries and academics to become members. It is a program of the Creative Commons which originated in the copyright realm. Science Commons asks for the contribution of copyright, patents, non-patented research tools, and data. The purpose of Science Commons is to remove legal and technical barriers to scientific collaboration and innovation. Thus, it combines publishing, data and licensing strategies for the purpose of integrating and streamlining the research process. It achieves these goals through the facilitation of several programs: the creation of a digitally-networked environment; open access copyright to scholarly works; the management of biological material transfers; model material transfer licenses; and data-sharing. By adopting a wider focus of IP assets as well as a broader scope of programs, Science Common shows the future potential of open source initiatives, which is undoubtedly broader than the originators of the movement ever dreamed.

¹⁰⁸³ At: <http://sciencecommons.org/>.

6.3.2 Open Source & IP Contracts

As in the sphere of IAM, IP contracts are critical to the implementation of open source initiatives. Open source encourages a utilization of IP assets in a manner consistent with their scope. This does not mean that open source promotes a conscious awareness of IP distinguishing traits of IP assets. However, it promotes awareness that IP assets have specific definitions that include particular traits, such as control and balance. Still, the question remains: Can open source strategies cause IP contracts to address IP contract strain? The discussion that follows sheds light on this query.

6.3.2.1 Grass-Roots: Influence of Practice & Institutions

Open source, at its crux, provides an alternative to traditional IP exclusivity. It is an initiative based upon sentiments of certain groups and populations – researchers, scientists, students, developing nation advocates, etc. – each of whom recognize that traditional IP contracts often support a contractual use of IP assets that does not promote but hinders innovation. The initiative is at the grass-roots level and recognizes that “an open source community must develop from the bottom up; it cannot be imposed from the top down.”¹⁰⁸⁴ Open source responds by allowing people to create a new sphere of IP use to address the perceived deficiencies in the traditional uses of IP.

This bottom-up development of open source strategies has implications for the influence of rules, practices and institutions exerted in the IP contracting sphere.¹⁰⁸⁵ Open source is a means whereby those who utilize IP assets have a say in the rules, practices and institutions that shape

¹⁰⁸⁴ Opderbeck, "The Penguin's Genome, or Coase and Open Source Biotechnology", *supra* note 1067 at 192.

¹⁰⁸⁵ Hart, *The Concept of Law*, *supra* note 492 at 9. Hart notes that significant rules, even some that are treated as mandatory, may not be grounded in statute or any “deliberate act”. This does not diminish the effectiveness of such legal rules or diminish the adherence to them.

the use of those assets.¹⁰⁸⁶ It is an example of private-ordering by industry players that has an effect similar to that achieved by public legislation.¹⁰⁸⁷ Thus, increasingly, open source strategies are looked to as reflecting IP contracting and asset norms, in place of IP legislation. This is partly due to the delayed response of legislatures to technological and cultural change. Some believe that ‘a repeated pattern of bilateral exchanges will coalesce into industry “rules of thumb”, or norms’.¹⁰⁸⁸ Open source creates a realm wherein exchange of IP assets can occur in a virtually uninhibited manner. This does not mean exchange occurs in ignorance of IP laws, but it involves the diminishment of the negative effects of IP laws for impacted populations by implementing solutions that work-around troublesome laws.

There are several aspects of the grass-roots nature of open source that bear consideration. In particular, the effect of reliance on contractual rights, and a change in the voice of the rule-makers are addressed in this section. Both offer important insight into the development of open source strategies. These points further offer observations of the way that open source perceives of IP assets. This perception instructs the contractual uses of IP assets.

¹⁰⁸⁶ Litman’s comments on fandom are outside the realm of open source specifically, but directly related thereto. She notes that in the world of copyright fannish behaviour that mimics or parodies well-known works, such as those that appear on YouTube.com, may not need the permission of implied license. Litman argues that the role of the public in the consumption and use of some works creates rights of use. She says, “listening, viewing, and playing can engage the imagination in comparable ways [to that of the creator]. If copyright is designed to encourage listening, viewing, and playing – and if it is not, it is curious that it confers protection on works designed to be listened to, viewed, or played – we presumably want individuals to bring the same creativity to their listening, viewing, and playing that we assume they bring to their reading....Our collective failure to pay sufficient attention to the interests of readers, listeners, and viewers is especially damaging to the overall fabric of copyright law” (Litman, “Creative Reading”, *supra* note 537 at 180). Arguably the popular understanding that fannish behaviour is permissible and the right of a fan may prevail over contemporary copyright limitations.

¹⁰⁸⁷ Samuelson, “Copyright and Freedom of Expression in Historical Perspective”, *supra* note 897 at 334. Samuelson states that coordination amongst institutions holding copyright assets, such as those in the DVD industry, can have the same result as copyright legislation (at 335).

¹⁰⁸⁸ Merges, “Intellectual Property Rights and New Institutional Economics”, *supra* note 4 at 1864.

6.3.2.1.1 Practices and Institutions: Reliance on Contractual Terms

In the context of open source, IP asset use increasingly is dictated by IP practice rather than legal rules, and this has many effects.¹⁰⁸⁹ One effect is a move from traditional reliance upon IP assets to protect innovative products and works, to a dependence upon contractual protections.¹⁰⁹⁰ Contractual terms are the means of articulating and controlling IP asset contractual uses. A party to an IP contract is required to utilize the IP asset in a particular manner in accordance with uses dictated by contractual terms. Thus, contractual terms take the place of legal rules. Moreover, since open source does not rely upon a firm set of rules or guidelines, IP contractual terms replace written guiding principles.

As has been discussed in Chapter 1, placing the power of prescription of appropriate IP asset use in the hands of IP asset holders does not always result in positive outcomes. Authors claim that the appropriate resolution to potential misuse is that, “contractual freedom should, however, be curtailed by a set of compulsory terms.”¹⁰⁹¹ But this begs the question: Who is authorized to set the compulsory terms?¹⁰⁹² The goals of the open source movement, to promote free-access to IP assets, is one means of ensuring that the power represented by an IP asset is not applied by contractual terms in a manner that is detrimental to society, or particular communities.

An IP contract that adversely affects a community, for example by restricting access to an IP asset, is contrary to the spirit of the open source movement. An example of an effect upon a

¹⁰⁸⁹ Sullivan, *Profiting from Intellectual Capital: Extracting Value from Innovation*, *supra* note 15 at 111.

¹⁰⁹⁰ Fisher, "Symposium on the Internet and Legal Theory: Property and Contract on the Internet", *supra* note 98 at 1203. See also: Cohen, "Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management”", *supra* note 115.

¹⁰⁹¹ Fisher, "Symposium on the Internet and Legal Theory: Property and Contract on the Internet", *supra* note 98 at 1204.

¹⁰⁹² Reichman & Uhler, "A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment", *supra* note 66 at 431 & 449. Reichman and Uhler attempt to address the issue of the imposition of contractual terms in the open source environment. They note that many stakeholders need to be involved in the drafting of contractual templates that adequately protect a research commons in particular. These stakeholders include: “universities, federal funders, and scientific bodies” (at 449).

community caused by restricted access to IP assets is evidenced by that of patent rights for HIV/AIDs medications.¹⁰⁹³ Thus, IP contracts drafted to uphold open source activities are expected to thwart the dangers afflicted by some traditional IP contracts. As the goal of open source is to recognize rights and interests beyond merely those of the IP asset holder, open source contract terms often restrain from augmenting the IP distinguishing trait of control of IP assets and thereby differ from traditional IP contracts.

6.3.2.1.2 Practices & Institutions: A Change in the Voice of the Rule-Makers

As is previously discussed, open source does not look to government policies or legislation for leadership regarding appropriate IP asset contractual uses. Instead open source is guided by practices and institutions as agreed upon, albeit in an informal manner, by the members of the particular open source initiative. These guiding practices and institutions are subject to change for a variety of reasons (e.g. new initiative leadership, emerging IP asset issues, etc.). However, generally open source norms are capable of keeping pace with innovation and the needs of populations. Thus, a result of open source is a fluctuation in IP contracting authority. The organized single-voice of parliamentary declaration through statute is replaced by the many-voices of open source participants.

This multi-voiced creation of guiding rules, practices and institutions for open source has benefits and detriments. One benefit has already been discussed – open source rules, practices and institutions remain current, staying abreast of innovations and the needs of communities. A detriment is that there is no clear leadership of the movement. Of course, this is not considered a detriment by all commentators. To some, the fluidity of leadership is a key benefit of open

¹⁰⁹³ See: *Intellectual Property Rights, Integrating Intellectual Property Rights and Development Policy*, *supra* note 525; and Bernier, Durell & Gold, "WHO Literature Review on the Impact of Gene Patents on Access to Genetic Technologies and Services: View from Developing Countries", *supra* note 922 at 19. Patent assets and the exclusive rights to manufacture and sell that these provide to asset holders are cited as reasons why HIV/AIDs drugs are not distributed to all communities requiring such drugs. In particular, poverty stricken communities do not have access to the drugs they require.

source. In fact, the lack of a traditional single-source leadership is one of the reasons why open source has overwhelming popularity.¹⁰⁹⁴

However, when discord occurs between voices claiming leadership, this can lead to confusion within the movement and possible divisions causing movements in divergent directions. Not just opposing strategies of IP asset use may occur, but conflicting philosophical views may divide the movement itself. This occurrence has the potential to damage the initiative and to diminish the influence of open source in the realm of IP asset contracting rules, practices and institutions.

6.3.2.1.3 Practices & Institutions: The Blurred Line between Private & Public Sectors

The possibility for contradictory voices to be raised in open source is particularly relevant today as the lines between the private and public sectors are becoming less pronounced. As this division weakens, open source is no longer solely relevant to the public sphere. Much modern-day innovation is derived from co-operation or integration of public and private actors. For example, university laboratories produce advances in medical science in cooperation with private sector companies.¹⁰⁹⁵ Academics no longer sit alone in ivory towers working in isolation from the pressures and influences of the private sector. Instead these worlds collide as public researchers create the basis for privately commercialized innovations.¹⁰⁹⁶ There are tensions inherent in this relationship.¹⁰⁹⁷

¹⁰⁹⁴ Marcus Maher, "Open Source Software: The Success of an Alternative Intellectual Property Incentive Paradigm" (2000) 10 Fordham Intell. Prop. Media & Ent. L.J. 615.

¹⁰⁹⁵ Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94.

¹⁰⁹⁶ An example of a university-developed technology that was transferred to private producers by way of a license agreement is the contract between Yale University and Oncolys BioPharma, Inc. Yale researchers discovered a novel compound for the treatment of HIV/AIDs. The license extended a global exclusive right for clinical and business development of the compound to Oncolys. See: "Yale licenses potential anti-HIV agent to Oncolys BioPharma of Japan" *Yale University* (27 June 2006), online:<http://www.eurekalert.org/pub_releases/2006-06/yu-ylp062306.php>.

¹⁰⁹⁷ James Stuart, "The Academic-Industrial Complex: A Warning to Universities" (2004) 75 U. Colo. L. Rev. 1011.

One such tension occurs due to the lack of clarity regarding the extent of the influence of the private sector organizations upon public researchers contracted to work upon particular projects. How far does the influence of the private sector extend in setting the terms of the resulting partnership? Does the fact that the private sector often provides the funding for the research give it the power to sway or alter prior academic norms, such as sharing of research results with other academics? Moreover, no one can determine if this relationship is necessary due to budget cuts to university funding.¹⁰⁹⁸ An all-encompassing question is: When do public-private partnerships (“PPPs”) turn the public university laboratory into a private-sphere environment? There are no clear answers to any of these questions, but these issues are raised to exemplify the growing closeness of the public and private sectors, which particularly affects open source and its method of IP contracting.¹⁰⁹⁹

What is clear is that the intersection of the public and private sectors is occurring at an increasing pace. For example, the number of PPPs is on the rise.¹¹⁰⁰ PPPs are generally any collaboration between private companies and public sector entities, such as government or universities.¹¹⁰¹ A PPP may be formed for many purposes, including the development of innovations or works that will produce IP assets. There are several PPP/IP initiatives. One such example is certification mark systems, whereby the government awards the right of use of certain trade-marks to private companies. The marks certify that a company complies with particular

¹⁰⁹⁸ Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94 at 60.

¹⁰⁹⁹ This closeness is characterized by some as the private sphere wielding power over the public. However, the force of the open source movement shows that this balance of power may be shifting. Robert P. Merges states that “behavioral norms can emerge out of repeated interactions among members of close-knit communities....similar forces lead community members to develop cooperative norms and push firms into collective IPR institutions” (Merges, “Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations”, *supra* note 460 at 1319). Through open source the public sphere is organizing its voice to counter a presumption of the power of economic-value over IP practices.

¹¹⁰⁰ See: “What are Public-Private Partnerships?” (12 February 2003) BBC New World Edition, online:<http://news.bbc.co.uk/2/hi/uk_news/1518523.stm>; and Bok, *Universities in the Marketplace: The Commercialization of Higher Education*, *supra* note 94.

¹¹⁰¹ “What are Public-Private Partnerships?”, *supra* note 1100.

standards, such as employment or product assessment standards.¹¹⁰² A perhaps better known example of a PPP involving IP assets is the funding of public research by private sources, such as by pharmaceutical companies to develop new drugs and therapies.¹¹⁰³

One PPP which exemplifies the encroachment of the private sector into the public sphere is the World Health Organization's Special Programme for Research and Training in Tropical Disease ("TDR") founded in 1975.¹¹⁰⁴ TDR was originally an open group-type research system aimed at the development of research capacity of endemic country researchers.¹¹⁰⁵ The research capacity was fostered to meet particular standards of clinical practice in accordance with the system.¹¹⁰⁶ One effect of the melding of public and private activities is exemplified by the imposed requirements that the standard of the research capacity be commensurate with private sector standards. This decision was made because if clinical practice standards are not measurable in accordance with private sector standards then it is difficult for private sector PPP participants to work effectively with the public sector counterparts.¹¹⁰⁷ Thus, the necessity for private sector standards to be adopted by the public sector in the context of PPPs is not necessarily a negative outcome of PPPs, but it shows the influence of the private sector in projects it undertakes in partnership with the public sector.

The intersection of the public and private spheres now constitutes a form of bottom-up regulatory force.¹¹⁰⁸ Revenue generation is beneficial to public and private organizations, but the welfare of communities is introduced through the goals of open source. The public sector may

¹¹⁰² Irina D. Manta, "Privatizing Trademarks" (2009) 51 *Ariz. L. Rev.* 381 at 404.

¹¹⁰³ Dan Phair, "Orphan Drug Programs, Public-Private Partnerships and Current Efforts to Develop Treatments for Diseases of Poverty" (2008) 4 *J. Health & Biomedical L.* 193 at 193.

¹¹⁰⁴ *Ibid.* at 197.

¹¹⁰⁵ *Ibid.* at 217.

¹¹⁰⁶ *Ibid.*

¹¹⁰⁷ *Ibid.* at 216.

¹¹⁰⁸ Andrea M. Matwyshyn, "Organizational Code: A Complexity Theory Perspective on Technology and Intellectual Property Regulation" (2006) 11 *J. Tech. L. & Pol'y* XIII.

not dominate the IP contracting agenda at present, but its voice is now part of some IP contract negotiations. Thus, the views and aims of other public sector stakeholders and affected communities may be represented in IP contract negotiations.¹¹⁰⁹

6.3.3 Open Source & IP Contract Strain

Open source offers an example of the influence of rules, practices and institutions on IP contracts, but it is not clear if this combination of factors causes open source to represent a means of addressing IP contract strain. A first comment is that open source applies to permissive IP contracts to permit access to and use of IP assets. Open source IP contracts may be characterized as broad non-exclusive licenses. Control is an IP distinguishing trait in such a contract, but it is wielded in a non-monopolistic manner. Moreover, balance is also recognized as an IP distinguishing trait of an IP asset, in that open source contracts permit access to IP assets. Contract legal principles may further be said to be acknowledged as open source contracts are respected as binding and the intent of the parties is respected.¹¹¹⁰

At this point it is necessary to echo a comment made regarding IAM contracts – the drafters of these contracts do not routinely consider either IP distinguishing traits or contract legal principles. It may be true that an open source IP contract is likely to include terms that

¹¹⁰⁹ As an example, groups such as Universities Allied for Access to Essential Medicines (“UAEM”), a student-based initiative having chapters at several North American universities, demand that the public welfare value of IP be recognized in contracts transferring university-developed IP. The aim of UAEM is to include a humanitarian clause in all university technology transfer agreements. This clause would maintain a right of free use of the university created innovation to be applied for the benefit of developing nations and under-privileged populations. This movement grew out of a cry for the dissemination of HIV/AIDs drugs in Africa, but has grown in focus beyond pharmaceuticals and solely medical technologies to encompass all forms of university-created innovations. Such initiatives note that IP can provide a vital source of funding that is crucial to both future university research and access to cutting-edge, potentially industry-leading innovations. Oftentimes the innovation is developed at a university or other public institution and then transferred to the private sphere for commercialization. The commercialization stage is when revenue is gleaned from an innovation. UAEM requires that the urge to generate profits does not overwhelm the potential to offer health benefits to society, especially impoverished communities. To find a common ground in IP contracts, the public and private spheres need to work together.

¹¹¹⁰ See: *Robert Jacobsen v. Matthew Katzer and Kamind Associates Inc.*, *supra* note 861. The Court confirmed the bindingness of open source agreements in this case.

encourage access to an IP asset and is less likely to alter, distort or omit the IP distinguishing traits of the asset. However, this is not a conscious, reliable outcome.

In some cases parties involved in drafting an open source contract may rely solely upon an understanding that the goal of open source is to permit access to an IP asset to a group of collaborators. Thus, the contracting parties may overlook some IP distinguishing traits. For example, the licenses of some open source groups, such as TDI, waive the right of an innovator collaborator to seek any IP protection for either the whole of an innovation or any part thereof.¹¹¹¹ The TDI initiative relies on the transfer of knowledge. Depending on the form of the knowledge, such knowledge may be protected by copyright which is an IP asset that is automatically generated upon the production of a work. If contract terms do not recognize this form of IP asset, and consequently the IP asset owner is not asked to waive or assign the right, the outcome may be that the contract terms alter or distort the IP asset. Such an IP contract may omit the IP distinguishing trait of control for the sake of balance. The IP distinguishing trait of control may be omitted due to the fact that the license agreement negates the ability of the IP asset holder to exert their IP asset. Permitting unfettered access to the copyright to other collaborators may further inflate, and thereby distort, the IP distinguishing trait of balance.

There may be readers who would argue that it is entirely valid to create a contract that permits use of an IP asset in a manner that downplays some of the IP distinguishing traits therein. While this may be true, there is a difference between a contract that does not utilize an IP asset to the full-extent of all of its IP distinguishing traits and one that diminishes a trait so as to omit, distort or alter that trait. The former admits of the IP asset in its true form, the latter alters the IP asset. The latter further is affected by IP contract strain.

¹¹¹¹ See: "The Tropical Disease Initiative: An Open-Source Initiative for Biomedical Research" (2005), online:<http://www.tropicaldisease.org/documents/20051128_TDI_poster.pdf>.

Thus, although open source contracts appear on their face to be kinder, gentler IP contracts, they do not necessarily address IP contract strain. As has already been discussed in the context of IAM contracts, open source contracts may inadvertently address IP contract strain. Nonetheless, the activity of explicitly integrating contract legal principles and all IP distinguishing traits of an IP asset is not a requirement when drafting open source contracts. It may further be contrary to the rules, practices and institutions that influence the drafting of open source contracts. Consequently, although it may be possible to create an open source contract that addresses IP contract strain, this is not a consistent achievement or even a conscious outcome if it occurs.

6.4 Conclusion

The review undertaken in this chapter highlights the implications of rules, practices and institutions for the causes and effects of IP contract strain. It further indicates that neither IAM nor open source initiatives are currently capable of intentionally and consistently addressing IP contract strain. This has three results for this thesis project. First, it teaches that the causes of IP contract strain are not expressly acknowledged by these two emerging grass-roots initiatives. Second, this chapter shows that IP contracting strategies have the potential to address IP contract strain, albeit inadvertently. Third, it highlights the importance that a means of addressing IP contract strain be intentional in order for it to be effective.

The next chapter builds upon the conclusion of this chapter – a resolution to IP contract strain requires conscious, directed effort. Chapter 7 proposes potential elements that may be included in a resolution to IP contract strain. These reflect an understanding of the influences of legal rules, practices and institutions on IP contracts, as well as knowledge of the causes and effects of IP contract strain gleaned from the prior discussion of this thesis. It does not provide a resolution, but merely to suggests elements to be considered in a resolution to IP contract strain.

7 POTENTIAL COMPONENTS OF A RESOLUTION TO IP CONTRACT STRAIN

7.1 Introduction

The primary goal of this thesis is to probe IP contract strain and thereby facilitate an understanding of its causes and effects. It is not the purpose of this thesis to provide a resolution to IP contract strain. As such, this thesis represents a first step that must occur before work towards a resolution may commence. This being said, the evaluation of this thesis points out some potential options that may either form the basis of, or at the very least elements of, a resolution to IP contract strain. As the required research to produce a resolution to IP contract strain is beyond the scope of this work, this thesis does not predict the option that will definitively resolve IP contract strain. Instead, the options included herein are possible contributors to a resolution. Other options may also be considered pertinent by future researchers. The options herein are presented to generate further ideas about how IP contract strain may be resolved.

The discovery of a resolution to IP contract strain is an important endeavour, worthy itself of being the topic a major research project. Moreover, there is urgency to the task due to the effects of IP contract strain, as discussed in Chapter 6. As IP assets and IP contracts affect both the private sector and society generally,¹¹¹² the task of resolving IP contract strain should not be taken lightly, nor should it be put off indefinitely.

The options are presented in this chapter as divided into two sets. One set includes options that likely will not be chosen as components of a resolution to IP contract strain due to inherent limitations. These options are included in the chapter because they shed light on viewpoints regarding factors that influence IP contracts and therefore should be considered in the course of a

¹¹¹² Cohen says, “creative and informational works affect individual and social self-determination” (Cohen, “Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management””, *supra* note 115 at 539).

project to develop a resolution to IP contract strain. The second set includes options that have the potential to resolve IP contract strain. A brief description of each option in the two sets is provided. Specifically, the nature of the option is discussed, as is the applicability of each to a resolution of IP contract strain. Although there is no definitive means of identifying options that may comprise a resolution to IP contract strain, what is clear is that such a resolution must be a considered approach. Significant thought and deliberation will be required in the course of its formulation. This process should reflect input from relevant affected parties – e.g. private sector rightsholders, IP asset users, judiciary, society and other stakeholders. It should also address the legal rule, practice and institutional influences on IP contracting. Only a solution crafted with this breadth of input will be capable of offering an effective resolution to IP contract strain.

Other factors may also contribute to the process of formulating an IP contract resolution. For example, the activity of developing a resolution to IP contract strain should not be distracted by symbols or other diversions. Julie Cohen says that “‘contract,’ ‘market,’ and ‘property’ are the efficient building blocks of the new social order’.”¹¹¹³ Additionally she points out that, “each has a talismanic significance, with the result that private-law forms of regulation are advocated absent any proof that they would produce the best regime, or even a good one, for disseminating information and promoting ongoing creative progress.”¹¹¹⁴ Moreover, a successful resolution must be sensitive to rhetoric and the language of IP and contracts. William P. Alford exemplifies the confusion that can be produced by IP language when he asks, “when we refer to intellectual property law, do we mean formal doctrine or the manner in which the law plays itself out in

¹¹¹³ Ibid. at 481.

¹¹¹⁴ Ibid.

society?”¹¹¹⁵ It must carefully examine the options and produce a researched and constructed solution.

Many factors affect IP contracts – market forces, legislation, jurisprudence, contracting norms, legal rules, practice, and institutions – so staying focused on the task may be more difficult than it initially sounds. As the case law presented in Chapter 4 illustrates, addressing IP contract strain is difficult even for the judiciary. Those who take on the task of developing a resolution to IP contract strain must be resolute in their approach to the task.

The discussion of this chapter is provided to evoke contemplation and reflection rather than provide exhaustive details of how to resolve IP contract strain. Additionally, this thesis intentionally does not attempt to identify links and relationships between the options, although notably such links are obvious in some cases. Nonetheless, it is for future researchers to draw the connections relevant to a determination as to which options may represent components of a resolution to IP contract strain. This chapter merely provides an initial reference point for this initiative.

7.1.1 Resolution Considerations

This section presents options that may not address IP contract strain, but that merit consideration in the course of developing a resolution nevertheless. These options include: pragmatism; and convergence of legal theories. The reasons why these options are placed in this category vary. Pragmatism by its very nature will not resolve IP contract strain. Essentially pragmatism holds that we do not need to address IP contract strain at all. However, pragmatism merits consideration because it offers a view of IP contract interpretation that has a degree of societal acceptance. It is therefore instructive of prevailing attitudes. Whereas, convergence of

¹¹¹⁵ Alford, "How Theory Does - and Does Not - Matter: American Approaches to Intellectual Property Law in East Asia", *supra* note 457 at 24.

theories has the potential to produce a resolution to IP contract strain, or at the very least be a part of such a resolution. However, the development, implementation and process of converging theories can be a complex undertaking. As such, this option may not be capable of producing a resolution in a timely manner.

7.1.1.1 Pragmatism

Pragmatism advocates for letting market forces have full sway. Adam D. Moore describes pragmatism in the following manner, “an action that was purely pragmatic would have no underlying principle guiding or justifying it – the agent does what works without being limited by theory or principle.”¹¹¹⁶ In colloquial terminology, this is the “relax and let it happen” approach. In the context of IP contract strain, a pragmatic approach would be not to address it at all.

In accordance with pragmatism, worrying about the effect of non-IP contracts or the intersection of IP distinguishing traits and contract legal principles in an IP contract is wasted energy. Pragmatic wisdom says there is no need to look to legal theories to justify or guide the drafting or interpretation of an IP contract. Moreover, it would further assert that IP contract strain is not an issue that needs be taken into account, because neither theory nor legal principles need be considered in the interpretation of an IP contract. In the view of one author, “philosophy can guide us in drawing the broad outlines of our lives, but only pragmatism can ink in the color.”¹¹¹⁷ Applying this analogy to IP contracts, the IP distinguishing traits and contract legal principles provides the outline whereas market activity gives the colour. Therefore, in a

¹¹¹⁶ Moore, "Intellectual Property: Theory, Privilege, and Pragmatism", *supra* note 259 at 193.

¹¹¹⁷ Schroeder, "Unnatural Rights: Hegel and Intellectual Property", *supra* note 664 at 460.

pragmatist's view, attention to IP contracts should focus upon the colour, meaning the private sector market activity.¹¹¹⁸ On its face this is a simplistic solution.

If theoretical grounding does not inform an IP contract then it is possible for market forces to dominate. Moore says, "to be economically pragmatic would be to do what works in an economic sense. An institution or system of rules, such as copyright or patent law, that was purely pragmatic would have no theoretical component limiting the kinds of rules adopted except the general prescription that the system should aim at doing what works economically."¹¹¹⁹ Moore's description of economic pragmatism basically reflects the present state of IP contract interpretation.

Moore suggests that as the role of IP theory weakens it cannot act as a check on economic pragmatism and privilege. The result is that "the globalization of intellectual property, rapid growth of digital networks and expanding power of multinational corporations, have pushed systems of intellectual property away from theoretical foundations and back toward privilege."¹¹²⁰ However, there is a fine line between pragmatism and theory derived contract legal principles and IP distinguishing traits. Once a question is raised as to whom the economic approach benefits, and an answer is received that everyone affected by an act or system should be considered, the result is movement away from pragmatism and an outcome that is "getting perilously close to theory."¹¹²¹

There are several flavours of pragmatism. Radical pragmatism casts off all bonds of theoretical grounding – "truth for the radical pragmatist, is something we create and depends on language, culture, habits, and experiences. Knowledge is thus contextual, relative, and

¹¹¹⁸ Ibid.

¹¹¹⁹ Moore, "Intellectual Property: Theory, Privilege, and Pragmatism", *supra* note 259 at 193.

¹¹²⁰ Ibid. at 205.

¹¹²¹ Ibid. at 193.

subjective.”¹¹²² In a radical pragmatist’s estimation it is impossible for a judge or legislator to consider theory because to do so must colour her view. Instead decision-makers must “do their best to be fair and just.”¹¹²³ Radical pragmatists further reject theoretical foundations because they believe that experience proves that the answers to tough legal questions are not derived from theory.¹¹²⁴ Additionally, radical pragmatists argue that adherence to theory can lead to absurd results in some situations.¹¹²⁵ For these reasons radical pragmatists assert that theory, and theory-level legal principles are not a reliable guide and must be rejected in favour of other more pertinent factors.

In the realm of IP contracting, pragmatism drives an increasingly popular approach to IP systems. It dictates that modifications to IP systems must be applicable to practice-based issues, such as the “ever-increasing number of economic studies indicating that a different arrangement of rights or a different system altogether would be better than current institutions.”¹¹²⁶ Other authors suggest that IP assets stem from a pragmatic garden, saying that:

it is possible that intellectual property is neither the outcome of a grand theory, nor a reflection of particular technologies. Instead, it may be a necessary institution to enable a capitalist system to extend itself to lucrative information markets, while at the same time overlooking the genetic defect that causes that institution to plant the seed for its own ultimate destruction.¹¹²⁷

A pragmatic view sees IP assets as evolving from the environment that surrounds them and believes that there is no foundational theory to consider. Such a view is contrary to traditional theory.

Notably, pragmatism is but one option to address IP contract strain. It is unlikely to be an effective resolution to IP contract strain in and of itself due to its lack of structure.

¹¹²² Ibid. at 194.

¹¹²³ Ibid.

¹¹²⁴ Ibid. at 195.

¹¹²⁵ Ibid.

¹¹²⁶ Ibid. at 205.

¹¹²⁷ Mayer-Schonberger, "In Search of the Story: Narratives of Intellectual Property", *supra* note 453 para. 47.

However, the growth of pragmatism causes it to be noteworthy for the purpose of this chapter. Increasingly, “when we are confronted with an insoluble problem in overlapping deeds, pragmatic concerns may outweigh doctrinal ones.”¹¹²⁸ Thus, the adoption of a pragmatic approach should be considered because it forces a determination as to whether there is a reason to address IP contract strain at all.

7.1.1.2 Convergence of Theories

The next option that may be considered in the course of an initiative to resolve IP contract strain is a convergence of theories. Dale Nance applies this approach to blend a plurality of theories that all stem from the IP realm. In the context of a resolution to IP contract strain, it may be possible to blend IP theories and contract theories.¹¹²⁹ As such, this is an inclusive approach that may facilitate the creation of a theoretical grounding for the creation of IP contracts that are free of IP contract strain.

In Nance’s opinion the very nature of IP assets is to restrain personal liberties and impose burdens on users of IP assets.¹¹³⁰ Convergence facilitates a means of removing the burdens while still supporting the continued reliance and enforcement of such IP assets.¹¹³¹ Moreover, to overcome seemingly insurmountable differences between theories, Nance argues that,

...fundamental analysis from such deep-level theories is a very tricky business. It is often wise, therefore, to consider a partial and comparative form of justification that asks instead: Can the institution in question be justified in a way that harmonizes identifiable fixed points, with other institutions that we can take as given for this purpose?”¹¹³²

¹¹²⁸ Litman, "The Public Domain", *supra* note 473 at 1021.

¹¹²⁹ Dale A. Nance, "Foreward: Owning Ideas" (1990) 13 Harv. J.L. & Pub. Pol’y 757.

¹¹³⁰ *Ibid.* at 771.

¹¹³¹ *Ibid.* at 772.

¹¹³² *Ibid.* at 766.

In other words, multiple theories can be concurrently applied – thus converged – despite having opposing natures. Convergence allows each theory to act as a check on the other and this ultimately augments society’s confidence in the final result.¹¹³³

A first consideration is whether convergence is a practicable means of blending IP and contract theories. Blending may result in a theory that reflects the intersection of contract legal principles and IP distinguishing traits of IP assets in IP contracts as the principles and traits are all theory-based. Thus, a convergence of IP and contract legal theories may lead to a resolution of IP contract strain.

Horacio M. Spector provides an example of convergence of seemingly incompatible theories by advocating for the blending of economic property theory and Locke’s labour theory.¹¹³⁴ He bases his assertion upon the identification of a common thread in each.¹¹³⁵ Spector suggests convergence may cause the theories to work together so that “each one of these theories moves, as it were, along different tracks, as a result of this, the problem of incompatibility vanishes.”¹¹³⁶ Spector’s work highlights two important facts: (i) convergence can overcome incompatibility; and (ii) convergence can be applied to theories from two divergent realms.

Other authors do not discuss convergence *per se*, but instead identify commonalities between contract and IP law. This is not the same as converging IP and contract theories, but it can be instructive to the development of a convergence model. For example, Margaret Llewelyn says “there is a very close similarity between the language and concepts of both the general commercial law, as underpinned by the law of contract, and the patent system.”¹¹³⁷ Specifically she notes that both IP and contract law uphold reasonable expectation and good faith as key

¹¹³³ Ibid. at 767.

¹¹³⁴ Horacio M. Spector, "An Outline of a Theory Justifying Intellectual and Industrial Property Rights" in Peter Drahos ed., *Intellectual Property* (Dartmouth: Ashgate, 1999) 535.

¹¹³⁵ Ibid.

¹¹³⁶ Ibid. at 538.

¹¹³⁷ Llewelyn, "Schrodinger’s Cat: An Observation on Modern Patent Law", *supra* note 981 at 58.

principles. These commonalities may be supported by IP and contract theories as well and could provide a basis for the convergence of IP and contract theories.

The work of Nance and Spector are by no means conclusive evidence that convergence could be the answer to, or even a component of, an effective resolution to IP contract strain. Notably, implementing a convergence of theories is a time-consuming undertaking. Even if it can be achieved it is unlikely that it could be implemented in a timely manner. Nonetheless, their work is instructive to the endeavour of resolving IP contract strain. In particular, it teaches that convergence is a tool that has the potential to provide a means of aligning IP and contract theories and thereby diminishing their inconsistencies. For this reason convergence merits further consideration as an option to resolve IP contract strain.

7.1.2 Potential Resolution Components

The options that follow are those that are deemed to have the potential to be part of a workable resolution to IP contract strain.

7.1.2.1 Practical Approach Components

Of all the options offered in this chapter, the practical approach is one that likely must be a part of any successful strategy to address IP contract strain.¹¹³⁸ This is true because practical approaches can address not only legal rules, but practices and institutions as well. Specifically, there are two practical activities that may be particularly beneficial to this undertaking, namely education and IP contractual models.

Education and IP contractual models are considered individually in this section, but both are of equal import. Moreover they are interconnected and if both are to be utilized as components of a resolution to IP contract strain, it is necessary that education be applied first.

¹¹³⁸ Notably, pragmatic and practical approaches may be considered by some to be related concepts. In the context of this thesis pragmatism relates to a theoretical viewpoint, whereas practical approaches are those which have an application to IP contract practice.

Without education, IP contract drafters will lack sufficient information to undertake their task in a manner that reconciles IP distinguishing traits and contract legal principles. Education may therefore lead to the recognition of the need for, and the creation of, effective IP contractual models. Thus, the two principles are linked, but should follow a set order. As an additional consideration a means of deriving compliance with education and/or contract models should be reviewed.

7.1.2.1.1 IP Contract Education

While knowledge of IP assets is spreading amongst communities all around the globe, an understanding of what IP assets entail is still low. In part it is inhibited by the confusion regarding IP assets, as discussed in Chapter 3. Therefore, while IP assets are being produced at an increasing rate, the rate of recognition of the role of IP distinguishing traits and contract legal principles in IP contracts is not keeping pace. The understanding among the private sector of the role of IP distinguishing traits in particular lags.

IP assets are no longer merely of interest to private and scientific sectors. IP assets are hot media topics, frequently featured on the evening television reports, in newspaper articles and magazines.¹¹³⁹ However, as the discussion in Chapter 3 highlights, just because the term “IP asset”, or even more specific terms like “patent”, “copyright”, or “trade-mark”, are used routinely, this does not mean that the persons engaging in discussions of IP assets truly understand their meaning. Nor does it ensure that a consistent definition is applied to these terms. Often persons discussing IP assets have little knowledge of the IP distinguishing traits underpinning these assets, or the relationship between these traits. Without this understanding it is impossible for contract drafters to examine the interaction of IP distinguishing traits of IP

¹¹³⁹ See: "Yale licenses potential anti-HIV agent to Oncolys BioPharma of Japan", *supra* note 1096; Ricardo Amaral, "Brazil Bypasses Patent on Merck AIDS Drug" *Reuters* (4 May 2007); and Whalen, "Roche sets talk with drug firms to make Tamiflu", *supra* note 21.

assets with contract legal principles in the context of IP contracts. This in turn hinders the ability of contract drafters to draft terms which resolve the potential for IP contract strain.

Several educational steps need to be considered. First, the lack of clear definitions applicable to IP terms evidences the need for efforts to be focused upon educating contract drafters about the nature of IP assets. A survey undertaken by two Canadian networks of excellence, the Advanced Foods and Materials Network and the National Institute of Nanotechnology, shows that knowledge of IP distinguishing traits is low.¹¹⁴⁰ These organizations include researchers who produce scientific discoveries and often seek IP assets. Yet, despite the acknowledged need for IP protection, the members understand neither the nature of IP assets nor appropriate uses for those assets. Education is necessary for contract drafters and other sectors of professionals who come into contact with IP assets on a daily basis.

Moreover, an understanding of IP assets must involve education regarding the limitations inherent in IP assets. This will aid in the identification of IP contract terms that alter, omit or distort IP distinguishing traits of IP assets. As such, education will not necessarily resolve IP contract strain in and of itself, but it will help contract drafters recognize IP contract terms which fail to accurately represent IP assets.

Second, education should be focused upon an understanding of the circumstance of IP assets within IP contracts. As discussed in Chapter 4, disconnect between persons who create and seek protection for IP assets, from those who create business strategies and negotiate IP contracts creates a dangerous gap. Integration of these parties is critical. Only through such integration can the negotiators of IP contracts integrate considerations of IP distinguishing traits of IP assets, as well as contract legal principles, into the business strategy and contract negotiations. Notably, IP

¹¹⁴⁰ The results of these studies are in the possession of AFMNet researchers and are not publicly available at this time.

assets can “provide an intelligent re-design of economies, but only if IP managers will speak up and dispel myths and false conventional wisdom.”¹¹⁴¹

Some companies, such as Philips, the Dutch multinational discussed in Chapter 6, already apply an approach of IP education to its IP contract strategy. For example, Philips employees involved in IP contract negotiations seek to understand its IP landscape.¹¹⁴² This has involved significant internal training of staff members. Notably, internal training was deemed necessary because no external programme or university course in existence was deemed capable of meeting Philips’ IP training needs.¹¹⁴³ A vision of IP rights as a business asset, not just a legal issue, is part of this training strategy, as is cooperation amongst departments.¹¹⁴⁴ In the words of Ruud Peters, the CEO of Philips IP & Standards, the Philips approach is to “look at IP rights in combinations, not in isolation” and to “ensure that people with different backgrounds work together on projects as this helps us find the best ways both of protecting products and also of ensuring they provide solutions for their markets.”¹¹⁴⁵

Philips staff members engage in common IP training that incorporates teaching about the relevance of IP assets generally. The result is that all staff members are trained in IP areas beyond their personal area of expertise.¹¹⁴⁶ This offers each staff member a broader vision of the role of IP assets at Philips than is strictly achieved through their position alone. Additionally, this training facilitates the “intermingling of expertise” aspect of Philips’ IP contract approach. Furthermore, Philips staff members investigate other parties with whom they are negotiating in the course of a transaction. In this manner Philips implements a broad and varied IP education

¹¹⁴¹ Douglas R. Elliott, "Intelligent Re-Design" *Intellectual Asset Management Magazine* 28 (2008) 12 at 12.

¹¹⁴² Joff Wild, "The Phillips Formula", *supra* note 253 at 27.

¹¹⁴³ *Ibid.* at 29.

¹¹⁴⁴ *Ibid.* at 30.

¹¹⁴⁵ *Ibid.* at 29.

¹¹⁴⁶ *Ibid.* at 28.

strategy into its business model. It is notable that the Philips example is by no means a corporate norm.¹¹⁴⁷

This being said, increasing education regarding IP assets is generally not a new initiative. In the past decade IP topics and modules have been added to many university curricula. Furthermore, breakfast seminars and other teaching forums within law firms and private sector institutions promote learning in the area of IP assets outside the academic community. Increased teaching of IP topics has led to other initiatives, such as the integration of IP assets with other areas of study (e.g. IP and economics mesh in the new institutional economics framework).¹¹⁴⁸ Cumulatively this means that IP is no longer a forgotten topic. However, it is not merely the prevalence of IP teaching but the fullness and correctness of lessons that causes IP education to be effective. In particular, existing IP courses lack instruction regarding IP distinguishing traits and IP asset business application.¹¹⁴⁹ This may be why IP assets remain a confusing topic in the private sector.

Furthermore, effective IP education can bring clarity to the intent of contracting parties by lessening the likelihood that two parties will each perceive of the nature of IP assets in entirely different manners. To say that confusion will be abolished is altogether overly ambitious, due to the nebulous nature of IP assets. However, an IP education may provide the basis for an assumption that parties understand that IP assets encompass IP distinguishing traits, such as control, flexibility/evolution and balance. Today no such assumption may be made with confidence. As discussed in Chapter 4, a lack of basic IP knowledge can be a factor of IP contract strain.

¹¹⁴⁷ Peters, "Taking IP into the boardroom", *supra* note 995 at 21.

¹¹⁴⁸ Merges, "Intellectual Property Rights and New Institutional Economics", *supra* note 4 at 1877.

¹¹⁴⁹ See: Wild, "The Phillips Formula", *supra* note 253 at 30.

Additionally, IP education should address the strong private sector belief in the freedom of contract. This conviction exacerbates reliance upon the ability of the intent of the parties to dictate the contractual terms. Contract drafters should be educated that each IP distinguishing trait of an IP asset and contract legal principle that comes into play in an IP contract is just one part of the whole. Exemplifying for contract drafters the possible effects of not allowing cooperation of IP distinguishing traits and contract legal principles in IP contracts may be one means of bringing about this recognition. Such an understanding will aid contract drafters in creating contractual terms which lessen IP contract strain. This is an improvement from the present situation whereby contract drafters often opt to insert contractual terms that aggravate strain.

As is true of other options discussed in this chapter, IP contract education will not necessarily affect a resolution to IP contract strain in isolation. However, a greater understanding of the IP distinguishing traits of an IP asset and contract legal principles intersecting in an IP contract will aid contract drafters in creating contractual terms that do not needlessly exacerbate IP contract strain.

7.1.2.1.2 Contract Norms & Models

As IP contracts increase in number and importance in the private sector, effort is being focused upon developing contractual modes for IP contracts. These modes often include contract models, which is a topic that is raised routinely in the sphere of open source initiatives, as evidenced by the discussion in Chapter 6. A contractual mode may be defined as a new method of IP contracting. For example, licensing has been employed as a mode for many years.

Currently a new mode, open innovation contracting, is increasing in popularity. In some companies open innovation contracts are replacing licenses.¹¹⁵⁰

Within each contractual mode specific contract models may be created to provide a basis for drafting particular contract types. For example, an open innovation contract for pharmaceutical products may be produced as a contract model. This model contract may be utilized by contract drafters in the course of creating a new open innovation pharmaceutical product contract. The model provides common terms that may be either copied or modified slightly to produce a particular type of contract that is specific to a set of facts. As such, the model provides the foundation for new contracts.

In the realm of open innovation contracts, models may actual represent an adjunct to a story “that demonstrates the value of the IP to the business and the new market opportunity.”¹¹⁵¹ The terms of model contracts may be flexible so as to facilitate the application of various stories. In other words, model contracts may be drafted so that the value of an IP asset to a particular business or market may be promoted. Inflexible model contracts that include rigid terms cannot undertake such a role.

The contractual model is basically a template contract which can be utilized in multiple similar transactions. Often times, contractual model sets include several forms of contracts each relating to a specific type of IP transaction because “the subject-matter of the transfer can be a process or product protected by patent or trade secret, a name or logo protected by trade-mark, or a work (literary, artistic, musical, dramatic, etc.) protected by copyright.”¹¹⁵² The creation of

¹¹⁵⁰ John Cronin & Kate Shore, "Managing IP in Open Innovation Partnerships" *Ibid.* 30 21 (2008) *Intellectual Asset Management Magazine* 21 at 21. Open innovation contracts are based upon a partnership structure between contracting parties. Whereas a traditional license represents the intentions of two separate parties, the open innovation mode involves more common ground between parties who are joined together into a cooperative structure by way of their contractual agreement.

¹¹⁵¹ *Ibid.*

¹¹⁵² Ramsay, *Ramsay on Technology Transfers and Licensing*, *supra* note 161 at 163.

contract models has two important outcomes: (i) it negates the need to negotiate IP contracts for every transaction, a time-consuming and costly process; and (ii) it ensures that contractual terms appropriate to specific IP assets are included in the agreement.

The creation of “contractual templates” is considered a “crucial step” by Reichman and Uhler, as well as other authors.¹¹⁵³ A contractual template may be a form of model contract. Reichman and Uhler note that contractual templates are not easy to formulate. They further point out that multiple stakeholders may need to be involved in the process in order to “resolve a number of contentious issues.”¹¹⁵⁴ However, once created contract models can be a useful tool.

Terms of IP contracts are not currently required to meet any particular standard. However, as contract models are created, these can be adopted as informal standards. For example, in a license agreement, “if the process or product is protected by patent, the grant clause could specifically refer to the subject patent.”¹¹⁵⁵ Such a standard would require model contracts to include a specific reference to the IP asset. For example, if the IP asset is a patent the contract may expressly state the patent number, the patent application number, the patent publication number, the patent filing date, the country of filing, the patent title, any prior filing, or any other identifying information relevant to the patent. At present contracts relating to patents do not always include such information. A contract model that requires that patent identifying information be included may set a standard, such as requiring the inclusion of patent numbers and thereby change the present IP contracting practice.¹¹⁵⁶ This is just one example of an informal standard that may be implemented by a contract model. The requirement that other

¹¹⁵³ Reichman & Uhler, “A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment”, *supra* note 66 at 421-422.

¹¹⁵⁴ *Ibid.* at 448-449.

¹¹⁵⁵ Ramsay, *Ramsay on Technology Transfers and Licensing*, *supra* note 161 at 163.

¹¹⁵⁶ Other licenses utilize more general clauses, and apply language such as the following: “grants to LICENSEE...a license under any and all Intellectual Property Rights owned or otherwise assertible by a Transferor to engage in the following Licensable Activities.” This is the wording applied in the ABA Draft Model Software Agreement (*Ibid.*).

information or terms relevant to an IP asset be included in an IP contract may also be instigated as an informal norm by way of a contract model.

A general IP contract clause may also benefit from a contract model that sets basic terms to be included therein and indicates how these may denote specific meanings. For example, the inclusion of a specific form of clause within a model IP contract can provide a means of ensuring that all of the contracts drafted to resemble the model utilize similar means of identifying and describing an IP asset. Moreover, as contracts are distributed to multiple parties, it is possible for contract model terms to influence the clauses in subsequent contracts. This is so because some contracts are used as models on an informal basis. This can occur if a contract drafter simply likes a form of IP contract he reviews. He may copy its terms into contracts he drafts in the future. Thus, the contract model can establish an informal standard for IP contract terms that is applied more widely than just those parties having direct access to the model.

Another benefit of contract models is that they may be particularly helpful to parties who have a limited knowledge of IP assets and contracts. The models present a place for such persons to start to recognize IP issues. Of course blind adherence to contract models, without any understanding of the significance of the terms, is not advisable. Indeed this can result in significant problems. Yet, as regional marketplaces truly expand to form a global marketplace, contract models may offer a starting point and a place for some parties to be introduced to specific IP issues. This is an increasingly important consideration as for example:

Many developing countries have little knowledge about the structure of international [technology transfer] contracts: What are reasonable royalty rates? What sort of conditions have sellers of technology been willing to accept? What types of contract clauses have proved helpful in encouraging local technological development? Answers to such important questions are available but their dissemination requires

concerted efforts on the part of the private as well as the public sector of developed countries.¹¹⁵⁷

Contract models can provide an initial foundation to address some of these questions.

Furthermore, the presentation of example clauses that are balanced can create global contract models. These can help ensure specific outcomes, such as preventing developing countries from accepting poor contract terms due to a bad-faith negotiation on the part of a developed world private sector parties to an IP transaction.¹¹⁵⁸ This can occur merely due to a lack of exposure to IP contracts. Thus, contract models can aid contracting parties who may lack sophistication and knowledge in the arena of particular forms of IP contracts.

Contract models can furthermore offer guidance as to the adequate means of establishing innovative success.¹¹⁵⁹ The term “innovative success” may be interpreted in several manners to point to various indicators of success, such as the quantity of innovation, the level of disruptiveness of innovation, the longevity of innovation, the economic value of innovation, etc. The provision of guidance towards innovative success can be achieved through engaging various considerations into the drafting of the contractual terms. The difference between terms established by contract negotiation and those in a contract model is that the former are derived between contracting parties alone. The latter may be formulated by many parties, including members of the private sector, community and stakeholders. This group may also include theorists.¹¹⁶⁰

¹¹⁵⁷ Bernard M. Hoekman et al., "Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options" (2004) World Bank Policy Research Working Paper No. 3332 at 25.

¹¹⁵⁸ Kuei-Jung Ni, "Legal Aspects of Prior Informed Consent on Access to Genetic Resources: An Analysis of Global Lawmaking and Local Implementation Toward an Optimal Normative Construction" (2009) 42 Vand. J. Transnat'l L. 227 at 257.

¹¹⁵⁹ Kenneth J. Arrow, "The Economic Welfare and the Allocation of Resources for Invention" in Peter Drahos ed., *Intellectual Property* (Dartmouth: Ashgate, 1999) 5 at 20.

¹¹⁶⁰ Theorists may not be expert at contracting, but they may provide critical information about IP distinguishing traits and other requirements pertaining to IP assets. Such information can assist the production of IP contract models that are free of IP contract strain. Theorists may aid an understanding of IP assets which may be a key step

Another aspect of contract models that recommends them to providing an element of a larger scheme of resolving IP contract strain is the fact that contract model terms are created outside the power-struggle of negotiation. The terms are unaffected by influences that may affect a contract drafted in a situation wherein at least one of the contracting parties can be characterized as under pressure.¹¹⁶¹ For example, the terms are not swayed by parties, each with a strong self-interest, being forced to negotiate to form a common agreement. Considered terms, which are the goal of contract models, can help resolve IP contract strain.

Through the combination of the two practical options of education and contract models it becomes apparent that contracting parties that are educated regarding IP assets are more likely to produce a contract that accurately addresses an IP asset. Moreover, if the collaborators formulating contract models are educated regarding IP assets, then the terms therein will be well thought out and able to effectively attend to the goals of the contract. As the present level of IP education is low and contract drafters lack an understanding of IP assets, much less the role of IP distinguishing traits of IP assets and contract legal principles in IP contracts, present contract models do not achieve this outcome.¹¹⁶²

Since contract drafters may stray far from the terms of the model before arriving at the terms to be included in a new IP contract, contract models do not present a complete resolution to IP contract strain. However, a combination of education and contract models provides a reason why IP contract models may be a useful element in a resolution to IP contract strain. Generally contract models provide: (i) the potential for contract models to address the roles of IP assets and

towards this goal. Thus, contract models have the potential to include more robust terms than those produced from a party-to-party negotiation.

¹¹⁶¹ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para 37.

¹¹⁶² See: Petrusson & Helden, "Making Patent Strategy Strategic", *supra* note 714 at 38.

contract legal principles in IP contracts; and (ii) the potential for contract models to resolve the tension that arises when these IP distinguishing traits and contract legal principles are combined.

7.1.2.1.3 Compliance with Education & Contract Models

One consideration that future researchers seeking a resolution to IP contract strain will need to address is a means for achieving compliance with the resolution to IP contract strain. This consideration is particularly relevant in light of the activities of education and contract models. There is no reason why education or contract models in isolation will inspire compliance by contract drafters. Afterall, as has been previously expressed, there is a strong current of self-interest and preoccupation with market advantage in the private sector.¹¹⁶³ Consequently, knowledge of what constitutes appropriate usages of IP assets and examples of how to achieve these may not be sufficient to influence the private sector to act in accordance with the education and contract models.

However, the act of education and identification of model contracts should not only offer the message of what should be done and why, but also the negative effects of not undertaking IP contractual uses that comply with the education and contract models. Awareness of the potential defects in the chain of title, the inability to achieve the required use of an IP asset, as well as other effects of IP contract strain discussed in this thesis should be part of the education and model contract approach. This still will not ensure absolute compliance by the private sector with what may be termed “IP contract best practices”, but such measures may be a means of persuasion towards acceptance of the best practices.

¹¹⁶³ For example, there may always be instances of power imbalances amongst contracting parties or other instances whereby one party may be tempted to act in a manner that disadvantages another through a usage of an IP asset that is contrary to the education and/or contract models.

7.1.2.2 IP Contract Directed Legislative or Judicial Reform

A final option that should be considered as a component of a resolution to IP contract strain is the development of IP contract directed legislative or judicial reform. Such reform should be specifically formulated for application to IP contracts. Successful reform acknowledges IP contract strain and overcomes this through two means: (i) by acknowledging and demanding support for IP distinguishing traits of an IP asset; and (ii) by incorporating awareness of contract legal principles collectively with IP distinguishing traits in an IP contract.

This proposal encompasses two types of reforms – legislation and jurisprudence. These are collectively defined as “legal rules” for the purpose of this thesis. Legal rules are deemed likely to be inadequate to address IP contract strain for the reasons discussed in Chapter 6. However, it is not impossible to create a legal rule that does achieve this goal. (For example, legal rules that recognize IP assets as standardized forms of property requiring contracts to support the IP distinguishing traits of the assets as the core traits of the asset, as discussed in Chapter 1, may provide the basis for developing a workable legal rule to address IP contract strain.) For this reason both legislative and judicial reform are relevant as potential means of addressing IP contract strain.

Judicial reform may be of particular import. As discussed in Chapter 4, courts currently do not simultaneously address both IP assets and contract legal principles in IP contract interpretation. However, just because this is not the present approach of the courts, it does not mean that reform may not influence the judiciary to create and apply such an interpretation in the future. Comprehensive IP contract interpretation has the potential to further aims of recognizing and addressing IP contract strain.

Legislative and judicial reforms are further presented together herein because they are linked activities. Courts are required to consider legislation, and judicial decisions can be adopted as legislation or common law. Furthermore, when legal rules, common law or legislation, are unworkable these will likely be brought before a court for adjudication. Therefore, there is a chance for reforms in either of these areas of law to have an effect upon the other area, or for tandem reform to occur in both.

As Jessica Litman states, “[c]ommon law lawmaking is ordinarily both gradual and slow. Although the rare judicial opinion can inspire widespread and rapid endorsement, the litigation process is protracted and resource intensive, and typically yields only incremental change.”¹¹⁶⁴ Consequently, present attempts to create reforms often involve businesses directing their efforts to lobbying to generate laws.¹¹⁶⁵ It is often easier to lobby a government than to find a legal case that can be brought before a court to generate a particular legal rule. However, for the purposes of addressing IP contract strain it may be wise for future researchers to consider both means of instigating reform. Each engages similar deliberations.

Before presenting some of these considerations it should be noted that the comments herein are not intended to dictate the content of an IP contract directed legislative or judicial reform. Yet, there are some general guidelines that may assist this initiative. For example, reform should not lean the work towards an acceptance of the present judicial standard of IP contract interpretation. It should also not gravitate to the limited narrow legal rules that have been drafted to address specific IP contract issues. Effective IP contract directed legislative or judicial reform must look beyond previously accepted boundaries for legal rules. It is only through an unencumbered lens that legislative or judicial reform which truly envelopes IP distinguishing

¹¹⁶⁴ Litman, "Information Privacy/Information Property", *supra* note 56 at 1313.

¹¹⁶⁵ *Ibid.*

traits and contract legal principles simultaneously can emerge. Reform should acknowledge the influence and role of practices and institutions upon IP contracts.

Generally, it is advisable that an “instrumentalism attitude” be taken to issues “related to the justification, formation, extension and enforcement of intellectual property rights” through contract.¹¹⁶⁶ In Drahos’ opinion the concept of “instrumentalism” in the context of law, “refers to the idea that law is a tool.”¹¹⁶⁷ Thus, reform must recognize the tools of IP distinguishing traits of IP assets and contract legal principles, and how these may be utilized collectively by contracting parties. This opinion harkens to the IAM hammer example raised in Chapter 6. IP assets are tools and can be applied advantageously with finesse, while still recognizing the fullness of the tool. In fact, they can, and should, be utilized in a manner that is appropriate to the situation. Any IP contract reform should be sensitive to this aspect of IP assets.

The components that must be considered in the development of IP contract directed reform are many and varied. Lester C. Thurow addresses some of these in his consideration of a new system of IP assets.¹¹⁶⁸ He stresses the importance that a new system should strike a balance “between production and the distribution of new ideas.”¹¹⁶⁹ It may also be wise to avoid some content in the resulting legislative and judicial reform. Julie Cohen states that the “truths” based on market science are ‘nothing of the sort. Rather, they are “just-so stories” that mask the need for first-order social welfare choices.’¹¹⁷⁰ Cohen’s remark points out that the development of IP contract directed reform should not be like a stew, wherein all manner of ingredients are mixed haphazardly, but it should be more like a sauce, involving a balancing of specific flavours.

¹¹⁶⁶ Drahos, *A Philosophy of Intellectual Property*, *supra* note 16 at 199.

¹¹⁶⁷ *Ibid.* at 213.

¹¹⁶⁸ Lester C. Thurow, "Needed: A new system of intellectual property rights" in David Vaver ed., *Intellectual Property Rights: Critical Concepts in Law*, vol. V (London: Routledge, 2006) 222.

¹¹⁶⁹ *Ibid.* at 101.

¹¹⁷⁰ Cohen, "Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management”", *supra* note 115 at 464.

Finally, creation of IP contract directed reforms should not necessarily be results-driven. As has been discussed in the context of legal rules in Chapter 5, legislative or judicial reform that has a predetermined narrow goal can be too slight in its application to be useful as a means of addressing IP contract strain. Alternatively legal rules drafted to achieve a predetermined narrow goal may exhibit a marked absence of consideration of related environmental issues, so as to be ineffectual. Additionally, the rule may not be applicable to institutions and practices, which this thesis identifies as part of IP contract strain. To exhibit the necessary characteristics the reforms cannot be overly narrow or specific. In such an environment legal reform may provide a tool for the resolution of IP contract strain.

7.2 Conclusion

The potential options for a resolution of IP contract strain presented in this chapter are by no means intended to represent an exhaustive list. Many others options, factors and considerations will undoubtedly arise as a concentrated effort is applied to establishing a resolution to IP contract strain. However, the options presented herein provide a starting point for those who engage in this work.

Deliberation of a resolution to IP contract strain is outside the scope of this thesis. The options listed in this chapter are those that become apparent in light of the discussion of this thesis as possible means of addressing IP contract strain. An effective resolution may include all of the options discussed or none of these. As has been stated, it is the purpose of this chapter to provide a starting point for future research on this issue. As such, it is a goal of this thesis to encourage others to pick up and start their research where this chapter ends.

8 CONCLUSION

8.1 Where Do We Go From Here?

Colloquial wisdom suggests that a critical first step towards resolving a problem is simply recognizing its existence. IP contract strain, as described in this thesis, is virtually unnoticed by contract drafters, academics and the judiciary. This is due in part to the fact that these groups only rarely explicitly consider, or address, the role of IP distinguishing traits of IP assets and contract legal principles in IP contracts. IP contracts are habitually drafted, applied and interpreted in a manner that is disconnected from such considerations.

This has at least two important implications and outcomes for IP contracts. First, the lack of an identification of a set of IP distinguishing traits leads to a dearth of guidance for drafters and interpreters of IP contracts regarding the skeleton definition of an IP asset. Without this guiding framework IP contract drafters and interpreters are left to grapple with “fuzzy” IP assets and attempt to define these without any reliable consistent aid. The lack of an acknowledgement of IP distinguishing traits as the core of IP assets can promote reliance upon contract legal principles in isolation to guide IP contract drafting and interpretation. This can result in a second implication – the perpetuation of IP contract strain.

This thesis undertakes an analysis of IP contract strain, identifying its causes and effects. In the past, authors argued that IP contract issues resulted from legal rules, namely a clash between IP laws and contract laws. Building upon this prior literature, but applying a legal pluralism lens, this thesis identifies a problem having a broader base than merely conflicting legal rules. Indeed practices and institutions also influence IP contracts and can induce causes of IP contract strain. For example, pressure to attain market advantage, confusion regarding IP asset scope, and the pervasive assumption that IP contract terms can mould IP assets, can all influence

causes of IP contract strain. This viewpoint alters the identification of IP contracts from representing an intersection of IP laws and contract laws, as applied by the prior literature, to a recognition of IP contracts as representing an intersection of IP assets and contract legal principles.

The causes of IP contract strain identified in this thesis include non-IP contracts and conflict between IP distinguishing traits of IP assets and contract legal principles. Moreover, the effects of IP contract strain can be wide and varied. It may: be a systemic problem; produce defects in the chain of title of IP assets; or inspire diminishing confidence in IP assets. The outcome of each of these has the potential to be significant for the private sector.

Having now uncovered some of the causes and effects of IP contract strain, the questions that must be faced include: Where do we go from here?; and What is the next step? The causes and effects of IP contract strain are such that it is not an appropriate response to just ignore its existence, and to carry on producing non-IP contracts and hoping for the best. Such a response will only cause the effects of IP contract strain and the risks it poses to become even more substantial. As IP contracts are tools that drive the modern-day economy, a prudent response is to utilize the knowledge gleaned in this thesis of the causes and effects of IP contract strain to resolve this problem.

This thesis has unveiled IP contract strain and it is now time to consider how future researchers may move from this point towards a resolution to IP contract strain.

8.2 A Step Towards a Resolution

Achieving a resolution for a problem as complex as IP contract strain is unlikely to occur quickly. For this reason, a plan for future steps contributing to a resolution can aid progress towards this ultimate goal. There are three basic steps that will start future researchers on the

right path towards a resolution of IP contract strain. First, it is necessary to admit there is a problem. Second, the problem must be probed so that its depth and breadth may be further recognized. Third, potential sources of options that may be incorporated into a resolution must be identified and examined. This thesis is an example of the first and second steps. However, engagement in the third step may highlight the need for further review and analysis of IP contract strain.

These are broad steps. Undoubtedly many sub-steps may be implemented into a detailed plan to better define the process of implementing the steps suggested herein. However, as the hardest part of any project can be deciding where to begin, these steps are presented as a starting point for future research initiatives. Thus, the steps proposed herein are offered to motivate researchers and induce further examination of IP contract strain.

8.2.1 Admitting there is a Problem

Until IP contract drafters and interpreters recognize the problem of IP contract strain there will be no impetus to establish a resolution. Non-IP contracts, and IP contract interpretations that fail to collectively apply IP distinguishing traits of IP assets and contract legal principles, are two of the causes of IP contract strain. IP distinguishing traits and contract legal principles represent different interests and goals in IP contract interpretation. These interests and goals are imbued with variant weights, due in part to the emphasis the private sector places upon each. The principles can be thought of as a musical chord – each is an individual note that offers critical input towards the final result, namely the harmony of the chord. The failure to play one of the notes accurately changes the chord. Likewise, the failure to require an IP contract to support all IP distinguishing traits of an IP asset and to respect contract legal principles, changes the interpretation of an IP contract.

As shown in Chapter 4, there is a tendency amongst judges to pronounce contract legal principles as dominant over IP distinguishing traits of an IP asset in IP contract interpretation. This bias is influenced by many factors, not the least of which is the pervasive private sector assumption that IP assets can be moulded by IP contract terms. In light of the fuzziness of IP assets, as discussed in Chapter 3, placing heavier reliance upon the seemingly clearer contract legal principles seems a logical choice. Unfortunately, this approach ultimately fails to address IP contract strain and instead sustains the problem by inducing its causes.

Thus, admitting there is a problem should involve recognition of the source of the problem, namely the causes and effects of IP contract strain. William P. Alford notes that when speaking of property, “we should be mindful of which of its many attributes or constituent elements we are speaking.”¹¹⁷¹ Alford’s comment is directed towards real property, but is equally relevant to IP contracts. Contracts meaning to achieve contractual uses of IP assets must acknowledge and accommodate each of the relevant IP distinguishing traits and contract legal principles. Failure to be mindful of these in the course of IP contract drafting and interpretation can result in IP contract strain.

The establishment of a method of drafting strain-free IP contracts is a laudable goal, but the path to this end must face several questions. How are contract legal principles and IP distinguishing traits to be balanced when an IP contract is drafted? What method is to be applied to determine that all contracting parties have the same understanding of the IP asset (e.g., should this involve developing an IP lexicon)? How is the requirement that IP distinguishing traits be supported by IP contract terms to be enforced? Consideration of these questions may have a

¹¹⁷¹ Alford, "How Theory Does - and Does Not - Matter: American Approaches to Intellectual Property Law in East Asia", *supra* note 457 at 23.

secondary effect of further defining IP contract strain due to revelations of more details of its causes and effects that occur as a result of these queries.

The resolution to IP contract strain should be developed in a thoughtful manner. It may require a fine balance of considerations. Admitting there is a problem and understanding this problem is an important first step towards a resolution.

8.2.2 Probing the Depth of IP Contract Strain

Once having recognized the problem of IP contract strain it is then necessary to consider its breadth and depth. IP contracts encompass a fundamental role in the private sector. Yet, as described in this thesis, it is likely that frequently non-IP contracts are drafted in the place of IP contracts. IAM and open source initiatives indicate that it is possible to implement IP contracting strategies that result in the production of IP contracts that are free of IP contract strain. However, this is not a consistent or conscious outcome of IAM and/or open source IP contracts. Therefore, a reliable means of drafting IP contracts that are unaffected by IP contract strain remains elusive.

Although on its face IP contract strain may appear as a problem merely affecting individual contracts, in reality it is likely more pervasive and therefore could affect the private sector generally, or at least market sectors. As discussed in Chapter 5, the daily increase in the number of IP contracts has several consequences, as does the control that IP contracts wield in the private sector. Non-IP contracts can be fixed but only on a contract-by-contract basis and this is costly and time-consuming process. It can require chain of title due diligence and subsequent contracts to repair IP asset holdings. Consequently, there is no easy and immediate resolution to widespread IP contract strain readily available.

Moreover, present legal rules, practices and institutions influencing IP contracts do not offer any strategy to avert IP contract strain. Neither courts nor known contract doctrines can be expected to affect a resolution either, as is the summation of the review undertaken in Chapter 4.

To find a resolution more must be known about the causes and effects of IP contract strain. This thesis introduces the topic, but undoubtedly further research may discover more of its details. Augmented knowledge on this topic may aid in formulating a workable resolution.

8.2.3 Identifying Potential Sources for a Resolution to IP Contract Strain

Once armed with knowledge and details of IP contract strain the next step must be to use this to find a resolution to the strain. Some initial options that may be pursued are presented in Chapter 7. As is stated in the chapter, the options are merely suggestions. A research project which admits of the problem of IP contract strain, and takes time to probe its breadth, so as to understand the causes and effects of the problem, will undoubtedly arrive at additional, better ideas of options that may be integrated into a resolution to IP contract strain.

Additionally, a thorough consideration of the applicability of each option presented in Chapter 7 will likely lead to the identification of additional options.¹¹⁷² This step will involve an approach that balances an open mind (so that possible options are not rejected out of hand) with focus (so that the effort does not become side-tracked). It is conceivable that if a greater number of options are considered this will lead to a more thorough and workable resolution result.

Although it is beyond the scope of this thesis to produce a resolution, it is acknowledged as an important future step. Arriving at a resolution will require concentrated study and brainstorming. Some of the best resolutions are formulated through integrated working and thus, the resolution will likely involve a team. It is a goal of this thesis that future researchers will be inspired by the presentation of the problem of IP contract strain in this thesis and as a consequence they will become engaged in developing a resolution to IP contract strain. It is a

¹¹⁷² Additional potential components may be identified in works not considered in this thesis, such as “Submission – University of Waterloo Response to the Challenge” Response to the *Knowledge Matters: Skills and Learning for Canadians* and *Achieving Excellence: Investing in People, Knowledge and Opportunity*, Innovation in Canada, Government of Canada.

challenging legal conundrum, but one that has the potential to negatively affect the private sector if it is left unexamined and unaddressed.

8.3 Conclusion

The conclusion of this thesis is unsatisfying on one level. It identifies a flaw in IP contracts – IP contract strain. It further shows that this is a systemic problem, growing daily, with the potential to negatively affect private sector markets. Means of fixing non-IP contracts are suggested, but the thesis ultimately ends without supplying a resolution. The content of Chapter 7 tries to ease the abrupt conclusion of this thesis. However, despite this attempt to ameliorate the blunt ending of this work, ultimately the thesis must close by posing a question: What is the next step towards resolving IP contract strain?

The follow-on from this thesis will ideally be research and deliberation aimed at finding a resolution for IP contract strain. There is some evidence of pessimism as to whether a fix is possible. Some say it is “frankly, not very good” because “everyone likes progress but nobody wants to change.”¹¹⁷³ Yet, this thesis chooses to end on an optimistic note. Thus, it can be viewed as fostering two purposes. The primary goal, and stated aim, is to identify IP contract strain and point out its causes and effects. However, the second aim is to encourage future research to achieve a resolution. These are both important tasks as, in the words of Anatole Krattinger: “We must act today.”¹¹⁷⁴

¹¹⁷³ Krattinger, "Technology transfer to developing countries and technology diffusion: the future role of institutions in capacity, regulation and funding", *supra* note 148 at 29.

¹¹⁷⁴ *Ibid.*

APPENDIX “A”

IP CONTRACTS LITERATURE REVIEW

A. Introduction: Prior IP Contract Literature Review

Existing academic commentary on the topic of IP contracts focuses on the issue of whether legal rules can be applied to such contracts in a meaningful manner. This thesis undertakes an analysis of IP contracts that considers the role of legal rules, but also moves beyond this consideration addressed by prior literature to consider other influences on IP contracts. These influences cause IP contract strain and produce the effects of the strain, as examined in this thesis. The prior literature is therefore of import to this thesis as representing a block of research which this thesis endeavours to build upon. The following overview is offered to provide a more detailed review of several relevant authors in the prior literature who are addressed in the Introduction.

Many of these authors, including Jerome Reichman who is arguably considered the most influential academic to offer a legal opinion regarding IP contracts, address the topic of IP contracts in reference to the proposal of the addition of Article 2B to the U.S. *Uniform Commercial Code* (“UCC”).¹¹⁷⁵ (For this reason an overview of Article 2B, which later became the *Uniform Computer Information Transactions Act* (“UCITA”), is provided in the Introduction.) This section by no means provides a comprehensive presentation of all of the existing legal commentary directed to IP contracts. Rather it offers an overview of some particularly persuasive IP contract literature. This section begins with an overview of literature written by Reichman. Subsequently, the works of other authors writing on the topic of IP contracts are introduced.

¹¹⁷⁵ *Uniform Commercial Code*, art. 2B, *supra* note 30.

1. Reichman's Contributions

Reichman discusses IP contracts in a number of co-authored articles. In each he and his co-authors argue that a legal rule solution may be applied to overcome perceived IP contract hurdles. This section briefly canvasses some of the proposals in Reichman's works.

i. Public-Interest Unconscionability Doctrine

An article co-authored with Jonathan A. Franklin, introduces a doctrine of "Public-Interest Unconscionability" for application to Article 2B.¹¹⁷⁶ Reichman and Franklin characterize Article 2B as an instance of subordination of public interests to private interests.¹¹⁷⁷ The public-interest unconscionability doctrine is offered as an answer to this flaw of Article 2B.¹¹⁷⁸ Generally the public-interest unconscionability doctrine prohibits the contractual rights of licensors under Article 2B from running amok. The authors characterize such an outcome as allowing model laws to "foster conditions that actually decrease innovation, discourage competition, and stifle the traditional marketplace of ideas."¹¹⁷⁹

The public-interest unconscionability doctrine provides courts with a guiding principle whereby they may analyze contract terms and declare some as acceptable and others as unacceptable.¹¹⁸⁰ Courts are to apply the principle on a case-by-case basis to weed out contracts

¹¹⁷⁶ Reichman & Franklin, "Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information", *supra* note 9. Reichman and Franklin comment that although the drafters of Article 2B may believe that they are creating policy that stems from the classical IP system, in fact "they paint a distorted picture of how that system actually operates" (at 891).

¹¹⁷⁷ *Ibid.* at 880.

¹¹⁷⁸ See: *Ibid.* Reichman and Franklin endeavour to reconcile freedom of contract with public good use of information and present "a truly enlightened set of default rules" that are intended to "chart appropriate limits to the contractual powers of information providers" (at 915). The doctrine they propose permits lawmakers to "combine the concept of unconscionability, as applied to standard form contracts in general, with the abiding concern for public-interest objections that characterize domestic intellectual property policy" (at 929). The authors' goal is to find a way to allow entrepreneurs "broad powers contractually to control the online exchange of downstream products", while simultaneously limiting their "autonomy to restrict use of the unbundled information in their possession as raw materials of science and education" (at 881).

¹¹⁷⁹ *Ibid.* at 881.

¹¹⁸⁰ *Ibid.* at 937. The authors suggest that with time "it will become clear that certain terms are almost always acceptable and others are virtually certain to be held unacceptable."

that disrupt the balance of private-public interests when they are applied. Private-public interests include harm to public interests or a threat to competition.¹¹⁸¹ Thus, the doctrine is a legal rule intended to temper the effect of Article 2B. With the public-interest unconscionability doctrine in their tool-box, courts can allow the implementation of Article 2B. The doctrine permits the courts to retain a means of inhibiting an attempt to override balance, which is a tenet of IP systems.

The public-interest unconscionability doctrine is an interesting proposition and it is in keeping with Reichman's interest in promoting "entrepreneurial success", as expressed in another of his articles, "Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation" (the "Green Tulips article").¹¹⁸² In that work, Reichman draws an alignment between a successful market for innovation and IP rights. He contends that IP rights are a necessary means to recoup investment costs of R&D.¹¹⁸³ He also recognizes that traditional elements of IP systems, such as balance, are worth protecting. His answer as to how to protect balance is through the introduction of an IP rule.

ii. Liability-Right System for Grain-Sized Innovations

Reichman's work commonly shows a sustained interest in the development of IP systems. He proposes in his Green Tulips article the grant of a liability-right instead of a property-right to

¹¹⁸¹ Ibid. at 936. The authors say that "the overall goal is to give the courts a tool to limit private legislative attempts to alter radically the existing public-private balance with respect to the protection and distribution of digitized information goods by means of non-negotiable contracts of adhesion" (at 937).

¹¹⁸² Reichman, "Of Green Tulips and Legal Kudzu: Repackaging Rights in Subpatentable Innovation", *supra* note 65 at 1746 & 1745. This view is also expressed by Reichman when he argues for the expansion of IP systems to encompass subpatentable innovations. Subpatentable innovations are, "cumulative and sequential working out of shared or common technical trajectories that increasingly drive the post-modern economy in Silicon Valleys and their equivalents throughout the world....The vulnerability of small grain-sized innovation to free-riding duplicators who incur no appreciable costs of reverse engineering and who confer no appreciable lead time advantages on those who first performed the underlying R&D under these conditions breeds fears of market failure that border on panic" (at 1746 & 1751). In Reichman's opinion subpatentable innovations are an important sector of the market to address "as the new millennium gets underway" (at 1746 & 1745).

¹¹⁸³ Ibid.

protect a currently unprotectable IP form, namely subpatentable innovations.¹¹⁸⁴ These are innovations that are too small to constitute inventions, and therefore cannot be protected by patent rights.¹¹⁸⁵ The liability-right system that Reichman proposes has four main elements¹¹⁸⁶: (i) definitions of bundles of “commercially valuable information”;¹¹⁸⁷ (ii) a flexible novelty standard;¹¹⁸⁸ (iii) a period of artificial lead time;¹¹⁸⁹ and (iv) a national registration resource¹¹⁹⁰.

The liability-rule system is entirely based upon the provision of fees for innovation use. It therefore has strong ties to licensing models. The system itself sets-up a form of license whereby use of an innovation requires payment of a fee by the user to the innovation holder. Reichman undoubtedly sees licensing and other commercial strategies involving IP rights as critical to the success of the innovation marketplace. His is a practical view. He sees the cost of innovative creation as prohibitive without the generation of profit from the innovation. This is a commonly held perspective – that innovation will fail without a cash flow.¹¹⁹¹ For this reason, it is necessary to create a means of providing profit for this class of innovations, which otherwise do not attract IP protection, whereby revenue may be expected or enforced.¹¹⁹²

¹¹⁸⁴ Ibid.

¹¹⁸⁵ Ibid. at 1746 & 1751. Under Reichman’s scheme creators of subpatentable innovations achieve a right to payment for their work. The innovations are recorded in a database and a fee is imposed upon those who wish to utilize the innovation.

¹¹⁸⁶ Ibid. at 1746 & 1781.

¹¹⁸⁷ Ibid. at 1746 & 1782. The first element creates a need to define an innovation, but also creates an environment that is industry-focused rather than individual-innovation specific.

¹¹⁸⁸ Ibid. Imposing a novelty standard, the second element, is not merely a replication of the patent novelty standard, but a lesser standard.

¹¹⁸⁹ Ibid. Lead time, the third element is considered important by Reichman for the purpose of allowing the creator of the subpatentable innovation to recoup investment costs through gathering payments for use by others, or through allowing time for the creator to seek out successful commercial strategies themselves.

¹¹⁹⁰ Ibid. National registration, as identified as the fourth element, is required to provide notice of when a fee payment is required. Fees will be set-up according to a liability formula.

¹¹⁹¹ Generally such a view holds that innovation is not undertaken for the sake of creation itself, or to fulfill a gap in the needs of society, but rather is commerce-driven. Thus, innovation must generate profit to be a worthwhile pursuit.

¹¹⁹² Reichman, "Non-Voluntary Licensing of Patented Inventions: Historical Perspective, Legal Framework under TRIPS, and an Overview of the Practice in Canada and the USA", *supra* note 68 at 24. It is noteworthy that Reichman co-authored an UNCTAD-ICTSD paper in which the authors state that “compulsory licensing converts exclusive property rights into *de facto* liability rules, and economists know little or nothing about how liability rules

Reichman's liability-right system is another example of applying new legal rules to support what he views as advantageous IP contracts. He suggests the creation of a licensing scheme to implement user fees for innovation use. However, he does not probe the relationship between the contractual terms of said license and the innovation asset. The application of the legal rules of the liability-rights system is assumed to be sufficient to create a license unaffected by issues, such as IP contract strain. It can be assumed that if flaws are found to exist in the resulting licenses then Reichman may look to new legal rules to address the specific flaws individually.

iii. Contractually Reconstructed Research Commons for Scientific Data

An additional Reichman proposal addresses legal rights and mechanisms to protect digital information resources from exploitation, such as "new ways to control access to and use of digital data by contractual restrictions that are technologically enforced."¹¹⁹³ Reichman and his co-author, Paul F. Uhler are concerned that the new access controls may disrupt research practices and cause the loss of research opportunities created by digital networks.¹¹⁹⁴ The authors set a lofty goal indeed, namely maximizing dissemination of government-funded scientific data while promoting opportunities for commercial exploitation in the private sector. These two elements appear on their faces to be divergent.

The authors propose that researchers create a public space and a contractual mechanism whereby the traditional sharing ethos can be preserved from commoditization.¹¹⁹⁵ Public-interest contractual templates will be created to protect the research commons in response to

operate in the intellectual property context". This lack of knowledge does not mean that liability rules should be avoided in the opinion of the authors, "as long as liability rules provide innovators with truly adequate compensation...they need not undermine the innovator's incentive to invest" (at 24).

¹¹⁹³ Ibid. at 319-320. This proposal is aimed at protecting scientific data from privatization and commercialization.

¹¹⁹⁴ Reichman & Uhler, "A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment", *supra* note 66 at 320. It is the goal of the authors, to "maximize the dissemination of scientific data in a quasi-public space where access and use for research purposes was ensured, without disrupting new opportunities for commercial exploitation of scientific databases in the private sector."

¹¹⁹⁵ Ibid. at 418. In the words of the authors, this step allows the research community to "take its own data management problems in hand".

privatization proposals.¹¹⁹⁶ Generally, the authors propose a model that imposes specific legal rules and contract models that support those rules, onto government-funded research data before it passes into private hands.

The authors admit that this proposal is not without its problems that must be addressed before a final version may be adopted.¹¹⁹⁷ However, its main message is clear. Legal rules for IP contracts can provide a means of protecting access to scientific data for public research purposes, while simultaneously permitting the commercial exploitation of such data by private interests for the profit of public interests.

2. Other IP Contract Authors' Contributions

A positive outcome of the introduction of Article 2B is that it sparked discussion of IP contract issues. Unfortunately, this discussion became mired in a focus upon the relationship between contract law and IP law.¹¹⁹⁸ Authors writing on the subject address the difficult relationship that IP and contract law experience when they are forced to interact.¹¹⁹⁹ Raymond Nimmer notes that the refrain that runs through these articles which suggests that IP contracts are a novel concept is “pretty amusing” because, in fact, IP contracts have existed “from time

¹¹⁹⁶ Ibid. at 420-22. For example, parties to such contracts would be limited from hindering access to data for nonprofit scientific research and education purposes by contractual terms and be obligated to make data available for nonprofit research and educational purposes on fair and reasonable terms and conditions. Contractual terms would further support data depositories by: providing protection for the data stored therein in a horizontal space for research purposes; and simultaneously contemplating private sector commercial exploitation of the data in a vertical space (at 429-30). The authors look to the licensing models applied to open source information technology initiatives, such as Linux.

¹¹⁹⁷ Ibid. at 448-52.

¹¹⁹⁸ In fact, the bulk of existing IP contract commentary was penned in response to the introduction of Article 2B. Several commentators spoke at a symposium hosted in April, 1998 by the Berkeley Center for Law and Technology on “Intellectual Property and Contract Law in the Information Age”. See: Samuelson, “Symposium: Intellectual Property and Contract Law in the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Transactions in Information and Electronic Commerce”, *supra* note 10; and Samuelson, “Intellectual Property and Contract Law for the Information Age: Foreword to a Symposium”, *supra* note 10. Organizers of the symposium recognized that the scrutiny of Article 2B by the drafting committee did not include a thorough consideration of its intersection with IP law. The symposium was a chance to unite these issues.

¹¹⁹⁹ See: Lemley, “Beyond Preemption: The Law and Policy of Intellectual Property Licensing”, *supra* note 37; Gordon, “Intellectual Property as Price Discrimination: Implications for Contract”, *supra* note 78; and Reichman & Franklin, “Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good uses of Information”, *supra* note 9.

immemorial” due to the need for contracts to govern the “transfer and exploitation” of IP assets.¹²⁰⁰ What is truly new about Article 2B is that it reflects an alteration in the global market – the emergence of information and digital commerce as strong sectors of the economy. This change introduced new forms of IP contracts, including shrinkwrap and online contracts.¹²⁰¹

Several authors have written on the topic of Article 2B and this section provides an overview of some of these. Many criticize Article 2B. It is the scope of these criticisms that are of interest to this thesis. The flaws of Article 2B are viewed as legal rule problems. Indeed the prevailing context of the discussion of the majority of the authors introduced in this section holds IP contracts as a topic immersed in and bounded by legal rules.

i. Charles McManis

In the course of the Article 2B amendment process a proposal was raised by Charles McManis that came to be known as the McManis motion. The McManis motion ‘states that a contractual term that is inconsistent with certain provisions of federal copyright law, including the various “users’ rights” enumerated therein, cannot become part of a contract under the mass-market license provision.’¹²⁰² In the course of a symposium discussion McManis defends his motion.¹²⁰³ He characterizes the motion as a legal rule amendment intended to ensure that users

¹²⁰⁰ Cooke Jr. et al., "Symposia: Before UCITA: Licensing, Selling, and Using Information Under the Proposal Formerly Known as UCC Article 2B and Federal Database Protection Legislation", *supra* note 40 at 622.

¹²⁰¹ *Ibid.* at 623.

¹²⁰² McManis, "The Privatization (or “Shrink-Wrapping”) of American Copyright Law", *supra* note 28 at 176. A background for McManis’ comments is provided by his 1998 article wherein he considers the future of the combination of IP and mergers and acquisitions, and more particularly the influence of digital technologies on this combination (McManis, "Intellectual Property and International Mergers and Acquisitions", *supra* note 72). McManis notes that academic journals are virtually silent on the issue of the relationship of IP law and mergers and acquisitions (at 1285). He further articulates his prediction for the future of digital technology availability in cyberspace that IP laws may be rendered inapplicable in such an environment due to “a new set of rules” which may support free content and has the potential to “turn the world of intellectual property upside down”. McManis notes that academic journals are virtually silent on the issue of the relationship of IP law and mergers and acquisitions (at 1300 & 1305). He grounds this discussion in a review of the long-term relevance of TRIPs and therefore is really looking at the potential laws required to govern future international IP contracts.

¹²⁰³ McManis, "The Privatization (or “Shrink-Wrapping”) of American Copyright Law", *supra* note 28 at Addendum.

of copyrighted works are not victimized by the Article 2B contractual device.¹²⁰⁴ McManis fears that the scope of mass-market licenses is prone to over-extension based on an unamended Article 2B. McManis recognizes that such over-reaching may be resolved in time by judicial decisions that “whittle the mass-market provision back to size”.¹²⁰⁵ However, he considers his amendment capable of rendering the cost of such litigation unnecessary because it implements an up-front protection.

Essentially, the motion is a new legal rule that obligates IP contracts to be drafted in accordance with existing laws. Thus, it is a legal rule that ties IP contracts to other legal rules. The McManis motion exemplifies a move towards requiring IP contract terms to support balance. However, the step does not progress far enough. McManis’ legal rule is created to address a specific flaw identified in IP contracts. The legal rule is therefore narrow in its scope which represents an inherent limitation in legal rules as solutions for IP contract flaws.

ii. Pamela Samuelson¹²⁰⁶ & Kurt Opsahl

Samuelson and Opsahl argue that the intersection of UCITA’s with other laws is “inherently troublesome”.¹²⁰⁷ Terms of mass-market contracts are intended to affect substantially more parties than the traditional contracts derived from a two-party negotiation. The authors look to legal doctrines to temper the effect of UCITA contract terms, and find that the doctrine of misuse may be useful for this purpose and that it may furthermore be a “subtler” option than preemption.¹²⁰⁸ Limits are necessary because UCITA cannot stand alone as is, and therefore must be influenced by “the wisdom” of this history of IP law.¹²⁰⁹

¹²⁰⁴ Ibid. at 186.

¹²⁰⁵ Ibid. at 176.

¹²⁰⁶ Samuelson is an organizer of the symposium.

¹²⁰⁷ Samuelson & Opsahl, "How Tensions Between Intellectual Property Policy and UCITA Are Likely to be Resolved", *supra* note 33 at 753.

¹²⁰⁸ Ibid. at 765. The authors characterize the misuse doctrine as applicable so that “any attempt to extend an intellectual property grant of monopoly rights beyond the statutory scope renders the federal right temporarily

The solution proffered by Samuelson and Opsahl is to temper a new law with older laws. This is similar to the approach of the McManis motion. Both exhibit outcomes exemplifying the specificity and narrow application that traditionally affects a legal rule.

iii. Jessica Litman

Litman criticizes Article 2B as one of a number of “disingenuous” proposals to improve existing law.¹²¹⁰ She argues that Article 2B is not new law, but instead is a means of sanctioning procedures that are already in place and which are comfortable to commercial lawyers.¹²¹¹ Ultimately, Article 2B promotes confusion, and in particular the drafters are confused about current IP law, unable to recognize simple aspects of copyright, such as the definition of “copies”.¹²¹²

In a later article Litman admits that common solutions are “gradual and slow”.¹²¹³ Consequently she advocates that a new digital data issue, namely data privacy, “really needs” federal statutory protection.¹²¹⁴ These comments give some insight into just how keen her disappointment is in Article 2B. In Litman’s opinion, if the drafted law is unworkable as written

unenforceable. It prevents an intellectual property rightsholder from thwarting the public policies underlying the grant” (at 763). The authors additionally point out that copyright misuse is most likely to affect UCITA, and this form of misuse is underdeveloped in comparison to other forms of misuse doctrine (at 764).

¹²⁰⁹ Ibid. at 765.

¹²¹⁰ Litman, “The Tales that Article 2B Tells”, *supra* note 74 at 932.

¹²¹¹ Ibid. at 940-41.

¹²¹² Ibid. at 942-43.

¹²¹³ Litman, “Information Privacy/Information Property”, *supra* note 56 at 1313.

¹²¹⁴ Ibid. The need for protection for privacy data is also discussed by Samuelson (Samuelson, “Privacy as Intellectual Property?”, *supra* note 759). Samuelson proposes the imposition of minimum standards of commercial morality on companies that process personal data by information privacy law, and the creation of default licensing rules to protect personal information in cyberspace. In this discussion she points to Article 2B as a model law that may have an effect upon licensing of personal data (at 1163) and whereby standards of terms and conditions of a website gathering personal information may be implemented (at 1165). Even if Article 2B is deemed not to be applicable to personal data in the end Samuelson argues that a contractual approach to protecting information privacy is preferable because it can accommodate many factors and is “flexible, adaptable, market-oriented” approach to control of use of personal data (at 1172).

this is a critical flaw because expecting common law to produce a legal rule to address a digital technology issue quickly is not a realistic option.¹²¹⁵

Litman's comments raise another problem of legal rule solutions for IP contract flaws. Not only are legal rules normally narrow and specific, as discussed above, they also frequently take a long time to be produced. In the world of technology, such as digital technologies, the pace of innovation is rapid. Therefore, there is a serious chance that once the legal rule is introduced the problem it was meant to address may already have become obsolete. For example, problems in shrinkwrap licenses that exist when this type of IP contract is first produced may no longer be an issue by the time a legal rule is generated to address the identified problems.

Moreover, Litman introduces an aspect of IP contracts which is not controlled by legal rules, namely legal practice. She notes that legal practice drives IP contracts for digital innovations and that Article 2B may merely be a legitimization of a practice. However, what Litman fails to recognize is that by the time the legal rule is accepted the practice may have changed. Consequently, legal rules do not dictate practice. In many cases, the rules remain steps behind practice. For this reason legal rules are a poor tool to address many IP contract flaws.

iv. Mark Lemley

Lemley views Article 2B as the basis for contract interpretation that is "about the transformation of copyright law from a creator's rights statute to a consumer protection statute."¹²¹⁶ He argues that the influence of IP law on contract enforcement is not limited to preemption.¹²¹⁷ Lemley sees Article 2B as expanding contract law so as to allow it to alter IP

¹²¹⁵ Litman, "Information Privacy/Information Property", *supra* note 56 at 1313.

¹²¹⁶ Lemley, "Beyond Preemption: The Law and Policy of Intellectual Property Licensing", *supra* note 37 at 115.

¹²¹⁷ *Ibid.*

rules.¹²¹⁸ He further recognizes that a means of reconciling IP laws and contract laws when these are in conflict is required.¹²¹⁹

Lemley ultimately concludes that it may be possible to “bar some license terms that Article 2B purports to validate” and stem the tide of “private legislation” imposed by contract terms.¹²²⁰ He relies for this outcome upon the application of existing legal rules, such as preemption, which will require that the balance of IP law be maintained.¹²²¹ Reliance upon preemption may be misplaced, primarily because courts do not routinely apply preemption to IP contract interpretation.

v. Raymond Nimmer

Nimmer does not consider Article 2B as capable of expanding contract law to a controlling position in its relationship with IP assets.¹²²² He, like Lemley, has faith in the ability of existing legal rules to temper any effect of Article 2B. Nimmer relies upon the long-standing relationship between IP and contract laws, and grounds his conviction in the fact that IP assets have always relied upon this relationship to realize commercialization.¹²²³ He acknowledges that there may be points of tension or potential for conflict between IP and contract laws promulgated by Article 2B, but believes there are means of addressing abuses that occur.¹²²⁴ Notably, Nimmer limits his vantage point for means of addressing tension between IP and contract laws to legal rules already in place.

¹²¹⁸ Ibid. at 125.

¹²¹⁹ Ibid. at 136.

¹²²⁰ Ibid. at 115 & 148.

¹²²¹ Ibid. at 171.

¹²²² Nimmer, "Breaking Barriers: The Relation Between Contract and Intellectual Property Law", *supra* note 16 at 829.

¹²²³ Ibid. at 888.

¹²²⁴ Ibid. at 889.

vi. Wendy Gordon

Prior to engaging in the Article 2B debate, Wendy Gordon considers the ability of contract to apply a “copy-privilege” as an alternative to copyright.¹²²⁵ Gordon is not suggesting that contracts should replace copyright. She notes that: “Contemporary copyright is valuable precisely because it extends beyond the place where the proprietor and his contractual extensions can stand guard. When a copyrighted book falls into the hands of an innocent nonpurchaser, the property regime’s prohibition against copying binds him just as closely as a person who has promised the author not to copy.”¹²²⁶ In this manner, copyright offers greater depth of protection than is possible through contract. Copyright binds all parties whereas contract only binds the contracting parties.

Having established that copyright is preferable to contract on some levels, she then considers whether price-discrimination, as between prices charged to various users of works, such as readers and the publisher of a novel, is best applied through contract.¹²²⁷ To aid in this exploration Gordon considers the *ProCD* case¹²²⁸ which addresses the legality of a shrinkwrap contract. She notes that the database at issue in the case was not protectable by copyright and therefore a prohibition on copying the database was only possible due to the contractual terms imposed.¹²²⁹ The digital age is therefore affecting the relationship between IP assets and contracts. Whereas once contracts were expensive and difficult to apply to many parties, as is expressed in her earlier work, resources are available at present whereby contractual terms may

¹²²⁵ Gordon, "An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent and Encouragement Theory", *supra* note 77 at 1418. Gordon bases her comments upon the work of Stanley Liebowitz and his research findings that library subscription fees are implicitly license fees for photocopying and determines from this that subscription contracts could replace copyright license fees.

¹²²⁶ *Ibid.* at 1419.

¹²²⁷ Gordon, "Intellectual Property as Price Discrimination: Implications for Contract", *supra* note 78 at 1371-72.

¹²²⁸ *ProCD, Inc. v. Zeidenberg*, *supra* note 46, as in Chapter 4.

¹²²⁹ Gordon, "Intellectual Property as Price Discrimination: Implications for Contract", *supra* note 78 at 1378-79.

be applied to many parties, quickly and easily, without the need for negotiation costs being expended for each contract.¹²³⁰

Gordon recognizes that some of her colleagues advocate a shift from IP rights to inter-working contractual rights and technological protections,¹²³¹ yet she continues to advocate for IP rights. Gordon finds that inadequacies considered to plague IP rights, such as inability to price discriminate, are unfounded.¹²³² Such inadequacies are not in Gordon's opinion "a reason to approve a firm's efforts to use contracts to acquire monopoly power over a market."¹²³³

Gordon argues that IP contract terms should not trump IP laws. For example, the inter-working of contractual rights and technological protection may occur if a CD is sold in accordance with shrinkwrap license agreement as well as anti-copying measures. In such a circumstance, it would not be the effect of copyright laws that prohibits a user from copying the content of the CD. Instead it would be a combination of the shrinkwrap license terms and the anti-copying measures that would keep a user from copying the content of the CD. Gordon does not conceive of replacing copyright with a combination of technological protection and contractual rights as a wise move forward. Instead she considers legal rules that govern IP assets to have a strong role to play in an IP contract. Overriding these rules, or deeming these rules to be obsolete in light of technological protections and contractual terms, is not the answer. Gordon does not explicitly acknowledge the existence of strain in IP contracts, but her work is notable in the context of this thesis because she focuses her analysis of IP contracts on the role of IP laws.

¹²³⁰ Ibid. at 1380.

¹²³¹ Ibid. at 1386. In particular Gordon references William Fisher III and the views Judge Easterbrook offers in the ProCD judgement.

¹²³² Ibid. at 1389.

¹²³³ Ibid. at 1390.

APPENDIX “B”:

TYPES OF IP ASSETS

A. IP Asset Types

Patent, copyright, industrial design and trade-mark are influential IP assets in the private sector. Although these all fit within the category of IP assets, each is unique. Not only the rights represented by these IP assets differ, but the legislation and jurisprudence governing each type of IP asset can differ slightly from country-to-country.¹²³⁴

To avoid an overly lengthy definition of each IP asset the discussion that follows utilizes Canadian IP systems as a point of reference. Additionally, the discussion herein is limited to those aspects of patent, industrial design, copyright and trade-mark legislation that are most relevant to private sector contracting interests. The purpose of this section is to describe aspects of IP assets and to offer a context for each IP asset in relation to IP contracts.

As becomes apparent from a review of existing IP assets individually, the IP distinguishing traits identified in this thesis are applicable to each of the types of IP assets. However, what may differ between the IP assets is the magnitude or level of each IP distinguishing trait existing in each IP asset. For example, as discussed above, industrial designs invoke weaker levels of control, yet include a higher level of balance, than patent rights. This is reflected in the fact that, as described below, a greater number of exclusive uses are granted to the holder of a patent than are granted to the holder of an industrial design.

¹²³⁴ See: Karen Lynne Durell & Tania Bubela, "Intellectual Property and Biotechnology" in Shayne Cox Gad ed., *Handbook of Pharmaceutical Biotechnology* (Hoboken: John Wiley & Sons, Inc., 2007). Forms of IP rights are governed by a combination of international treaties and national legislation. International treaties provide guidelines for national IP legislation. For example the *Trade-Related Aspects of Intellectual Property Rights* treaty, *Agreement on Trade-Related Aspects of Intellectual Property Rights*, *supra* note 523, sets minimum requirements that the national legislation of all countries that are members of the World Trade Organization must meet. Oftentimes the role of the international treaties is misunderstood and assumed to create a harmonized, international form of IP right. This is not the case.

Also, the IP distinguishing trait of control will exist at a higher magnitude in a patent than in a trade-mark because a patent (which reflects rights that protect an innovation against anyone else who wants to copy the invention) offers a greater magnitude of a trait of control of the asset than a trade-mark (which is limited to reflect rights that prohibit others from using the mark with respect to a proscribed number of wares and/or services). Moreover, the trait of flexibility/evolution may be at a higher magnitude for copyright assets than for patent assets. This is reflected in that copyright generally extends protection to subject matter immediately as new categories and types of works emerge.¹²³⁵ Patentable subject matter in some jurisdictions, such as Canada, is less likely to embrace new areas of invention as readily as copyright.¹²³⁶

The magnitude or levels of IP distinguishing traits for each type of IP asset will cause a different tempering relationship between the traits. For example, an IP asset with a greater magnitude of balance, such as an industrial design, will enjoy a greater level of tempering between the traits of balance and control than occurs between the same traits of a patent.

The differing levels or magnitudes of IP distinguishing traits for each IP asset are reflected in the descriptions of IP assets provided below. The descriptions are directed to the IP rights granted for each IP asset. As discussed above, IP rights are not synonymous with traits, but the levels or magnitude of the IP distinguishing traits inherent in an IP asset influence the IP rights provided by the IP asset. Moreover, the IP assets described below aid in an understanding of the role of IP assets in IP contracts, as these represent the IP assets that are most often utilized in corporate transactions. Furthermore, to help delineate the relationship between these IP assets

¹²³⁵ Durell, "Intellectual Property Protection for Computer Software: How Much and What Form is Effective?", *supra* note 184.

¹²³⁶ Software provides an example of this difference. In Canada copyright has expanded to protect software, however software is only patentable under strict conditions. See: *Ibid.*

and IP contracts, the types of IP contracts by which a contractual use of each IP asset is most frequently made by private sector contract drafters are identified in the discussion below.

1. Patents

Patents are granted in Canada in accordance with the Canadian *Patent Act*.¹²³⁷ Generally patents provide rights pertaining to inventions. However, not all inventions are patentable. To be patentable an invention must meet four criteria.¹²³⁸ First, it must incorporate specific, patentable subject matter.¹²³⁹ Second, it must be novel, which means the invention is new and has not been publicly disclosed outside a granted grace period.¹²⁴⁰ Third, it must have utility, which means that it must work. Fourth, it must be not be obvious. (An invention that a person skilled in the art or science of the invention would consider a foregone conclusion to create is deemed obvious.¹²⁴¹)

The first step of the patent process is filing an application describing the invention with a national or regional Patent Office.¹²⁴² The application must meet specific standards and formats, as prescribed by patent legislation relevant to the Patent Office where the application is filed. Patent applications are reviewed by Patent Office Examiners for compliance with specified rules

¹²³⁷ *Patent Act*, *supra* note 141.

¹²³⁸ *Ibid.* s. 2 & s. 28.3. See also, Hughes & Woodley, *Hughes and Woodley on Patents*, *supra* note 657 at §5.

¹²³⁹ Patent rights are only for specific subject matter. Wide categories of suitable inventions are defined in section 2 of the *Patent Act*, *supra* note 141, and includes “any new and useful art, process, machine, manufacture, or composition of matter” or any improvement thereof. Some particular types of inventions have been excluded from patentability both expressly in the Patent statute (abstract theorems, s. 27(8)) as well as through common law (games, medical treatments, etc.) Patentable subject matter varies amongst countries. TRIPs sets some wide guidelines regarding the subject matter that WTO member countries must respect as patentable, but it also acknowledges that other inventions are patentable at the discretion of individual countries. Higher life forms and stem cell innovations are two categories which have created great controversy in the recent past. (See: <http://cbac-cccb.ca/epic/site/cbac-cccb.nsf/en/ah00217e.html>; and <http://www.stemcellpatents.com/>).

¹²⁴⁰ *Ibid.* s. 28.2. A disclosure grace period of twelve months is provided for an inventor to disclose his or her invention to the public and still seek patent rights. Other jurisdictions, such as the European Patent Office, do not offer a disclosure grace period and require absolute novelty.

¹²⁴¹ *Ibid.* s. 28.3.

¹²⁴² The Canadian Intellectual Property Office (“CIPO”) is the national Patent Office of Canada. Regional patent offices include the European Patent Office and the African Regional Intellectual Property Office. A patent application may also be filed with a Patent Cooperation Treaty office, which provides a means of reserving the right to file a patent application with national and regional patent offices of members of the World Trade Organization.

and procedures. Such rules and procedures are influenced by several treaties. For example, the Canadian *Patent Act* allows for patent applications filed in one jurisdiction to be filed in other treaty-member states within twelve months of the original filing date.¹²⁴³ The subsequently filed patent application may claim priority to the original filed application, which can offer significant patent protection advantages.¹²⁴⁴

A patent right provides the patent holder with “the exclusive right, privilege and liberty of making, constructing and using the invention and selling it to others to be used.”¹²⁴⁵ Therefore, in order to utilize a patented invention a non-patent holder must seek permission from the patent holder. Generally, permission is granted through a patent license contract. Once granted a patent is enforceable for twenty (20) years from the patent application filing date.¹²⁴⁶ Patent rights may only be enforced by a patent holder within the jurisdiction where the patent is granted.¹²⁴⁷ For example, a patent granted by the Canadian Intellectual Property Office (“CIPO”) may be enforced in Canada.

¹²⁴³ *Patent Act*, *supra* note 141 s. 28.1. See also: *Paris Convention for the Protection of Industrial Property*, WO020EN art. 4.

¹²⁴⁴ *Patent Act*, *supra* note 141 s. 28.1. Claims included in the original filed application as well as the subsequently filed patent application may be granted a claim date that is the date of the filing of the original application. This means that the protection for the claimed element of the invention will be granted against the world as of the date of the earlier filing date, commonly known as the priority filing date.

¹²⁴⁵ *Ibid.* s. 42. Although the validity of the patent is assumed upon issuance, pursuant to s. 43(2), patent rights can be challenged before a court of competent jurisdiction.

¹²⁴⁶ *Ibid.* s. 44. A patent issued on the basis of applications filed prior to October 1, 1989 may be granted a term of seventeen years from the date of issuance, as per s. 45. However, most patents today are issued based upon patent applications filed on or after October 1, 1989 and therefore enjoy a twenty year term. The alteration in the patent term is an example of the effect of international conventions upon Canadian patent law, and that of other nations. The twenty-year term is supported by TRIPs and is enforced through that agreement by the WTO arbitrator. Thus, international pressures shape national patent laws. Jacqueline D. Krikorian, "Planes, Trains and Automobiles" (2005) 8 J. Int'l Econ. L. 921 at 947-951. See also: Gregory C. Walker, "Trade Usages and the CISG: Defending the Appropriateness of Incorporating Custom into International Commercial Contracts" (2005) 24 J.L. & Com. 263; Oman, "Corporations and Autonomy Theories of Contract: A Critique of the New Lex Mercatoria", *supra* note 319; Nico Krisch, "International Law in Times of Hegemony: Unequal Power and the Shaping of International Legal Order" (2005) 16 Eur. J. Int'l L. 369; and Matthew Fagin, "Regulating Speech Across Borders: Technology vs. Values" (2003) 9 Mich. Telecomm. & Tech. L. Rev. 395.

¹²⁴⁷ John R. Thomas, "Litigation Beyond the Technological Frontier: Comparative Approaches to Multinational Patent Enforcement" (1996) 27 Law & Pol'y Int'l Bus. 277.

Patent rights may be exerted over aspects of the invention that are identified in the claims of the patent. Claims are to be drafted to explicitly define the elements of the invention.¹²⁴⁸ Unfortunately, the boundary set by the claims is often difficult to establish with certainty and may require laboured interpretation of the claims text.¹²⁴⁹ In the words of David Vaver:

The requirement that the invention be fully disclosed is said to lie “at the heart of the whole patent system”; yet it is a heart that beats but faintly...“highly developed art of drafting patent claims so they disclose as little useful information as possible – while broadening the scope of the claim as widely as possible.”...Intelligent members of the public are disenfranchised: they have no idea of how a new invention may affect them because the language of the patent is not and need not be addressed to them. A judge who once suggested that a patent should be intelligible to the ordinary person was firmly rebuffed on appeal by the Supreme Court of Canada.¹²⁵⁰

Claims interpretation is to be undertaken in accordance with a judicially approved purposive construction test.¹²⁵¹

Interference with any of the rights granted in the patent, by a third party who is not authorized to make such interference, may be deemed an infringement of a patent.¹²⁵² A patent owner may enforce his or her rights against an infringer upon the occurrence of such interference, or after the patent is granted if infringement occurs pre-grant.¹²⁵³ Several exceptions to infringement are included in the *Patent Act*. For example, section 23 states that any use of an invention on, and expressly for the needs of, a ship, vessel, aircraft or land vehicle entering

¹²⁴⁸ *Patent Act*, *supra* note 141 ss. 27(4).

¹²⁴⁹ See: *Free World Trust v. Électro Santé Inc.*, *supra* note 183; *Whirlpool Corp. v. Camco Inc.*, *supra* note 183; and *Electric and Musical Industries et. al. v. Lissen et. al.*, (1939) 56 R.P.C. 23 (H.L.) at 39 & 41-42. The House of Lords has said that, “the prima facie meaning of words used in a claim may not be their true meaning when read in the light of such a dictionary or of such technical knowledge; and in those circumstances a claim, when so constructed, may bear a meaning different from that which it would have borne had no such assisting light been available.”

¹²⁵⁰ David Vaver, "Intellectual Property Today: Of Myths and Paradoxes" (1990) 69 *La Revue de Barreau Canadien* 98 at 123. The Supreme Court of Canada case referenced in the citation is *Consolbord Inc. v. MacMillan Bloedel (Sask.) Ltd.*, [1981] 1 S.C.R. 504 and the commentary is found at pp. 523, 526.

¹²⁵¹ The Supreme Court of Canada defines the purposive construction test in concurrent judgements *Whirlpool Corp. v. Camco Inc.*, *supra* note 183, and *Free World Trust v. Électro Santé Inc.*, *supra* note 183. Other claims construction tests are applied in other jurisdictions.

¹²⁵² *Monsanto Canada Inc. v. Schmeiser*, *supra* note 243 paras. 30 & 34.

¹²⁵³ *Patent Act*, *supra* note 141 ss. 55(2).

Canada temporarily or accidentally, does not constitute patent infringement. Furthermore, section 55.2 states that interference with exclusive patent rights may not be an infringement if this occurs for the purpose of the “development and submission of information required under any law of Canada, a province or a country other than Canada that regulates” a product.

The process to obtain patent rights can be difficult and time-consuming to undertake.¹²⁵⁴ Patent rights are granted in Canada to the inventor who files an application for a particular invention first, and therefore has an earlier filing date than subsequent applications filed for the same invention.¹²⁵⁵ The Canadian patent system is based upon a “first-to-file” system. (Not all patent systems respect the rights of patentees who are the first to file.) Moreover, the Examiners can raise many bases to reject a patent application during the prosecution stage. Patent rights can also be difficult to retain.¹²⁵⁶ The validity of a patent, and therefore its longevity, can be linked to technical steps occurring during the patent grant process, such as payment of maintenance fees.¹²⁵⁷ Small mistakes, or errors in procedure, can have catastrophic results down the line for patent holders and can result in the loss of patent rights.¹²⁵⁸

Once a patent is granted it may be difficult to understand its scope. As inventions are becoming more complex (e.g., with the introduction of complex innovations, such as

¹²⁵⁴ The difficulty of obtaining a patent, and the question as to whether those who do obtain patents deserve to do so, has long been asked. In the words of Charles Dickens: ‘No man in England could get a Patent for an Indian-rubber band, or an iron-hoop, without feeling all of [the application stage]. Some of them over and over again. I went through thirty-five stages. I began with the Queen upon the Throne. I ended with the Deputy Chaff-wax. Note. I should like to see the Deputy Chaff-wax. Is it a man, or what is it?....My opinion is “that the whole gang of Hanapers and Chaff-waxes must be done away with, and that England has been chaffed and waxed sufficient”’ (Charles Dickens, “A Poor Man’s Tale of a Patent” in David Vaver ed., *Intellectual Property Rights: Critical Concepts in Law* (New York: Routledge, 2005) 37 at 42).

¹²⁵⁵ Hughes & Woodley, *Hughes and Woodley on Patents*, *supra* note 657 at §16.

¹²⁵⁶ See: Llewelyn, “Schrodinger’s Cat: An Observation on Modern Patent Law”, *supra* note 981 at 15-16.

¹²⁵⁷ See: *Barton No-till Disk Inc. v. Dutch Industries Ltd.*, (2001) 14 C.P.R. (4th) 499.

¹²⁵⁸ For example, disclosure of prior art, maintenance fee payments, public disclosure of an invention, if inadequately performed can each threaten the validity of a patent. This is of particular concern when a patent right is transferred or sold. A subsequent owner of patent rights may not be aware of the activities of the original owners of the patented invention. Thus, owners of patents should be aware that due to the nature of patents, rights granted therein are not free and clear upon the issuance of a patent.

biotechnology, nanotechnology and pharmaceutical inventions) some authors question whether patent drafting has degenerated to a point that patents cannot even be understood by the inventors of the technology. It is suggested that patent agents “may adopt wording quite different from that in which the inventor might have used.”¹²⁵⁹ For example, some scientists complain that they cannot understand patents written to protect their own inventions and advise junior researchers not to expect to understand patents written to disclose inventions they develop.¹²⁶⁰

These comments are of great concern in light of the fact that patent documents are meant to be addressed to persons skilled in the art of the invention, and these are the people saying they do not understand the patent content.¹²⁶¹ If the person who created the invention, being a person who is undoubtedly skilled in the art of the invention, cannot understand the patent document how are his or her colleagues to be expected to understand the document? And if persons skilled in the art cannot decipher patent documents, then who is qualified to ascertain the scope of the patent? An even more disconcerting consideration is that an unintelligible patent can fail to mark fenceposts to warn the public not to tread within the patent rights.¹²⁶² The end result is that the true scope of a patent may be virtually impossible to determine with certainty.

Despite the uncertainty surrounding patent rights, several forms and types of IP contracts are utilized in relation to patents. The following are some examples of these IP contracts:

- Licenses offer a particular contractual use of a patent. The use may be limited to a particular time period or jurisdiction. Other limitations pertaining to use of the patent may also be included in the contract terms.

¹²⁵⁹ MacOdrum & Hitchman, "Don't Fence Me In: Infringement in Substance in Patent Actions", *supra* note 456.

¹²⁶⁰ Advanced Food and Materials Network, HQP Training conference, (January 2007), Hull Quebec.

¹²⁶¹ See: Mark A. Lemley & Dan L. Burke, "Biotechnology's Uncertainty Principle" (2004) 54 Case W. Res. L. Rev. 691. This requirement can itself be the basis of confusion regarding patent scope. Identifying persons who fit the profile of being skilled in the art can be a difficulty – who is too skilled, or not skilled enough? Moreover, interpreting the patent document through the eyes of this fictional character can lead to different interpretations and standards of knowledge depending on the area of technology.

¹²⁶² See: MacOdrum & Hitchman, "Don't Fence Me In: Infringement in Substance in Patent Actions", *supra* note 456.

- Assignments transfer all rights, or a portion of the rights, in the patent to another party.
- Joint Development Agreements are generally created between parties engaged in the development of a new technology. For example, a group that may draft a joint development agreement is a research team. The contract terms may address patent rights in technologies to be integrated into the development process, as well as future patent rights that may relate to the technology to be developed.
- Material Transfer Agreements are a form of license that governs the transfer of a material between parties. This form of agreement is often applied to patented biological materials, such as genes. The agreement may address the mode of transfer, the date of transfer, as well as dictate rights of contractual use (e.g., term of use, type of use, who can use the material, any further transfer of the material, etc.).

As patents are a popular form of IP asset and are considered a generator of substantial corporate value, new contract forms evolve regularly to facilitate applications of patent assets.

There are several important considerations relating to IP contracts involving patents. Firstly, the inventor is generally the first owner of a patent. Consequently knowledge of the chain of title is critical to ensure that the party granting or transferring rights in a patent asset is the true owner. Additionally, as discussed previously, technical details can cause a patent to be invalidated and as a result, it is important that contracting parties undertake significant due diligence to establish the past use, status and scope of a patent asset. Moreover, an IP contract involving a patent should include terms that assign liabilities relating to the patent, as well as appropriate representations and warranties between the parties. Such terms provide guidance as to the responsibilities of each contracting party for general maintenance of the patent asset. Most importantly, parties should understand the boundaries or scope of the patent asset, which are defined by the claims of the patent, the laws governing the patent and IP distinguishing traits.

2. Industrial Designs

Industrial designs are governed in Canada by the *Industrial Design Act*.¹²⁶³ An industrial design is defined in s. 2 of the *Act* to mean “features of shape, configuration, pattern or ornament and any combination of those features that, in a finished article, appeal to and are judged solely by the eye.” As such, the grant of an industrial design does not provide any protection relating to the function of the product, but merely protects its aesthetics.¹²⁶⁴ The term of registration may last for ten years from the date of the registration of the design.¹²⁶⁵ In order to indicate that a design is registered the product manufactured based on the design may be marked with a “D” in a circle.¹²⁶⁶

In order to seek an industrial design an application must be submitted to a national registration body, such as CIPO. The application should include a drawing of the design and a written description thereof.¹²⁶⁷ The registration of an industrial design grants the owner an exclusive right to the design shown in the drawing of the application.¹²⁶⁸ To be registerable a design must be distinct. Moreover, registration of any design that is “contrary to public morality or order” may be refused by the Minister, in accordance with subsection 6(2). Additionally, subsection 6(1) states that an industrial design right will not be granted to a design that either is “identical with” or does “so closely resemble any other design already registered” that it may be “confounded therewith”.

Any interference with the rights in the design by any third party may be grounds for an infringement action.¹²⁶⁹ Such interference may include making, importing for the purpose of

¹²⁶³ *Industrial Design Act*, R.S.C. 1985, c. I-9, c. I-9.

¹²⁶⁴ *Ibid.* s. 5.

¹²⁶⁵ *Ibid.* s. 10.

¹²⁶⁶ *Ibid.* ss. 17(2)(a).

¹²⁶⁷ *Ibid.* ss. 4(1).

¹²⁶⁸ *Ibid.* s. 9.

¹²⁶⁹ *Ibid.* s. 15.

trade or business, selling, renting or offering or exposing for sale or rent “any article in respect of which the design is registered”, including doing any of these things in relation to a kit.¹²⁷⁰ An infringement action may be instigated by the owner of the design or any licensee of the design.¹²⁷¹ The first author of the design will be the first owner, unless the design is created on behalf of another person for consideration, in which case the person who the design is created for is the first owner.¹²⁷² An infringement allegation may be the basis for court proceedings.

Industrial designs are relied upon by particular industries, for example the fragrance industry and the sportswear industry. The reason industrial designs are of particular interest to these industries is that they seek protection for the look of their wares. Industrial designs provide an exclusive right in the non-functional aspects of a ware. Consequently distinct designs, such as that of a perfume bottle or the appearance of an athletic shoe, may be protected by way of an industrial design. Industrial design rights provide a means to stop competitors from copying a design holder’s wares.

Rights in an industrial design may be assigned to another party, or the design holder may “grant and convey an exclusive right to make, use and vend...throughout Canada or any part thereof” to a third party during the term of registration.¹²⁷³ An assignment may be achieved by way of an IP contract that includes an assignment term. Whereas, granting or conveying the exclusive right, or any portion thereof, relating to an industrial design may be achieved by way of a license. It may further be possible for a development agreement to be in place prior to the creation of the industrial design. This may be between two or more parties working together to produce the design.

¹²⁷⁰ Ibid. s. 11.

¹²⁷¹ Ibid. s. 15.

¹²⁷² Ibid. s. 12.

¹²⁷³ Ibid. s. 13.

3. Copyright

Copyright is governed in Canada by the *Copyright Act*.¹²⁷⁴ The right is granted for the expression of an idea and attaches to works that are “original literary, dramatic, musical and artistic.”¹²⁷⁵ Ownership of copyright allows a copyright holder to prohibit others from copying a protected work. Copyright is generally enforceable for the lifetime of the author of the work plus fifty (50) years, although the term of copyright can vary for some works.¹²⁷⁶

Unlike patent rights, copyright does not require an application to be filed, a review process, or a formal grant. Copyright comes into existence automatically upon the creation of a work.¹²⁷⁷ This being said, it should be noted that voluntary copyright registration is facilitated by some national Copyright Offices, including CIPO.

Another difference between patent and copyright is that copyright not limited to protection within a single national border. In accordance with international treaty rights, copyright can protect a work across borders of treaty member states.¹²⁷⁸ For example, copyright in a book written in England, such as the Harry Potter books by J.K. Rowlings, must be respected not only in England but in treaty member states as well, including Canada and the United States. Copyright is respected in accordance with the laws of each state where the work resides – e.g.

¹²⁷⁴ *Copyright Act*, *supra* note 114.

¹²⁷⁵ *Ibid.* ss. 5(1) & ss. 3(1).

¹²⁷⁶ Handa, *Copyright in Canada* at 243-44. Recently the term of copyright protection has generated controversy. It is argued by some to be greater than the useful life of various business related works, such as software. Despite the recent debate the United States, following the lead of the European Union, decided in 1998 to extend copyright protection to the lifetime of the author plus seventy years (at 252-53). This change has been criticized as having been motivated by corporate interests. (See: Chris Sprigman, "The Mouse that ate the Public Domain" *FindLaw* (2002), online: <http://writ.corporate.findlaw.com/commentary/20020305_sprigman.html>. In the U.S. where what started as a concern about the expiration of copyright in Mickey Mouse (due to expire in 2003) led to the passing of the *Sonny Bono Copyright Term Extension Act*. This Act increased the term of works copyrighted: a) by individuals since 1978 to life plus 70 years from the previous life plus 50 year term; and b) works for hire made by or for corporations to 95 years.)

¹²⁷⁷ *Copyright Act*, *supra* note 114 s. 54.

¹²⁷⁸ An example of an international copyright convention is the *Berne Convention*. This should not be misunderstood as a global copyright. Copyright rules and policy are dictated for each nation, however, these rights are respected in other countries, a fact facilitated by treaties.

Canadian laws for Harry Potter books in Canada, U.S. laws for Harry Potter books in the U.S., and so forth.

A copyright holder has the right to produce or reproduce a whole work, or a substantial portion of a work, in any form whatsoever.¹²⁷⁹ A recent Canadian decision has held that a work does not need to be original or creative, it is merely required to be the product of the exercise of skill and judgement by the creator.¹²⁸⁰ The standard of “skill and judgement” reflects recent changes to the *Copyright Act*, modified in 1988 to extend the definition of “literary work” (at s. 2) to include computer programs and compilations. Previously “literary work” was limited to works of personal expression, such as novels. The modification of this definition extended the scope of copyright protection to include works that are mechanical and technical.

In fact, an extension of copyright protection to new categories of works is an almost regular occurrence. Amendments to the *Copyright Act* in 1999 extended copyright protection to computer programs and compilations. This change is an example of how copyright protection can expand to protect corporate interests. Virtually every corporation is affected in some manner by copyright protection for computer programs – whether it creates software, or has to license-in software. Moreover, by articulating a test of “skill and judgement” the Supreme Court of Canada placed the bar of copyright protection between “intellectual effort” and mere “mechanical exercise”¹²⁸¹, thereby supporting the 1999 amendments and further widening the door to include other intellectual assets which do not meet a standard of creativity. Thus, the modifications and the new standard, when united, provide a wider category of assets upon which corporations may claim copyright protection.

¹²⁷⁹ *Copyright Act*, *supra* note 114 s. 3.

¹²⁸⁰ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 14 para. 16.

¹²⁸¹ *Ibid.*

Copyright is an important private sector asset by virtue of the fact that it attaches to many tangible assets owned by companies (e.g., manuals, software, designs, logos, performances, presentations, broadcasts, etc.). Yet, proving infringement of copyright can be extremely difficult. Technologies such as the Internet mean that digital works in particular, can be easily copied and widely distributed at the touch of a button. Proving who copied the work and then holding that person accountable can incur expenditure of vast resources. Additionally, it is questionable whether existing methods of copying digital works, such as peer-to-peer distribution, actually offend the *Copyright Act*.¹²⁸² Immunity from infringement action is granted to certain types of copying, known as fair dealing.¹²⁸³ These include copying for research or private study,¹²⁸⁴ for criticism or review¹²⁸⁵ and news reporting¹²⁸⁶.

An aspect of Canadian copyright that is often overlooked, or misunderstood, is that of moral rights.¹²⁸⁷ These rights recognize an author's personal relationship with their creation and allow the author to protect the integrity of her work, even after the work is no longer in her possession or control. Moral rights extend automatically and last the same term as copyright. They are not assignable, but may be waived either wholly or partially by the author.¹²⁸⁸

¹²⁸² For example, the wording of section 80 of the *Copyright Act* is not directly relevant to the means of transferring digital files between computers, as is utilized in P2P transfers. P2P transfers involve packets, and do not encompass the passing of a whole work as an intact product, thus, some authors argue that P2P is not encompassed by section 80.

¹²⁸³ Fair use in the U.S. is not identical to Canadian fair dealing, but both doctrines are similar in that they carve out activities that would otherwise be deemed infringement of copyright and declare such actions permissible.

¹²⁸⁴ *Copyright Act*, *supra* note 114 s. 29.

¹²⁸⁵ *Ibid.* s. 29.1.

¹²⁸⁶ *Ibid.* s. 29.2.

¹²⁸⁷ *Ibid.* s. 14. For example, section 14 assets that the author has "the right to the integrity of the work" and this right grants the author a privilege to either be "associated with the work as its author" or to remain anonymous. This section was upheld by the Supreme Court in the decision of *Theberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 14. The United States does not extend moral rights, but one American court has upheld the application of rights that are akin to moral rights on behalf of the owner of a work (*Gilliam v. American Broadcasting Companies, Inc.*, 1976, 538 F.2d 14).

¹²⁸⁸ *Copyright Act*, *supra* note 114 ss. 14.1(2)-(4) & ss. 14.2(1).

Several IP contracts involve copyright, including licenses and assignments. There are several issues that such agreements should address. Copyright is particularly sensitive to mass distribution, as discussed previously, and therefore contract terms should acknowledge this fact and assign responsibilities between the parties regarding appropriate use and distribution to any third parties. Additionally, the contract terms should be aware that variant rights are granted for specific types of copyright works. Consequently, the same rights may not be granted for a performers' performance as for a literary work. Thus, a level of sensitivity should be applied to copyright in IP contracts. Another consideration for contract terms is that they must address moral rights and either: accept that these still rest with the copyright creator; or explicitly cause the creator to waive those rights.

4. Trade-marks

Trade-marks are granted in Canada in accordance with the *Trade-marks Act*.¹²⁸⁹ Specifically, a trade-mark is granted for “a mark that is used by a person for the purpose of distinguishing or so as to distinguish wares or services manufactured, sold, leased, hired or performed by him” from the wares of another individual.¹²⁹⁰ Rights may also be granted over a “trade-name”, which is defined as “the name under which any business is carried on.”¹²⁹¹ A trade-mark holder is permitted to prohibit others from using the same or a similar trade-mark in relation to the same categories of wares and services. This right is granted for an initial period of fifteen (15) years, and this term may later be extended by way of a renewal. Like patent rights, trade-mark rights are only enforceable in a particular jurisdiction where that trade-mark is registered or enjoys a right of common law use (as described below).

¹²⁸⁹ *Trade-Marks Act*, *supra* note 547.

¹²⁹⁰ *Ibid.* s. 2 “trade-mark”.

¹²⁹¹ *Ibid.* s. 2.

Section 16 of the *Trade-Marks Act* sets out the method required to receive a grant of national registration for a trade-mark. Notably, certain marks are prohibited, such as the emblem of the Red Cross, as set out in section 9. The first step is submission of a proposed trade-mark and a list of the wares and services to be associated with the trade-mark. This is followed by a review of the trade-mark to ensure it is not substantially similar to an existing mark.¹²⁹² If two or more existing marks are similar, the owners of the first mark may have a right to charge the owner of the second mark with passing-off. This means the public is unable to distinguish one brand from another and assumes wares and/or services of the second owner are produced by the first owner.¹²⁹³ This creates the potential for a newcomer to profit from the popularity, reputation or goodwill of the original trade-mark.

Unregistered marks may also be granted trade-mark protection as common law marks. Such marks generally are granted weaker rights than registered trade-marks. However, common law marks can be enforced to restrict competitors from utilizing a particular mark. For example, an unregistered trade-mark can counter a passing-off charge. In the face of a passing-off allegation the owner of an unregistered mark may show the accused unregistered mark to have pre-existed the registered mark.

For example, this may occur if a swoosh logo was used in the trade-mark for George Nike, used by the G. Nike footwear company that operates in the Greater Toronto Area. It may be assumed by the public that such a mark promotes goods or services of the well-known sportswear company, Nike. In such a case Nike could accuse G. Nike of passing-off their trade-mark as that of Nike – and consequently misleading the public. However, if evidence shows that G. Nike has actually been using its trade-mark prior to the registration of the Nike mark, the G.

¹²⁹² Ibid. ss. 15(1). Confusing trade-marks may only be registered if they are owned by the same applicant and therefore are associated trade-marks.

¹²⁹³ Ibid. s. 6.

Nike trademark may be deemed a common law mark. In such a case, even though the Nike trademark is registered and the G. Nike trade-mark is unregistered, G. Nike may be allowed to continue to use its trade-mark in the Greater Toronto Area. Nike may have to reach a settlement with G. Nike in order to use its trade-mark in the same region.

In this manner, marks that have been used and made known in Canada may have rights that trump a more recently registered mark.¹²⁹⁴ A passing-off allegation is not the only means of achieving this outcome. An opposition may also be raised against the newly introduced trademark during the registration process. Both registered and non-registered marks “share common legal attributes.”¹²⁹⁵ The outcome is that even registration does not ensure the validity and reliability of a trade name or mark.

Perhaps the most famous example of a trade name and trade-mark are those owned by The Coca-Cola Co. Ltd. The name Coca-Cola and the logo of its famous script have taken on a life beyond that of the soft drink product that they describe. The Coca-Cola trade-mark not only adorns the cans and bottles that contain the soft drink, but also can be found on t-shirts, hats and a host of other items for sale to the public.¹²⁹⁶ This type of application of a trade name and trademark is known as branding. Coca-Cola exemplifies that a successful brand can offer value to its corporate owners that extends beyond the mere reference to the product that the trade name and trade-mark are intended to achieve.

There are several pitfalls that trade name and trade-mark holders should be aware of. First, companies need to be wary of trade names becoming house-hold references. A trade name may no longer be deemed to be protected if it is used to reference a class of product and no longer

¹²⁹⁴ Ibid. s. 16.

¹²⁹⁵ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para. 58.

¹²⁹⁶ Thus the Coca-Cola logo is an example of the value of branding. The logo is lucrative for the company beyond its use upon the Coca-Cola soft drink product.

represents a specific brand, an outcome known as genericization.¹²⁹⁷ For example, the use of Kleenex to reference all tissues generally, not only tissues manufactured under the Kleenex trade-mark, is genericization. Second, the Internet poses a challenge due to the use of domain names. Domain names, being alphabetic representation of the numeric address of a website, have been introduced in order to increase the ease of locating websites by offering a more meaningful representation of the address of a website than its numeric representation. In some cases domain names include trade names. This is a concern because there is no body that affirms domain names that are trade names are purchased by the trade name holder.¹²⁹⁸

Recent Canadian case law further highlights an attempt by a trade-mark holder to augment their right to equivalency with patent rights. This strategy was thwarted by the Supreme Court of

¹²⁹⁷ Such was the case with Xerox. The owner of the Xerox trade name and trade-mark came close to losing their intellectual property rights when photocopied pages came to be referenced regularly by the public as “xeroxes” indiscriminately, whether the copy had been created by a Xerox brand machine or not. The Xerox website now includes a statement requesting that customers do not utilize the trade-mark in a generic manner.

¹²⁹⁸ A person visiting a website with a trade name incorporated into the domain name may assume that they are visiting a site controlled by the trade name owner. However, due to the method of assigning websites and domain names, there is no correlation between the owner of a domain name and that of the corresponding trade name incorporated within the domain name. For example, the domain name www.mcdonalds.com, is not necessarily owned by the company McDonalds which owns the trade name and all related trade-marks corresponding to McDonalds the hamburger chain. Indeed, there is no reason why www.mcdonalds.com should not be owned by Mr. McDonald, a Scottish retired gentleman who wants to display his family photos. Of much more concern to corporations is that a small hamburger chain in some remote area of the world where the McDonalds chain does not have an outlet (if such a place exists) and the McDonalds trade name and marks have not been registered, which has named itself McDonalds should come to own www.mcdonalds.com. In such a case an American visiting the www.mcdonalds.com website may be unaware that any content found thereupon was not sanctioned by the McDonalds food chain that they are familiar with. In fact, the American web surfer may even order product through the website believing that they are purchasing product from the international conglomerate McDonalds when in fact they are buying stock from a small “Mom & Pop” shop. This is another example of passing-off. The Mom & Pop run McDonalds may glean large amounts of business merely due to the fact that their website included a well-known trade name, business that the patrons intended to direct to the international conglomerate, not to Mom & Pop who actually benefit from a mistaken identity. Moreover, national distinctions cannot be protected in the Internet environment. Although the final letters of a domain name may signify affiliation with a particular country, such as “.ca” which signifies Canada, generic endings also exist which do not point to any particular territory, such as “.org” and “.com”. It is well known that the most popular websites visited most regularly by the web-surfing public end in “.com”. Thus, when attempting to locate a corporate website a person may initially try www.x.com (where “x” represents the trade name of the company). However, this does not guarantee that the web surfer has located the corporate website he or she was searching for. In the situation that two companies have nationally registered trade names that are identical, there is no formal recognized means of determining which one should have the right to the website ending in “.com”, if either of them should. The present system may erode the value of the trade name by breaking the relationship between a trade name, a trade-mark and a specific product. It can have a significant impact upon the business of a corporation.

Canada who held that, “a purely functional design may not be the basis of a trade-mark....The law of passing off and of trade-marks may not be used to perpetuate monopoly rights enjoyed under now-expired patents.”¹²⁹⁹ However, it is not surprising that this challenge was raised. Trade-marks represent significant economic value and are of great importance to their holders. In fact market operation now relies extensively on brands.¹³⁰⁰

Trade-marks introduce several specific considerations in the context of IP contracts. In light of the importance of brands, IP contracts relating to trade-marks should consider the role of a brand which may encompass more than one trade-mark and include terms drafted to address multiple trade-marks. Additionally, trade-marks that are used over a period of time, but are not registered, can be recognized as representing rights that may supersede a later registered trade-mark (as described above). For this reason, contract drafters should recognize that trade-marks may be overridden in some locales (such as a province or city), where a non-registered, common law trade-marks is deemed to have a preceding right. Moreover, in some jurisdictions, such as India, foreign trade-marks that have achieved a level of fame or notoriety may be protected without registration or formal use in the country. Therefore the bases for trade-mark recognition should be reflected in contract terms.

IP contracts for trade-marks may include licenses and assignments that should support aspects such as inter-relations between trade-marks and other IP assets (e.g, a logo trade-mark may also be protected by copyright). The terms should also support the types of wares or services that the trade-mark is granted for. These define a facet of the asset’s scope. Additionally, trade-mark rights are renewable, therefore contracting parties should follow the chain of title and ensure that registration is up-to-date and make allowance for renewal if applicable.

¹²⁹⁹ *Kirkbi AG v. Ritvik Holdings, Inc.*, *supra* note 135 para. 3.

¹³⁰⁰ *Ibid.* para. 39.

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