

# Chapter 1: Introduction

## 1.1 Research Motive

The progress of science and technology relies on the disclosure, distribution, share, accumulation, and derivative invention of research fruits. To promote the progress of science and technology, the Constitution of the United States empowered the Congress to promote the progress of science and useful arts by securing for limited times to the patent owners the exclusive right to their respective inventions.<sup>1</sup> The Congress thus stipulated the first Patent Act and established the patent system in the United States in 1790.<sup>2</sup> The patent system aims at stimulating researchers to invent and disclose their research fruits by drafting patent specifications and filing patent applications, and the injunctive remedies which maintain the patent's right to exclude are the ground of the incentives to invention in the patent system.<sup>3</sup>

However, the patent protection of the patent owner is not always in harmony with the purpose of promoting the progress of science and useful arts. A commentator noted that the patent system allowing the patentee to exclude others from using the invention for research is inconsistent with the traditional scientific norms.<sup>4</sup> Particularly, the patent protection with the measures of injunctive remedies generally inhibits the distribution, share, accumulation, and derivative invention of research fruits. Another commentator thus emphasized that a permanent injunction or its threat can cause patent holdup, which forces the manufacturers to

---

<sup>1</sup> U.S. CONST. art. 1, §8, cl. 8: "The Congress shall have power ...to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries..."

<sup>2</sup> 1790 Patent Law, Ch. 7, 1 Stat. 109-112 (April 10, 1790).

<sup>3</sup> Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 ANTITRUST L. J. 889, 904 (2011).

<sup>4</sup> See Kevin Sandstrom, *How Much do We Value Research and Development?: Broadening the Experimental Use Exemption to Patent Infringement in Light of Integra Liefsciences I, Ltd v. Merck KGaA*, 331 F.3D 860 (Fed. Cir. 2003), 30 WM. MITCHELL L. REV. 1059, 1096 (2004).

unwillingly pay royalties on the ground of their switching expenses but not the real value of the patented technology.<sup>5</sup> Therefore, to absolutely and one-dimensionally protect the patent's right to exclude may not always be conducive to the developments of science and technology.<sup>6</sup>

It is obvious that the purpose of the patent law is to promote the progress of useful arts, and patent protection to the patent owner is only a measure to achieve that purpose.<sup>7</sup> The measures to achieve the purpose need to be in harmony with the purpose itself. If one form of patent protection conflicts with the purpose of promoting the progress of science and useful arts, such form of patent protection should be unconstitutional. Subsequently, the Supreme Court of the United States mentioned that the Constitution includes not only a grant of power but also certain limitations to the execution of the power.<sup>8</sup> Instead of merely protecting the patent owner's right and benefit, the patent system should be designed to balance the patentee's right to exclude and the public's productive uses of science and technology.<sup>9</sup>

The current patent system is a game of "winner-takes-all". If two companies separately file patent applications for an identical invention, a patent right will be granted to the company first to file the patent application. When a company finds that it has lost (or is likely to lose) the lead in technology development, the company has the following three options: (1) trying to catch up by conducting independent invention; (2) trying to design

---

<sup>5</sup> Suzanne Michel, *supra* note 3, at 904.

<sup>6</sup> See also, Robert P. Mergers, *Property Rights Theory and the Commons: The Case of Scientific Research*, in *SCIENTIFIC INNOVATIONS, PHILOSOPHY, AND PUBLIC POLICY* 145, 145-147 (1996); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anti-commons in Biomedical Research*, 280 *SCIENCE* 698, 698-699 (1998); Lisa Larrimore Ouellette, *Do Patents Disclose Useful Informations?* 25 *HARV. J. L & TECH.* 545, 546 (2012); John M. Golden, *Innovation Dynamics, Patents, and Dynamic-Elasticity Tests for the Promotions of Progress*, 24 *HARV. J. L & TECH.* 47, 48 (2010).  
Arti Kaur Rai, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 *NW. U.L.REV.* 77, 78 (1999).

<sup>7</sup> *Great Allantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 154 (1950), Justice DOUGLAS concurring ("The purpose is "To promote the Progress of Science and useful Arts...." The means for achievement of that end is the grant for a limited time to inventors of the exclusive right to their invention.")

<sup>8</sup> *Bonito Boat, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989).

<sup>9</sup> James M. Fischer, *The "Right" To Injunctive Relief For Patent Infringement*, 24 *SANTA CLARA COMPUTER & HIGH TECH. L.J.* 1, 28 (2007).

around; and (3) giving up research activities.

It is not always possible to design around the existed patent or to change the R&D course. The report by the Federal Trade Commission of the United States mentioned that design-around may be technically impossible in some circumstances.<sup>10</sup>

For example, claim 1 of the U.S. Pat. 5,889,943 states that:

1. An apparatus for detecting and selectively removing viruses in messages transferred using an electronic mail system, the apparatus comprising:  
a message detecting module, for detecting the presence of a message; and  
a virus analyzing module, in communication with the message detecting module, for determining whether data associated with the message contains a virus.

Obviously, it is a patent relating to an antivirus software for detecting a virus in an email. It is a very broad claim since there are only two limitations in this claim, which are a message detecting module for detecting an email and a virus analyzing module for determining whether there is a virus in the email. In fact, the message detecting module and the virus analyzing module are the basic and indispensable elements of an antivirus software for detecting a virus in an email. It is hard to imagine how to develop a non-infringing antivirus software for detecting a virus in an email without these two elements: (1) without the message detecting module, the antivirus software is not able to detect the presence of an email; (2) without the virus analyzing module, the antivirus software can not detect whether there is a virus in the email. Therefore, to design around this claim is technically impossible.

Another example is the U.S. Pat. RE 37,958, whose claim 1 is as follows:

---

<sup>10</sup> TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY: A REPORT BY THE FEDERAL TRADE COMMISSION, Fed. Trade Comm'n (October 2003), Ch. 2, at 21, at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>.

1. An isolated human DNA sequence which codes for a protein having substantially the same biological activity as human protein C., *wherein said protein comprises a light chain as shown in FIG. 3 from amino acid number 1 to amino acid number 155, and a heavy chain as shown in FIG. 3 from amino acid number 158 to amino acid number 419.*

It is a patent relating to Genomic and cDNA sequences coding for a protein having substantially the same biological activity as human protein C. Since the human protein C is specified, there is no room for persons to technically design around this claim.

Furthermore, the report by the Federal Trade Commission of the United States mentioned that design-around may be economically impossible when the patented technology is needed to conform to an industrial standard.<sup>11</sup>

For example, the spread spectrum technology developed by Qualcomm Incorporated is the basic technology of CDMA which was applied to both W-CDMA and cdma-2000 industrial standards of 3G telecommunication. In Japan, Qualcomm's patent 261509/87 has been verified by Association of Radio Industries and Businesses (ARIB) to be its essential industrial property right in the ARIB STD-T63 "IMT-2000 DS-SS-SSMA System".<sup>12</sup> Since it is economically impossible to built a 3G telecommunication system apart from the W-CDMA and cdma-2000 industrial standards, Qualcomm's Japanese patent 261509/87 is economically impossible to be designed around.

In conclusion, to design around an existed patent is sometimes technically or economically impossible. Even in the cases in which the design-around is technically and economically possible, the design-around fails frequently because the effective scope of a patent claim is very hard to be identified under the doctrine of equivalents. Therefore,

---

<sup>11</sup> *Id.* at 22.

<sup>12</sup> ARIB STD-T63, ver. 1.00.

design-around is not always an effective way to avoid from patent infringement. For this reason, the option of design-around will not be emphasized in this dissertation. This dissertation will focus on the comparison between the option 1 (trying to catch up by conducting independent invention) and option 3 (giving up research activities).

As the independent invention is unaccepted under the current system, whenever a company finds that it has lost (or is likely to lose) the lead in technology development, this dissertation finds that the best policy for the company is to give up research activities to avoid wasteful duplication (option 3), rather than to catch up (option 1). To explain this statement, this dissertation suggests a hypothetical scenario with *Companies A, B and C* as three direct competitors in the same market. *Company A* and *Company B* competed with each other to independently develop the same technology for the same commercial product. Each of them spent US \$100 million to develop the same technology and reached the same research result. We assume that *Company A* first completed the technology development, filed and obtained a patent right. Given that the current patent system does not accept the independent invention defense in the patent infringement litigation, *Company B* can not use the self-invented technology without *Company A*'s prior consent. To be authorized to use the patented technology, *Company B* needs to beg for *Company A*'s license and pay a licensing fee to *Company A*. Meanwhile, *Company C* knew well that it did not lead in the technology development and chose to "save money" from the beginning and not to develop the technology.

	Company A	Company B	Company C
R&D?	✓ (first)	✓ (second)	X
Cost for R&D?	✓ (US \$100 M)	✓ (US \$100 M)	X
Filed a patent?	✓ (first)	✓ (second)	X
Obtained a patent?	✓	X	X
Gained or lost while <i>Company A</i> decides not to license	- US \$100 M + patent	- US \$100 M	0
Gain or lost while <i>Company A</i> licenses in US \$100 million	+US \$100 M + patent	- US \$200 M + market	- US \$100 M + market

Table 1: a hypothetical scenario to point out the research motive of this dissertation

If *Company A* decides not to license the patent to *Company B* and *Company C*, both of them cannot use the patented technology. Under this circumstance, *Company A* paid US \$100 million to develop the patented technology and obtained a patent right to exclude *Company B* and *Company C* from the market. *Company A* will gain an economic benefit if the market value of the patented product is larger than the expenses of R&D. *Company B* paid US \$100 million to invent independently but gained nothing. On the other hand, *Company C* lost nothing because it did not pay any expenses for technology development. Under this circumstance, *Company B* is poorer than *Company C*.

By contrast, if *Company A* decides to license the patent to *Company B* and *Company C*, the licensing fee is generally equivalent to or even higher than the development expenses. For simplicity, we assume that the licensing fee is US \$100 million. Accordingly, *Company*

A will gain a total of US \$200 million as licensing fee which compensates the R&D expenses and also creates a net profit of US \$100 million. *Company B* needs to pay a total of US \$200 million to use the self-invented technology, wherein US \$100 million is the development expense and the other US \$100 million is the licensing fee. Meanwhile, *Company C* pays only US \$100 million to use the patented technology. Under this circumstance, *Company B* is again poorer than *Company C*.

Under both circumstances, of course, *Company A* gains the best position among the three companies. *Company A* took the lead in technology development and obtained the patent right, whereas *Company B* is poorer than *Company C* under both circumstances. It is clear that the current patent systems in the world encourage people or enterprises to act as *Company C* rather than *Company B*. In other words, “chasing” development as *Company B* did is only a waste of research resources. The current patent law encourages people or companies to stop conducting further research and to save money for paying licensing fee to the patent owner, in case they find they cannot take the lead in technology development.<sup>13</sup> If they continue to research and develop, it would be evaluated as repeated research and development, and it is predestined to be a waste.<sup>14</sup>

This dissertation finds that it is absurd to establish a patent system to encourage a second-lead company to give up its research activities. This dissertation concludes that the total denial of the independent invention defense would be harmful to the progress of science and useful arts.

---

<sup>13</sup> Of course, the companies may also try to design around the existed patent or to change their R&D course. However, as mentioned, to design around an existed patent is sometimes technically or economically impossible. Therefore, design-around will not be emphasized in this dissertation.

<sup>14</sup> TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY: A REPORT BY THE FEDERAL TRADE COMMISSION, Fed. Trade Comm’n (October 2003), Ch. 2, at 20, at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>.

## 1.2 Research Objectives

One of the primary purposes of this dissertation is to suggest a system in which *Company B* will have a better position than *Company C* to encourage enterprises to continue to research and develop despite whether they take the lead in technology development. To create the aforementioned system and to harmonize the measures of protecting patent rights with the purpose of promoting the progress of useful arts, this dissertation suggests considering the independent invention defense in evaluating the four factors of preliminary injunction and permanent injunction proceedings as a mechanism to balance the patentee's right to exclude and the public's productive uses of science and technology.

Another purpose of this dissertation is to rethink the patent's right to exclude and to study how to balance the patentee's right to exclude and the public's use of science and technology, particularly in preliminary injunction and permanent injunction proceedings.

Also, this dissertation seeks to understand the real practices regarding the issues of whether defendants raised the independent invention defense in patent practice (including patent infringement litigations, preliminary injunction proceedings, and permanent injunction proceedings) and whether courts accepted the independent invention defense in patent practice.

Furthermore, another purpose of this dissertation to study possible approaches that support proposing the independent invention defense to the patent practice, including a historical approach, a constitutional approach, an empirical approach, and an economical approach.

This dissertation also seeks to study possible arguments to implement the independent invention defense into the considerations of four factors of preliminary injunction and permanent injunction proceedings as a mechanism to balance a patentee's right to exclude and



the public's productive uses of science and technology.

### 1.3 Research Methods

This dissertation conducts an empirical study of judicial decisions<sup>15</sup> to understand the issues of whether defendants raised the independent invention defense, and whether courts accepted the independent invention defense in patent practice. In regard to the judicial decisions in the United States, the empirical study was conducted at the judicial database of WestLaw<sup>16</sup>, with the search key-words of “independent invention”. With regard to the judicial decisions in Taiwan, the empirical study was conducted at the judicial database of LawBank<sup>17</sup>, with the search key-words of “independent invention” (the Chinese words are 「獨立研發」、「獨立發明」、「自主研發」、「自主發明」、「自力研發」、「自力發明」). Regarding to the judicial decisions in China, the empirical study was conducted at the judicial database of ChinaLawInfo<sup>18</sup>, with the search key-words of “independent invention” (the Chinese words are 「独立研发」、「独立发明」、「自主研发」、「自主发明」、「自力研发」、「自力发明」).

In addition, this dissertation combines a historical analysis, a constitutional analysis, an empirical analysis, and an economic analysis to form a comprehensive view that supports the acceptance of independent invention defense.

With regard to the historical analysis<sup>19</sup>, this dissertation studies the law development of the patent's right to exclude and finds that the form and strength of patent right is drifting in patent history, which can be divided into at least four stages: a monopoly for sale, a substantive right to practice, a negative right to exclude with a general rule in the permanent

---

<sup>15</sup> See, Shang-Jyh Liu, San-Yuan Lin, Huang-Chih Sung, *A Review on the Development of Empirical Legal Study*, 3-2 TECH. L. REV. 1, 22-23 (2006).

<sup>16</sup> WestLaw is the largest judicial database in the U.S., whose website is <http://www.westlaw.com/>.

<sup>17</sup> LawBank is the largest judicial database in Taiwan, whose website is <http://www.lawbank.com.tw/>.

<sup>18</sup> ChinaLawInfo is the largest judicial database in China, whose website is <http://www.chinalawinfo.com/>.

<sup>19</sup> Markus Dirk Dubber, *Historical Analysis of Law*, 16 LAW & HISTORY REV. 159 (1998).

injunction proceedings, and a negative right to exclude but weakened by *eBay*.

In regard to the constitutional analysis, this dissertation studies the U.S. Constitution and judicial precedents to conclude that: (1) the total denial of the independent invention defense will inhibit the progress of science and useful arts; and (2) the adjudication of patent's injunctive relief measures (including preliminary injunction and the permanent injunction) may consider the freedom to use the self-invented technologies.

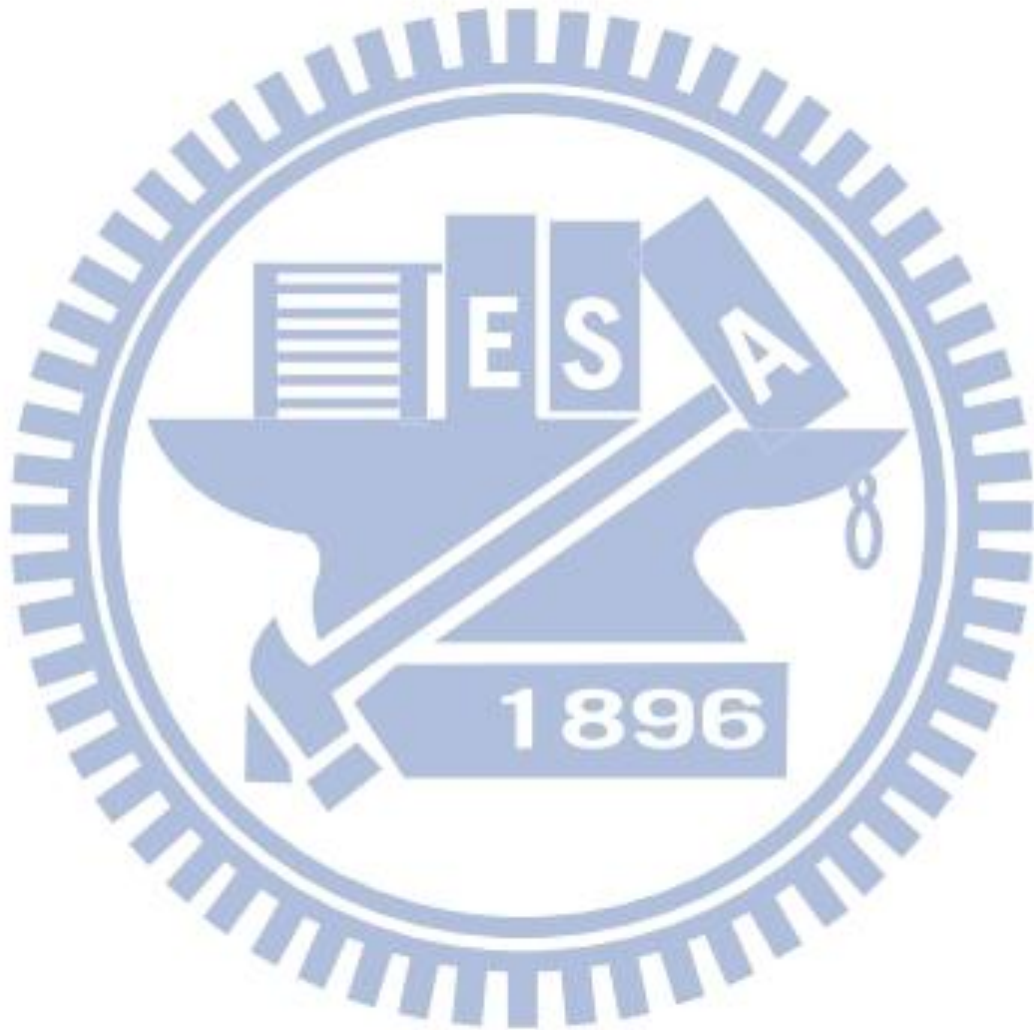
Regarding to the empirical analysis, this dissertation conducts an empirical study of judicial decisions in the U.S. to find that wrongfully-enjoined defendants are generally under-compensated because the patentee-movant's liability is limited to the amount of the posted bond. This empirical study was conducted at the judicial database of WestLaw with the search key-words of combination of "patent", "wrongful preliminary injunction", and "bond". Furthermore, this dissertation conducts an empirical study of judicial decisions in Taiwan to find that the possibility for the wrongfully-defendant to win a lawsuit claiming for damages approaches zero. This empirical study was conducted at the judicial database of LawBank with the search key-words of combination of "專利", "定暫時狀態處分", "侵權行為", and "損害賠償".

With regard to the economic analysis, this dissertation applies Professors William M. Landes and Richard A. Posner's theory that the denial of independent invention defense would cause patent races and the rent-seeking costs,<sup>20</sup> and concludes that: (1) the denial of independent invention defense encourages enterprises to act as a free rider rather than an independent developer; and (2) the current patent law encourages companies to stop further research and development to save money for paying licensing fee to the patent owner, in case they find they cannot take the lead in technology development. The economic analysis also

---

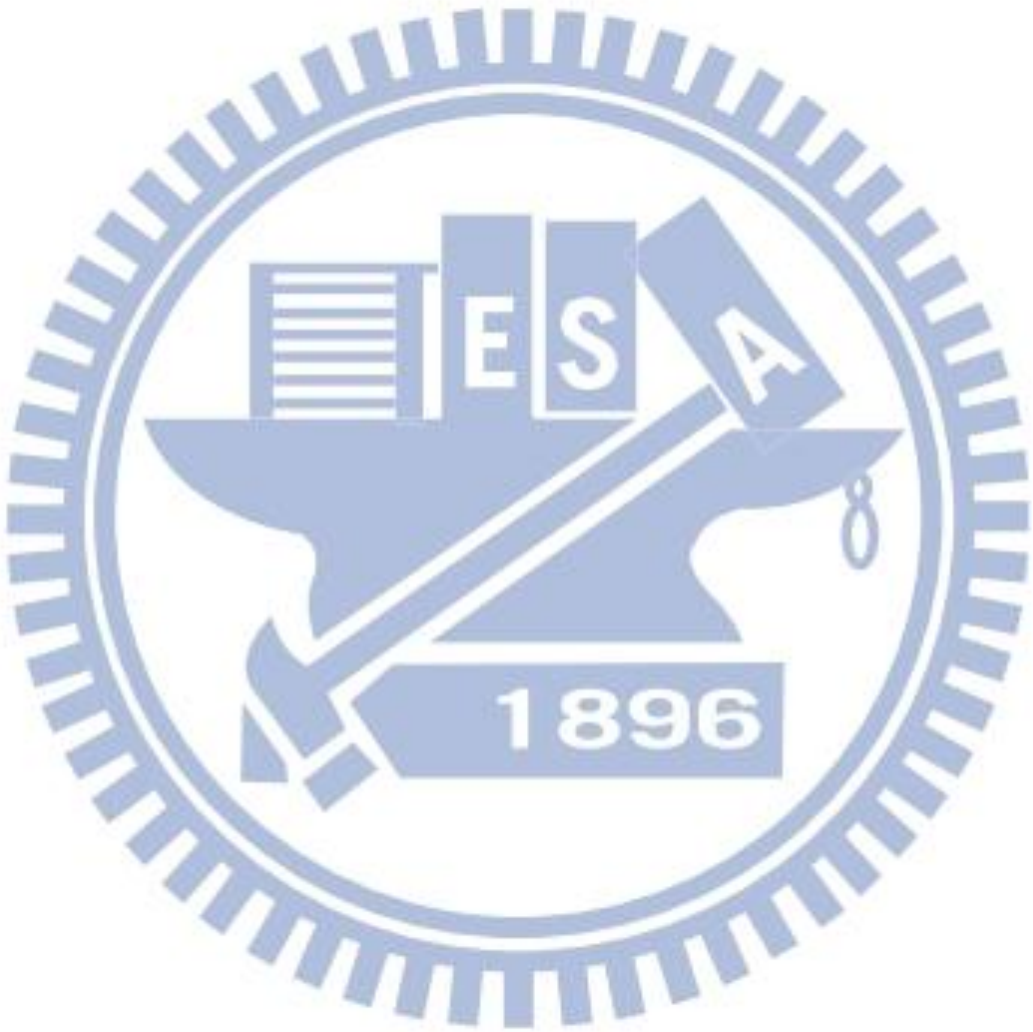
<sup>20</sup> William M. Landes & Richard A. Posner, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 295-296 (2003).

applies the theory of two economists Professors Stephen M. Maurer and Suzanne Scotchmer<sup>21</sup> to reach the conclusion that the independent invention defense is a win-win-win policy, including allows the patentee to recover his invention expenses, allows the independent developer to obtain a patent license without wasteful duplication, and also enhances social benefit.



---

<sup>21</sup> Stephen M. Maurer & Suzanne Scotchmer, *The Independent Invention Defense in Intellectual Property*, 69 *ECONOMICA* 535, 535 (2002).



## CHAPTER 2: PATENT'S RIGHT TO EXCLUDE AND THE FIRST INSIGHT OF INDEPENDENT INVENTION DEFENSE

### 2.1 The Nature of Patent's Right to Exclude

#### 2.1.1 The Patent Right is a Right to Exclude

Persuade to the current patent systems around the world such as the United States, Taiwan and China, the patent right is a right to exclude<sup>1</sup> rather than a “practice right”<sup>2</sup>. In other word, the patent right is a negative right to exclude others but not a substantive right to practice the patented technology.<sup>3</sup>

A majority of people *incorrectly* think that a patent right is a substantive practice right, being a right to manufacture, use, sell, or import the patented products or a right to use the patented processes. They *incorrectly* believe that a patent right can protect the patented products from being sued; therefore, as long as they obtain a patent, they are authorized to manufacture or sell the patented products, without needing to worry about others' patent rights.<sup>4</sup>

However, the afore-mentioned thoughts are not consistent with the current patent systems in the world. For example, section 271 (a) of the United States Patent Law<sup>5</sup>

---

<sup>1</sup> Thomas Reed Powell, *The Exclusive Right of the Patentee--Should the Right or Power To Exclude Others Be Dependent on Sale or Licensing by the Patentee?*, 58 HARV. L. REV. 726, 728 (1945).

<sup>2</sup> The definition of “practice right” will be described in the next paragraph.

<sup>3</sup> Miranda Jones, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not The Same: How eBay v. Mercexchange Affects The Patent Right of Non-Practicing Entities*, 58 GEO. MASON L. REV. 1036, 1038 (2007); Stefan A. Riesenfeld, *The New American Patent Act in the Light of Comparative Law: Part II*, 102 U. Pa. L. Rev. 723, 746 (1954).

<sup>4</sup> For example, in a case of patent infringement at the Taichung District Court (95-Chih-53), the defendant argued that it had independently invented the accused product and even had obtained a patent with ROC Patent number 501,519. The defendant argued against the patent infringement claim by asserting that it is a legitimate practice of its patent right to manufacture the accused product. In a case of patent infringement at the Taipei District Court (94-Chih-45), the defendant also argued that the accused product had been independently invented by the defendant, so the defendant did not have any intention or negligence to infringe the patent-in-suit.

<sup>5</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

mentions that “Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent therefor, infringes the patent”. Obviously, this section stipulates that the patent right under the U.S. Patent Law provides a market power to the patent owners<sup>6</sup>: it is a right to exclude others from manufacturing or selling the patented products (or using the patented process) without patentee’s prior consent, rather than a right to manufacture or sell the patented products (or use the patented process).

In addition, Article 56 of Taiwanese Patent Law<sup>7</sup> has similar rule, and further states in Section 2, Article 78 that “The patent holder of a derivative patent<sup>8</sup> shall not practice his/her patented invention without obtaining a prior consent from the patentee of the original invention.” Further, Taiwanese Patent Law was amended and promulgated on December 21, 2011 by Presidential Order (hereinafter “the 2011 Amendment of the Patent Law”), which will become effective on January 1, 2013. Section 1, Article 58 of the 2011 Amendment of the Patent Law states that “Unless otherwise provided for in this Law, the patentee of a patent has an exclusive right to prevent others from practicing the patented invention without the patentee’s prior consent”. For an apparatus patent, the patent owner has the rights to exclude others from manufacturing, offering for sale, selling, using, or importing the patented products<sup>9</sup>; for a process patent, the patent holder has the rights to exclude others from using

---

<sup>6</sup> Deborah A. Coleman, *Antitrust Issues in the Litigation and Settlement of Infringement Claims*, 37 AKRON L. REV. 263, 263-264 (2004).

<sup>7</sup> Taiwanese Patent Law, Art. 56, sec. 1 & sec. 2: “Unless otherwise provided for in this Act, the patentee of a patented article shall have the exclusive right to preclude other persons from manufacturing, making an offer for sale, selling, using, or importing for above purposes the patented article without his/her prior consent” and “Unless otherwise provided for in this Act, the patentee of a patented process shall have the exclusive right to preclude others from using such process and using, selling or importing for above purposes the articles made through direct use of the said process without his/her prior consent”.

<sup>8</sup> According to Section 1, Article 78 of the Taiwanese Patent Law, the derivative invention patent means an invention which is accomplished through use of the principal technical contents of an invention created by another person.

<sup>9</sup> 2011 Amendment of the Patent Law, art. 58, sec. 2: “Where the invention is a product, practicing of which means the acts of making, offering for sale, selling, using, or importing that product for the aforementioned purposes”.

the patented process and using, offering for sale, selling or importing the products manufactured directly by that process<sup>10</sup>

Accordingly, even though the patentee of a derivative patent owns the patent right, he or she can not practice his or her patented invention without the prior consent of the patent owner of the original invention. This rule is the strongest evidence to show that the patent right is only a negative right to exclude but not a substantive practice right.

In conclusion, a patent right is a negative right to exclude, which means that a patent owner can bring suit in one of the courts<sup>11</sup> to exclude others from manufacturing, selling, using, or importing the patented products without her or his prior consent.<sup>12</sup> Therefore, if one manufactures, sells, uses, or imports the patented products or uses the patented processes without the patentee's prior authorization, he or she infringes the patent right, no matter whether he or she owns a patent on the accused product.

From this aspect, a new invention can be analogized to be a new creation of the "technology farmland". To file a patent application for the new invention can be analogized as the "enclosure of technology farmland". As long as the patent application is granted by the patent authority, others can not "farm"<sup>13</sup> on the "enclosure of technology farmland"<sup>14</sup> without permission of the patent owners. This analogy shows the exclusive nature of the patent rights.

Nevertheless, the "technology farmland" is not a real farm. Once a farmer gets a real farm, he or she can freely cultivate any crop he or she likes, without needing to worry about

---

<sup>10</sup> 2011 Amendment of the Patent Law, art 58, sec. 3: "Where the invention is a process, practicing of which means the following acts: (1) using the process; and (2) using, offering for sale, selling or importing for these purposes the product obtained directly by that process".

<sup>11</sup> S. W. O'Donnell, *Unified Theory of Antitrust Counterclaims in Patent Litigation*, 9 VA J. L. & TECH. 1, 2 (2004).

<sup>12</sup> Michael S. Kramer, *Valuation and Assessment of Patents and Patent Portfolios Through Analytical Techniques*, 6 J. MARSHALL REV. INTELL. PROP. L. 463, 466 (2007).

<sup>13</sup> The term of "farm" here is the analogue of "make, use, or sell of the patented products or use of the patented method".

<sup>14</sup> See David Friedman, LAW'S ORDER 132 (2000).

being accused of trespass. Accordingly, we can say that to obtain a real farm is to obtain a substantive “practice right” to the farm.<sup>15</sup> However, as mentioned above, to obtain a “technology farmland” (i.e. a patent right) is NOT to obtain a practice right to the “technology farmland”. In detail, once a patent owner is granted to a “technology farmland”, he or she can only exclude others from trespassing the “technology farmland”, but he or she is NOT absolutely allowed to cultivate any crop (produce any product) on the “technology farmland”. Undeniably, this statement is really anti-intuitional. That is the reason why a majority of people *incorrectly* think that a patent right is a practice right.

Just like creating a new farm on the earth, the creation of a new “technology farmland” is also one kind of limited resources. Once a new farm is occupied and owned by a specific farmer, other farmers can not farm on the new farm. Similarly, once a new “technology farmland” is “patented” by the patent owner, others can not manufacture, sell, or use the patented products or use of the patented method. For example, GaN was invented to be the substrate of blue-light LED diodes. Although others can use other materials to be the substrate of the blue-light LED diodes<sup>16</sup>, they can not use GaN without permission of the patent owner. Therefore, David D. Friedman mentioned on this famous book that the exhaustion of the invention areas is very serious.<sup>17</sup> Under Friedman’s theory<sup>18</sup>, some of patentee’s benefits from the exclusive patent right are transferred from the ones who may finish the same invention later.<sup>19</sup> Accordingly, as long as a patent is granted by the patent authority, the patent owner gains some benefits from others, especially the independent developers<sup>20</sup>.

---

<sup>15</sup> Taiwan Civil Law, art. 765: “The owner of a thing has the right, within the limits of the Acts and regulations, to use it, to profit from it, and to dispose of it freely, and to exclude the interference from others”.

<sup>16</sup> Actually no one can find a material other than GaN which can be used as the substrate of the blue-light LED diodes.

<sup>17</sup> David Friedman, *supra* note 14, at 135.

<sup>18</sup> *Id.*

<sup>19</sup> It is actually the “independent developer” in this dissertation.

<sup>20</sup> The concept of independent developer will be defined and introduced later in this dissertation.



### 2.1.2 Injunctive Relief: Most Important Aspect of the Patent's Right to Exclude

The remedies for the patent infringement are damages and injunctive relieves. A right to exclude, implying the injunctive relief, is the essential part of the exclusive patent right.<sup>21</sup> In most cases, the injunctive relief is an attractive remedy for the patent holders to enjoin the infringers from making, using, selling or importing the patented products or from using the patented methods.<sup>22</sup> The Court of Appeal of the Federal Circuit (hereinafter the “Federal Circuit”) in *Smith Int'l Inc. v. Hughes Tool Co.*<sup>23</sup> in 1983 mentioned that “The very nature of the patent right is the right to exclude others.”

There are two main kinds of injunctive reliefs, i.e. preliminary injunction and permanent injunction. In general, a permanent injunction is granted to a patent owner against a defendant who has been found to infringe a valid patent.<sup>24</sup> In the United States, as long as the permanent injunction is issued by one of the district courts to enjoin the infringer from manufacturing or selling the patented products, the permanent injunction remains in effect during the appeal proceedings unless a stay of the permanent injunction is granted by the Court of Appeal.<sup>25,26,27</sup>

---

<sup>21</sup> Martin J. Adelman, Randall R. Rader, John R. Thomas, and Harold C. Wegner, *CASES AND MATERIALS ON PATENT LAW* 930 (2003).

<sup>22</sup> *Id.*

<sup>23</sup> *Smith Int'l Inc. v. Hughes Tool Co.*, 718 F. 2d 1573 (Fed. Cir. 1983).

<sup>24</sup> KIMBERLY A. MOORE, PAUL R. MICHEL, RAPHAEL V. LUPO, *PATENT LITIGATION AND STRATEGY* 565 (2003).

<sup>25</sup> *Id.* at 567.

<sup>26</sup> Federal Circuit rule of Appellate Procedure 8 (a)(2): “A motion for the relief mentioned in Rule 8(a)(1) may be made to the court of appeals or to one of its judges. (A) The motion must: (i) show that moving first in the district court would be impracticable; or (ii) state that, a motion having been made, the district court denied the motion or failed to afford the relief requested and state any reasons given by the district court for its action. (B) The motion must also include: (i) the reasons for granting the relief requested and the facts relied on; (ii) originals or copies of affidavits or other sworn statements supporting facts subject to dispute; and (iii) relevant parts of the record. (C) The moving party must give reasonable notice of the motion to all parties. (D) A motion under this Rule 8(a)(2) must be filed with the circuit clerk and normally will be considered by a panel of the court. But in an exceptional case in which time requirements make that procedure impracticable, the motion may be made to and considered by a single judge. (E) The court may condition relief on a party's filing a bond or other appropriate security in the district court.”

<sup>27</sup> Taiwanese Civil Procedure Law, art. 390: “In an action concerning proprietary rights, where the plaintiff makes a preliminary showing that he/she will suffer damage which is difficult to compensate for or calculate without execution of the final judgment before it becomes final with binding effects, the court shall on the plaintiff's motion declare provisional execution” and “Where the plaintiff makes a motion for provisional

On the contrary, the motion for preliminary injunction is generally filed together with or shortly before/after filing the complaint of the patent infringement litigation. If the patent owner files the motion for preliminary injunction long after filing the complaint, the district court may find that the preliminary injunction is not so urgent so as to deny it.<sup>28</sup>

In fact, the motion for preliminary injunction is not a real case on the merits. Although the district court needs to consider the “likelihood of success on the merits” while adjudicating the motion for preliminary injunction, the court has neither time nor detailed procedures to completely make sure of the patent validity and the patent infringement. Accordingly, the defendant may not have enough opportunities to raise the invalidity and non-infringement defenses in the preliminary injunction proceedings. However, as long as a preliminary injunction is granted and issued by the district court, the defendant can no longer manufacture, sell, or use the accused product or use the patented process.<sup>29</sup> A commentator thus mentioned that the issuance of the preliminary injunction is the most terrible thing to a defendant in the patent infringement litigation.<sup>30</sup>

## **2.2 A Patent Right is Much Stronger than a Copyright and a Trademark**

The patent right’s to exclude appears on the following two legal rules: (1) independent invention is NOT a defense in the patent infringement litigation; and (2) the possession of a patent is NOT a defense in the patent infringement litigation. From these two rules, we can

---

execution by stating that he/she is willing to provide security before the execution is performed, the court shall, despite the absence of the preliminary showing provided in the preceding paragraph, designate a reasonable amount of security and then declare the judgment to be provisionally executed upon provision of such security”. Article 391 of Taiwanese Civil Procedure Law states that “Where the defendant makes a preliminary showing that he/she will suffer irreparable harm from the provisional execution, the court shall, in the case provided in the Article 389, on the defendant’s motion declare that no provisional execution shall be granted and, in the case provided in the preceding article, declare that the plaintiff’s motion for provisional execution is denied”.

<sup>28</sup> KIMBERLY A. MOORE, PAUL R. MICHEL, RAPHAEL V. LUPO, *supra* note 24, at 545.

<sup>29</sup> Generally, a preliminary injunction is to enjoin the defendant from manufacturing and selling the accused product or using the patented process. Accordingly, as long as a preliminary injunction is granted and issued by the district court, the defendant can no longer manufacture, sell, or use the patented product or use the patented process.

<sup>30</sup> Michelle Armond, *Introducing The Defense of Independent Invention to Motions for Preliminary Injunctions in Patent Infringement Lawsuits*, 91 CAL. L. REV. 117, 120-21 (2003).

find that the patent’s right to exclude is much stronger than the rights to exclude provided by a copyright, a trademark, or a trade secret.

### **2.2.1 The Independent Invention is NOT a defense in the Patent Infringement Litigation**

The “independent invention defense” in this dissertation stands for a defense in the patent infringement litigation, in which the defendant argues that the accused product or accused process was independently developed by the defendant herself or himself rather than copied from the patent-in-suit. In other words, the defendant did not copy or counterfeit the patented product made by the patent owner, nor the defendant made the accused product by referring to the specification of the patent-in-suit.<sup>31</sup>

In addition, this dissertation defines the “independent developer” to be the person who independently invented the accused product by herself or himself without referring to the patented product or the patent specification.<sup>32</sup> Particularly, the “independent developer” in this dissertation indicates the developers who can not assert the “prior use defense”; otherwise, the developers can merely assert the prior use defense in the patent litigation and do not need to use the independent invention defense.

Under the present patent systems around the world such as the U.S., Taiwan and China, the independent invention is not a defense to patent infringement.<sup>33</sup> For example, if *Company B*’s product falls into *Company A*’s patent scope, *Company B* is judged to infringe *Company A*’s patent right, even if *Company B*’s accused product was independently invented by *Company B* itself.

Different to the patent law, it is well-known that the independent creation is a defense to

---

<sup>31</sup> *Id.* at 139.

<sup>32</sup> See also Samson Vermont, *Independent Invention as a Defense to Patent Infringement*, 105 MICH. L. REV. 475, 484 (2006).

<sup>33</sup> See Martin J. Adelman, Randall R. Rader, John R. Thomas, and Harold C. Wegner, *supra* note 21, at 748 (“A competitor who independently creates the claimed invention is still an infringer.”)

the copyright infringement.<sup>34</sup> In order to constitute a copyright infringement, the copyright owner needs to prove both that: (1) the accused work is substantially similar to the copyrighted work-in-suit; and (2) the defendant had direct or indirect access to the copyrighted work. In other word, if the defendant has never accessed to the copyrighted work but created the accused work by himself or herself, the copyright owner will lose the infringement lawsuit even if the accused work is substantially similar to the copyrighted work-in-suit.<sup>35</sup>

Similarly, the Trade Secret Law does not provide protection against the independent invention.<sup>36</sup>

In conclusion, the right to exclude of a copyright or trade secret does not exclude others from independent creation. Accordingly, the patent's right to exclude is much stronger than the rights to exclude provided by a copyright and a trade secret.

### **2.2.2 Possession of a Patent is NOT a defense in the Patent Infringement Litigation**

Under the present patent systems around the world such as the U.S., Taiwan and China, possession of a patent for the accused product (hereinafter the "possession of patent defense") is not an acceptable defense for the defendants in the patent infringement litigation. The most obvious legal ground is Section 2, article 78 of Taiwanese Patent Law, stating that the patent owner of a derivative invention shall not practice the patented invention without prior permission of the patent owner.

On the other hand, the trademark right is a practice right. As soon as a trademark is granted to an entity, the entity obtains a right to use the mark, no matter whether the registered-mark is similar to others' trademarks. Accordingly, the patent's right to exclude is

---

<sup>34</sup> WILLIAM BURNHAM, INTRODUCTION TO THE LAW AND LEGAL SYSTEM OF THE UNITED STATES 484 (2003).

<sup>35</sup> *Id.*

<sup>36</sup> *Kewanee Oil Co. v. Bicron Corp. et al*, 416 U.S. 470, 476 (1974).

much stronger than the right to exclude provided by a trademark.

### 2.2.3 Empirical Study

Although “independent invention” and “possession of patent” are not defenses in patent infringement litigations, an empirical research on the database of Taiwanese court’s judgments shows that lots of defendants in patent infringement litigations asserted “independent invention” and/or “possession of patent” as defenses. The empirical study was conducted at the judicial database of LawBank<sup>37</sup> during the period of January 1, 2003 to Oct. 31, 2012, with the search key-words of “independent invention”<sup>38</sup>. This dissertation finds that “independent invention defenses” and “possession patent defenses” were unacceptable by courts, including the cases which the defendant prevailed or lost. Some judgments are selected and analyzed as follows:

#### 1. The Cases which the Defendants Prevailed

##### (1) Chia-Yi District Court--95-Chih-1

In a patent infringement litigation at the Chia-Yi District Court<sup>39</sup>, two defendants were accused of patent infringement. The first defendant argued that the patents-in-suit were invalid and the accused produce was manufactured by the second defendant. The first defendant further argued that the accused product had been independently invented by the second defendant, and the second defendant did own a patent right on the accused product.<sup>40</sup> After adjudication, the district court dismissed this case by holding that the patents-in-suit were invalid.<sup>41</sup> From beginning to end, the court’s decision did not touch the defenses of

---

<sup>37</sup> LawBank is the largest judicial database in Taiwan, whose website is <http://www.lawbank.com.tw/>.

<sup>38</sup> The Chinese words are 「獨立研發」、「獨立發明」、「自主研發」、「自主發明」、「自力研發」、「自力發明」.

<sup>39</sup> 95-Chih-1 (Chia-Yi District Court, 2006).

<sup>40</sup> *Id.*

<sup>41</sup> Intellectual Property Case Adjudication Act, art. 16: “When a party claims or defends that an intellectual property right shall be cancelled or revoked, the court shall decide based on the merit of the case, and the Code of Civil Procedure, Code of Administrative Litigation Procedure, Trademark Act, Patent Act, Species of Plants

“independent invention” and “possession of a patent right”.<sup>42</sup>

(2) Taichung District Court--95-Chih-25

In a patent infringement litigation at the Taichung District Court<sup>43</sup>, the defendant raised an independent invention defense arguing that the accused product had been independently invented by itself and the defendant had obtained a ROC utility model patent in regard to the accused product. After adjudication, the district court dismissed the case by holding that the plaintiff bore the burden of proof but failed to prove the patent infringement. The court’s opinion mentioned nothing about the defenses of “independent invention” and “possession of a patent right”.

(3) Taichung District Court--95-Chih-53

In another case of patent infringement at the Taichung District Court<sup>44</sup>, the defendant argued that the accused product did not fall into the patent scope. In addition, the defendant mentioned that it had independently invented the accused product and even had obtained a patent with ROC Patent number 501,519. The defendant argued against the patent infringement claim by asserting that it is a legitimate practice of its patent right to manufacture the accused product.<sup>45</sup> After adjudication, the district court found no patent infringement and thus dismissed this case. However, neither the “independent invention defense” nor the “possession of patent defense” were considered by the Taichung District Court.

(4) Miao-Li District Court--92-Chih-3

---

and Seedling Act, or other applicable laws concerning the stay of an action shall not apply” and “Under the circumstances in the preceding paragraph, the holder of the intellectual property right shall not claim any rights during the civil action against the opposing party where the court has recognized the grounds for cancellation or revocation of the intellectual property right”.

<sup>42</sup> *Supra* note 39.

<sup>43</sup> 95-Chih-25 (Taichung District Court, 2006).

<sup>44</sup> 95-Chih-53 (Taichung District Court, 2006).

<sup>45</sup> *Id.*

In a patent infringement litigation at the Miao-Li District Court<sup>46</sup>, the defendant argued against the patent infringement by alleging that all of its products had been invented by itself and it had applied for several tens of patent applications in the world<sup>47</sup>. After adjudication, the Miao-Li District Court dismissed this case by noting that the plaintiff had not been injured by the defendant's activities. However, the Miao-Li District Court disregarded the "independent invention defense" and the "possession of patent defense" raised by the defendant.

(5) Tainan District Court--92-Chih-3

In a patent infringement lawsuit at the Tainan District Court<sup>48</sup>, the defendant argued that the accused machine had been independently developed by the defendant itself, and the defendant had filed and obtained two patents in Taiwan already.<sup>49</sup> After adjudication, the Tainan District Court found no patent infringement because there are large differences between the patent-in-suit and the accused machine. Nevertheless, the Tainan District Court disregarded the "independent invention defense" and the "possession of patent defense" raised by the defendant.

(6) Tainan District Court--92-Chih-25

In another case of patent infringement at the Tainan District Court<sup>50</sup>, the defendant argued against the patent infringement claim by reasons that: (1) the accused machines with model numbers of TY528, TY550, and TY880 had been independently developed by the defendant itself; and (2) the defendant had filed some patent applications for the technologies of TY528, TY550, and TY880.<sup>51</sup> After adjudication, the Tainan District Court concluded

---

<sup>46</sup> 92-Chih-3 (Miao-Li District Court, 2003).

<sup>47</sup> *Id.*

<sup>48</sup> 92-Chih-3 (Tainan District Court, 2003).

<sup>49</sup> *Id.*

<sup>50</sup> 92-Chih-25 (Tainan District Court, 2003).

<sup>51</sup> *Id.*

that the defendant did not infringe the patent-in-suit, but did not mention about the “independent invention defense” or the “possession of patent defense” in the court’s opinion.

(7) Tao-Yuan District Court--92-Suit-363

In a case of patent infringement at the Tao-Yuan District Court<sup>52</sup>, the defendant argued that the accused product had been independently invented so as not to infringe plaintiff’s patent-in-suit.<sup>53</sup> After adjudicating this case, the Tao-Yuan District Court found no patent infringement, but did not take into consideration of the “independent invention defense”.

(8) Taipei District Court--94-Chih-45

In a case of patent infringement at the Taipei District Court<sup>54</sup>, in addition to the non-infringement argument, the defendant also argued that the accused product had been independently invented by the defendant, so the defendant did not have any intention or negligence to infringe the patent-in-suit.<sup>55</sup> The district court found no patent infringement in this case, but the decision did not mention about the “independent invention defense”.

(9) The Intellectual Property Court—98-Ming-Chung-Shan-30

In a patent infringement case at the Intellectual Property Court<sup>56</sup>, all of the defendants argued against patent infringement. Two of the arguments of the defendants are: (1) the electronic controller of the accused products had been independently developed by one of the defendants (the supplier of the electronic controller); and (2) the supplier had obtained three utility model patents for the electronic controller. The IP Court found no patent infringement after adjudication, but did not consider the “independent invention defense” or the “possession of patent defense” in reaching the conclusion.

---

<sup>52</sup> 92-Suit-363 (Tao-Yuan District Court, 2003).

<sup>53</sup> *Id.*

<sup>54</sup> 94-Chih-45 (Taipei District Court, 2005).

<sup>55</sup> *Id.*

<sup>56</sup> 98-Ming-Chung-Shan-30 (IP Court, 2011).



## (10) Short Conclusion

In conclusion, several defendants raised the “independent invention defense” and “possession of patent defense” in the patent infringement litigations. However, none of these arguments were considered or accepted by the courts. That’s because the “independent invention defense” and “possession of patent defense” are not defenses to patent infringement under the current patent system, so the courts even did not mention about these defenses in the reasoning.

### 2. The Cases Which the Plaintiffs Prevailed

#### (1) Chang-Hwa District Court--93-Chih-16

In a case of patent infringement at the Chang-Hwa District Court<sup>57</sup>, the defendant argued that the accused products had been independently invented by itself, so the defendant did not have the intention or negligence to infringe the plaintiff’s patent. However, the district court did not accept the independent invention defense and held patent infringement.<sup>58</sup>

In court’s opinion of this decision, the judge mentioned that the defendant bore the burden to search for other’s patents to make sure of non-infringement since the defendant was a manufacturer in the plastic industry. Although the defendant argued that it had re-invented the accused product by referencing a product imported from a foreign country, the district court noted that the defendant should particularly keep watching whether the accused product had been patented as there had already been similar products in the market. Since all issued patents are accessible on the website of the patent authority, the defendant has no difficulty to access to the patent-in-suit. Accordingly, the district court held that the defendant had negligence because the defendant should and is able to notice the existence of the patent-in-suit but failed to notice it. Therefore, the district court disregarded the

---

<sup>57</sup> 93-Chih-16 (Chang-Hwa District Court, 2004).

<sup>58</sup> *Id.*

“independent invention defense” and held patent infringement.<sup>59</sup>

(2) Kaohsiung District Court--94-Chih-6

In a patent infringement case at the Kaohsiung District Court<sup>60</sup>, the defendant argued against patent infringement by asserting that the accused product had been independently developed by itself. However, the district court reached a conclusion that the defendant infringed the plaintiff’s patent right and should pay damages to the plaintiff.<sup>61</sup> The argument of the independent invention defense even did not appear on the court’s opinion.

(3) Taipei District Court--94-Chih-27

In a case of patent infringement at the Taipei District Court<sup>62</sup>, the defendant argued that it had no need to copy plaintiff’s patented product because it had independently developed the accused product and had obtained two ROC patents for the independent invention.<sup>63</sup> However, the district did not accept the independent invention defense and held patent infringement.

(4) The IP Court--99-Ming-Chang-Sue-215

In a case of patent infringement at the IP Court<sup>64</sup>, the defendant argued against patent infringement by asserting that: (1) the defendant had dedicated to manufacture and sell the accused products for several tens of years; (2) the defendant had a professional team to develop the accused products; (3) the defendant had obtained many patents for the accused products; and (4) the defendant had no necessity to copy plaintiff’s patented technology.<sup>65</sup>

However, the IP Court disregarded the “independent invention defense” and held patent

---

<sup>59</sup> *Id.*

<sup>60</sup> 94-Chih-6 (Kaohsiung District Court, 2005).

<sup>61</sup> *Id.*

<sup>62</sup> 94-Chih-27 (Taipei District Court, 2005).

<sup>63</sup> *Id.*

<sup>64</sup> 99-Ming-Chang-Sue-215 (IP Court, 2011).

<sup>65</sup> *Id.*

infringement.<sup>66</sup> The IP Court noted that the defendant should particularly keep watching whether the accused product had been patented as there had already been similar products in the market. Since the patents are issued and accessible on the website of the patent authority, the defendant has no difficulty to access to the patent-in-suit. Accordingly, the IP Court held that the defendant had negligence because the defendant should and is able to notice the existence of the patent-in-suit but failed to notice it.

#### (5) Short Conclusion

In conclusion, several defendants raised the “independent invention defense” and “possession of patent defense” in the patent infringement litigations. However, none of these arguments were considered or accepted by the courts, and the defendants were held patent infringement. That’s because the “independent invention defense” and “possession of patent defense” are not defenses to patent infringement under the current patent system, so the courts disregarded defenses in the determination of patent infringement.

#### 3. Conclusion of the Empirical Study

The empirical study shows that “independent invention defense” and “possession of patent defense” are unacceptable in practice in Taiwan. However, it is interesting to find that numerous defendants argued against patent infringement by raising such defenses. This phenomenon more or less reflects that such defenses are a “common sense” of the persons, even for lawyers who do not focus on patent practice. In other words, with regard to the issue of independent invention defense, the current patent systems in the world are inconsistent with people’s intuition. What does it mean? It is actually an interesting issue which this dissertation would like to clarify.

#### **2.2.4 The Influence on Industries in the Absence of the “Independent Invention Defense”**

---

<sup>66</sup> *Id.*

## and “Possession of Patent Defense”

### 1. “Chasing” Development is a Waste

The current patent system is a game of “winner-takes-all”. If more than two persons or companies separately filed patent applications for an identical invention, the patent right will be granted to the person first to file the patent application. Since the independent invention defense is not allowed in current patent infringement litigation, once the first person (or company) obtains the patent right, others including the independent developer can not practice the patented technologies without the first person (or company)’s prior permission.

This rule is very disadvantageous to the independent developer. Since the technology was developed by the independent developer himself or herself, the independent developer needed to spend the development expenses as much as the patent owner. However, the independent developer can not use the technology developed by himself or herself. If the independent developer wants to use the patented technology, he or she needs to pay an extra licensing fee to the patent owner, which is roughly identical to or even higher than the development expenses. Accordingly, the independent developer should pay at least twice of the development expenses in order to practice the technology developed by himself or herself.

Subsequently, the current patent law encourages people or companies not to continue the research activity if cannot take the lead in technology development. In this circumstance, the best way for the second or third leading company is to stop further researching and developing and save money for paying licensing fee. Otherwise, the chasing development will be a waste.

It’s really difficult to imagine that people built a patent system encouraging the second-ranking company not to continue its research activities. This dissertation notes that this situation is controversy to the purpose of patent law to promote the progress of science

and technology.<sup>67</sup> However, it is an inevitable result from the denial of independent invention defense. Accordingly, this dissertation finds the necessity of considering the independent invention defense in the patent infringement litigation.

Of course, the second and third leading companies may also try to design around the existed patent or to change their R&D course. However, as described in Chapter 1, to design around an existed patent is sometimes technically or economically impossible. Even in the cases in which the design-around is technically and economically possible, the design-around fails frequently because the effective scope of a patent claim is very hard to be identified under the doctrine of equivalents. Therefore, the design-around is not always an effective way to avoid from patent infringement. For this reason, this dissertation notes that the design-around can not always substitute the necessity of the independent invention defense.

## 2. High Duty of Care to Conduct Patent Searches

Because the “independent invention defense” and “possession of patent defense” are not acceptable in the current patent world, each enterprise needs to conduct a fully and completely patent search before developing any product. This dissertation notes that the duty of due care to conduct such a patent search is significantly high by the following reasons.

Firstly, there are so many patents issued on the patent databases of the developed countries, such as the United States, Japan, China, and EPO. For example, there are so many patents related to the computer, the phone, the IC, the semiconductor, and DRAM on the patent database of the U.S.. The table below shows the patent numbers in the U.S. searching by the keywords of “computer”, “phone”, “IC”, “semiconductor”, and “DRAM” in “Title of Patent”, “Abstract of Patent”, and “Specification of Patent” up to the date of October 2, 2012

---

<sup>67</sup> U.S. CONST. art. 1, §8, cl. 8: “The Congress shall have power . . .to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries...”

	Title	Abstract	Specification
computer	47,418	122,198	931,937
phone	5,548	7,666	154,504
IC	4,448	14,286	185,977
semiconductor	100,537	153,028	562,095
DRAM	2,710	5,580	92,242

Table 2: patent search result

For instance, a cell phone contains several ICs, at least one circuit board, some controlling circuits, one or two panels such as TFTLCD or OLED, some software and firmware including the CDMA protocol, and the housing shell. Therefore, if a company wants to develop a new cell phone, it needs to search the patents on IC design, IC layout, IC manufacture, IC test and IC package for the ICs, materials, structures and manufacturing processes for the circuit board, the design and manufacturing processes for the controlling circuits, the materials, structures, and manufacturing processes for the panels, the light source of the panels such as LEDs, the processes for the software and firmware, and the structures, manufacturing processes, and designs of the housing shell of the cell phones. Accordingly, there are tens or even hundreds of thousand of patents to be searched and studied, but it is actually impossible for any company to do that.

Secondly, it is not possible for an enterprise to search and find out all of the patents which are needed to be concerned. One reason is that any patent applications need to be kept in secret before being issued or published. There is no way for anybody to search and find out the patent applications in secret. It is a natural and non-conquerable limitation of the patent search work.

The other major reason is that the patent applicants are allowed to define any terminologies they prefer in their patent specifications, so it is not possible to “guess” all of the keywords while conducting the patent searches.

For example, Nokia sometimes used “mobile phone”, but sometimes used “cellular phone” in the titles of their patents. Up to October 2, 2012, Nokia used “mobile phone” in 2,041 of its 10,068 patents<sup>68</sup>, and used “cellular phone” in 413 of its 10,068 patents<sup>69</sup>. However, Nokia seems like to use “Handset” as the titles of their design patents.<sup>70</sup> Except for “cellular phone” and “mobile phone”, Samsung used “portable phone” in 582 design patents and used “wireless cell phone” in U.S. Pat. No. 7,565,182.

For another example, while drafting the patent specifications related to CD-R or DVD, the patent applicants did not tend to directly use the terms of “CD-R<sup>71</sup>” and “DVD<sup>72</sup>”. Instead, the patent applicants prefer to use some abstract and vague terms such as “optical disc<sup>73</sup>”, “optical storage<sup>74</sup>”, “optical element<sup>75</sup>”, “optical reading and recording device<sup>76</sup>” to stand for CD-R or DVD. Some patents related to CD-R or DVD even do not have the word “optical” in the title or the specification. For example, “record carrier<sup>77</sup>”, “information disc<sup>78</sup>” were used in the title of some patents related to CD-R or DVD.

---

<sup>68</sup> For example, the title of 7,443,386 is “Mobile phone and method”, and the title of 7,403,977 is “Mobile phone having hinting capabilities for operation function selection”.

<sup>69</sup> 6,912,384 used “Method and system for transferring a cellular phone call” as the title of the patent.

<sup>70</sup> For example, D604,283 and D603,827 used “handset” as the titles of the design patents.

<sup>71</sup> Till November 17, 2009, there are only eleven (11) patents issued in the United States with the titles of “CD-R”.

<sup>72</sup> Till November 17, 2009, there are only 444 patents issued in the United States with the titles of “DVD”.

<sup>73</sup> Till November 17, 2009, there are only 2251 patents issued in the United States with the titles of “optical disc”, such as 7,619,962 and 7,619,958.

<sup>74</sup> Till November 17, 2009, there are only 515 patents issued in the United States with the titles of “optical storage”, such as 7,613,093 and 7,609,605.

<sup>75</sup> 6,930,973 used “optical element” as the title of the invention.

<sup>76</sup> 5,719,614 used “Optical reading and recording device containing a radiation source which has a substantially constant mean heat dissipation during reading and recording” as the title of the invention.

<sup>77</sup> The title of 5,724,327 is “Record carrier having first variations of a first physical parameter corresponding to information recorded thereon and second variations of a second physical parameter relating to recovery of the information”.

<sup>78</sup> The title of 6,028,831 is “Loading mechanism for loading and unloading an information disc into/from an information-technology apparatus”.

After finding out the patents which are relevant to the concerned products, the company needs to glance over the patents, and to filter and select the patents which need to be read more detailed, generally in the number amount of hundreds or at least tens of patents. The company needs to read the selected patents in details, and compare the concerned products with all claims of the selected patents one by one, by using the rule of “literal infringement” and “infringement under doctrine of equivalents”<sup>79,80</sup>. It is known by the people who have ever conducted this kind of work that it is really a very huge work, even for a company with tens of patent staffs. The huge work wastes lots of money and human power of any companies in every industry, particularly in the fields of information technology, semiconductor, LED, and TFTLCD. This dissertation notes that this is a non-necessary waste, resulting from the denial of independent invention defense.

On contrast, the companies can waive or save this burdensome, time-consuming and costly effort as long as the “independent invention defense” is acceptable in the patent litigation cases.

### **2.3 Theories of Patent’s Right to Exclude**

To deny the “independent invention defense” and “possession of patent defense” is a direct conclusion of the patent’s right to exclude. According to the traditional theories of patent right, this dissertation tries to find out the rationalities of the patent’s right to exclude as follows.

#### **2.3.1 The Nature Right Theory and the Fruit of Labor Theory**

The natural right theory is based upon John Lock’s theory in seventeenth century, saying

---

<sup>79</sup> Darcy August Paul, *The Judicial Doctrine of Equivalents*, 17 HARV. J. OF L. & TECH. 247, 250 (2003).

<sup>80</sup> A commentator criticized the doctrine of equivalents, see Joshua D. Sarnoff, *Abolishing the Doctrine of Equivalents and Claiming the Future After Festo*, 17 BERKELEY. TECH. L.J. 1157, 1167-68 (2004)(“The modern doctrine of equivalents lacks theoretical justification, impose high cost on society, and likely impedes innovation.”).



that any worker is naturally entitled to own the outcome of her or his work.<sup>81</sup> Although there was no patent law in John Lock's era, Nozick applied John Lock's theory to the patent law in 1974, alleging that the inventor of an invention should be naturally entitled to own the result of her or his invention.<sup>82</sup>

This theory is of course not consistent with the present patent laws in the world. Under the Natural Right Theory, the inventor ought to be entitled to the patent right as soon as the invention is completed.<sup>83</sup> However, under the current patent systems in the world, an inventor should prepare a patent specification and file a patent application to the patent authority for formality and substantial examinations in each and every country, and will not be entitled to a patent right until the patent authority grants the application and issues the patent.<sup>84</sup> Accordingly, the Supreme Court of the United States denied this theory in *Graham v. John Deere Co.* case<sup>85</sup>, stating that the patent right was not designed to protect the inventor for his natural right in his invention.<sup>86</sup>

Nevertheless, this dissertation thinks highly of this theory. It is actually a powerful theory for us to consider the independent invention defense in the patent infringement litigations. For example, under the current patent system, if Company B's product falls into Company A's patent scope, Company B infringes Company A's patent right even if Company B's product was invented by Company B itself. However, if we consider the Natural Right Theory, Company B ought to be entitled to a "natural right" upon its invention of the product. In this dissertation, I try to consider that the "natural right" owned to the independent

---

<sup>81</sup> PETER DRAHOS, *A PHILOSOPHY OF INTELLECTUAL PROPERTY* 43 (1996); DOMINIQUE GUELLEC, *THE ECONOMICS OF THE EUROPEAN PATENT SYSTEM: IP POLICY FOR INNOVATION AND COMPETITION* 46 (2007).

<sup>82</sup> GUELLEC, *id.* at 47.

<sup>83</sup> On the other hand, since the author of a work is entitled to a copyright as soon as she or he completes the work under the main copyright laws in the world, the natural right theory is basically consistent with the copyright laws.

<sup>84</sup> GUELLEC, *supra* note 81, at 47.

<sup>85</sup> *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

<sup>86</sup> *Id.* at 9 ("The patent monopoly was not designed to secure to the inventor his natural right in his discoveries. Rather it was a reward, and inducement, to bring forth new knowledge.").

developer is not a patent right but an affirmative defense in the patent infringement litigation.

### 2.3.2 Invention Disclosure Theory

Under this theory, the grant of a patent is a quid pro quo for the patent applicant's disclosure of the invention on the patent specification<sup>87</sup>, and thus the patent application is deemed to be a contract between the patent applicant and the country government,<sup>88,89</sup> wherein to file a patent application is an offer provided by the patent applicant, and to grant a patent right is an acceptance by the country's patent authority. More particularly, to completely disclose the invention on the patent specification is the consideration of the contract. This theory thus illustrates the ground of the "enablement" and "the best mode" requirements in drafting the patent specification.<sup>90</sup> A commentator mentioned that this theory has been accepted by courts but not economists.<sup>91</sup>

Theoretically, this theory provides the rationale to the patent's right to exclude. Upon drafting the patent specification, the patent applicant needs to completely disclose his or her invention as the consideration of the contract between the patent applicant and the government. As long as the patent specification/claims meet all of the patentability requirements in the patent law, the authority should grant the patent application and issue the patent following applicant's payment of the issue fee and publication fee. From this aspect, the main purpose of the patent system is to exchange for the disclosure of the invention by granting an exclusive patent right in a limited time. As long as the patent expires, each and

---

<sup>87</sup> Lisa Larrimore Ouellette, *Do Patents Disclose Useful Information?* 25 HARV. J. L & TECH. 545, 546-547 (2012).

<sup>88</sup> CHRISTIAN POHL, DIE VORAUSSETZUNGEN DER PATENTRECHTLICHEN ZWANGSLIZENZ, 1998, S. 123.

<sup>89</sup> PETER D. ROSENBERG, PATENT LAW FUNDAMENTALS 1-4 (2nd ver. 1997).

<sup>90</sup> 35 U.S.C. § 112 (a): "The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention."

<sup>91</sup> Kevin Sandstrom, *How Much do We Value Research and Development?: Broadening the Experimental Use Exemption to Patent Infringement in Light of Integra Liefsciences I, Ltd v. Merck KGaA*, 331 F.3D 860 (Fed. Cir. 2003), 30 WM. MITCHELL L. REV. 1059, 1097 (2004).

every person can use the disclosed invention for further searches and developments.

Based on this theory, the patent right should be a right to exclude in order to protect the patent owner during the patent term. In details, because the patent owner has disclosed the details of the patented invention in the patent specification, the patented technology is quite easy to be pirated or copied if the patent right is not able to exclude others from manufacturing or selling the patented products or using the patented process. Accordingly, to protect the disclosure of the patented invention is the legal ground of the patent's right to exclude.

However, this theory and the aforementioned explanation are still questionable. In details, even if the patent laws around the world request the patent applicants to disclose their inventions fully, clearly, and concisely as to enable any person with ordinary skill in the art, it is a real question whether the patent applicants comply with the disclosure duty. In fact, in my patent practice experience<sup>92</sup>, the examiners in the patent offices are very hard to judge whether the patented invention is fully disclosed in the patent specification. An article even estimated that about a half of patents can not be executed without some know-how.<sup>93</sup> Since the disclosure duty is not fully respected by the patent applicants, it is doubtful whether the disclosure duty is able to rationalize the patent right's to exclude.

Furthermore, this dissertation finds that the patent specifications are not always the unique way for people to understand the patented inventions. In some cases, people can simply understand the patented technologies directly from the end products derived from the invention, without reading the specification of the patents. For example, U.S. Patent No. 6,789,269 disclosed an invention of "Pants with one or more zippers on the rear thereof";<sup>94</sup>

---

<sup>92</sup> The author of this dissertation has 15+ years experience in patent practice.

<sup>93</sup> Barkev S. Sanders, Joseph Rossman, & L. James Harris, *Attitudes of Assignees Toward Patented Inventions*, 2 PAT, TRADEMARK & COPYRIGHT J. RES. & EDUC. 463, 467-68 (1958).

<sup>94</sup> The claim 1 of the U.S. Patent No. 6,789,269 is: "1. A pair of pants, comprising: (a) a seat portion, a waist portion, and two leg portions joined together in a conventional manner to form said pants; (b) at least one

and U.S. Patent No. 6,640,379 disclosed an invention of “Attachable eyeglass wipers”.<sup>95</sup> It’s very obvious that everyone who sees the products of the “pants with one zipper on the rear” and the “attachable eyeglass wipers” can be aware of the technologies without reading the patent specifications.

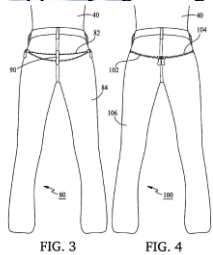
From this aspect, not only for some of the utility patents but also for almost of the design patents, the patent authority does not need to grant patent rights to such technologies to exchange for their disclosures of the patented inventions. For this reason, this dissertation notes that the Invention Disclosure Theory does not provide a solid legal ground for the patent’s right to exclude.

### 2.3.3 Invention Stimulation Theory

The Invention Stimulation Theory argues that the exclusive nature of the patent right provides the stimulation to invent.<sup>96</sup> In the absence of the patent protection, the research

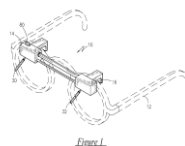
---

zipper disposed on a rear of said pants between a crotch area and a top of said pants, said at least one zipper being partially or completely unzippable to reveal a selected portion of a wearer of said pants; and (c) said at least one zipper lying on a generally horizontal line”. The Fig. 3 and Fig. 4 of the U.S. Patent No. 6,789,269



are as:

<sup>95</sup> The claim 1 of the U.S. Patent No. 6,640,379 is “1. Wipers for attachment to otherwise conventional eyeglasses, said wipers comprising: a first housing for housing a battery; a second housing rigidly affixed to said first housing and separated by a rigid housing support, said second housing for housing a drive motor; said rigid housing support formed as a hollow, elongated tube affixed in rigid mechanical contact at each end to one said housing and in fluid communication with an interior cavity of each said housing; electrical communication wiring in electrical contact between the battery in the said first housing and the drive motor in said second housing via a hollow shaft within said rigid housing support; a first wiper arm pivotally mounted within said the first housing and extending downward therefrom is a first wiper arm; and a second wiper arm pivotally mounted within said second housing and extending downward therefrom is a second wiper arm; and wherein the intended connection of the wipers to a conventional pair of eyeglasses is via a rearward cantilever extended attachment



clamp affixed to the rear of each housing.”, and its Fig. 1 is

<sup>96</sup> See Kevin Sansstrom, *supra* note 91, at 1098.

achievement can be easily pirated by the free riders. Because the counterfeiters do not need to research or develop the technologies by themselves, they enjoy the advantageous position of low cost. Accordingly, the counterfeiters can enter and dominate the market with low price, so that the original inventor can not recover his or her development expenses. For this reason, companies' aspiration and motivation for research and development will be lessened if there is no patent system, especially the exclusive right to protect inventions.<sup>97</sup>

However, the Invention Stimulation theory is also questionable. Friedman commented that some benefits obtained from the exclusive patent right are transferred from the independent developers.<sup>98</sup> Therefore, Friedman argued that the royalties from patent licensing or damages from patent infringement litigation may over-reward the patent owners, much more than their expenses for research or development activities.<sup>99</sup>

This dissertation considers that the Invention Stimulation Theory is based on utilitarianism. Actually, not all inventors in the world are utilitarian. Not deniably, to obtain the patent protection is not the unique purpose for doing research and development, especially for the professors and researchers in the universities or institutes. For this reason, this dissertation does not see this theory provides a solid rationale for the patent's right to exclude.

#### **2.3.4 Investment Stimulation Theory and Prospect Theory**

The Investment Stimulation Theory states that the patent system provides the incentive for the enterprise to invest on development and innovation.<sup>100</sup> This dissertation can not totally negate this theory, because the patent systems do provide the incentive for the

---

<sup>97</sup> See Rebecca S. Eisenberg, *Patent and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017, 1026 (1989).

<sup>98</sup> David Friedman, *supra* note 14, at 135.

<sup>99</sup> *Id.*

<sup>100</sup> See Jay P. Kesan and Marc Banik, *Re-engineering Patent Law: The Challenge of New Technologies: Part 1: Administrative Law Issues: Patents as Incomplete Contracts: Aligning Incentives for R&D Investment with Incentives to Disclose Prior Art*, 2 WASH. U. J.L. & POL'Y 23, 23 (2000).

enterprises to invest for invention. Especially in the pharmaceutical industry, it spends a huge amount of money for the pharmaceutical companies to develop a new medicine. However, as long as the a new medicine is developed and released to the market, it is quite easy for other pharmaceutical companies to conduct a reverse engineering so as to find out the compound of the new medicine and even copy it. Accordingly, if there is no patent right to protect the invention, few pharmaceutical companies want to “waste’ money to develop new medicines.

The Prospect Theory, proposed by Edmund W. Kitch in 1977<sup>101</sup>, further expanded the Investment Stimulation Theory. The Prospect Theory analogizes the patent right to the mining right. As long as one person is authorized by the government to mine at a specific area, that person can exclude others from mining at the area. Similarly, as long as one person finishes an invention and her or his patent application is granted by the patent authority, she or he will be entitled to a patent’s right to enjoin others from making or selling the patented products. More particularly, the Prospect Theory tried to overthrow the traditional theory that the patent’s right to exclude is limited to the completed invention. Instead, the Prospect Theory claimed that the patent’s right to exclude should be expanded to any future invention, including but not limited to any innovation of merchandise from the original invention<sup>102</sup>.

This dissertation does not agree with the Prospect Theory. This dissertation does not think that the patent right can be analogized to the mining right. The most significant difference between the patent right and the mining right is that any mine will be exhausted after mining but the practice of the patent right<sup>103</sup> will not deplete the patent right. Defending to this criticism, Kitch argued that although the practice of the patent right will not

---

<sup>101</sup> Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265 (1977).

<sup>102</sup> Roger L. Beck, *The Prospect Theory of the Patent System and Unproductive Competition*, in RESEARCH IN LAW AND ECONOMICS 194 (1983).

<sup>103</sup> The “practice” of patent right here is to make, sell, offer for sale, use, or import the patented products.

deplete the patent right, the resource to practice is limited. For this reason, Kitch stated that the exclusive patent right provides the patent owner a predominant position to integrate the follow-up development and innovation, so as to improve the efficiency of limited search resources.<sup>104</sup>

However, this dissertation notes that Kitch's argument falls into a trap that the practice of the patent right can establish a monopoly in the innovation market. Of course, only a monopoly in the innovation market will not inevitably violate the antitrust law. However, if the patent owner abuses the dominant power of subsequent developments in order to exclude others from conducting further development, the patent owner may violate the antitrust law by abusing the monopoly power in the innovation market. In fact, the Prospect Theory has been used by the patent owners in real practice as a legal ground of expanding the patent rights. In this aspect, this dissertation finds that the Prospect Theory leads the patent owners to pass through the boundary of reasonable practice of the patent rights.

Rebecca S. Eisenberg further interpreted the Prospect Theory. Under her theory, because the exclusive patent right can exclude others from conducting further developments, no one will invest for further developments without prior permission of the patent owners. Otherwise, the chasing developers will be largely lost if the patent owner file a motion for injunctive relief to enjoin the chasing developers from manufacturing or selling the patented products. According, Eisenberg thought that the exclusive patent right is helpful for the patent owners to efficiently integrate the resources for follow-up developments, in order to reduce the waste of repeated developments.<sup>105</sup>

However, this dissertation finds that the patents right to exclude may not reduce the wasteful duplication unless the following two prerequisites can be met: (1) any development

---

<sup>104</sup> Kitch, *supra* note 101, at 275-76.

<sup>105</sup> Eisenberg, *supra* note 97, at 1041-2 (1989).

can find the entire prior art references by conducting the patent search; and (2) the transaction cost of negotiating patent licensing should not be too high.

This dissertation notes that the first prerequisite is hard (or even impossible) to meet. That's because the patent search needs high profession and experiences, and any patent search can not ensure to find 100% of the prior art references. Furthermore, the pending applications without publication or issuance are secret within the patent authority, and thus no one can find the pending patents through the patent searches.

This dissertation notes that the second prerequisite is also hard to meet, because the denial of patent licensing has become a most powerful business means for the patent owner to heighten the bargain power during negotiation. According, the anticipation for low transaction cost of negotiating patent licensing is like to fish in the air. For these reasons, this dissertation does not see this theory provides a solid rationale for the patent's right to exclude.

### **2.3.5 Conclusion**

Except the theory of Nature Right and the Fruit of Labor, all of the theories support the patent's right to exclude. However, none of the theories can strongly support the patent's right to exclude, so the exclusive nature of the patent right is not non-questionable in theory. Therefore, the denial of the independent invention defense is not theoretically absolute or inevitable, so some theories were developed to support the independent invention defense as follows.

## **2.4 Debates about the Independent Invention Defense**

In the past ten years, there have been more and more debates about whether to recognize the independent invention defense. It is quite interesting to find that the scholars fighting for the independent invention defense are almost economists and the scholars fighting against the



independent invention defense are almost legalists.

#### 2.4.1. Arguments for the Independent Invention Defense

Two economists, Professors Stephen M. Maurer and Suzanne Scotchmer, wrote an article to argue for the independent invention defense in 2002,<sup>106</sup> concluding that to accept the independent invention defense is the best rule in the patent litigations.<sup>107</sup>

To reach this conclusion, Maurer and Scotchmer first noted that the threat of independent invention (if it is accepted in the patent infringement litigation) provides the patent owners an incentive to license the patented technology to the potential independent developers.<sup>108</sup> In order to provide an incentive to the potential independent developers not to duplicate the patented invention but to accept the patent licensing, the licensing fee (or royalty) should be equivalent to or even lower than the investment cost of independent invention. Accordingly, the potential independent developers can obtain a license to practice the patented technologies with relatively-low cost, without the necessity to invent independently.<sup>109</sup>

On the other hand, since the potential independent developers are encouraged to pay the licensing fee (or royalty) equivalent to the invention investment instead of developing by themselves, the patent owner can recover the invention investment by collecting the licensing fee (or royalty) from the potential independent developers.<sup>110</sup> Therefore, the independent invention defense ensures that the research and development costs of the patent owner will be reasonably recovered, but not over-rewarded.<sup>111</sup>

Secondly, Maurer and Scotchmer mentioned that to admit the independent invention

---

<sup>106</sup> Stephen M. Maurer & Suzanne Scotchmer, *The Independent Invention Defense in Intellectual Property*, 69 *ECONOMICA* 535 (2002).

<sup>107</sup> *Id.* at 535.

<sup>108</sup> *Id.*

<sup>109</sup> *Id.*

<sup>110</sup> *Id.* at 536 (“the threat of independent invention curbs market power without threatening the patent-holder’s ability to cover his R&D costs.”)

<sup>111</sup> *Id.*

defense can reduce the wasteful duplication.<sup>112</sup> That's because the patent owners are motivated to provide the patent license with reasonable licensing fee under the threat of independent invention. As soon as the potential independent developers can obtain the patent license with reasonable licensing fee (or royalty), they do not need to independently invent by themselves.<sup>113</sup>

This idea was echoed by Professor Samson Vermont<sup>114</sup>, who published a paper in 2006 pointing out that the independent invention defense can reduce the wasteful R&D duplication and also increase spread of technology without largely decreasing the incentive of conducting inventions.<sup>115</sup>

Thirdly, Maurer and Scotchmer illustrated that the threat of independent invention, which is able to promote the patent licenses with reasonable licensing fee, can not only create social benefits but also reduce the deadweight loss.<sup>116</sup>

In fact, one of the major topics of the patent law is the problem that the patent owners would not like to license the patent rights to the potential entrants. Since the patent law provides the right to exclude to the patent owners, the patent holders do have the right to refuse to license. For this reason, section 271 (d) of U.S. Patent Law<sup>117</sup> rules that refusal to license does not constitute a patent misuse.<sup>118</sup> However, as soon as the patent owners refuse

---

<sup>112</sup> *Id.* at 540-42.

<sup>113</sup> *Id.*

<sup>114</sup> Samson Vermont is an assistant Professor of Law at George Mason University School of Law.

<sup>115</sup> Samson Vermont, *Independent Invention as a Defense to Patent Infringement*, 105 MICH. L. REV. 475, 475 (2006).

<sup>116</sup> Stephen M. Maurer & Suzanne Scotchmer, *supra* note 106, at 545.

<sup>117</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

<sup>118</sup> 35 U.S.C. 271 (d): "No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement; (4) refused to license or use any rights to the patent; or (5) conditioned the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent owner has market power in the relevant market for the patent or

to license, the potential licensees can not get the license to enter into the market. The patent owner may have the monopoly power to dominate the market and to determine the product price, so the deadweight loss may be significantly high. Accordingly, the deadweight loss resulting from the patent's right to exclude becomes the necessary evil under the present patent systems in the world.

This dissertation agrees with Maurer and Scotchmer's argument that the independent invention defense provides a threat to the patent owners. The independent invention defense conveys a message to the patent owners that if you do not agree to license your patent rights, the potential independent developers will independently invent the technology<sup>119</sup> and directly compete with the patent owners in the markets without paying any licensing fee. Accordingly, the patent owners have the motivation to license their patents in reasonable licensing fees. As soon as the potential independent developers obtain the patent license to enter into the market, the market will no longer be monopolized by the patent holder. Subsequently, the price of the patented products will be significantly lower than the monopoly price, the deadweight loss may be reduced and the social profit will be generated.

Maurer and Scotchmer's idea was echoed by Vermont again, stating that the independent invention should be a defense against patent infringement.<sup>120</sup> Vermont noted that too many incentives to stimulate invention will impose deadweight losses.<sup>121</sup> Vermont further mentioned that the deadweight losses come from the following two purposes: (1) the consumer access will be diminished due to prices of inventions which are enhanced above the normal level; and (2) the R&D costs will be also enhanced.<sup>122</sup>

Two years later, another two economists Professors Elisabetta Ottoza and Franxo Cugno

---

patented product on which the license or sale is conditioned.”

<sup>119</sup> For example, the potential independent developer may set up a “clean room” in order to independently invent the technology.

<sup>120</sup> Samson Vermont, *supra* note 115, at 475.

<sup>121</sup> *Id.* at 503.

<sup>122</sup> *Id.*

wrote another paper to echo and further extend Maurer and Scotchmer's paper.<sup>123</sup> Under the assumptions that (1) there is only one single potential entrant in the relevant market and (2) the only legally allowable patent licensing agreements are royalty-based contracts with uniform rate and non-negative fixed fee<sup>124</sup>, Ottoz and Cugno operated a model to conclude that the independent invention defense reduces the price of the patented products, without necessarily threatening the motive to further research and develop.<sup>125</sup>

In details, this paper provided a proof for the Proposition 1 which mentions that if the independent invention defense is acceptable in the patent infringement litigation, the independent developer will be able to enter the market and thus the price of the patented products will be lower than the monopoly price.<sup>126</sup>

The Proposition 1 is comprehensible through legal language. As long as the independent invention is a defense in the patent infringement litigation, any independent developer can directly compete with the patent owner in the market with similar invention cost and without paying any licensing fee (or royalty). This conclusion results in two disadvantages to the patent holders: (1) the price of the patented products will be lowered, and (2) the patent holders cannot obtain any licensing fee or royalty from the independent developers. In order to prevent from this worse situation, the patent owner will enthusiastically license its patent right to the potential independent developers with a relatively low licensing fee (or royalty), roughly equivalent to the invention cost. Accordingly, even there is only single one potential independent developer to be licensed, the licensing fee (or royalty) is almost enough to recover the cost of the research and development for the patented invention. Therefore, the acceptance of independent invention defense will

---

<sup>123</sup> Elisabetta Ottoz and Franxo Cugno, *The Independent Invention Defense in a Cournot Duopoly Model*, *ECONOMICS BULLETIN*, Vol. 12, No. 5, at 1-7 (2004).

<sup>124</sup> *Id.* at 3.

<sup>125</sup> *Id.* at 6.

<sup>126</sup> *Id.* at 3.

not threaten the incentive to invent.

On the other hand, from the point of view of the potential independent developers, the licensing fee (or royalty) is as low as the cost of independent invention. Accordingly, the potential independent developers do have large incentive to deal the patent license with the patent owners, so as not to wastefully duplicate the invention.

Furthermore, the Proposition 4 of Ottoza and Cugno's paper mentioned that as long as the independent invention defense is acceptable in the patent litigations, the entry through the patent licensing agreement always bears positive effects on the social welfare.<sup>127</sup>

Therefore, the independent invention defense is actually a win-win-win way to improve the patent system. Firstly, the patent owners can license the patent right to the potential independent developers with a licensing fee (or royalty) enough to cover the investment cost for developing the patented technology. Secondly, the potential independent developer can get a patent license by paying a reasonable licensing fee (or royalty) roughly equivalent to the independent invention cost, and the cost for duplicating the patented invention may be saved. Thirdly, the market price will be much lower than the monopoly price, so the social benefit is created.

#### **2.4.2 Arguments Against the Independent Invention Defense**

Shortly after the publication of Maurer & Scotchmer's paper, Professors Roger D. Blair and Thomas F. Cotter wrote a paper<sup>128</sup> to controvert it. Roger and Cotter's paper listed a total of 6 points to fight against the independent invention defense. The major two points are as follows.

Firstly, Roger and Cotter's paper argued that the theory, which stated that the

---

<sup>127</sup> *Id.* at 6.

<sup>128</sup> Roger D. Blair & Thomas F. Cotter, *Strict Liability and Its Alternatives in Patent Law*, 17 BERKELEY TECH. L.J. 799 (2002).

independent invention defense can improve the social welfare, seems counterintuitive.<sup>129</sup> To reach this conclusion, Roger and Cotter's paper mentioned that the existence of the patent's right to exclude is needed to induce the invention and encourage the disclosure of the invention. Roger and Cotter argued that "In the absence of a patent system, ..., free riders would undermine the incentive to invent and disclose..." the invention, so the independent invention defense seems antithetical to the patent law's premise.<sup>130</sup>

Secondly, Roger and Cotter argued that as long as the independent invention defense is accepted in the patent infringement litigation, the "patentee's competitors may have an incentive to copy but claim independent discovery."<sup>131</sup> Although Maurer & Scotchmer suggested borrowing the "clean room" procedures for the copyright issue of the copyright law,<sup>132</sup> Roger and Cotter's still thought it is not applicable.<sup>133</sup>

#### **2.4.3 This Dissertation Supports the Independent Invention Defense**

In response to the first point of Roger and Cotter's paper, this dissertation finds that Roger and Cotter's paper may have some misunderstanding about Maurer & Scotchmer's paper and the independent invention defense.

Firstly, although Maurer & Scotchmer argued for the independent invention defense, they did not assert to abolish the patent system or the patent law. Accordingly, the statement "In the absence of the patent system" in Roger and Cotter's paper is not responsive to Maurer & Scotchmer's paper.<sup>134</sup> Secondly, the independent invention defense can only be applied, if possible, by an independent developer who has developed the technology by himself or herself. Therefore, an independent developer is not a free rider. Roger and Cotter's paper,

---

<sup>129</sup> *Id.* at 809.

<sup>130</sup> *Id.* at 809.

<sup>131</sup> *Id.* at 814.

<sup>132</sup> Maurer and Scotchmer, *supra* note 106, at 544.

<sup>133</sup> *Id.* at 814-15.

<sup>134</sup> Of course, the argument for independent invention defense does not equal to the arguments of abolishing the patent system or "in the absence of the patent system".

using the “free riders” as the base to criticize the independent invention defense, is again not responsive to Maurer & Scotchmer’s premise.

With regard to the second point raised by Blair and Cotter, this dissertation agrees with that once the independent invention defense is acceptable in the patent infringement litigation, some free-riding infringers may impersonate and argue for independent invention in the patent litigation. However, this is merely an issue of burden of proving independent invention in the lawsuit<sup>135</sup>, and should not be used as an argument to fight against the independent invention defense. Otherwise, the independent work defense in the copyright litigations should be abolished by the same reason.

This dissertation will argue for independent invention defense in more details in Sections 1-4 of Chapter 5 of this dissertation.

## **2.5 The Possible Implementations of the Independent Invention Defense**

With regard to the real practice of the independent invention defense, this dissertation proposes three possible ways to implement the independent invention defense in the patent infringement litigation. The first possible way is to assert that the independent invention is not covered by the effect of the patent right. The second possible way is to consider the independent invention while determining whether the patent infringement is willful. The third possible way is to consider the independent invention while determining whether to grant/deny a preliminary injunction or permanent injunction. These three possible ways are introduced and illustrated in details as follows.

### **2.5.1 Not Covered by the Effect of Patent Right**

The first possible way to implement the independent invention defense is to assert that

---

<sup>135</sup> This dissertation notes that the independent developer shall bear the burden of proving his or her independent invention in the patent infringement litigation or injunctive relieves proceedings. This dissertation will address this issue in Chapter 5.

the independent invention is not covered by the effect of patent right.

Firstly, this dissertation analogizes the independent invention defense in the patent infringement litigation to the independent creation defense in the copyright infringement litigation. To allege copyright infringement, the plaintiff in a copyright litigation bears the burden of proving “similarity” and “access”. In the “access” requirement, the plaintiff needs to show that the defendant has accessed or have had reasonable opportunity to access to the copyrighted work. In other word, the independent creation is an affirmative defense to copyright infringement. In fact, this dissertation can not find any reason to differentiate or discriminate between the patent law and the copyright law in the independent invention/creation defense. In other word, there is no reason why the independent creation can be a defense to copyright infringement but the independent invention cannot be a defense to patent infringement.<sup>136</sup>

Secondly, this dissertation analogizes the independent invention defense in the patent infringement litigation to the prior user’s right in the patent infringement litigation. According to article 57 of Taiwanese Patent Law, the effect of a patent right shall not extent to the cases if the patented invention had been used in Taiwan or the patented product had been in existence in Taiwan prior to the filing date of the patent-in-suit.<sup>137</sup> Furthermore, according to Article 59 of the 2011 Amendment of Taiwanese Patent Law, the effect of a patent right shall not extent to the cases if the accused infringer has been practicing the patented technology or has been making all the necessary preparations for practicing the patented

---

<sup>136</sup> See also MARTIN J. ADELMAN, RANDALL R. RADER, JOHN R. THOMAS, AND HAROLD C. WEGNER, CASES AND MATERIALS ON PATENT LAW 748 (2003) (“Is this simply a matter for legal historians, or does such a telling difference exist between patentable inventions and works of authorship that justifies the dissimilarities between these intellectual property schemes?”)

<sup>137</sup> Taiwanese Patent Law, art. 57: “The effect of an invention patent right shall not extend to any of the following matters: (2) where, prior to filing for patent, the invention has been used in this country, or where all necessary preparations have been completed for such purpose provided, however, that this provision shall not apply where knowledge of the manufacturing process was obtained from the patent applicant within six (6) months prior to applying for patent and the patent applicant has made a statement concerning the reservation of his/her patent right therein; (3) where the article has already been in existence in this country prior to the filing of the patent application;”



technology before the filing date of the patent-in-dispute.<sup>138</sup>

This dissertation does not deny that the “time” factor is the most important factor to assert the prior user’s right to patent infringement. It will be a defense only if the defendant had finished the patented invention or produced the patented product prior to the filing date of the patent-in-suit. However, a study to the purpose of enacting the prior user’s right shows that the prior use’s right is to protect the person who had finished the patented invention or produced the patented product before the filing of the patent-in-suit application but filed the patent application later than the patent owner (or did not file the patent application). Since the defendant who asserts the prior user’s right had finished the patented invention and had been ready for mass production, it would be unfair to the defendant and non-profitable to the public interest if the defendant can not execute the invention and even be forced to discard or destroy the equipment for mass production. Note that the purpose seems having little linkage with the time for the defendant to finish the patented invention or to produce the patented product. Accordingly, this dissertation concludes that it could be arguable and even acceptable on theory to analogize the prior user’s right to the independent invention defense.<sup>139</sup>

In order to theoretically rationale the introduction of independent invention defense to

---

<sup>138</sup> 2011 Amendment of Taiwanese Patent Law, art. 59: “The effects of a patent right shall not extend to the following circumstances: (1) activities done privately and for non-commercial purpose; (2) necessary activities to practice the patented technology for research or experimental purpose; (3) activities done by a person who has been practicing the patented technology or making all the necessary preparations for doing such act in this country before the filing date of the patent. However, this provision shall not apply where a person learning of the patented technology from the applicant of the patent within six months and the applicant has made a statement reserving his right in the event of a patent being granted; (4) a vehicle merely passing through the territory Taiwan; (5) where a patent granted to a person not entitled to apply for a patent is revoked as a result of an invalidation filed by the patentee, acts done by a licensee who has, prior to patent invalidation, been practicing the patented technology in good faith or making all the necessary preparations to do such an act; (6) where, after the sale of a patented product made by the patent owner or made under consent of the patent holder, using or reselling such product. The making and selling as mentioned above are not limited to acts done domestically; (7) where, after a patent is ceased pursuant to Subparagraph 3, Paragraph 1 of Article 70 and before it is reinstated and published under Paragraph 2 of Article 70 of this Act, acts done by a person who has been practicing the invention in good faith or making all the necessary preparations to do such an act.”

<sup>139</sup> See also, Samson Vermont, *supra* note 115, at 483 (2006). This paper analogized to the prior user rights as well, although the reasons are different with this dissertation.

the patent infringement litigation, a historical perspective, a constitutional perspective, an empirical perspective, and an economic perspective will be studied in Chapter 5 of this dissertation.

### **2.5.2 Determine Whether the Defendant is Willfully Liable**

According to Paragraph 2, Section 284 of the United States Patent Law<sup>140</sup>, if the defendant in patent infringement litigation is found willful patent infringement, the punitive damages may increase the damages up to three times the amount found.<sup>141</sup> While determining whether the defendant willfully infringed the patent-in-suit, the court should consider whether: (1) the defendant acted in good faith once he or she had actual knowledge of the patent-in-suit; and (2) he or she determined after a sound inquiry that she had a reasonable basis to believe that his or her actions did not infringe the patent-in-suit.<sup>142</sup>

As mentioned, this dissertation defines the “independent developer” to be the person who independently invented the patented product by himself without referring to the patented product or the patent specification. Accordingly, the independent developer did not have the actual knowledge of the patent-in-suit while he independently developing his own technology. From this aspect, the independent developer should not be accused of willful patent infringement.

However, under the current patent rule, the independent developers are still possible to be held willfully liable if the defendants had an actual knowledge of the patent-in-suit after they had completed the independent inventions. For example, a patentee sent a cease and

---

<sup>140</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not substantially amend this section.

<sup>141</sup> 35 U.S.C. 284: “Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court. When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed. Increased damages under this paragraph shall not apply to provisional rights under section 154(d) of this title. The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.”

<sup>142</sup> KIMBERLY A. MOORE, PAUL R. MICHEL, RAPHAEL V. LUPO, *supra* note 24, at 640.

desist letter to an independent developer after the independent developer had completed the independent invention and had released his own product to the market. Under the current patent system, the independent developer needs to stop the mass production immediately while receiving the cease and desist letter; otherwise, he will be accused of willful patent infringement. Consequently, his expense for the independent invention reduces to ashes. This dissertation really doesn't find that this result is good to the scientific development and social/economic benefits.

Therefore, this dissertation suggests considering the independent invention while determining whether the defendant is liable of willful infringement.<sup>143</sup> A defendant in a case of patent infringement should not be held willfully liable if he can prove that: (1) he conducted a patent search but didn't find the patent-in-suit at the development stage and (2) he finished the patented invention by his own independent invention.

### **2.5.3 Deny the Motion for Injunctive Relieves**

In United States, Taiwan, and China, only the courts on the merits will finally determine the patent validity and infringement. The patent validity and infringement are only preliminarily considered in the preliminary injunction proceedings, even though the district courts consider the "likelihood of success on the merits" while adjudicating the motion for preliminary injunction. However, as long as the preliminary injunction is granted and issued by the district court, the defendant can no longer manufacture, sell, or use the patented product or use the patented process.

Accordingly, a commentator mentioned that the issuance of the preliminary injunction is the most terrible thing to a defendant in the patent infringement litigation.<sup>144</sup> He alleged that the independent invention defense should be taken into consideration while adjudicating the

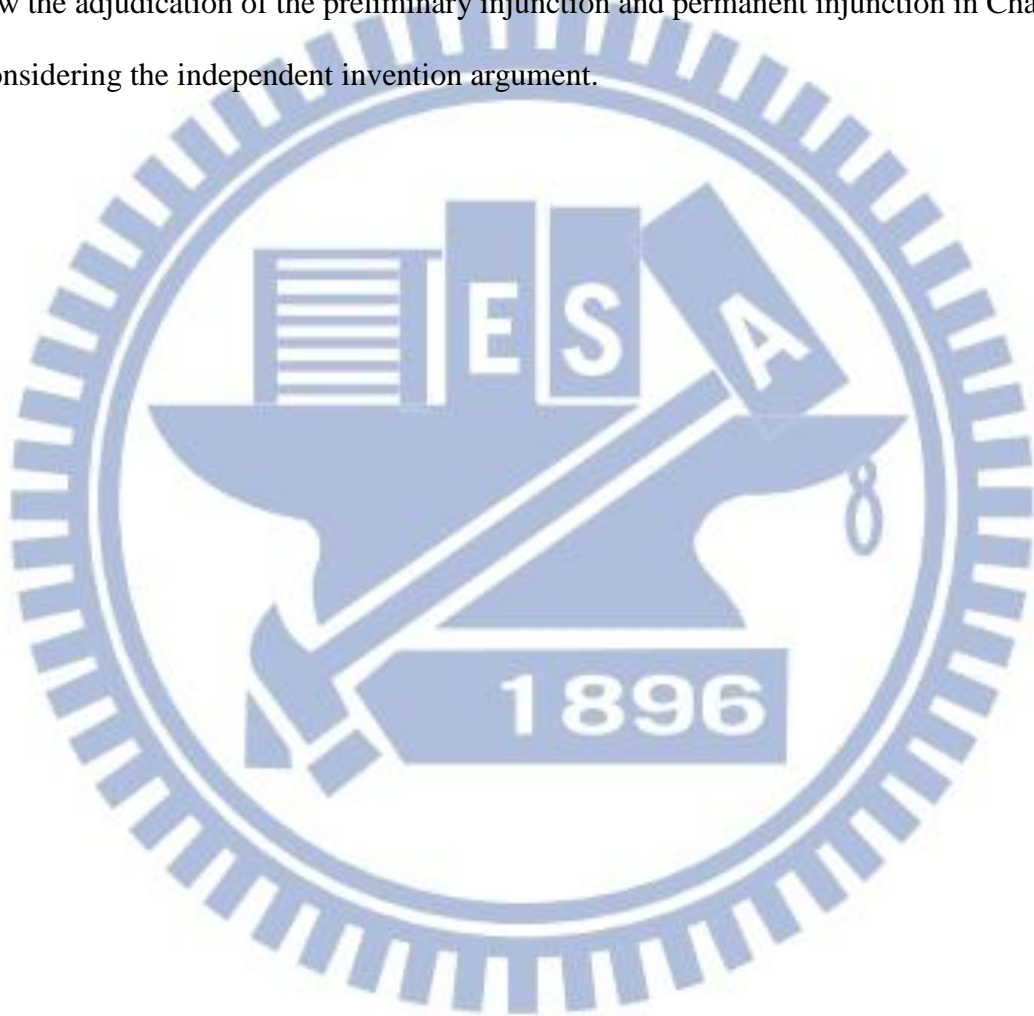
---

<sup>143</sup> See also Mark A. Lemley, *Should Patent Infringement Require Proof of Copying?*, 105 MICH. L. REV. 1525, 1533 (2007).

<sup>144</sup> Michelle Armond, *supra* note 30, at 120-21 (2003).

motion for preliminary injunction, so that the defendant can continuously use the self-developed technology before the patent infringement litigation is closed.<sup>145,146</sup>

This dissertation not only agrees with this paper, but also desires to expand his theory to the adjudication of permanent injunction.<sup>147</sup> This dissertation will investigate the preliminary injunction in Chapter 3 and the permanent injunction in Chapter 4, and then review the adjudication of the preliminary injunction and permanent injunction in Chapter 5 by considering the independent invention argument.



---

<sup>145</sup> *Id.* at 139-41.

<sup>146</sup> *See also* Mark A. Lemley, *supra* note 143, at 1535.

<sup>147</sup> *Id.*

## CHAPTER 3: COMPARATIVE AND EMPIRICAL RESEARCHES OF PRELIMINARY INJUNCTION

### 3.1 Nature of Preliminary Injunction

Injunctive relief is one of the remedies in patent infringement litigations, often the most valuable and powerful remedy<sup>1</sup>. It is based on the patent's right to exclude, which allows a patent holder to stop the infringer from manufacturing, selling or using the accused product or using the accused process without the patentee's prior permission. It is also broadly adopted by the legal systems around the world. The TRIPS Agreement thus requests the WTO members to authorize their judicial authority to issue an injunctive order to enjoin the infringers from continuous infringement of intellectual property rights.<sup>2</sup>

There are two main kinds of injunctive reliefs, i.e. preliminary injunction and permanent injunction. In general, a permanent injunction is granted to a patent owner by a court against a defendant who has been held to infringe the patentee's valid patent.<sup>3</sup> In most countries, as long as a permanent injunction is issued by one of the district courts to enjoin the infringer from manufacturing or selling the patented products or using the patented process, the permanent injunction will remain effective during the subsequent appeal proceedings unless a stay of the permanent injunction is granted by the Court of Appeal.<sup>4,5,6</sup> Permanent

---

<sup>1</sup> MARTIN J. ADELMAN, RANDALL R. RADER, JOHN R. THOMAS, AND HAROLD C. WEGNER, CASES AND MATERIALS ON PATENT LAW 931 (2003).

<sup>2</sup> TRIPS art. 44(1): "The judicial authorities shall have the authority to order a party to desist from an infringement, inter alia to prevent the entry into the channels of commerce in their jurisdiction of imported goods that involve the infringement of an intellectual property right, immediately after customs clearance of such goods. Members are not obliged to accord such authority in respect of protected subject matter acquired or ordered by a person prior to knowing or having reasonable grounds to know that dealing in such subject matter would entail the infringement of an intellectual property right."

<sup>3</sup> KIMBERLY A. MOORE, PAUL R. MICHEL, RAPHAEL V. LUPO, PATENT LITIGATION AND STRATEGY 565 (2003).

<sup>4</sup> *Id.* at 567.

<sup>5</sup> Federal Circuit rule of Appellate Procedure 8 (a) (2): "A motion for the relief mentioned in Rule 8(a) (1) may be made to the court of appeals or to one of its judges. (A) The motion must: (i) show that moving first in the district court would be impracticable; or (ii) state that, a motion having been made, the district court denied the motion or failed to afford the relief requested and state any reasons given by the district court for its action.

injunction attracted people's attentions in recent years<sup>7</sup> because of the decisive *eBay* case<sup>8</sup> which fundamentally altered the standard of granting permanent injunction.

On the contrary, the motion for preliminary injunction is generally filed by the patentee-movant together with or shortly before/after filing the complaint of the patent infringement litigation. Before the final decision of the patent litigation on the merits, preliminary injunction provides a provisional protection for the patent owner to enjoin the defendant from infringing the patent right. The TRIPS Agreement also requests its members to authorize their judicial authority to issue a preliminary injunction order to enjoin from continuous infringement of intellectual property rights.<sup>9</sup>

---

(B) The motion must also include: (i) the reasons for granting the relief requested and the facts relied on; (ii) originals or copies of affidavits or other sworn statements supporting facts subject to dispute; and (iii) relevant parts of the record. (C) The moving party must give reasonable notice of the motion to all parties. (D) A motion under this Rule 8(a) (2) must be filed with the circuit clerk and normally will be considered by a panel of the court. But in an exceptional case in which time requirements make that procedure impracticable, the motion may be made to and considered by a single judge. (E) The court may condition relief on a party's filing a bond or other appropriate security in the district court."

<sup>6</sup> Taiwan's Civil Procedure Law art. 390: "In an action concerning proprietary rights, where the plaintiff makes a preliminary showing that he/she will suffer damage which is difficult to compensate for or calculate without execution of the final judgment before it becomes final with binding effects, the court shall on the plaintiff's motion declare provisional execution." and "Where the plaintiff makes a motion for provisional execution by stating that he/she is willing to provide security before the execution is performed, the court shall, despite the absence of the preliminary showing provided in the preceding paragraph, designate a reasonable amount of security and then declare the judgment to be provisionally executed upon provision of such security.". In addition, Taiwan's Civil Procedure Law art. 391 states that "Where the defendant makes a preliminary showing that he/she will suffer irreparable harm from the provisional execution, the court shall, in the case provided in the Article 389, on the defendant's motion declare that no provisional execution shall be granted and, in the case provided in the preceding article, declare that the plaintiff's motion for provisional execution is denied."

<sup>7</sup> See Yixin H. Tang, *The Future of Patent Enforcement After eBay v. MercExchange*, 20 HARV. J. L. & TECH. 236 (2006); Edward D. Manzo, *Injunctions in Patent Cases After eBay*, 7 J. MARSHALL REV. INTELL. PROP. L. 44 (2007); Matthew J. May, *Patent Reform, Injunctions, and Equitable Principle; A Triangle of Changes for the Future*, J. MARSHALL REV. INTELL. PROP. L. 671 (2007); Aaron Homer, *Whatever it is... You can get it on eBay... Unless You Want an Injunction—How the Supreme Court and Patent Reform are Shifting Licensing Negotiations from the Conference Room to the Courtroom*, 49 S. TEX. L. REV. 235 (2007); Gavin D. George, *What is Hiding in the Bushes? eBay's Effect on Holdout Behavior in Patent Thickets*, 13 MICH. TELECOMM. TECH. L. REV. 557 (2007); Michael W. Carroll, *Patent Injunctions and the Problem of Uniformity Cost*, 13 MICH. TELECOMM. TECH. L. REV. 421 (2007).

<sup>8</sup> *eBay, Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1837, 1840 (2006).

<sup>9</sup> TRIPS art. 50(1): "The judicial authorities shall have the authority to order prompt and effective provisional measures: (a) to prevent an infringement of any intellectual property right from occurring, and in particular to prevent the entry into the channels of commerce in their jurisdiction of goods, including imported goods immediately after customs clearance; (b) to preserve relevant evidence in regard to the alleged infringement."

In comparison with the significant change in the standard of granting permanent injunctions, the standard of granting preliminary injunction orders in patent disputes is relatively stable in the United States. Pursuant to 35 U.S.C. §283<sup>10</sup>, the courts may grant injunctions in accordance with the principles of equity to prevent the violation of patent right. In practice, the principles of equity are in the form of four factors: (1) reasonable likelihood of success on the merits; (2) irreparable harm; (3) the balance of hardships tipping in its favor; and (4) the impact of the injunction on the public interest.<sup>11</sup> The four-factor test standard is stable in preliminary injunction cases, so legal scholars did not pay close attention to it. However, this dissertation finds that there are many issues regarding preliminary injunction needed to be clarified and further developed. It is interesting to find that most of the articles concerning preliminary injunction in patent disputes were published by economists rather than legalists.<sup>12</sup>

Compared with the United States, the preliminary injunction proceedings in patent disputes is quite new in China. In fact, the Patent Law effective in 2001 was amended for the purpose to comply with the WTO/TRIPS agreement; it was the first time the preliminary injunction procedure was promulgated in the Chinese Patent Law. Given that the procedure is still new to the judges, the standard of adjudicating preliminary injunction cases is still vague and continually developing. In other words, though the criteria of granting a preliminary injunction order have been codified in the Chinese Patent Law, the people's courts do not seem to definitely follow the provision while adjudicating the preliminary injunction cases.<sup>13</sup> Although some documents pointed out that it is hard for a patent holder

---

<sup>10</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

<sup>11</sup> *Hybritech Inc. v. ABBOTT Lab.*, 849 F. 2d 1446, 1451 (Fed. Cir. 1988).

<sup>12</sup> See John R. Boyce and Aidan Hollis, *Preliminary Injunctions and Damage Rules in Patent Law*, *Journal of Economics & Management Strategy* 16:2, 385-405 (2007); Jean O. Lanjouw and Josh Lerner, *Tilting the Table? The Use of Preliminary Injunctions*, 14 *J. L. & ECON.* 573 (2001); and Nancy T Gallini, *The Economics of Patents: Lessons from Recent U.S. Patent Reform*, 16 *J. ECONOMIC PERSPECTIVES* 131 (2002).

<sup>13</sup> A review of courts' decisions will be mentioned to explain this phenomenon later in this dissertation.

to obtain preliminary injunction in China,<sup>14</sup> statistics of the Supreme People's Court shows a quite different result<sup>15</sup> and the author of this dissertation has quite different experiences in practice. Accordingly, how the people's courts adjudicate preliminary injunctions is an interesting legal issue to be investigated.

On the other hand, although the preliminary injunction system is not new in Taiwan, the system has been significantly changed in recent ten years, particularly in disputes of intellectual property rights. First, the provisions regarding preliminary injunctions in the Civil Procedure Law were significantly amended in 2002. In addition, a Court for Adjudicating cases of Intellectual Property Rights (hereinafter the "IP Court") was established on July 1, 2008, which applies a new Procedure Law for Adjudicating IP Cases effective on the same day to adjudicate the IP cases. Because the Procedure Law for Adjudicating IP Cases largely changed the rule of granting preliminary injunctions in patent disputes, the standard of preliminary injunction is also still developing.

Having been on the special 301 list for a long time,<sup>16</sup> both Taiwan<sup>17</sup> and China are struggling to free themselves from the notoriety of piracy empires. The establishment of the IP Court and the promulgation for preliminary injunctions in the Chinese Patent Law are the significant milestones for Taiwan and China respectively to promote the protection of the patent rights. In this dissertation, in addition to the review of the four-factor test in the United States, the law transitions of patent-related preliminary injunctions in Taiwan and

---

<sup>14</sup> J. Benjamin Bai, Peter J. Wang, and Helen Cheng, *What Multinational Companies Need to Know About Patent Invalidation and Patent Litigation in China*, 5 NW. J. OF TECH. & INTELL. PROP., 448, 459 (2007).

<sup>15</sup> Do-Do Wang, *The Supreme People's Court mentioned that "Judicial Protection of Intellectual Property Rights is getting Wide and Strong."* < <http://wr.cccv.cn/1181/dyn20071018172550799.shtm> (2007.10.18)>(last visited January 6, 2012). This statistics will be analyzed later in this dissertation.

<sup>16</sup> See e.g., 2007 Special 301 Report, Office Of The United States Trade Representative, April 30, 2007, [http://www.ustr.gov/Document\\_Library/Press\\_Releases/2007/April/SPECIAL\\_301\\_Report.html](http://www.ustr.gov/Document_Library/Press_Releases/2007/April/SPECIAL_301_Report.html) (last visited January 6, 2012)( "Again this year, USTR's Special 301 report highlights the prominence of concerns with respect to China and Russia, in spite of some evidence of improvement.")

<sup>17</sup> Taiwan was finally removed from the Watch List by the United States Trade Representative in early 2009. See Office Of The United States Trade Representative, *2009 Special 301 Report* (April 30, 2009), < [http://www.ustr.gov/assets/Document\\_Library/Press\\_Releases/2009/January/asset\\_upload\\_file824\\_15293.pdf](http://www.ustr.gov/assets/Document_Library/Press_Releases/2009/January/asset_upload_file824_15293.pdf)> (last visited January 6, 2012).



China are investigated. More over, the outcomes of the provisions of preliminary injunctions, i.e., the decisions made by courts in Taiwan and China, are next analyzed. Particularly, through the empirical study, this dissertation will watch: (1) whether the defendants in the U.S., Taiwan and China raised the independent invention defense in the preliminary injunction proceedings; and (2) whether the courts considered the independent invention defense in the preliminary injunction proceedings. Furthermore, after reviewing the rules of preliminary injunctions of Taiwan and China, this dissertation provides some suggestions to promote the adjudication of patent-related preliminary injunction in both Taiwan and China.

## **3.2 Patent Preliminary Injunction in the United States**

### **3.2.1 The Four-factor Test in the United States**

Pursuant to Rule 65 (a)<sup>18</sup> of the Federal Rules of Civil Procedure of the United States, the district court of the United States may issue a preliminary injunction. Further, Rule 65 (d) (1)<sup>19</sup> further requests that every order granting an injunction must state the reasons why it is issued and its terms specifically, and describe in reasonable details the act or acts required or restrained.

In the United States, the district courts adjudicating a motion for preliminary injunction should assess four equity factors: (1) the likelihood of the patentee's success on the merits; (2) irreparable harm if the injunction is not granted; (3) the balance of hardships between the

---

<sup>18</sup> Rule 65 (a) of the Federal Rules of Civil Procedure: "(1) Notice: The court may issue a preliminary injunction only on notice to the adverse party; (2) Consolidating the Hearing with the Trial on the Merits: Before or after beginning the hearing on a motion for a preliminary injunction, the court may advance the trial on the merits and consolidate it with the hearing. Even when consolidation is not ordered, evidence that is received on the motion and that would be admissible at trial becomes part of the trial record and need not be repeated at trial. But the court must preserve any party's right to a jury trial."

<sup>19</sup> Rule 65 (d) (1) of the Federal Rules of Civil Procedure: "Every order granting an injunction and every restraining order must: (A) state the reasons why it issued; (B) state its terms specifically; and (C) describe in reasonable detail — and not by referring to the complaint or other document — the act or acts restrained or required."

parties; and (4) the public interest.<sup>20</sup> The details of these four factors are illustrated as follows.

### 1. Likelihood of Success

Attempting to obtain a preliminary injunction order in the United States, the patentee-movant bears the burden of showing the likelihood of success on the merits, both in regard to the validity of the patent-in-dispute and with respect to infringement of the patent-in-dispute.<sup>21</sup>

According to 35 U.S.C. 282 (a)<sup>22</sup>, a patent is assumed valid.<sup>23</sup> In order to rebut the presumption, the defendant in patent infringement litigation bears the burden of proof to establish invalidity by clear and convincing evidence,<sup>24</sup> which is much higher than the ordinary standard of preponderance evidence.

However, the standard in the preliminary injunction procedure is quite different. Because the patentee-movant in the preliminary injunction procedure bears the burden of showing the likelihood of success on the merits, the defendant needs only to raise a substantial question concerning validity of the patent-in-dispute.<sup>25</sup> Thereafter, the burden of proof will be shifted to the patentee-movant, so that the patentee bears the burden of proving a reasonable likelihood that the challenge on the patent validity would fail.<sup>26</sup>

If the defendant does not succeed in raising a substantial question about the validity, the

---

<sup>20</sup> *Supra* note 11; *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1350 (Fed.Cir.2001); *Reebok Int'l Ltd. v. J. Baker, Inc.*, 32 F.3d 1552,1555 (Fed.Cir.1994).

<sup>21</sup> *Id.*

<sup>22</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) slightly amended this sentence.

<sup>23</sup> 35 U.S.C. §282 (a): “A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.”

<sup>24</sup> *Microsoft Corp. v. i4i Ltd. Partnership*, 564 U.S. \_\_\_\_ (2011).

<sup>25</sup> *Impax Labs., Inc. v. Aventis Pharms., Inc.*, 235 F. Supp. 2d 390, 392 (D. Del. 2002).

<sup>26</sup> *Id.*

patentee-movant needs to further prove the likelihood of patent infringement. In determining the likelihood of infringement, the court will construe the claims of the patent-in-dispute<sup>27</sup>, and then compare the accused product to the construed claims.<sup>28</sup>

## 2. Irreparable Harm

Attempting to be granted a preliminary injunction, the patentee-movant needs to establish that it will suffer irreparable harm in the absence of preliminary injunction. The term “irreparable harm” means an injury for which the monetary damages are not adequate to compensate.<sup>29</sup>

In fact, this is a very complicated factor. The district courts in the United States generally consider many sub-factors in the consideration of this factor, such as: (1) whether the field of technology covered by the patent-in-dispute is new; (2) whether there is a substantial amount of competition in this field; (3) whether the defendant is a very large presence in this field; (4) whether this is a field where technology changes fairly quickly; (5) whether this is a lot of research being done in this field; (6) whether the patent-in-dispute can help the patentee-movant establish a market position and create business relationship in the market; (7) whether the potential injury is unpredictable; and (8) whether other potential infringers will be encouraged to infringe in the absence of preliminary injunction.<sup>30</sup>

Generally, the irreparable harm is presumed if the patent holder has strongly shown the likelihood of patent validity and infringement.<sup>31</sup> Accordingly, this factor is highly correlated to the likelihood of success factor.

## 3. Balance of Hardships

---

<sup>27</sup> However, the claim construction by the court of preliminary injunction is neither final nor binding at trial. See *Illinois Tool Works, Inc. v. Grip-Pak, Inc.*, 906 F.2d 679, 681 (Fed.Cir.1990).

<sup>28</sup> *Cybor Corp. v. FAS Tech., Inc.*, 138F.3d 1448, 1466 (Fed.Cir.1998) (en banc).

<sup>29</sup> *Forest City Daly Housing, Inc. v. Town of North Hempstead*, 175 F. 3d 144, 153 (2d Cir. 1999).

<sup>30</sup> *Supra* note 11, at 1456.

<sup>31</sup> *Roper Corp. v. Litton Sys., Inc.*, 757 F.2d 1266, 1271 (Fed.Cir.1985); *Pfizer, Inc. v. Teva Pharms. USA, Inc.*, 429 F.3d 1364, 1381(Fed.Cir.2005).

With regard to the “balance of hardships” factor, the district courts must balance the harm which will happen to the patentee-movant from the denial of preliminary injunction with the harm which the defendant will suffer if the preliminary injunction is granted.<sup>32</sup>

In many cases, the courts consider whether the defendant is the direct competitor of the patentee-movant.<sup>33,34</sup> If it is, the courts generally note that patentee’s losses of profit and market share would continue in the absence of preliminary injunction, and thus favor the patentee-movant in this factor.<sup>35</sup>

#### 4. Public Interest

In most cases, the courts held that to ensure the enforcement of a valid patent is an important public interest, because such enforcement encourages and promotes the progress of useful inventions.<sup>36</sup> Accordingly, the factor is highly correlated to the likelihood of success factor. Unless the accused products are highly related to health, safety or welfare of many people,<sup>37,38</sup> this factor is generally considered to be in favor of issuing a preliminary injunction if the court finds the patent-in-dispute valid and infringed.

#### 5. How to Apply the Four-factor Test

There is a legal issue how to apply the four-factor test? How is the priority or weight of the four factors? Pursuant to the precedent of the Federal Circuit, no single factor should dominate, and the district courts have to weigh and measure each factor against other factors.<sup>39</sup> Theoretically, the four factors may not always favor the same party side. For

---

<sup>32</sup> *Supra* note 11, at 1457.

<sup>33</sup> *Novartis Corp. v. Teva Pharmaceuticals USA, Inc.*, 2007 WL 1695689 (D.N.J.), at 29.

<sup>34</sup> *Torspo Hockey Int’l, Inc. v. Kor Hockey Ltd.*, 491 F. Supp. 2d 871 (D. Minn. 2007).

<sup>35</sup> *Canon Inc. v. GCC International Ltd.*, 450 F.Supp.2d 243, 256 (S.D.N.Y. 2006).

<sup>36</sup> *Id.* at 257.

<sup>37</sup> *Supra* note 33, at 31.

<sup>38</sup> *Supra* note 35, at 257.

<sup>39</sup> *Supra* note 11, at 1451.

example, in *Novartis Corp. v. Teva Pharmaceuticals USA, Inc.*<sup>40</sup>, the district court held that the first, second and fourth factors were in favor of the defendant, but the third factor was in the patentee-movant's favor. In conclusion, although the third factor was in patentee-movant's favor, the district court weighed and measured one factor against the other factors, and concluded that the first, second and fourth factors weighed against the third factor.<sup>41</sup> Subsequently, the district court did not grant the preliminary injunction.

However, the *Canon Inc. v. GCC Int'l Ltd.* case<sup>42</sup> had a totally different approach. In that case, the court held that a preliminary injunction in a patent case is an extraordinary remedy only available for the situations in which the merits of the patentee's case are clear, the irreparable harm of the patentee is manifest, the hardships tip unambiguously in the patentee's favor and the public interest is served by the preliminary injunction.<sup>43</sup> From this point of view, to weigh and to measure one factor against the other factors are not important; in fact, the patent owner cannot obtain a preliminary injunction unless all of the four factors are in favor of the patent owner.

How dose the practice work in fact? The empirical study of this dissertation will analyze and answer this question later.

### **3.2.2 The Empirical Study of the Four-factor Test in the United States**

Through the empirical study, this dissertation will watch: (1) how the four-equity test was operated; (2) whether the defendants in the U.S., Taiwan and China raised the independent invention defense in the preliminary injunction proceedings; and (3) whether the courts considered the independent invention defense in the preliminary injunction proceedings in the United States.

---

<sup>40</sup> *Supra* note 33.

<sup>41</sup> *Id.* at 31.

<sup>42</sup> *Supra* note 35.

<sup>43</sup> *Id.* at 246.

## 1. The Cases Granted a Preliminary Injunction

### (1) Canon Inc. v. GCC International Ltd.

Canon Inc. (“Canon”), the patent owner of U.S. Patent 6,336,018 (“the ‘018 patent”), sued GCC International Ltd., GCC Management Limited, Gatehill International Limited, Q-Imaging (USA) Inc., and TallyGenicom LP (collectively, “GCC”), alleging that GCC’s toner cartridges (the “accused products”) which could be used as replacements in Canon laser printers and laser fax machines infringed the ‘018 patent. Canon also filed a motion for preliminary injunction.<sup>44</sup>

Considering the “likelihood of success” factor, the district court conducted a two-step analysis. Firstly, GCC relied on three patents as prior art to argue against the validity of the ‘018 patent. However, the district court did not accept GCC’s argument and concluded that the invalidity argument lacked substantial merit. Secondly, the district court held that GCC had shown a likelihood of success on the merits on the ground that GCC’s accused products literally infringe the ‘018 patent. Accordingly, this factor was determined to be in favor of issuing a preliminary injunction order.<sup>45</sup>

With regard to the “irreparable injure” factor, the district court noted that direct competition from GCC would likely cause significant price erosion of Canon’s products. Canon would thus lose sales and market share to GCC continuously if the preliminary injunction was not granted. Therefore, the district court held that monetary damages was not enough to compensate Canon’s injure, so this factor was also in Canon’s favor.<sup>46</sup>

Regarding the “balance of hardships between the parties” factor, the district court concluded that Canon’s loss of profit and market share would continue in the absence of

---

<sup>44</sup> *Supra* note 35, at 246.

<sup>45</sup> *Id.* at 252-54.

<sup>46</sup> *Id.* at 254-56.

preliminary injunction. The district court thus held that this factor was in favor of issuing a preliminary injunction.<sup>47</sup>

Concerning the “public interest” factor, the district court noted that the accused products were not related to health, safety or welfare of many people. The district court noted that to ensure valid patents enforced is a strong public interest because such enforcement is to encourage and promote the progress of useful arts. Accordingly, the district court held that this factor should be in favor of issuing a preliminary injunction.<sup>48</sup> In conclusion, the district court granted a preliminary injunction and issued an order. Although GCC appealed to the Federal Circuit, the Federal Circuit did not agree all of the arguments raised by GCC and affirmed the preliminary injunction granted by the district court.<sup>49</sup>

GCC did not raise an independent invention defense in the preliminary injunction proceedings, so neither the district court nor the Federal Circuit deliberated the independent invention defense in the considerations of the four equity factors.

(2) *Abbott Laboratories, v. Andrx Pharmaceuticals, Inc.*

Abbott Laboratories (“Abbott”) is the patent owner of the U.S. Patent nos. 6,010,718 (“the ‘718 patent”), 6,551,616 (“the ‘616 patent”), and 6,872,407 (“the ‘407 patent”). Abbott sued Andrx Pharmaceuticals, Inc. (“Andrx”) at the United States District Court for the Northern District of Illinois alleging patent infringement, and also filed a motion for preliminary injunction against Andrx’s activity of releasing formulations of clarithromycin. The district court granted the preliminary injunction by holding that Abbott had established the likelihood of infringement and Andrx had failed to prove that the ‘718 patent, the ‘616 patent and the ‘407 patent were invalid.<sup>50</sup> Andrx appealed to the Federal Circuit.

---

<sup>47</sup> *Id.* at 256-57.

<sup>48</sup> *Id.* at 257.

<sup>49</sup> *Canon, Inc. v. GCC Int'l Ltd.*, 2007 U.S. App. LEXIS. 26584 (Fed. Cir. 2007).

<sup>50</sup> *Ranbaxy Labs. Ltd. v. Abbott Labs., Abbott Labs. v. Andrx Pharms. Inc.*, Nos. 04 C 8078, 05 C 1490

On appeal, the argument was focused on the likelihood of success factor, because Andrx did not argue for the other three factors. The Federal Circuit concluded that the district court's finding that Abbott had proved the likelihood of infringement was correct.<sup>51</sup> Since Andrx had not challenged the findings of the district court on the other three factors on appeal, the Federal Circuit did not consider the other factors. Hence, the Federal Circuit affirmed the preliminary injunction granted by the district court.<sup>52</sup> The likelihood of success factor was deemed as the most essential factor in examining the motion of a preliminary injunction.

Andrx did not raise an independent invention defense in the preliminary injunction proceedings, so neither the district court nor the Federal Circuit deliberated the independent invention defense in considering the four equity factors.

### (3) Sanofi-Synthelabo v. Apotex

Sanofi-Synthelabo, Sanofi-Synthelabo, Inc. and Bristol-Myers Squibb Sanofi Pharmaceuticals Holding Partnership (collectively, "Sanofi") are the patent owner of the U.S. Patent no. 4,847,265 ("the '265 patent"). Sanofi sued Apotex, Inc. and Apotex Corp. (collectively, "Apotex") at the United States District Court for the Southern District of New York alleging patent infringement, and also filed a motion for preliminary injunction. The district court applied the four-factor test in reaching the decision and then granted the preliminary injunction order.<sup>53</sup> Apotex appealed to the Federal Circuit.

On appeal, the Federal Circuit examined the factor of likelihood of success on the merits first. Apotex challenged the validity of the '265 patent by asserting "anticipation", "obviousness", and "obviousness-type double patenting". The Federal Circuit rejected

---

(N.D. Ill 2005)(Preliminary Injunction Order).

<sup>51</sup> Abbott Labs. v. Andrx Pharms. Inc., 473 F. 3d 1196, 1213 (Fed. Cir. 2007).

<sup>52</sup> *Id.*

<sup>53</sup> Sanofi-Synthelabo v. Apotex, 488 F.Supp.2d 317 (S.D.N.Y. 2006)(Preliminary Injunction Order).



Apotex's arguments by holding that the district court had not erred in determining the validity of the '265 patent. Accordingly, the Federal Circuit favored Sanofi in this factor.<sup>54</sup>

For the irreparable injure factor, the district had applied a presumption of irreparable harm based on the conclusion that Sanofi had established the likelihood of success on the merits.<sup>55</sup> Furthermore, the district court had found that Sanofi would suffer irreparable harms such as irreversible price erosion, loss of good will, potential lay-off of employees, and the discontinuance of clinical trials in the absence of preliminary injunction.<sup>56</sup> The Federal Circuit agreed with the findings and thus held that the district court had not abused the discretion in considering this factor to favor Sanofi.<sup>57</sup> Besides, the Federal Circuit did not concern the last two factors too much, and held that the district court had not erred to favor Sanofi in these two factors.<sup>58</sup>

Since Apotex did not raise an independent invention defense in the preliminary injunction proceedings, neither the district court nor the Federal Circuit pondered whether to accept the independent invention defense in the considerations of the four equity factors.

(4) *Abbott Laboratories v. Sandoz, Inc.*

Abbott Laboratories ("Abbott") is the patent owner of U.S. Patent No. 6,010,718 ("the '718 patent") and U.S. Patent No. 6,551,616 ("the '616 patent"). Abbott sued Sandoz, Inc. ("Sandoz") in the United States District Court for the Northern District of Illinois alleging patent infringement, and also filed a motion for preliminary injunction. After adjudication, the district court granted Abbott's motion for preliminary injunction.<sup>59</sup> Sandoz appealed to the Federal Circuit to argue that the district court incorrectly resolved and weighted the

---

<sup>54</sup> *Sanofi-Synthelabo v. Apotex*, 470 F.3d 1368, 1374-81 (Fed. Cir. 2006).

<sup>55</sup> *Supra* note 53, at 342-44.

<sup>56</sup> *Id.*

<sup>57</sup> *Supra* note 54, at 1381-83.

<sup>58</sup> *Id.* at 1383.

<sup>59</sup> *Abbott Laboratories v. Sandoz, Inc.*, 500 F. Supp. 2d 807 (N.D. Ill. 2007) (Preliminary Injunction Order).

equitable factors relevant to the grant of a preliminary injunction.<sup>60</sup>

With regard to the factor of likelihood of success on the merits, Sandoz challenged the patent validity by arguing lack of novelty and non-obviousness, and also asserting unenforceability and non-infringement.<sup>61</sup> After adjudication, the Federal Circuit favored Abbott in this factor by concluding that the district court did not abuse its discretion in finding that (1) the '718 and '616 patents were not invalid<sup>62</sup>; (2) the '718 and '616 patents were not likely to be unenforceable<sup>63</sup>; and (3) Abbott had shown a reasonable likelihood of infringement<sup>64</sup>.

About the irreparable harm factor, the Federal Circuit affirmed the district court's decision which favored Abbott by reason that Sandoz's entrance of the market had caused Abbott's losses of market share and revenue.<sup>65</sup> The Federal Circuit cited *Purdue Pharma L.P. v. Boehringer Ingelheim GmbH*<sup>66</sup>, *Bio-Technology Gen. Corp. v. Genentech, Inc.*<sup>67</sup>, and *Polymer Technologies, Inc. v. Bridwell*<sup>68</sup> to conclude that price erosion and loss of market position would cause irreparable harm.<sup>69</sup> The Federal Circuit also reached the conclusions that the last two factors were in Abbott's favor<sup>70</sup>, so the preliminary injunction order issued by the district court was affirmed.<sup>71</sup>

Sandoz did not raise an independent invention defense in the preliminary injunction proceedings, so neither the district court nor the Federal Circuit pondered the independent invention defense in considering the four equity factors.

---

<sup>60</sup> *Abbott Laboratories v. Sandoz, Inc.*, 544 F. 3d 1341, 1343 (Fed. Cir. 2008).

<sup>61</sup> *Id.* at 1344.

<sup>62</sup> *Id.* at 1352-53.

<sup>63</sup> *Id.* at 1353-58.

<sup>64</sup> *Id.* at 1358-61.

<sup>65</sup> *Id.* at 1361-62.

<sup>66</sup> *Purdue Pharma L.P. v. Boehringer Ingelheim GmbH*, 237 F. 3d 1359, 1368 (Fed. Cir. 2001).

<sup>67</sup> *Bio-Technology Gen. Corp. v. Genentech, Inc.*, 80 F. 3d 1553, 1566 (Fed. Cir. 1996).

<sup>68</sup> *Polymer Technologies, Inc. v. Bridwell*, 103 F. 3d 970, 975-76 (Fed. Cir. 1996).

<sup>69</sup> *Supra* note 60, at 1361-62.

<sup>70</sup> *Id.* at 1362-63.

<sup>71</sup> *Id.* at 1341.

## 2. The Cases Denied a Preliminary Injunction

### (1) *Erico Int'l Corp. v. Doc's Marketing, Inc.*

*Erico Int'l Corp.* (“Erico”) is the patent owner of the U.S. Patent no. 5,740,994 (“the ‘994 patent”). Erico sued *Doc's Marketing, Inc.* (“Doc's”) at the United States District Court for the Northern District of Ohio alleging patent infringement, and also filed a motion for preliminary injunction. After adjudication, the district court granted the preliminary injunction<sup>72</sup>, and Doc's appealed to the Federal Circuit.

The Federal Circuit vacated the preliminary injunction order on the reason that Doc's had raised a substantial question to the validity of the ‘994 patent.<sup>73</sup> In reaching the decision, the Federal Court quoted *Amazon.com*<sup>74</sup> to rule that the defendant does not need to prove the actual invalidity in the preliminary injunction proceeding. Different to the clear and convincing standard applied to show actual invalidity on the merits, the Federal Court noted that the defendant in the preliminary injunction proceeding need only raise a substantial question of invalidity, requiring less proof than the clean and convincing standard to prove actual patent invalidity.<sup>75</sup>

As the Federal Circuit vacated the preliminary injunction order on the ground that the defendant had raised a substantial question as to the validity of the patent-in-dispute, it's obvious that the factor of likelihood of success on the merits is not only one of the four equity factors, but also the prerequisite of granting a preliminary injunction.

Since Doc's did not raise an independent invention defense in the preliminary injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to

---

<sup>72</sup> *Erico Int'l Corp. v. Doc's Mktg., Inc.*, 2006 WL 1174259 (N.D. Ohio)(Initial Order); 2007 WL 108450 (N.D. Ohio)(Reconsideration Order).

<sup>73</sup> *Erico Int'l Corp. v. Doc's Mktg., Inc.*, 516 F.3d 1350, 1356-57 (Fed. Cir. 2008).

<sup>74</sup> *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1350 (Fed. Cir. 2001).

<sup>75</sup> *Supra* note 73, at 1356.

accept the independent invention defense in considering the four equity factors.

(2) Chamberlain Group, Inc. v. Lear Corp.

Chamberlain Group, Inc. (“Chamberlain”) is the patent owner of U.S. Patent no. 6,154,544 (“the ‘544 patent”). Chamberlain sued against Johnson Controls Interiors LLC and Lear Corp. (collectively, “the Defendants”) at the United States District Court for the Northern District of Illinois alleging patent infringement and also filed a motion for preliminary injunction. The district court granted the preliminary injunction by mainly holding that the ‘544 patent was valid and Chamberlain had established the likelihood of success on the merits.<sup>76</sup> The Defendants thus appealed to the Federal Circuit.

After adjudication, the Federal Circuit found that the district court had erred in interpreting the term “trinary code” in the claim 1 of the ‘544 patent. Therefore, the Federal Circuit reversed the claim construction conducted by the district court, vacated the preliminary injunction order and remanded.<sup>77</sup>

In reaching the decision, the Federal Circuit noted that a preliminary injunction requires considering the likelihood the success on the merits, and an accurate claim construction is always a prerequisite to grant a preliminary injunction.<sup>78</sup> The wrongful claim construction of the district court resulted in the wrongful decisions of the patent validity and patent infringement, so as to influence the determination of the likelihood of success on the merits.<sup>79</sup> Accordingly, the Federal Circuit vacated the preliminary injunction and remanded.<sup>80</sup> It’s again obvious that the factor of likelihood of success on the merits is the prerequisite of granting a preliminary injunction, rather than only one of the four equity factors to be considered.

---

<sup>76</sup> Chamberlain Group, Inc. v. Lear Corp., Inc., 2007 WL 1017751 (N.D.Ill.)(Preliminary Injunction Order).

<sup>77</sup> Chamberlain Group, Inc. v. Lear Corp., Inc., 516 F.3d 1331, 1333 (Fed. Cir. 2008).

<sup>78</sup> *Id.* at 1340.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

Since the Defendants did not raise an independent invention defense in the preliminary injunction proceedings, neither the district court nor the Federal Circuit pondered whether to accept the independent invention defense in the considerations of the four equity factors.

(3) *Torspo Hockey Int'l, Inc. v. Kor Hockey Ltd.*

Kor Hockey Ltd. (“Kor”), the patent owner of the U.S. Design Patent no. D514,505 (“the ‘505 patent”), was a maker of hockey skates and related equipment. Torspo Hockey Int'l, Inc. (“Torspo”) was a direct competitor of Kor in the market of hockey skates. By knowing that Kor would sue it for patent infringement, Torspo brought a declaratory judgment action in the United States District Court for the District of Minnesota to seek a judgment that the ‘505 patent is invalid as well as Torspo’s products do not infringe the ‘505 patent. After receiving the complaint, Kor filed a motion for preliminary injunction to enjoin Torspo from continuously selling, offering to sell, making, using, or distributing skates which infringed the ‘505 patent.<sup>81</sup>

In analyzing Kor’s likelihood of success on the merits, the district court applied the “ordinary observer test” and the “point-of-novelty test” to examine the likelihood of infringement of the design patent. The district court concluded that Kor did not prove the likelihood of infringement under the point-of-novelty test, so this factor was in Torspo’s favor.<sup>82</sup>

It’s very important to point out that the district court found the “likelihood of success” factor is the key, even the sufficient factor of the four-factor test. Before considering the other three preliminary-injunction factors, the district court noted that because Kor had not established the likelihood of patent infringement, the court must deny Kor’s motion for a

---

<sup>81</sup> *Torspo Hockey Int'l, Inc. v. Kor Hockey Ltd.*, 491 F. Supp. 2d 871, 873 (D. Minn. 2007).

<sup>82</sup> *Id.* at 873-880.

preliminary injunction.<sup>83</sup> Therefore, the district court further noted that the court would only discuss the remaining three preliminary injunction factors briefly.<sup>84</sup>

In regard to the irreparable harm factor, Kor argued that it was entitled to a presumption of irreparable harm since it had established a likelihood of success on the merits. On the ground of the decision of the Supreme Court in *eBay*<sup>85</sup>, however, the district court held that it may not presume that a patentee-movant would suffer irreparable harm without a preliminary injunction even if the patentee had established a likelihood of success on the merits.<sup>86</sup> In light of the decision in *Canon, Inc. v. GCC Int'l Ltd.*<sup>87</sup>, the court held that *eBay*'s thought disallows the district courts to categorically presume irreparable harm even if the patentee has establish a likelihood of success on the merits in the preliminary injunction proceedings, although *eBay* was related to permanent injunction rather than preliminary injunction.<sup>88</sup> The district court found that Kor had not proved that it would suffer irreparable harm in the absence of preliminary injunction, even if Torspo was infringing the '505 patent. Therefore, the district court held that this factor was in Torspo's favor.<sup>89</sup>

With regard to the balance of hardships factor, the court found that Kor would suffer an invasion of its patent rights and some commercial handicap as well if Torspo was infringing the '505 patent. Hence, the district court held that this factor was in favor of Kor.<sup>90</sup> For the "the public interest" factor, the district court held that this factor was in Kor's favor because the public interest is in general served by the enforcement of the patent rights.<sup>91</sup>

Even though the last two factors were in Kor's favor, the district court still concluded

---

<sup>83</sup> *Id.* at 881.

<sup>84</sup> *Id.*

<sup>85</sup> *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

<sup>86</sup> *Supra* note 81. at 881.

<sup>87</sup> *Canon, Inc. v. GCC Int'l Ltd.*, 450 F.Supp.2d 243, 254 (S.D.N.Y.2006).

<sup>88</sup> *Supra* note 81. at 881.

<sup>89</sup> *Id.* at 881-882.

<sup>90</sup> *Id.* at 882.

<sup>91</sup> *Id.*

that the last two factors were not sufficient to grant a preliminary injunction. Because Kor had established neither the likelihood of success on the merits nor the irreparable harm in the absence of preliminary injunction, the district court denied the motion for a preliminary injunction.<sup>92</sup>

This case shows that the factor of “likelihood of success” is the most important one and the factor of “irreparable harm” is the second most important factor, although all of the four factors should be examined in the preliminary injunction proceedings.

Torspo did not raise an independent invention defense in the preliminary injunction proceedings, so the district court did not ponder whether to accept the independent invention defense in the preliminary injunction proceedings.

(4) *Novartis Corp. v. Teva Pharmaceuticals USA, Inc.*

Novartis Corp. (“Novartis”), the patent owner of U.S. Patent 6,162,802 (“the ‘802 patent”), filed a motion for preliminary injunction against Teva Pharmaceuticals USA, Inc. (“Teva”), seeking to enjoin Teva from marketing generic versions of Novartis’s product Lotrel®.<sup>93</sup>

With regard to the factor of reasonable likelihood of success on the merits, the district court noted that Novartis in the preliminary injunction proceedings needed to prove that: (1) Teva infringed at least one claim of the ‘802 patent; and (2) Teva did not raise a reasonable challenge to the patent validity or enforcement of the ‘802 patent. The district court further noted that the motion of preliminary injunction should not be granted if Teva raised a substantial question to the patent validity or infringement.<sup>94</sup>

The major issue concerned in this factor was the claim construction of the term

---

<sup>92</sup> *Id.*

<sup>93</sup> *Novartis Corp. v. Teva. Pharm. USA, Inc.*, 2007 WL 1695689, at 1 (D.N.J. 2007).

<sup>94</sup> *Id.* at 4.

“physically separated” in some claims of the ‘802 patent. The district court noted that Novartis constructed the claim term too broad but Teva constructed the term too narrow. The district court found that neither parties’ claim constructions of the term “physically separated” were supported by the intrinsic or extrinsic evidence.<sup>95</sup> Therefore, the district court held that this factor was not in favor of issuing a preliminary injunction because Teva had raised a substantial challenge to the patent infringement.<sup>96</sup>

Regarding the factor of irreparable harm, Novartis argued that it would suffer severe harm of irreversible price erosion, lost market share, lost sales revenue, lost business, and even lost research chances in the absence of preliminary injunction.<sup>97</sup> Against such classical examples of harms such as the lost market share and lost sales revenue, Teva argued that they were calculable so the extraordinary injunctive relief prior to trial could not be justified.<sup>98</sup> The district court quoted *eBay Inc. v. Bidder’s Edge, Inc.*<sup>99</sup> to conclude that the calculation of damages by Novartis’s own expert showed that the damages were calculable, and the calculable damages might be reparable by monetary damages.<sup>100</sup> Accordingly, the district court disfavored the patent owner in this factor.

With regard to the balance of hardships factor, the district court found that the ‘802 patent would not expire within ten years. Since Teva was the direct competitor of Novartis in the relevant market, to enforce the ‘802 patent was profitable to Novartis. Therefore, the district court held that this factor was in favor of Novartis’s side.<sup>101</sup> Regarding the public interest factor, Novartis argued that it is always great public interest to protect valid patent rights. However, the district court did not agree with Novartis’s argument by reason that Teva had successfully questioned the likelihood of infringement of the ‘802 patent. Hence,

---

<sup>95</sup> *Id.* at 5-24.

<sup>96</sup> *Id.* at 25.

<sup>97</sup> *Id.* at 26.

<sup>98</sup> *Id.*

<sup>99</sup> *eBay Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

<sup>100</sup> *Supra* note 93, at 28.

<sup>101</sup> *Id.* at 28-31.



the district court held that this factor was in Teva's favor.<sup>102</sup> Obviously, the determination of the fourth factor is highly related to the first factor.

In conclusion, although the third factor is in Novartis's favor, the district court quoted *Amazon.com*<sup>103</sup> to weigh and measure factor against the other factors, and thus found that the first, the second and the fourth factors weighed against the third factor.<sup>104</sup> Accordingly, the district court denied the motion for preliminary injunction.

Teva did not raise an independent invention defense in the preliminary injunction proceedings, so the district court did not ponder whether to accept the independent invention defense in the preliminary injunction proceedings.

(5) Automated Merchandising System v. Crane Co.

After a long-term debate for three years, the Federal Circuit in *Automated Merchandising System v. Crane Co.* case<sup>105</sup> reached a conclusion that the presumption of irreparable harm based on proof of infringement had been discarded under the Supreme Court's decision in *eBay Inc. v. MercExchange, L.L.C.*.

In this case, Automated Manufacturing Systems, Inc. (hereinafter "AMS") is the patent holder of several United State patents related to systems which apply the optical technology to detect if a product that the user of the machine has purchased has actually been delivered by the machine.<sup>106</sup> AMS filed a lawsuit against Crane Co. (hereinafter "Crane") in the United States District Court for the Northern District of West Virginia in June 2008, alleging that Crane infringed two of AMS's patents.<sup>107</sup> Simultaneously, AMS filed a motion for preliminary injunction in order to immediately enjoin Crane from making and selling the

---

<sup>102</sup> *Id.* at 31.

<sup>103</sup> *Supra* note 74.

<sup>104</sup> *Supra* note 93, at 32.

<sup>105</sup> *Automated Merchandising System v. Crane Co.*, 357 Fed.Appx. 297, 2009 WL 4878643 (C.A.Fed. (W.Va.)).

<sup>106</sup> *Id.* at 299.

<sup>107</sup> *Id.*

accused products. After adjudication, the district court granted a preliminary injunction order in December 2008.<sup>108</sup> Crane then appealed to the Federal Circuit.

On appeal, the Federal Circuit reviewed whether the district court abused its discretion in granting the preliminary injunction order. Although a decide to grant or deny a preliminary injunction needs to consider the four equity factors, the Federal Circuit cited *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*<sup>109</sup> to note that a moving party can not be granted a preliminary injunction order unless the party successfully establishes both of the first two factors of the four equity factors:: (1) likelihood of success on the merits; and (2) irreparable harm.<sup>110</sup>

For the factor of likelihood of success on the merits, the Federal Circuit held that the district court had definitely erred in finding that AMS had demonstrated a reasonable proof of this factor. In fact, the district court favored AMS in this factor on the reason that Crane had failed to prove its invalidity argument. The Federal Circuit noted that it had been AMS's burden to prove the likelihood of success on the merits, but not Crane's burden to prove invalidity by clear and convincing evidence. Accordingly, the Federal Circuit held that the district court wrongfully shifted the burden to Crane to prove the invalidity of the patents-in-suit.<sup>111</sup>

In order to prove the irreparable harm, AMS simply argued that the price erosion and the losses of revenue and market share could not be compensated by monetary damages if the motion for preliminary injunction was not granted.<sup>112</sup> With regard to the "loss of revenue", the Federal Circuit cited *Abbott Labs. v. Andrx Pharms., Inc.*<sup>113</sup> to note that the loss of revenue only is not enough to prove irreparable harm; otherwise, irreparable harm will be

---

<sup>108</sup> *Id.*

<sup>109</sup> *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F. 3d 1343, 1350 (Fed. Cir. 2001).

<sup>110</sup> *Supra* note 105, at 300.

<sup>111</sup> *Id.* at 302.

<sup>112</sup> *Id.* at 300.

<sup>113</sup> *Abbott Labs. v. Andrx Pharms., Inc.*, 452 F. 3d 1331, 1348 (Fed. Cir. 2006).

found in each case in which patent holder has its own products.<sup>114</sup> The Federal Circuit thus concluded that the evidence of loss of revenue by itself can not support the irreparable harm, no matter how much evidence AMS provided.<sup>115</sup>

With regard to the “loss of market share”, the Federal Circuit cited *eBay*<sup>116</sup> to hold that the presumption of irreparable harm is no longer the law, so the patent holder bears the burden to prove that its potential losses can not be compensated by monetary damages in the absence of preliminary injunction.<sup>117</sup>

With regard to the “price erosion”, AMS argued that Crane would drop its prices in the market in order to drive AMS out of the market if a preliminary injunction is not granted. However, the Federal Circuit found that AMS had not provided any evidence to prove this assumption. Therefore, the Federal Circuit held that the district court had erred in finding that AMS had proved the irreparable harm.<sup>118</sup>

In conclusion, the Federal Circuit found that AMS could not demonstrate the likelihood of success and irreparable harm. Accordingly, the Federal Circuit vacated the preliminary injunction granted by the district court and remanded for further proceedings.<sup>119</sup>

Because Crano did not raise an independent invention defense in the preliminary injunction proceedings, neither the district court nor the Federal Circuit pondered whether to accept the independent invention defense in considering the four equity factors.

#### (6) Symbol Technologies Inc. v. Janam Technologies LLC

Symbol Technologies Inc. (“Symbol”) is the patent owner of the U.S. Patent No. 5,334,821 (“the ‘821 patent”), the U.S. Patent No. 5,835,366 (“the ‘366 patent”), and U.S.

---

<sup>114</sup> *Supra* note 105, at 300-301.

<sup>115</sup> *Id.* at 301.

<sup>116</sup> *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 392-94 (2006).

<sup>117</sup> *Supra* note 105, at 301.

<sup>118</sup> *Id.*

<sup>119</sup> *Id.* at 302-303.

Patent 6,714,969 (“the ‘969 patent”). Symbol filed a lawsuit in the United States District Court for the District of Delaware on June 9, 2008, alleging patent infringement against Janam Technologies LLC (“Janam”). Later on June 18, 2008, Symbol also filed a motion for preliminary injunction to enjoin Janam from continuously selling its XM-60, which is a Windows-OS based handheld computing device.<sup>120</sup>

With regard to the factor of likelihood of success on the merits, the district court cited *Purdue Pharma L.P. v. Boehringer Ingeheim GmbH*<sup>121</sup> to state that the movant of preliminary injunction proceedings must show the following two factors: (1) any questions to the validity and enforceability of the patents-in-suit lacked substantial merit; and (2) the patents-in-suit were infringed.<sup>122</sup>

Regarding to the infringement analysis of the ‘821 patent, the district court found that Symbol had showed a likelihood of success on the merits by proving literal infringement of the ‘821 patent.<sup>123</sup> With regard to the invalidity analysis of the ‘821 patent, however, the district court mentioned that Symbol had failed to show that the invalidity defense raised by Janam lacked substantial merit because Janam had raised a substantial question of the non-obviousness (under 35 U.S.C. 103) of claim 9 of the ‘821 patent.<sup>124</sup>

For the infringement analysis of the ‘366 patent, the district court found that Symbol was not likely to prove that the ‘366 patent was infringed under literal infringement or doctrine of equivalents by a preponderance of the evidence.<sup>125</sup> With regard to the validity analysis of the ‘366 patent, the district court concluded that Janam had raised a substantial question of the novelty (under 35 U.S.C. 102) of claim 7 of the ‘366 patent.<sup>126</sup>

---

<sup>120</sup> *Symbol Technologies Inc. v. Janam Technologies LLC*, 729 F.Supp.2d 646, at 650 (D. Del. 2010).

<sup>121</sup> *Purdue Pharma L.P. v. Boehringer Ingeheim GmbH*, 237 F.3d 1359, 1363 (Fed. Cir. 2001).

<sup>122</sup> *Supra* note 120, at 654.

<sup>123</sup> *Id.* at 656.

<sup>124</sup> *Id.* at 658.

<sup>125</sup> *Id.* at 659.

<sup>126</sup> *Id.* at 660-661.

In regard to the infringement analysis of the '969 patent, the district court noted that Symbol had showed a likelihood of success on the merits by proving literal infringement of the '969 patent.<sup>127</sup> With regard to the validity analysis of the '969 patent, however, the district court reached a conclusion that Symbol had failed to prove that the invalidity defense raised by Janam lacked substantial merit because Janam had raised a substantial question of the novelty (under 35 U.S.C. 102) of the claims 16, 22, and 25 of the '969 patent.<sup>128</sup> In sum, the district court reached a conclusion that as a whole Symbol had not demonstrated a likelihood of success on the merits.<sup>129</sup>

Regarding to the factor of irreparable harm, the district court cited *Johnson & Johnson Orthopaedics, Inc. v. Minnesota Min. & Mfg. Co.*<sup>130</sup> to note that a preliminary injunction cannot issue merely to assuage the fears of the moving party. To obtain a preliminary injunction, the movant needs to make a clear showing of immediate irreparable harm or at least a currently existing threat.<sup>131</sup>

For this factor, Symbol argued that Janam did not need to bear the costs of research and development which Symbol needed to bear, so Janam could enter the market with a much lower price. The sales of the accused products significantly caused price erosion and decreased Symbol's sales in the market. Furthermore, Symbol emphasized that Janam would not be capable of paying the damages incurred by Symbol due to price erosion because Janam is quite a young company.<sup>132</sup>

For the arguments, the district court cited *Sanofi-Synthelabo v. Apotex, Inc.*<sup>133</sup> to note that price erosion is able to justify a finding of irreparable harm.<sup>134</sup> However, the district

---

<sup>127</sup> *Id.* at 661.

<sup>128</sup> *Id.* at 661-663.

<sup>129</sup> *Id.* at 663.

<sup>130</sup> *Johnson & Johnson Orthopaedics, Inc. v. Minnesota Min. & Mfg. Co.*, 715 F. Supp. 110 (D. Del. 1989)

<sup>131</sup> *Supra* note 120, at 663.

<sup>132</sup> *Id.* at 664.

<sup>133</sup> *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F. 3d 1368, 1382-83 (Fed. Cir. 2006).

<sup>134</sup> *Supra* note 120, at 664.

court found that the evidences raised by Symbol could not convince the court that the price erosion damages suffered by Symbol were incalculable.<sup>135</sup> Moreover, the district court cited *Eli Lilly & Co. v. Premo Pharm. Labs., Inc.*<sup>136</sup> to note that the defendant's inability to pay the monetary damages is possibly sufficient to establish irreparable harm.<sup>137</sup> The district court found that some evidence showed that Janam, as a young enterprise, was not able to pay Symbol's damage award in the absence of preliminary injunction. Accordingly, the district court concluded that this factor should be slightly in Symbol's favor. However, the district court emphasized that the weight of this factor was not enough to outweigh that of the likelihood of success factor.<sup>138</sup>

For the factor of balance of hardships, the district court balance the injury that would occur to Symbol from the denial of preliminary injunction with the injury that Janam would suffer if the preliminary injunction was granted. The district court accepted Janam's argument that a preliminary injunction would effectively destroy its young business. Accordingly, the district court concluded that the balance of hardships weighed in Janam's favor and thus against the allowance of a preliminary injunction.<sup>139</sup>

With regard to the factor of public interest, the district court accepted Symbol's argument that the public interest would be best served by protecting and enforcing valid patents. Accordingly, the district court concluded that the public interest weighed in Symbol's favor.<sup>140</sup>

In conclusion, although the factors of irreparable harm and public interest supported granting a preliminary injunction, the factors of likelihood of success on the merits and balance of hardships weighed against granting the injunctive relief. By balancing these four

---

<sup>135</sup> *Id.* at 664-665.

<sup>136</sup> *Eli Lilly & Co. v. Premo Pharm. Labs., Inc.*, 630 F.2d 120, 137 (3d Cir.1980).

<sup>137</sup> *Supra* note 120, at 665.

<sup>138</sup> *Id.* at 665.

<sup>139</sup> *Id.*

<sup>140</sup> *Id.* at 666.

factors against each other and assessing the magnitude of the necessary relief, the district court reached a conclusion that the motion for preliminary injunction was denied.<sup>141</sup>

In this case, Janam did not raise an independent invention defense, so the district court did not deliberate whether to accept the independent invention defense in the considerations of the four equity factors.

(7) Wellman Inc. v. Eastman Chemical Company

Wellman Inc. (“Wellman”) is the patent owner of the U.S. Patent No. 7,094,863 (“the ‘863 patent”). Wellman filed a motion for preliminary injunction in the United States District Court for the District of Delaware to enjoin Eastman Chemical Company (“Eastman”) from continuously selling its polyethylene terephthalate (“PET”) resin.<sup>142</sup>

With regard to the factor of likelihood of success on the merits, the district court considered both the validity issue and the infringement issue. Regarding to the validity issue, the district court found that the claim 15 of the ‘863 patent is obvious because it is quite similar with the cited references.<sup>143</sup> With regard to the infringement issue, the district court noted that Wellman had not demonstrated the likelihood of infringement. Accordingly, the district court concluded that Wellman had failed to carry its burden of proving likelihood of success on the merits.<sup>144</sup>

For the factor of irreparable harm, the district court noted that Wellman had failed to prove the irreparable harm because of the following two reasons: (1) the patented resins accounted for only a small percentage of its total business; and (2) the loss of business to Eastman is not directly related to the sales of the patented technology.<sup>145</sup>

---

<sup>141</sup> *Id.*

<sup>142</sup> Wellman Inc. v. Eastman Chemical Company, 2008 WL 4449608, at 2 (D. Del.).

<sup>143</sup> *Id.* at 3.

<sup>144</sup> *Id.*

<sup>145</sup> *Id.*

Accordingly, the district court denied the motion for preliminary injunction because Wellman had failed to establish a likelihood of success on the merits and irreparable harm.<sup>146</sup> It is abnormal that the district court made the decision without considering the balance of hardships and the public interest.

Because Eastman did not raise an independent invention defense in the preliminary injunction proceedings, the district court did not ponder whether to accept the independent invention defense in the preliminary injunction proceedings.

(8) *Abbott Laboratories, v. Teva Pharmaceuticals, Inc.*

Abbott Laboratories (“Abbott”) is the patent owner of the U.S. Patent nos. 6,010,718 (“the ‘718 patent”) and 6,551,616 (“the ‘616 patent”). Abbott sued Teva Pharmaceuticals USA, Inc. (“Teva”) at the United States District Court for the Northern District of Illinois alleging patent infringement, and also filed a motion for preliminary injunction against Teva’s activity of releasing formulations of clarithromycin. The district court granted the preliminary injunction, and Teva appealed to the Federal Circuit.<sup>147</sup>

On appeal, the argument was focused on the likelihood of success factor. The Federal Circuit found that Teva had raised a substantial question of validity with each of the asserted claims so the patentee-movant Abbott had not established a likelihood of success on the merits.<sup>148</sup>

With regard to the irreparable harm factor, the Federal Circuit noted that Abbott was no longer entitled to a presumption of irreparable injury because it had not established a likelihood of success on the merits as mentioned above.<sup>149</sup> Since either party was not able to establish the irreparable harm, the Federal Circuit held that this factor did not favor either

---

<sup>146</sup> *Id.*

<sup>147</sup> *Abbott Labs. v. Teva Pharms. Inc.*, 452 F.3d 1331, 1332-33 (Fed. Cir. 2006).

<sup>148</sup> *Id.* at 1347.

<sup>149</sup> *Id.*



party.<sup>150</sup>

For the balance of hardship factor, the Federal Circuit favored Abbott because Teva was reluctant to quantify the hardship.<sup>151</sup> As to the public interest factor, the Federal Circuit held Teva's favor again because Abbott had not established a likelihood of success on the merits as mentioned above.<sup>152</sup>

The Federal Circuit concluded that the district court's finding that Abbott had proved the likelihood of infringement was incorrect. Hence, the Federal Circuit vacated the preliminary injunction granted by the district court.<sup>153</sup> The "likelihood of success" factor was again deemed as the most essential factor in examining the motion of a preliminary injunction

Since Teva did not raise an independent invention defense in the preliminary injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in considering the four equity factors.

(9) Apple Inc., v. Samsung Elecs. Co.

Apple Inc. ("Apple") is the patent owner of the U.S. Patent Nos. D593,087 ("the D'087 patent"), D618,677 ("the D'677 patent"), D504,889 ("the D'889 patent"), and 7,469,381 ("the '381 patent")(collectively "the patents-in-suit"). Apple sued Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC (collectively "Samsung") at the United States District Court for the Northern District of California on April 15, 2011, alleging patent infringement of the patents-in-suit. Later on July 1, 2011, Apple filed a motion for preliminary injunction against Samsung's activity of importing into and selling within the United States some accused products, including the

---

<sup>150</sup> *Id.* at 1348.

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

<sup>153</sup> *Id.*

smartphones Galaxy S 4G, Infuse 4G, and Galaxy Tab 10.1 tablet.<sup>154</sup>

After examining the four factors, the district court denied the motion for preliminary injunction by reasons that: (1) as to the claims of the D'889 patent and D'087 patent, the district court held that Apple had failed to establish a likelihood of success on the merits; (2) as to the claims of the D'677 patent and the '381 patent, the district court held that Apple had failed to show the irreparable injuries from Samsung's continuing patent infringement. The district court found no irreparable harm by reasons that: (1) there had been no nexus between Samsung's patent infringement and Apple's loss of market share; and (2) Apple's delay of moving for preliminary injunction undercut the claim of urgency.<sup>155</sup> Apple appealed.

On appeal, the Federal Circuit considered the patents-in-suit one by one. For the D'677 patent, the Federal Circuit upheld the district court's finding that Apple had failed to establish the irreparable injuries in the absence of preliminary injunction.<sup>156</sup> Although Apple argued that it needed not to show a nexus between Samsung's patent infringement and Apple's loss of market share to establish irreparable injuries, the Federal Circuit cited *Voda v. Cordis Corp.*<sup>157</sup> and *Procter & Gamble Co. v. Ultreo, Inc.*<sup>158</sup> to hold that a likelihood of irreparable injury cannot be established if the patentee's sales would be lost regardless of the accused products sold by the defendants.<sup>159</sup> Since the district court found that Samsung's infringement acts did not have any negative effects on Apple's market share, the Federal Circuit upheld the district court's finding that Apple had failed to establish the irreparable injuries in the absence of preliminary injunction.<sup>160</sup>

As to the D'087 patent, the Federal Circuit held that the district court erred in finding

---

<sup>154</sup> Apple Inc., v. Samsung Elecs. Co., 2011 WL 7036077 (N. D. Cal., 2011).

<sup>155</sup> *Id.*

<sup>156</sup> Apple Inc., v. Samsung Elecs. Co., 678 F. 3d 1314, 1323-1326 (Fed. Cir. 2012).

<sup>157</sup> *Voda v. Cordis Corp.* 536 F. 3d 1311, 1329 (Fed. Cir. 2008).

<sup>158</sup> *Procter & Gamble Co. v. Ultreo, Inc.*, 574 F. Supp. 2d 339, 349 (S.D.N.Y. 2008).

<sup>159</sup> *Supra* note 156, at 1324.

<sup>160</sup> *Id.* at 1325-1326.

that the D'087 patent had been likely anticipated by a Japanese patent so Apple had failed to show the likelihood of success on the merits. However, the Federal Circuit still upheld the district court's denial of a preliminary injunction by reason that Apple had failed to establish the irreparable injuries in the absence of preliminary injunction with the identical reasons mentioned above for the D'677 patent.<sup>161</sup>

In regard to the '381 patent, the Federal Circuit upheld the district court's denial of a preliminary injunction by reason that Apple had failed to establish the irreparable injuries in the absence of preliminary injunction with the identical reasons for the D'677 patent as mentioned above.<sup>162</sup>

As to the D'889 patent, the district court denied the motion for preliminary injunction by holding that Apple had failed to show a likelihood of success on the merits, although the district noted that Apple had shown the irreparable injury from Samsung's accused patent infringement. After examining the validity of the D'889 patent, the Federal Circuit found the D'889 patent was likely to be valid, so the district court had erred in negating the patent's validity.<sup>163</sup>

In conclusion, the Federal Circuit affirmed the district court's denial of preliminary injunction in respect to the D'677 patent, the D'087 patent, and the '381 patent. However, the Federal Circuit vacated district court's denial order of preliminary injunction with respect to the D'889 patent, and remanded this case back to the district court for further consideration.<sup>164</sup>

Because Samsung did not raise an independent invention defense in the preliminary injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to

---

<sup>161</sup> *Id.* at 1326-1327.

<sup>162</sup> *Id.* at 1327-1328.

<sup>163</sup> *Id.* at 1328-1333.

<sup>164</sup> *Id.* at 1333.

adopt the independent invention defense in the preliminary injunction proceedings.

### 3.2.3 Analysis from the Empirical Study

1. A Preliminary Injunction will not be Granted Unless all of the Four Factors Are in Patentee-movant's Favor

Pursuant to the earlier precedents of the Federal Circuit, no single factor should dominate, and the district courts must weigh and measure each factor against the other factors.<sup>165</sup> However, the empirical study above shows that the real practice is conducted by a different way.

As the Federal Circuit vacated the preliminary injunction in the *Erico Int'l Corp. v. Doc's Mktg., Inc.* case on the ground that the defendant had raised a substantial question as to the validity of the patent-in-dispute<sup>166</sup>, it's obvious that the factor of "likelihood of success on the merits" is not only one of the four equity factors, but also the prerequisite of granting a preliminary injunction.

Furthermore, in the *Chamberlain Group, Inc. v. Lear Corp., Inc.* case, the Federal Circuit even held that a preliminary injunction requires assessing the likelihood the success on the merits, and an accurate claim construction is always a prerequisite to grant a preliminary injunction.<sup>167</sup> The wrongful claim construction of the district court resulted in the wrongful decisions of the patent validity and patent infringement, and thus influenced the determination of the likelihood of success on the merits.<sup>168</sup>

In the *Torspo Hockey Int'l, Inc. v. Kor Hockey Ltd.* case, the district court denied to issue the preliminary injunction though the third and fourth factors were in the

---

<sup>165</sup> *Supra* note 11, at 1451 ("These factors, taken individually, are not dispositive; rather, the district court must weigh and measure each factor against the other factors and against the form and magnitude of the relief requested.")

<sup>166</sup> *Supra* note 73, at 1356-57.

<sup>167</sup> *Supra* note 77, at 1340.

<sup>168</sup> *Id.*

patentee-movant's favor. Especially, the district court found the "likelihood of success" factor is the key, even the sufficient factor of the four-factor test. Before considering the other three preliminary-injunction factors, the district court has already held that because Kor had not established the likelihood of patent infringement, the court must deny Kor's motion for preliminary injunction.<sup>169</sup>

In the *Novartis Corp. v. Teva Pharmaceuticals USA, Inc.* case, the district court denied the preliminary injunction though the third factor was determined to favor the patentee-movant.<sup>170</sup> In the *Symbol Technologies Inc. v. Janam Technologies LLC* case, although the factors of irreparable harm and public interest supported granting a preliminary injunction, the factors of likelihood of success on the merits and balance of hardships weighed against granting the injunctive relief. By balancing these four factors against each other and assessing the magnitude of the necessary relief, the district court reached a conclusion that the motion for preliminary injunction was denied.<sup>171</sup> In sum, it is reasonable to conclude that the factor of "likelihood of success on the merits" is not only the most important factor, but also the prerequisite of granting a preliminary injunction in real practice.

Furthermore, in the *Canon Inc. v. GCC Int'l Ltd.* case, the court held that a preliminary injunction in a patent case is an extraordinary remedy only available for the situations in which the merits of the patentee-movant's case are clear, the irreparable harm is manifest, the hardships tip decidedly in the patentee-movant's favor and the public interest is also served by the preliminary injunction.<sup>172</sup> From this point of view, the patent owner can be awarded to a preliminary injunction unless all of the four factors are in favor of the patent owner.

---

<sup>169</sup> *Supra* note 81, at 881 ("[b]ecause Kor has not established that it is likely to succeed in the underlying patent litigation, the Court must deny Kor's motion for a preliminary injunction. The Court would thus discuss the remaining three preliminary-injunction factors only briefly").

<sup>170</sup> *Supra* note 93, at 32.

<sup>171</sup> *Supra* note 120, at 666.

<sup>172</sup> *Supra* note 35, at 246 ("A preliminary injunction in a patent case is an extraordinary remedy reserved for circumstances in which the merits of movant's case are clear, the irreparable injury is manifest, the hardships tip decidedly in the movant's favor and the public interest is served by the injunction.")

The aforementioned empirical study closely accords with the opinion of the *Canon Inc. v. GCC Int'l Ltd.* case. In all of the cases granting the preliminary injunction, all of the four factors are in favor of the patent owners. In real practice, it seems only a nominal rule for the district courts to weigh and measure each factor against the other factors. In fact, from the empirical study, a preliminary injunction will not be granted unless all of the four factors are in patentee-movant's favor.

## 2. No Independent Invention Defenses were raised by the Defendants and considered by the Courts

The empirical study shows that no defendant raised the independent invention defense in the preliminary injunction proceedings. Accordingly, there is no chance for courts to consider whether to adopt the independent invention defense in examining the four equity factors.

This dissertation finds the most important reason is that the independent invention defense is absolutely unacceptable in current patent practice. Defendants (and their lawyers) will look very "amateur" to patent practice if they raise the independent invention defense in preliminary injunction proceedings. Accordingly, the defendants will hesitate to assert independent invention defense even if they finished the accused products by independent development.

### 3.3 Patent Preliminary Injunction in China

#### 3.3.1 Law and Regulations

China is always deemed to have a high rate of intellectual property infringements.<sup>173,174</sup>

---

<sup>173</sup> U.S.: China Has High Rate of Intellectual Property Infringement, April 29, 2005, <http://usinfo.state.gov/usinfo/Archive/2005/Apr/29-580129.html> (last visited October 12, 2011).

<sup>174</sup> Peter K. Yu, *Three Questions That Will Make You Rethink the U.S.-China Intellectual Property Debate*, 7 J. MARSHALL REV. INTELL. PROP. L. 412, 412 (2008).

The eyes of the international community are being fixed on China with regards to the issue of protection of intellectual property rights because China is becoming the manufacturing capital of the world.<sup>175</sup> However, the first version of the Chinese Patent Law was stipulated as late as in 1984.<sup>176</sup>

There are three kinds of patent rights in Chinese Patent Law,<sup>177</sup> i.e., the invention patent,<sup>178</sup> the utility model patent,<sup>179</sup> and the design patent.<sup>180</sup> Pursuant to Chinese Patent Law, once an invention patent protecting an apparatus or a utility model patent is granted by State Intellectual Property Office (hereinafter “SIPO”), no one can make, use, offer to sell, sell or import the patented product without the prior consent of the patent owner; once an invention patent protecting a method or process is granted by SIPO, nobody can use the patented process, or use, offer to sell, sell or import the product directly obtained by the patented process.<sup>181</sup> Similarly, once a design patent is granted by SIPO, nobody can make, sell or import the product incorporating its patented design without the authorization of the patent holder.<sup>182</sup> Before July 1, 2001, however, there were no injunction-related provisions in Chinese Patent Law.

---

<sup>175</sup> David Orozco, *Will India and China Profit from Technological Innovation?*, 5 NW. J. OF TECH. & INTELL. PROP., 425, 433 (2007) (“China has become manufacturer to the world.”).

<sup>176</sup> It was adopted at the 4th Meeting of the Standing Committee of the Sixth National People’s Congress on March 12, 1984.

<sup>177</sup> Chinese Patent Law art. 2, sec. 1: “In this Law, ‘inventions-creations’ mean inventions, utility models and designs.”

<sup>178</sup> Chinese Patent Law art. 2, sec. 2: “‘Invention’ in the Patent Law means any new technical solution relating to a product, a process or improvement thereof.”

<sup>179</sup> Chinese Patent Law art. 2, sec. 3: “‘Utility model’ in the Patent Law means any new technical solution relating to the shape, the structure, or their combination, of a product, which is fit for practical use.”

<sup>180</sup> Chinese Patent Law art. 2, sec. 4: “‘Design’ in the Patent Law means any new design of the shape, the pattern or their combination, or the combination of the color with shape or pattern, of a product, which creates an aesthetic feeling and is fit for industrial application.”

<sup>181</sup> Chinese Patent Law art. 11, sec. 1: “After the grant of the patent right for an invention or utility model, except where otherwise provided for in this Law, no entity or individual may, without the authorization of the patentee, exploit the patent, that is, make, use, offer to sell, sell or import the patented product, or use the patented process, and use, offer to sell, sell or import the product directly obtained by the patented process, for production or business purposes.”

<sup>182</sup> Chinese Patent Law art. 11, sec. 2: “After the grant of the patent right for a design, no entity or individual may, without the authorization of the patentee, exploit the patent, that is, make, sell or import the product incorporating its patented design, for production or business purposes.”

In order to join the World Trade Organization (WTO),<sup>183</sup> China needed to change its laws on intellectual property rights to comply with the requirements of the WTO/TRIPS agreement.<sup>184</sup> For this purpose, the Chinese Patent Law was amended on August 25, 2000,<sup>185</sup> which became effective on July 1, 2001 (hereinafter “the 2001 Chinese Patent Law”). Complying with Article 50 of the TRIPS agreement,<sup>186</sup> Article 61 of the 2001 Chinese Patent Law stated that the patent owners or the interested parties may file a motion for preliminary injunction before filing infringement litigation.<sup>187</sup> In order to obtain the preliminary injunction order, the patent holder or the interested party needed to prove that: (1) the defendant is infringing or will soon infringe the patent-in-suit; and (2) the patent owner or the interested party will be irreparably harmed if the preliminary injunction is not granted by the people’s court. In order to implement the 2001 Chinese Patent Law, the Supreme People’s Court of China issued “*Several Rules of the Supreme People’s Court Relating to Laws Regarding Preliminary Injunctions for Patent Disputes before Litigation*” (hereinafter the “Rules Regarding Preliminary Injunctions”) in 2001, which provided detailed and comprehensive rules for all the people’s courts in determining whether to issue a preliminary injunction as follows:

### 1. Standing

---

<sup>183</sup> China joined WTO on December 11, 2001.

<sup>184</sup> See Randal S. Alexander, *China’s Struggle to Maintain Economic Viability While Enforcing International and Domestic Intellectual Property Rights*, 4 J. MARSHALL REV. INTELL. PROP. L. 608, 608 (2005); Jennifer A. Crane, *Riding The Tigers: A Comparison of Intellectual Property Rights in the United States and The People’s Republic of China*, 7 CHI.-KENT J. INTELL. PROP. 95, 109 (2008).

<sup>185</sup> It was amended in accordance with the Decision of the Standing Committee of the Ninth National People’s Congress on Amending the Patent Law of the People’s Republic of China adopted at its 17th Meeting on August 25, 2000.

<sup>186</sup> TRIPS art. 50(1): “The judicial authorities shall have the authority to order prompt and effective provisional measures: (a) to prevent an infringement of any intellectual property right from occurring, and in particular to prevent the entry into the channels of commerce in their jurisdiction of goods, including imported goods immediately after customs clearance; and (b) to preserve relevant evidence in regard to the alleged infringement.”

<sup>187</sup> 2001 Chinese Patent Law art. 61, sec. 1: “Where any patentee or interested party has evidence to prove that another person is infringing or will soon infringe its patent right and that if such infringing act is not checked or prevented from occurring in time, it is likely to cause irreparable harm to it; patentee or interested party may, before any legal proceedings are instituted, request the people’s court to adopt measures for ordering the suspension of relevant acts and the preservation of property.”



The 2001 Chinese Patent Law stated that both patent owners and the interested parties have the standing to move for preliminary injunction.<sup>188</sup> Unlike the clear definition of the “patent owners”, the scope of the “interested parties” is unclear and needs the judiciary to clarify. Pursuant to the Rules Regarding Preliminary Injunctions, the scope of “interested parties” includes the licensees and the legitimate successors of the patent rights.<sup>189</sup>

The licensees with standing can be divided into two categories, i.e., the monopoly licensees and the exclusive licensees. The monopoly licensees can move for preliminary injunctions individually without the consents of the patent owners. On the other hand, the exclusive licensees can file a motion for preliminary injunctions only when the patent owners have no intent to move for preliminary injunction.<sup>190</sup>

## 2. Burden of Proof

To file a motion for preliminary injunction, the patentee-movant shall bring up concrete reasons in writing. The concrete reasons should include a concrete description mentioning that the patentee-movant’s right will be subjected to an irreparable harm if the preliminary injunction is not granted to stop the defendant from manufacturing or selling the accused products.<sup>191</sup>

In details, the patentee-movant shall first prove that the patent right is valid by attaching the patent right certificate, patent specification, patent claims, and annual fee receipts. The validity of the patent can be proved as soon as the patent right certificate, patent specification, patent claims, and annual fee receipts are addressed to the people’s court.<sup>192</sup> The defendant has no opportunity to argue against the validity of the patent-in-suit

---

<sup>188</sup> *Id.*

<sup>189</sup> The Rules Regarding Preliminary Injunctions, art. 1, sec. 2.

<sup>190</sup> *Id.*

<sup>191</sup> The Rules Regarding Preliminary Injunctions, art. 3.

<sup>192</sup> It is so unbelievable that the validity of the patent can be proved by merely using the patent right certificate, patent specification, patent claims, and annual fee receipts. Differently, the patent owners seeking for preliminary injunction in U.S. must prove that the defendant cannot prove by showing clear and convincing

in the procedure of preliminary injunction.<sup>193</sup>

Particularly, under the Chinese Patent Law, only a preliminary examination<sup>194</sup> is needed for SIPO to grant the patent right of a utility model patent or a design patent.<sup>195</sup> In other words, the Chinese utility model patents and the design patents are not substantially examined by SIPO, so the validity of the utility model patents and design patents are not so clear or stable. According to the Rules Regarding Preliminary Injunctions, the patent owner of a utility model patent has to present a patent search report made by the administrative

---

evidence that the patent is invalid (*see* KIMBERLY A MOORE, PAUL R. MICHEL, AND RAPHAEL V. LUPO, PATENT LITIGATION AND STRATEGY 559 (2003)).

<sup>193</sup> If the defendant wants to argue the invalidity of the asserted patent, he or she needs to file an invalidation procedure with SIPO. However, the people's court adjudicating the motion for preliminary injunction will not stay the preliminary injunction proceedings to wait for the result of the invalidation procedure.

<sup>194</sup> The definition of "Preliminary Examination" is stipulated in Article 44 of Implementing Regulations of the Patent Law of the People's Republic of China (which is corresponding to the 2001 Chinese Patent Law):

"Preliminary examination" referred to in Articles 34 and 40 of the Patent Law means the check of a patent application to see whether or not it contains the documents as provided for in Articles 26 or 27 of the Patent Law and other necessary documents, and whether or not those documents are in the prescribed form; such check shall also include the following:

- (1) whether or not any application for a patent for invention obviously falls under Article 5 or 25 of the Patent Law, or is not in conformity with the provisions of Article 18 or of Article 19, paragraph one of the Patent Law, or is obviously not in conformity with the provisions of Article 31, paragraph one, or Article 33 of the Patent Law, or of Rule 2, paragraph one, or Rule 18, or Rule 20 of these Implementing Regulations;
- (2) whether or not any application for a patent for utility model obviously falls under Article 5 or 25 of the Patent Law, or is not in conformity with the provisions of Article 18 or of Article 19, paragraph one of the Patent Law, or is obviously not in conformity with the provisions of Article 26, paragraph three or four, or of Article 31, paragraph one, or of Article 33 of the Patent Law, or of Rule 2, paragraph two, or of Rule 13, paragraph one, or of Rule 18 to 23, or of Rule 43, paragraph one of these Implementing Regulations, or is not entitled to a patent right in accordance with the provisions of Article 9 of the Patent Law;
- (3) whether or not any application for a patent for design obviously falls under Article 5 of the Patent Law, or is not in conformity with the provisions of Article 18 or of Article 19, paragraph one of the Patent Law, or is obviously not in conformity with the provisions of Article 31, paragraph two, or of Article 33 of the Patent Law, or of Rule 2, paragraph three, or of Rule 13, paragraph one, or of Rule 43, paragraph one of these Implementing Regulations, or is not entitled to a patent right in accordance with the provisions of Article 9 of the Patent Law.

The Patent Administration Department under the State Council shall notify the applicant of its opinions after checking the application and shall invite the applicant to state its observations or to correct its application within the specified time limit. If the applicant fails to make any response within the specified time limit, the application shall be deemed to have been withdrawn. Where, after the applicant has made its observations or the corrections, the Patent Administration Department under the State Council still finds that the application is not in conformity with the provisions of the Articles and the Rules cited in the preceding subparagraphs, the application shall be rejected.

<sup>195</sup> The 2001 Chinese Patent Law, art. 40: "Where it is found after preliminary examination that there is no cause for rejection of the application for a patent for utility model or design, the patent administration department under the State Council shall make a decision to grant the patent right for utility model or the patent right for design, issue the relevant patent certificate, and register and announce it. The patent right for utility model or design shall take effect as of the date of the announcement."

department to prove the validity of the utility model patent.<sup>196</sup>

In addition, the Rules Regarding Preliminary Injunctions stipulates that the patentee-movant has to show that the defendant is infringing or ready to infringe the patent-in-dispute.<sup>197</sup> If the patent-in-dispute is an apparatus patent, the patent-movant has to present both accused product and an assessment report by an external expert comparing the accused product and the patent-in-dispute.<sup>198</sup> This rule conforms to Article 61 of the 2001 Chinese Patent Law.<sup>199</sup> Furthermore, if the exclusive licensees independently file a motion for preliminary injunctions, she or he needs to provide evidence to prove that the patent holder has waived her or his right for filing a motion for preliminary injunction. The legitimate successors need to provide evidence to show their legitimate succession of the patent right.<sup>200</sup>

### 3. The 48-hour Rule

Pursuant to the Rules Regarding Preliminary Injunctions, the people's courts shall make the decisions of preliminary injunction in 48 hours.<sup>201</sup> Moreover, the preliminary injunction shall be executed promptly as soon as it is granted by the people's courts.<sup>202</sup> Because of the short time limitation, the courts generally examine the motion for preliminary injunction based on the recitation and the evidence in written form (without oral hearing). Whenever necessary, the court has the discretion to summon either or both parties to hold an oral examination, and try to make the final decision in 48 hours.

---

<sup>196</sup> The Rules Regarding Preliminary Injunctions, art. 4, sec. 1.

<sup>197</sup> Chen v. Fujian FenAn, Fo-Chung-Fa-Ming3-Gin No.1 (Intermediate People's Court of Foshan, Guangdong, 2007) (which mentioned that the motion for preliminary injunction was denied because the evidence provided by the plaintiff cannot prove that the defendant was manufacturing the accused products).

<sup>198</sup> The Rules Regarding Preliminary Injunctions, art. 4, sec. 3.

<sup>199</sup> However, a review of courts' decisions shows that the judicial practice did not exactly follow the Chinese Patent Law and the Rules Regarding Preliminary Injunctions. The case review will be discussed in this Chapter later.

<sup>200</sup> The Rules Regarding Preliminary Injunctions, art. 4, sec. 2.

<sup>201</sup> The Rules Regarding Preliminary Injunctions, art. 9.

<sup>202</sup> *Id.*

Once the preliminary injunction is granted and compulsorily executed, the patentee-movant shall file a civil lawsuit to claim for damages within 15 days. Otherwise, the people's court has to lift the compulsory execution of the preliminary injunction.<sup>203</sup>

#### 4. Bond and Counter-bond

The Rules Regarding Preliminary Injunctions require that the patentee-movant shall post a bond as security,<sup>204</sup> in order to compensate the potential damages of the defendant in case the preliminary injunction is wrongfully granted.<sup>205</sup> If the patentee-movant fails to post the bond, the people's courts shall deny the preliminary injunction.<sup>206</sup>

To determine the amount of the bond, the court shall consider the sale income influenced by the preliminary injunction and reasonably assess the potential injuries of the defendant to be prohibited to continually manufacture or sell the accused product.<sup>207</sup> In addition, the Rules Regarding Preliminary Injunctions state that the court can order the patentee-movant to supplement the bond if the injuries of the defendant become greater during the compulsory execution of the preliminary injunction order. If the plaintiff refuses to supplement the bond, the court can vacate the preliminary injunction order.<sup>208</sup>

Particularly, the Rules Regarding Preliminary Injunctions stipulate that the defendants are always not allowed to post a bond (hereinafter "the counter-bond") to lift the compulsory execution of the preliminary injunction.<sup>209</sup> This rule, being considered to be the most

---

<sup>203</sup> The Rules Regarding Preliminary Injunctions, art. 12.

<sup>204</sup> The Rules Regarding Preliminary Injunctions, art. 6, sec. 1.

<sup>205</sup> Similarly, the Federal Rule of Civil Procedure 65(c) of the United States mentions that: "The court may issue a preliminary injunction or a temporary restraining order only if the movant gives security in an amount that the court considers proper to pay the costs and damages sustained by any party found to have been wrongfully enjoined or restrained."

<sup>206</sup> *See, e.g.*, Li v. Foshancity YingBang Machine Co. Ltd, Fo-Chung-Fa-Ming3-Gin No.12 (Intermediate People's Court of Foshan, Guangdong, 2005) (mentioning that the motion for preliminary injunction was denied because the plaintiff did not post the bond); Liang v. HongDou Group Co. Ltd., Fo-Chung-Fa-Ming3-Gin No.14 (Intermediate People's Court of Foshan, Guangdong, 2006) (mentioning that the motion for preliminary injunction was denied because the bond posted by the plaintiff was not enough").

<sup>207</sup> The Rules Regarding Preliminary Injunctions, art. 6, sec. 3.

<sup>208</sup> The Rules Regarding Preliminary Injunctions, art. 7.

<sup>209</sup> The Rules Regarding Preliminary Injunctions, art. 8.

significant regulation in China's preliminary injunction rules, exerts very intense pressure upon the defendants. As soon as the preliminary injunction order is granted by the people's court, the defendant has no possibility in any circumstances to assert posting a counter-bond to lift the compulsory execution of the preliminary injunction.

Pursuant to the Rules Regarding Preliminary Injunctions, the party which is not satisfied with the decision of preliminary injunction can file a motion for reviewing the case, although the motion cannot stay the compulsory execution of the preliminary injunction.<sup>210</sup> In reviewing the case, the people's court shall consider the following four factors: (1) whether the activity of the defendant infringes the patent right; (2) whether the patentee-movant will suffer irreparable harm if the preliminary injunction is not granted; (3) whether or how the patentee-movant posted the bond; and (4) whether the public interest will be harmed if the preliminary injunction is granted.<sup>211</sup>

The 2001 Chinese Patent Law was amended on December 27, 2008,<sup>212</sup> which became effective on October 1, 2009 (hereinafter "the 2009 Chinese Patent Law"). The 2009 Chinese Patent Law moved the old Article 61 to Section 1 of Article 66 with identical statutory texts.

In addition, the 2009 Chinese Patent Law moved some provisions of the Rules Regarding Preliminary Injunctions directly into the Chinese Patent Law. The text and some explanations are shown as follows:

Under the 2009 Chinese Patent Law, in order to obtain a preliminary injunction, the patentee-movant shall post a bond as security to compensate the potential damages of the defendant in case the injunction is wrongfully granted. If the patentee-movant fails to post

---

<sup>210</sup> The Rules Regarding Preliminary Injunctions, art. 10.

<sup>211</sup> The Rules Regarding Preliminary Injunctions, art. 11.

<sup>212</sup> It was amended in accordance with the Decision of the Standing Committee of the Eleventh National People's Congress on Amending the Patent Law of the People's Republic of China adopted at its 6th Meeting on December 27, 2008.

the bond, the people's courts shall deny the motion for preliminary injunction.<sup>213</sup>

The people's courts must make the decision of the motion for preliminary injunction in 48 hours.<sup>214</sup> The preliminary injunction should be compulsorily executed immediately as soon as it is granted by the people's courts.<sup>215</sup> Pursuant to the 2009 Chinese Patent Law, the party which is unsatisfied with the decision of preliminary injunction can file a motion for reviewing the case, although the motion cannot stay the preliminary injunction.<sup>216</sup>

Once the preliminary injunction is granted and compulsorily executed, the patentee-movant needs to file a civil lawsuit to claim for damage within 15 days.<sup>217</sup> Otherwise, the people's court shall lift the compulsory execution of the preliminary injunction.<sup>218</sup>

Under the 2009 Chinese Patent Law, the patentee is liable for defendant's damages resulting from the wrongful preliminary injunction.<sup>219</sup> When the defendant prevails in the underlying litigation, the people's court can award the posted bond to the wrongfully-enjoined defendant to compensate for injuries suffered at the preliminary injunction without further litigation.

In conclusion, the 2009 Chinese Patent Law made no difference with regard to the topic of preliminary injunction.

### **3.3.2 Case Review of Preliminary Injunctions in China**

According to the statistics by the Supreme People's Court, there were a total of 430 patent preliminary injunction cases in China during the period of 2002 to October of 2006,

---

<sup>213</sup> 2009 Chinese Patent Law art. 66, sec. 2.

<sup>214</sup> 2009 Chinese Patent Law art. 66, sec. 3(1).

<sup>215</sup> 2009 Chinese Patent Law art. 66, sec. 3(2).

<sup>216</sup> 2009 Chinese Patent Law art. 66, sec. 3(3).

<sup>217</sup> 2009 Chinese Patent Law art. 66, sec. 4(1).

<sup>218</sup> 2009 Chinese Patent Law art. 66, sec. 4(2).

<sup>219</sup> 2009 Chinese Patent Law art. 66, sec. 5.

425 of which were finally judged by the courts. Overall, the courts granted preliminary injunctions in 83.17% of the cases.<sup>220</sup>

A review of some decisions also shows a high rate of granting preliminary injunction in China. This dissertation randomly selected ten cases to figure out their procedures, evidence, and the reasoning behind the decisions of preliminary injunction cases.

### 1. Cases Granting Preliminary Injunctions

Among the selected ten cases, the people's courts granted preliminary injunctions in seven cases. In most cases, the people's court granted a preliminary injunction by reasons that "the patentee-movant had provided some evidences (such as the registration of the company, the patent certificate, the issuance of the patent specification, and the notarization of the patent certificate and issuance) to show the patent infringement" and "the patentee-movant would be irreparably harmed if the preliminary injunction was not granted."<sup>221</sup> However, the people's courts did not explain the reasoning behind the determinations of patent infringement<sup>222</sup> and irreparable harm.

In fact, it is well-known that the evidences such as the registration of the company, the patent certificate, the issuance of the patent specification, and the notarization of the patent certificate and issuance can only prove the patent ownership. Without comparing the

---

<sup>220</sup> Do Do Wang, *The Supreme People's Court mentioned that "Judicial Protection of Intellectual Property Rights is getting Wide and Strong,"* < <http://wr.cccv.cn/1181/dyn20071018172550799.shtm> (2007.10.18)>(last visited 2012.1.6).

<sup>221</sup> *See, e.g.*, Pu v. Xin-Shun-Nau ceramics, Fo-Chung-Fa-Ming3-Gin No.15 (Intermediate People's Court of Foshan, Guangdong, 2005); Zuo v.Chen, Fo-Chung-Fa-Ming3-Gin No.19 (Intermediate People's Court of Foshan, Guangdong, 2005); Lian-Zhi Furniture Design v. Chen, Guangdong, Fo-Chung-Fa-Ming3-Gin No.21 (Intermediate People's Court of Foshan, 2005); Huah v. Jiangsu Rudong Fengli Machinery Factory, Su-Injunction No. 0001 (JiangSu High People's Court, 2005); Wu v. Hengchan Furnitures Co., Ltd., Fo-Chung-Fa-Ming3-Gin No.13 (Intermediate People's Court of Foshan, Guangdong, 2005); Wuhan LONWEL Science and Technology Co., Ltd v. I-Chan Chan-Ker Rubber Product Co., Ltd., Huba, Wu-Zhi-Injunction No. 19 (Intermediate People's Court of WuHand, 2006); Wang v. Heba Chin Huaba, Der-Chung-Ming4-Injunction No. 66 (Intermediate People's Court of Derchou, Sandung, 2006).

<sup>222</sup> Generally, the decisions used the sentence "the defendant is likely infringing the patent," without providing any reasoning. *See, e.g.*, Huah v. Jiangsu Rudong Fengli Machinery Factory, Su-Injunction No. 0001(JiangSu High People's Court, 2005); Zuo v.Chen, Fo-Chung-Fa-Ming3-Gin No.19 (Intermediate People's Court of Foshan, Guangdong, 2005); Lian-Zhi Furniture Design v. Chen, Fo-Chung-Fa-Ming3-Gin No.21 (Intermediate People's Court of Foshan, Guangdong 2005).

patent-in-suit with the accused product, it is not possible to use such evidences to prove the patent infringement and the irreparable harm if the preliminary injunction is not granted. Although some decisions mentioned that “the likelihood of infringement is larger than the unlikelihood”<sup>223</sup>, such decisions did not comprehensively illustrate the reasoning. In fact, all of the decisions did not illustrate how to reach the conclusion of patent infringement.<sup>224</sup> It is really *interesting* to learn that the courts in China can grant a preliminary injunction only by examining the patent certificate, the patent specification, and their notarizations.<sup>225</sup>

Among the cases granting the preliminary injunction, the case *Lonwel Science and Technology v. Chan-Ker Rubber Product*<sup>226</sup> is worth introducing. In the decision’s opinion, the people’s court first pointed out all of the limitations in claim 1 of the patent-in-dispute. Next, the accused product was analyzed. Thereafter, a comparison between the claim 1 and the accused product was conducted to find that all limitations in claim 1 read on the accused product.<sup>227</sup> This decision, substantially examining the patent infringement, is one of few decisions which conformed to the standard in Article 61 of the 2001 Chinese Patent Law and Article 66 of the 2009 Chinese Patent Law.

By contrast, *Wang v. Heba Chin Huaba*<sup>228</sup> is an implausible decision. In this case, the patent-in-dispute is a utility model patent which was not substantially examined by SIPO as mentioned above. The court found patent infringement and thus granted the preliminary

---

<sup>223</sup> See, e.g., *Huah v. Jiangsu Rudong Fengli Machinery Factory*, Su-Injunction No. 0001 (JiangSu High People’s Court, 2005); *Zuo v. Chen*, Fo-Chung-Fa-Ming3-Gin No.19 (Intermediate People’s Court of Foshan, Guangdong, 2005); *Lian-Zhi Furniture Design v. Chen*, Fo-Chung-Fa-Ming3-Gin No.21 (Intermediate People’s Court of Foshan, Guangdong, 2005).

<sup>224</sup> The decisions mentioned neither the “literal infringement analysis” by using the all-elements rule, nor prove the “infringement under doctrine of equivalents.”

<sup>225</sup> See, e.g., *Pu v. Xin-Shun-Nau ceramics*, Fo-Chung-Fa-Ming3-Gin No.15 (Intermediate People’s Court of Foshan, Guangdong, 2005); *Zuo v. Chen*, Fo-Chung-Fa-Ming3-Gin No.19 (Intermediate People’s Court of Foshan, Guangdong, 2005); *Lian-Zhi Furniture Design v. Chen*, Fo-Chung-Fa-Ming3-Gin No.21 (Intermediate People’s Court of Foshan, Guangdong, 2005).

<sup>226</sup> *Wuhan Lonwel Science and Technology Co., Ltd v. I-Chan Chan-Ker Rubber Product Co., Ltd.*, Wu-Zhi-Injunction No. 19 (Intermediate People’s Court of WuHand, Huba, 2006).

<sup>227</sup> It is somehow similar with the “literal infringement analysis” by using the all element rule in the U.S. patent law.

<sup>228</sup> *Wang v. Heba Chin Huaba*, Der-Chung-Ming4-Injunction No. 66 (Intermediate People’s Court of Derchou, Sandung, 2006).



injunction by reason that both patent certificate and specification were valid.<sup>229</sup>

## 2. Cases denying Preliminary Injunctions

Three of the ten selected decisions did not grant the preliminary injunctions. The reasons for denying the preliminary injunctions are quite different.

In *Liang v. HongDou Group*,<sup>230</sup> after determining and ordering the patentee-movant to post a bond, the court found during the evidence reservation procedure that the mass production scale of the defendant is quite larger than that described by the patentee-movant. The court noted that the bond should be supplemented in order to secure the potential injuries of the defendant, so the court proposed an order to ask the patentee-movant to supplement the bond in a definite period. However, the patentee-movant failed to supplement the bond in the definite period, so the court denied the preliminary injunction.<sup>231</sup>

In *Chen v. Fujian FenAn*,<sup>232</sup> the court did not find any evidence showing that the defendant was manufacturing or selling the accused product. Accordingly, the court denied the preliminary injunction by reason that the patentee-movant did not fully prove the irreparable harm in the absence of preliminary injunction.<sup>233</sup>

It is worth mentioning that the court in *KEDA Industrial Co., Ltd. v. Kotai*<sup>234</sup> substantially examined whether the accused product falls into the range of patent-in-dispute. The court noted that the patent owner had to bear the burden of showing that the adverse party was manufacturing or ready to manufacture the accused product and the accused product infringed the patent-in-dispute. After adjudication, the court found no patent infringement

---

<sup>229</sup> *Id.*

<sup>230</sup> *Liang v. HongDou Group Co. Ltd.*, Fo-Chung-Fa-Ming3-Gin No.14 (Intermediate People's Court of Foshan, Guangdong, 2006).

<sup>231</sup> *Id.*

<sup>232</sup> *Chen v. Fujian FenAn*, Fo-Chung-Fa-Ming3-Gin No.7 (Intermediate People's Court of Foshan, Guangdong, 2007).

<sup>233</sup> *Id.*

<sup>234</sup> *KEDA Industrial Co., Ltd. v. Kotai*, Fo-Chung-Fa-Ming3-Gin No.15 (Intermediate People's Court of Foshan, Guangdong, 2006).

by holding that two necessary limitations of the patent claim were missing on the accused product.<sup>235</sup> Accordingly, the court denied the preliminary injunction.

In conclusion, the decisions of granting or denying the preliminary injunctions in China's practice are quite short. The "likelihood of infringement" requirement under the Chinese Patent Law seems not substantially examined by the people's courts. Generally speaking, it is relatively easy for the patent holders to obtain a preliminary injunction in China.

This dissertation also conducted an empirical study at the judicial database of ChinaLawInfo<sup>236</sup> during the period of January 1, 2003 to Oct. 31, 2012, with the searching key words of "independent invention"<sup>237</sup>, finding that there were no defendants arguing for independent invention in the preliminary injunction proceedings. Therefore, no decisions considered whether to accept the independent invention defense in the preliminary injunction proceedings.

### **3.4 Patent Preliminary Injunction in Taiwan**

#### **3.4.1 Legal Development of Preliminary Injunctions**

There are three kinds of patent rights in Taiwanese Patent Law, i.e., the invention patent,<sup>238</sup> the utility model patent,<sup>239</sup> and the design patent.<sup>240</sup> Before 1997, to infringe any

---

<sup>235</sup> *Id.*

<sup>236</sup> ChinaLawInfo is the largest judicial database in China, whose website is <http://www.chinalawinfo.com/>.

<sup>237</sup> The Chinese words are 「独立研发」、「独立发明」、「自主研发」、「自主发明」、「自力研发」、「自力发明」.

<sup>238</sup> It is similar to the utility patent in the US Patent Law. Article 21 of Patent Law states that: "The term 'invention' as used herein refers to any creation of technical concepts by utilizing the rules of nature." The 2011 Amendment of the Taiwanese Patent Law states the same.

<sup>239</sup> Article 93 of Patent Law states that: "The term 'utility model' shall refer to any creation of technical concepts by utilizing the acts of nature, in respect of the form, construction or installation of an article." Article 104 of the 2011 Amendment of the Taiwanese Patent Law (which will become effective on January 1, 2013) slightly amended this provision to: "'Utility model' means the creation of technical ideas relating to the shape or structure of an article or combination of articles, utilizing the laws of nature."

<sup>240</sup> Article 109 of Patent Law states that: "The term 'design' shall refer to any creation made in respect of the shape, pattern, color, or combination thereof of an article through eye appeal" and "[T]he term 'associated design' as used herein refers to a creation made by the same person, which is originated from and similar to

kind of patent right was a crime in Taiwan. The Taiwanese Patent Law de-criminalized the acts of infringing the invention patent right in 1997. The current Patent Law of Taiwan was amended in 2002 and became effective on July 1, 2003, which de-criminalized the acts of infringing utility model patents and design patents. Accordingly, the patent holders lost the most powerful weapon to fight against the infringers. At present, in addition to sue for damages against the infringers,<sup>241</sup> to move for preliminary injunctions at a civil court is deemed to be the most important weapon of the patent owners.<sup>242</sup>

The patent right is a right to exclude<sup>243</sup> under Taiwanese Patent Law, as well as in the United States.<sup>244</sup> The patent holder can exclude the infringers from the relevant technical

---

his/her original design.” Article 121 of the 2011 Amendment of the Taiwanese Patent Law (which will become effective on January 1, 2013) slightly amended this provision to: ““Design” means the creation made in respect of the shape, pattern, color, or any combination thereof, of an article as a whole or in part by visual appearance.” and “For computer generated icons (Icons) and graphic user interface (GUI) applied to an article, an application may also be filed pursuant to this Act for obtaining a design patent.”

<sup>241</sup> Section 1 of Article 85 of Taiwanese Patent Law states that “To claim damages in accordance with the preceding Article, any of the following options may be adopted for calculating the amount of damages: (1) to claim in accordance with Article 216 of the Civil Code (a patentee may, however, take the balance derived by subtracting the profit earned through the practice of his/her patent after the existence of infringement from the profit normally expected through the practice of the same patent as the amount of the damages, provided that no proving method can be presented to justify the damages); and (2) to claim based on the profit earned by the infringer as a result of his/her infringement act. The entire income derived from the sale of the infringing articles shall be deemed the infringer’s profit, provided that the infringer is unable to produce proof to justify his/her costs or necessary expenses.” Article 97 of the 2011 Amendment of Taiwanese Patent Law (which will become effective on January 1, 2013) amended this provision to: “Damages claimed in accordance with the preceding Article may be calculated according to any of the following methods: (1) the method provided in Article 216 of the Civil Law; patent holder may claim damages based on the amount of the balance derived by subtracting the profit earned through exploiting the patent after infringement from the profit normally expected through exploiting the same patent, if no method of proof can be produced to prove the damage suffered; (2) the profit earned by the infringer as a result of patent infringement; and (3) the equivalent amount of royalty that may be collected from exploiting the invention patent under licensing.”

<sup>242</sup> Although it is not so powerful in practice as shown in the subsequent part of this dissertation, most patent holders like to file a motion for preliminary injunction before or at the time of filing a civil lawsuit.

<sup>243</sup> The Taiwanese Patent Law, art. 56, sec. 1 states that “Unless otherwise provided for in this Act, the patentee of a patented article shall have the exclusive right to preclude other persons from manufacturing, making an offer for sale, selling, using, or importing for above purposes the patented article without his/her prior consent.” Furthermore, the Taiwanese Patent Law, art. 56, sec. 2 states that “Unless otherwise provided for in this Act, the patentee of a patented process shall have the exclusive right to preclude others from using such process and using, selling or importing for above purposes the articles made through direct use of the said process without his/her prior consent.” Article 58 of the 2011 Amendment of the Taiwanese Patent Law (which will become effective on January 1, 2013) slightly amended this provision to: “Unless otherwise provided for in this Law, the patent holder of an invention patent has an exclusive right to prevent others from practicing the patented technology without the patentee’s prior consent. Where the invention is a product, practicing of which means the acts of making, offering for sale, selling, using, or importing that product for the aforementioned purposes. Where the invention is a process, practicing of which means the following acts: (1) using the process; (2) using, offering for sale, selling or importing for these purposes the product obtained directly by that process.”

<sup>244</sup> 35 U.S.C. 154 (a)(1) states “Every patent shall contain a short title of the invention and a grant to the

markets and obtain a market power of monopoly once the preliminary injunction is granted by one of the district courts or the IP Court.<sup>245</sup> Moreover, the exclusive licensee of a patent right, as well as the patent owners, has the standing to exclude the infringers from continuously manufacturing or selling the accused products.<sup>246</sup> Furthermore, both patent owner and its exclusive licensee can request for destruction of the infringing products or the raw materials.<sup>247</sup>

Unlike the Patent Law of the United States<sup>248</sup> and Chinese Patent Law<sup>249</sup> which substantially stipulate the standards in determining whether to grant a preliminary injunction, Taiwanese Patent Law only stipulates that the patent owner can seek for injunctive relief in patent infringement dispute, but there is no standard for granting preliminary or permanent injunctions. For the preliminary injunction proceedings in patent litigations, therefore, courts should conform to the rules in Civil Procedure Law and the related laws (to be

---

patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof.”

<sup>245</sup> The Taiwanese Patent Law, art. 84, sec. 1 states that “In the event of infringement on an invention patent, the patentee may claim for damages and demand the removal of the infringement and the prevention of any threat of infringement.” Sections 1 to 2 of Article 96 of the 2011 Amendment of the Taiwanese Patent Law (which will become effective on January 1, 2013) amended this provision to: “A patent holder of an invention patent may demand a person who infringes or is likely to infringe the patent right to stop or prevent such infringement.”, “In the case of infringement of an invention patent with intent or due to negligence, the patent owner may claim for damages suffered therefrom.”

<sup>246</sup> The Taiwanese Patent Law, art. 84, sec. 2 states that “An exclusive licensee may also make the claim or demand set forth in the preceding Paragraph, unless otherwise provided for in an agreement, and in such case, the provisions set out in the agreement shall prevail.”. Section 4 of Article 96 of the 2011 Amendment of the Taiwanese Patent Law (which will become effective on January 1, 2013) amended this provision to: “An exclusive licensee may, within the licensed scope, make demands in accordance with the preceding three paragraphs. However, if it is otherwise provided for in an agreement, such agreement shall prevail.”

<sup>247</sup> The Taiwanese Patent Law, art. 84, sec. 3 states that “When an invention patentee or an exclusive licensee claims for damages pursuant to the preceding two Paragraphs, he/she may request for destruction of the infringing products or the raw materials or implements used in infringing the patent, or request for other necessary disposals.” Section 3 of Article 96 of the 2011 Amendment of the Taiwanese Patent Law (which will become effective on January 1, 2013) amended this provision to: “When making a demand pursuant to Section 1, the patentee may request for destruction of the infringing articles or the materials or implements used in infringing the patent, or request for other necessary disposal.”

<sup>248</sup> 35 U.S.C. §283 states that “The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”

<sup>249</sup> The 2009 Chinese Patent Law, art. 66.

mentioned later) which provide general standard of granting preliminary injunctions.

The Civil Procedure Law rules the procedures of civil lawsuits in Taiwan. The rules of preliminary injunction in the Civil Procedure Law have been significantly changed during the past ten years, and the law transition can be divided into three stages: before 2003, the period between 2003 and mid 2008, and after July 1, 2008.

Before 2003, there was only one provision in the Civil Procedural Law regulating preliminary injunction (hereinafter “the Old Civil Procedural Law”).<sup>250</sup> Although the legal precedent of the Supreme Court in 1972 stated that the dispute in patent infringement is legitimate to move for preliminary injunctions under the Old Civil Procedural Law<sup>251</sup>, it was not broadly used by the patent holders at that time. The main reason is that the Old Civil Procedural Law was too primitive; in particular, the grounds for granting preliminary injunctions were vague, so the courts’ decisions of preliminary injunctions were generally unpredictable. Accordingly, the patent owners did not see the preliminary injunction as a powerful weapon. At that time, to infringe a patent right was still a crime in Taiwan as mentioned, so the patent owners generally imposed sanctions against the infringers by using the Criminal Procedure Law.

Nevertheless, it was relatively easy for a patent owner to obtain a preliminary injunction at that time. Although the patent owners needed to provide preliminary evidence to show the claims and the grounds for the preliminary injunction motions under the Old Civil Procedural Law, they could always post a bond to substitute the burden of showing the preliminary evidence.<sup>252</sup> Accordingly, it was always possible for a patent owner to obtain a

---

<sup>250</sup> The Old Civil Procedure Law art. 538 states “The provisions related to provisional measures apply *mutatis mutandis* to disputes over legal relations for which a temporary adjustment is necessary.”

<sup>251</sup> 1972-Tai-Kan-506 (Supreme Court, 1972).

<sup>252</sup> The Old Civil Procedure Law art. 526, sec. 2 stated that: “Though the creditor does not make such explanations as referred to above, still the court may issue an order for provisional seizure, provided that the creditor has furnished the security fixed by the court for damages that might be sustained by the debtor in consequence of the provisional seizure.”

preliminary injunction order by merely posting a bond without showing any preliminary evidence.<sup>253</sup> This rule was largely criticized by many scholars and practitioners, especially from the viewpoint of the defendants. That is because the “rich” patent owner could always use this rule to “ride roughshod over” the poor defendants by posting a security bond to obtain a preliminary injunction order without showing any preliminary evidence to establish the patent infringement.

The Old Civil Procedure Law, including the rules of preliminary injunction, was largely amended in 2003 (hereinafter the “2003 Civil Procedural Law”). Pursuant to the 2003 Civil Procedural Law, the grounds for granting preliminary injunctions were clearly defined as follows: (1) for purposes of preventing material harm, (2) for purposes of preventing imminent danger, or (3) for purposes of other similar circumstances.<sup>254</sup> In addition, the preliminary injunctions could be granted only when the legal relation in dispute may be ascertained in an underlying litigation.<sup>255</sup>

Regarding the rule which allowed the patent owners to merely post a bond to substitute the burden of showing the preliminary evidence in the Old Civil Procedural Law, the 2003 Civil Procedural Law changed the rule so that the deposition of bonds cannot always substitute the burden for showing the preliminary evidence. Pursuant to the 2003 Civil Procedural Law, the movant of preliminary injunction bore the burden of showing the preliminary evidence to prove the essentiality of granting a preliminary injunction;<sup>256</sup> in case

---

<sup>253</sup> Of course, the patent owner at that time did not need to prove the “likelihood of success” or the “likelihood of infringement.” This topic will be discussed later.

<sup>254</sup> The 2003 Civil Procedure Law art. 538, sec. 1: “Where necessary for purposes of preventing material harm or imminent danger or other similar circumstances, an application may be made for an injunction maintaining a temporary status quo with regard to the legal relation in dispute.”

<sup>255</sup> The 2003 Civil Procedure Law art. 538, sec. 2: “The ruling provided in the preceding paragraph may be issued only where the legal relation in dispute may be ascertained in an action on the merits.”

<sup>256</sup> The 2003 Civil Procedure Law art. 538-4: “Except as otherwise provided, the provisions pertaining to provisional injunction shall apply mutatis mutandis to injunctions maintaining a temporary status”; the 2003 Civil Procedure Law art. 533: “The provisions pertaining to provisional attachment shall apply mutatis mutandis to provisional injunction except as otherwise provided in Article 535 and Article 536”; and the 2003 Civil Procedure Law art. 536, sec. 1: “A preliminary showing of the claim and the ground for the provisional attachment must be made.”

the preliminary evidence was insufficient to prove the essentiality, the court had the discretion to grant the preliminary injunction by requesting the movant to post a bond.<sup>257</sup> On the other hand, if the movant had never shown any preliminary evidence, the court should deny the motion for preliminary injunction.<sup>258</sup> In other words, it is no longer possible for the patent owner to obtain a preliminary injunction order without showing any preliminary evidence.

Furthermore, the 2003 Civil Procedural Law also authorized the district courts to allow the defendant to post a bond to lift the compulsory execution of the preliminary injunction.<sup>259</sup> It is said to be “counter-bond” in Taiwan’s practice. This rule is also criticized by many practitioners that if the allowance of posting a counter-bond is abused, the preliminary injunction system would become functionless and only exists in name only.

The IP Court, similar to CAFC in the United States, was established on July 1, 2008. At the same time, the Procedure Law for Adjudicating IP Cases also became effective, which is deemed to be a special law of the Civil Procedure Law. If there is any controversy between the Civil Procedure Law and the Procedure Law for Adjudicating IP Cases, the IP Court needs to adopt the Procedure Law for Adjudicating IP Cases rather than the Civil Procedure Law.<sup>260</sup>

Under the Procedure Law for Adjudicating IP Cases, the requirements of moving for

---

<sup>257</sup> The 2003 Civil Procedure Law art. 526, sec. 2: “In cases of insufficiency in the preliminary showing provided in the preceding paragraph, where the creditor has represented willingness to provide a security or where it is deemed appropriate by the court, the court may assess an amount for the security and issue a ruling for a provisional attachment upon the creditor’s provision of such security” and the 2003 Civil Procedure Law art. 526, sec. 3: “The court may still order the creditor to provide a security for the provisional attachment sought despite the fact that the preliminary showing of the claim and the ground for the provisional attachment has been made by the creditor.”

<sup>258</sup> It is a stable opinion of the Supreme Court. *See, e.g.*, 2006-Tai-Kan-621 (Supreme Court 2006); 2005-Tai-Kan-792 (Supreme Court 2005); 2004-Tai-Kan-937 (Supreme Court 2004); and 2004-Tai-Kan-323 (Supreme Court 2004).

<sup>259</sup> The 2003 Civil Procedural Law, art. 527: “A provisional attachment ruling shall provide that the debtor may be exempt from or move for revocation of the ruling by providing the court-assessed countersecurity or by lodging the amount claimed.”

<sup>260</sup> The Procedure Law for IP Cases, art. 1: “Intellectual property cases shall be adjudicated pursuant to this Act. For matters not provided for under the Act, the laws applicable to civil, criminal or administrative actions, as the case may be, shall govern.”

preliminary injunction is to prevent material harm, to prevent imminent danger, or other similar circumstances with regard to the legal relation in dispute. However, it is still too vague and indefinite.

Regarding the issue of allowing the patent owners to post a bond as a substitute for showing the preliminary evidence in the Old Civil Procedure Law, the Procedure Law for Adjudicating IP Cases changed the rule again (only for the IP-related cases) so that to post bonds can no longer be a substitute or supplement for showing the preliminary evidence. Pursuant to Section 2, Article 22 of the Procedure Law for Adjudicating IP Cases, a movant of preliminary injunction bears the burden of showing the preliminary evidence to prove that it is necessary to prevent material harm or imminent danger or other similar circumstances with regard to the legal relation in dispute. In case the preliminary evidence is insufficient to prove the essentiality, the court shall deny the motion for preliminary injunction.<sup>261</sup> It is quite different from the rule in the 2003 Civil Procedural Law. Under the Procedure Law for Adjudicating IP Cases, it is no longer possible for the patent owner to merely post a bond to substitute or compensate the failure or insufficiency of showing the preliminary evidence.

### **3.4.2. Traditional Viewpoint of Preliminary Injunctions in Taiwan Before July, 1, 2008<sup>262</sup>**

1. The Legal Relation in dispute was not considered in the decision of the Preliminary Injunctions

Taiwan follows the continental legal system, in which the courts adjudicating the provisional remedies do not (and shall not) consider the substantial legal relation in dispute.

---

<sup>261</sup> The Procedure Law for Adjudicating IP Cases art. 22, sec. 2 and sec. 3: “An applicant seeking an injunction maintaining the temporary status quo shall provide a preliminary showing proving it is necessary to prevent material harm or imminent danger or other similar circumstances with regard to the legal relation in dispute. The court shall dismiss the application if the preliminary showing is insufficient” and “When the grounds for an application for an injunction maintaining the temporary status quo are demonstrated in the preliminary showing, the court may still order the applicant to provide a bond for granting the injunction.”

<sup>262</sup> The word “traditional” is used to differentiate the new rule in the Procedure Law for Adjudicating IP Cases, which became effective on July 1, 2008. The new rule will be mentioned later.



Accordingly, the courts adjudicating the preliminary injunction motions do not consider the factor of “likelihood of success on the merits” which is one of the four equity factors in the legal system of the United States.

The patent dispute was not an exception before the Procedure Law for Adjudicating IP Cases became effective. Before July 1, 2008, the courts adjudicating the motions for preliminary injunction considered only the irreparable harm or imminent danger in the absence of preliminary injunction. The factor of “likelihood of infringement” or “likelihood of success” should not be considered by the courts in the preliminary injunction procedure before the establishment of the IP Court.<sup>263</sup>

In fact, it is hard to imagine that the courts could judge the “material harm” or “imminent danger” without considering the “likelihood of infringement.” In details, if there is no patent infringement, there will be neither harm nor danger; there will be harm or danger only if there is a possibility of patent infringement. Theoretically, to know the likelihood of patent infringement ought to be the prerequisite of determining the “material harm” or “imminent danger”.

Therefore, it is incredible for previous Taiwanese courts to adjudicate the motions for preliminary injunction without considering the likelihood of infringement. In fact, since the effect of the preliminary injunction is quite similar to that of the permanent injunction<sup>264</sup>, the determination of the preliminary injunction needs to be very cautious. Because the court made the decisions without the knowledge of the likelihood of infringement, it's more likely

---

<sup>263</sup> In Taiwan's practice before July 1, 2008, if the defendant argued that he did not infringe the applicant's patent rights in the court of preliminary injunction, the Judge would tell him that he could argue the legal relation only in the court on the merits; “in my court, I do not consider the legal relation.”

<sup>264</sup> As soon as a preliminary injunction is granted to a patent owner and compulsorily executed by the district courts, the defendant is prohibited to continuously manufacture and/or sell the product(s) in dispute unless the preliminary injunction is lifted or withdrawn. The preliminary injunction will be lifted only if it is vacated by the courts, or the patent owner loses the lawsuit on the merits later. If the patent owners win the civil lawsuit later, the permanent injunction will be automatically granted like the circumstance of the United States before the *eBay* case. Accordingly, the effect of the preliminary injunction is similar to that of the permanent injunction.

for previous Taiwanese courts to make wrongful decisions than in the United States. This dissertation will further address this issue in details in Section 3 of this Chapter.

## 2. Empirical Study of Preliminary Injunctions of Patent Cases before July 1, 2008

As mentioned, it is dangerous to determine whether to grant a preliminary injunction without knowing the likelihood of infringement and patent validity. It is valuable to realize how the courts adjudicated the preliminary injunctions without reviewing the likelihood of infringement. For this purpose, this dissertation reviews the decisions of the preliminary injunctions, a total of 19 cases, made by the Supreme Court in the period between January 1, 2006 and December 31, 2007 as follows:

### (1) The Cases Granting Preliminary Injunctions

The Supreme Court granted the preliminary injunctions in 11 of the 19 cases. Among the 11 cases, eight of them are “normal preliminary injunctions,” and three of them are “reversed preliminary injunctions.” The “normal preliminary injunctions” mean the proceedings which are initiated by the patent owners, seeking to prohibit the defendant from manufacturing or selling the accused product continuously. The “reversed preliminary injunctions” mean the procedures which are initiated by the defendants, seeking that the patent owners should tolerate the movants to continuously manufacture and/or sell the accused product.

The empirical study shows that the compulsory execution of the normal preliminary injunctions allows the patent owner to stop the defendant from continuously manufacturing and selling the accused products. In order to compulsorily execute the normal preliminary injunctions, the patent owners usually need to deposit a bond in advance. However, except for two unclear cases,<sup>265</sup> the cases granting the normal preliminary injunctions allowed the

---

<sup>265</sup> They are 2006-Tai-Kan-156 (Supreme Court, 2006) and 2006-Tai-Kan-523 (Supreme Court, 2006). The opinions of these two decisions did not state whether to grant the defendants to lift the compulsory

defendants to deposit a counter-bond to lift the compulsory execution of the normal preliminary injunctions. Such decision made both parties deposit bonds to the court, and the defendants could still continue to manufacture and sell the accused products.

A review of the cases revealed that the main reason for allowing the defendants to deposit the counter-bonds to lift the compulsory executions of the preliminary injunctions is to avoid the potential irreparable harms to the defendants.<sup>266</sup> The Supreme Court held in many cases that any harm to the patent owners could always be compensated by the monetary remedy if the motions for preliminary injunction were not granted or the court's decisions allowed the defendants to deposit the counter-bonds to lift the compulsory executions of the preliminary injunctions.<sup>267</sup> On the other hand, the harm to the defendants, such as loss of clients and goodwill, might be irreparable if the courts wrongfully granted the preliminary injunctions but did not allow the defendant to deposit the counter-bonds to lift the preliminary injunctions.<sup>268</sup>

The Supreme Court of Taiwan has a very special opinion stating that "The final purpose of the patent owner seeking for a preliminary injunction is to recover its damages; naturally, the damages can always be compensated by the monetary remedy."<sup>269</sup> Based on the special opinion, the Supreme Court reached the conclusion that any harm to the patent owners, such as loss of profits, can be recovered by monetary remedy, if the patent owners finally prevail in the underlying infringement litigation on the merits but the court did not grant the motion for preliminary injunction at the beginning of the patent dispute.

---

execution of the preliminary injunctions by depositing a counter-bond. Because the preliminary injunction decisions of the district courts and high courts were not published, this dissertation is not able to realize whether the counter-bonds were granted by the courts.

<sup>266</sup> See, e.g., 2007-Tai-Kan-154 (Supreme Court, 2007), 2006-Tai-Kan-575 (Supreme Court, 2006), 2006-Tai-Kan-522 (Supreme Court, 2006), 2006-Tai-Kan-268 (Supreme Court, 2006), 2006-Tai-Kan-241 (Supreme Court, 2006), and 2007-Tai-Kan-667 (Supreme Court, 2007).

<sup>267</sup> 2006-Tai-Kan-575 (Supreme Court, 2006)

<sup>268</sup> 2006-Tai-Kan-522 (Supreme Court, 2006)

<sup>269</sup> 2007-Tai-Kan-667 (Supreme Court, 2007)

With regard to the three cases of the reversed preliminary injunctions,<sup>270</sup> the movants are the reverse parties of the patent owners. When the adverse party has been threatened by the patent owner by an actual notice, the adverse party has the standing to move for preliminary injunction. If a preliminary injunction is granted by the courts, the patent owner has to endure the adverse party to continuously manufacture and/or sell the accused products.

In these three decisions, the motions for preliminary injunction were granted, so that the patent holders should endure the movants to continuously manufacture and/or sell the accused products. Each movant was ordered to deposit a bond in order to compulsorily execute the preliminary injunction, which was to secure the potential damages of the patent owner if the patent owner finally prevailed in the underlying infringement litigation. In these three decisions, the patent owners were not allowed to post a counter-bond to lift the preliminary injunction.

## (2) The Cases Denying Preliminary Injunctions

The Supreme Court denied the preliminary injunctions in 8 of the 19 cases. A review of these eight cases shows that the major legal ground for the Supreme Court to adjudicate the preliminary injunction cases is to consider whether the two parties will cause irreparable harm as follows: (1) whether the adverse party (defendant) will incur irreparable harm if the preliminary injunction is granted; and (2) whether the patent owner will incur irreparable harm if the preliminary injunction is denied.<sup>271</sup> To review the factor of “irreparable harm”, the Supreme Court examined: (1) whether the potential injuries of the adverse party can be recovered if the preliminary injunction is granted but the adverse party prevails in the underlying patent infringement litigation; (2) whether the potential injuries of the patent owner can be recovered if the preliminary injunction is not granted but the patent owner

---

<sup>270</sup> 2006-Tai-Kan-566 (Supreme Court, 2006), 2007-Tai-Kan-183 (Supreme Court, 2007), and 2006-Tai-Kan-462 (Supreme Court, 2006).

<sup>271</sup> O<sub>2</sub> Micro v. HP, 2006-Tai-Kan-161 (Supreme Court, 2006).

prevails in the underlying infringement litigation.<sup>272</sup>

The review of these eight cases shows that the Supreme Court did not grant the preliminary injunction by reasons that: (1) the injuries of the patent owners can always be recovered by the monetary remedies even if the patent owners prevail in the underlying infringement litigation; and (2) the harm to the adverse parties generally cannot be recovered by the monetary remedies if the adverse parties prevail in the underlying infringement litigation. Some examples of the irreparable harm mentioned by the Supreme Court are the suspension of manufacture and sales, breach of contracts, losses of goodwill and credit, losses of clients' purchase orders, and the lapse of market power.<sup>273</sup>

For example, in the *O<sub>2</sub> Micro v. HP* case<sup>274</sup>, the Supreme Court found that the patentee-movant O<sub>2</sub> Micro did not practice the patented technology for mass production. Instead, O<sub>2</sub> Micro licensed the patent-in-suit to a licensee to collect the licensing fee and royalty. The Supreme Court further examined whether the injuries of the patentee-movant and the defendant can be recovered by the monetary remedies as follows. If the preliminary injunction is not granted but the patent owner prevails in the underlying infringement litigation, the loss of licensing fee of the patentee-movant is US \$10 for each sale of the accused products.<sup>275</sup> On the other hand, if the preliminary injunction is granted but the adverse party prevails in the underlying patent infringement litigation, the lost profit of the adverse party is NT \$1991 (about US \$650) for each sale of the accused products, and the total loss of annual revenue will be up to NT \$667 Million (about US \$33 Million).<sup>276</sup> For this reason, the Supreme Court reached the conclusion that the injuries suffered by the adverse party will be much larger than those of the patentee-movant. Accordingly, the Supreme

---

<sup>272</sup> *Id.*

<sup>273</sup> 2007-Tai-Kan-327 (Supreme Court, 2007) and 2007-Tai-Kan-266 (Supreme Court, 2007).

<sup>274</sup> *Supra* note 271.

<sup>275</sup> *Id.*

<sup>276</sup> *Id.*

Court held that the injuries of O<sub>2</sub> Micro could be relatively compensated by monetary damages even if HP would be held patent infringement in the underlying infringement litigation, and thus denied the motion for preliminary injunction.<sup>277</sup>

The company size of the adverse party was sometimes considered to evaluate whether the compulsory execution is possible if the patent owner prevails in the underlying infringement litigation.<sup>278</sup> In the *Eli Lilly v. ScinoPharm* case<sup>279</sup>, the Supreme Court said that the adverse party ScinoPharm Taiwan Ltd., a manufacturer of active pharmaceutical ingredients, was a company with quite financial capability and goodwill.<sup>280</sup> Therefore, there would be no problem for the patentee-movant to conduct the compulsory execution if the patentee prevails in the underlying infringement litigation. On the other hand, if the preliminary injunction was granted, the manufacture, sales, importation and exportation of the accused products would be totally terminated.<sup>281</sup> The harms suffered by the adverse party, such as loss of goodwill, the lapse of market power, breach of contracts, losses of clients' purchase orders and credit, would not be recovered by the monetary damages. Accordingly, the Supreme Court denied the motion for preliminary injunction.<sup>282</sup>

In particular, in the *KingPak Technology v. ATP Electronics* case, the Supreme Court did not grant the preliminary injunction on the grounds that there was no imminent danger to be prevented. The reasoning of the Supreme Court was to consider the facts and findings that: (1) the sales volume of the patent owner was still significantly growing; and (2) the patent owner did not move for preliminary injunction until the two-year statute of limitation was about to lapse.<sup>283</sup>

---

<sup>277</sup> *Id.*

<sup>278</sup> *Eli Lilly and Company v. ScinoPharm Taiwan Ltd.*, 2007-Tai-Kan-266 (Supreme Court, 2007).

<sup>279</sup> *Id.*

<sup>280</sup> *Id.*

<sup>281</sup> *Id.*

<sup>282</sup> *Eli Lilly and Company v. ScinoPharm Taiwan Ltd.*, 2007-Tai-Kan-266 (Supreme Court, 2007).

<sup>283</sup> 2006-Tai-Kan-780 (Supreme Court, 2006).

Although the courts did not review the factor of “likelihood of infringement” in the procedure of preliminary injunctions before July 1, 2008, most movants and defendants post legal opinions by external experts to the courts to support their infringement or non-infringement arguments. However, few courts accepted the expert reports as important evidence for the determination of preliminary injunction.

The most particular case, *Rohm v. Aimtron*,<sup>284</sup> is worth introducing. The Supreme Court in this case mentioned that the four factors: “irreparable harm,” “balance of hardship,” “public interest,” and “likelihood of infringement,” should be reviewed in adjudicating the motion for preliminary injunction. This is the first case to consider the four factors in Taiwan. After the adjudication, the Supreme Court denied the motion for preliminary injunction by accepting the non-infringement conclusion made by an external expert engaged by the district court.<sup>285</sup>

In conclusion, before July 1, 2008, it was hard for the patent owners to obtain a preliminary injunction in Taiwan. The Supreme Court either denied the motions for preliminary injunction, or granted the preliminary injunctions but also allowed the defendants to deposit a counter-bond to lift the compulsory executions of the preliminary injunction. The opinion of the Supreme Court was based on the following two special concepts: (1) the harm of the patent owners can always be recovered by the monetary relief if the preliminary injunction is wrongfully denied; and (2) the damages of the defendant can be irreparable if the preliminary injunction is wrongfully granted.

This dissertation also conducts an empirical study at the judicial database of LawBank<sup>286</sup> during the period of January 1, 2003 to Oct. 31, 2012, with the searching key

---

<sup>284</sup> Rohm Co., Ltd, v. Aimtron Technology Corp., 2006-Tai-Kan-231 (Supreme Court, 2006).

<sup>285</sup> *Id.*

<sup>286</sup> LawBank is the largest judicial database in Taiwan, whose website is <http://www.lawbank.com.tw/>.

words of “independent invention”<sup>287</sup>, finding that there were no defendants arguing for independent invention in the preliminary injunction proceedings. Therefore, no decisions considered whether to accept the independent invention defense in the preliminary injunction proceedings.

### 3.4.3 New System of the Preliminary Injunctions in Taiwan

#### 1. Is it Possible to Change?

This circumstance *may* be changed after the establishment of the IP Court. Under the Procedure Law for Adjudicating IP Cases, the requirement of moving for preliminary injunction is to prevent material harm, to prevent imminent danger, or other similar circumstances with regard to the legal relation in dispute. However, it is still too vague and indefinite.

As soon as the establishment of the IP Court and the effectiveness of the Procedure Law for Adjudicating IP Cases, “Intellectual Property Case Adjudication Rules” were announced by the Judicial Yuan<sup>288</sup> on April 24, 2008 and became effective on July 1, 2008. Section 3, Article 37 of the Intellectual Property Case Adjudication Rules states that the courts should review the following four equity factors in the preliminary injunction cases: (1) likelihood of success on the merits; (2) irreparable harm; (3) balance of hardships; and (4) public interest.<sup>289</sup> When the defendant argues that movant’s patent is invalid and provides some pieces of evidence to prove that, the motion for preliminary injunction should be denied

---

<sup>287</sup> The Chinese words are 「獨立研發」、「獨立發明」、「自主研發」、「自主發明」、「自力研發」、「自力發明」.

<sup>288</sup> All 42 Sections were enacted and promulgated on April 24, 2008 by Judicial Yuan Order Yuan Tai Ting Xing 1 Zi No. 0970009012.

<sup>289</sup> The Guidelines for Adjudicating IP Cases, art. 37, sec. 3 mentions that “The court reviewing an application for maintaining the temporary status quo shall, with respect to the necessity of preservation, deliberate on the likelihood of success of the applicant in the principal case in the future, whether the granting or rejection of the application will cause irreparable harm to the applicant or opposing party, balance on the degree of damage to both parties, and impact on public interest”.



if the court found that the patent has a high likelihood of invalidation.<sup>290</sup>

A strange phenomenon thus happened. Similar to the Civil Procedural Law, the requirements of moving for preliminary injunction in the Procedure Law for Adjudicating IP Cases are to prevent material harm, to prevent imminent danger, or other similar circumstances with regard to the legal relation in dispute. Accordingly, the legal relation in dispute (such as patent validity and patent infringement) should not be considered in the adjudication of the preliminary injunctions under the Procedure Law for Adjudicating IP Cases. However, its administrative regulation, the Intellectual Property Case Adjudication Rules, requests the courts to consider the likelihood of invalidation and infringement.

## 2. Empirical Study of Preliminary Injunctions of Patent Cases after July 1, 2008

Anyway, the IP Court applied Section 3, Article 37 of the Intellectual Property Case Adjudication Rules in adjudicating the motion for preliminary injunction.<sup>291</sup> In a patent preliminary injunction proceeding, the IP Court held that the court shall consider the patentee-movant's likelihood of success on the merits while adjudicating the motion for preliminary injunction.<sup>292</sup> More particularly, the IP Court mentioned that in order to determine the likelihood of success on the merits, the procedure of adjudicating the preliminary injunction case shall be as completely as the procedure of hearing the infringement litigation case.<sup>293</sup> Accordingly, the IP Court investigated the evidences, heard the arguments of both parties, and allowed the defendant challenging the validity of the patent-in-suit on the ground of Section 4, Article 37 of the Intellectual Property Case Adjudication Rules. The IP Court finally held that the motion for preliminary injunction should be denied because the patentee-movant had not established the likelihood of success,

---

<sup>290</sup> The Guidelines for Adjudicating IP Cases, art. 37, sec. 4.

<sup>291</sup> 2008-Min-Zhuan-Kang-19 (IP Court, 2008).

<sup>292</sup> *Id.*

<sup>293</sup> *Id.*

even if the patentee-movant had been willing to provide security bond and had shown the likelihood of irreparable harm.<sup>294</sup> This dissertation notes that this decision made a large progress in the patent practice of Taiwan.

In the *PTE v. Elan* case, PTE. Ltd. (“PTE”) was the patent owner of the R.O.C. Patent 207,503. PTE filed a motion for preliminary injunction against Elan Microelectronics Corp. (“Elan”) at the Hsin-Chu District Court. Since the Hsin Chu District Court denied the motion for preliminary injunction, PTE appealed to the IP Court.<sup>295</sup>

When adjudicating this preliminary injunction case, the IP Court considered the four equity factors one by one as follows. Firstly, with regards to the factor of likelihood of success on the merits, the IP Court held that PTE failed to prove the likelihood of patent infringement. Although PTE had provided two infringement assessment reports, the IP Court noted that these two assessment reports were not convincing enough to prove the patent infringement.

Secondly, with regards to the factor of irreparable harm, the IP Court disfavored PTE on the reason that PTE failed to prove its losses of market share and revenue resulting from the accused products sold by Elan. As found by the IP Court, PTE’s market share had been decreased season after season before Elan sold the accused products because there had already been a large number of direct competitors on the relevant market such as Intel, IBM and HP. Furthermore, the sales of PTE’s patented products did not share a high ratio of its revenue, so the IP Court held that it was difficult to conclude that PTE would suffer irreparable harm in the absence of preliminary injunction.<sup>296</sup>

With regards to the factor of balance of hardships, the IP Court favored Elan again by reason that the accused products shared a relatively high ratio of Elan’s revenue. The IP

---

<sup>294</sup> *Id.*

<sup>295</sup> 2009 Tai-Kang 713 (Supreme Court, 2009).

<sup>296</sup> *Id.*

Court found that Elan would suffer irreparable harm if the preliminary injunction was awarded to PTE.<sup>297</sup>

Finally, with regards to the factor of public interest, the IP Court favored Elan again by reason that Elan's accused products shared about 70% of the market and was at least 50% cheaper than other products in the market. The IP Court concluded that the market would be short of the products (mouse for computer use) and the price of the products would get higher if the preliminary injunction was granted. For those reasons, the IP Court affirmed the decision of the Hsin-Chu District Court and thus denied the preliminary injunction.<sup>298</sup>

### **3.5 Compensations to the Wrongfully-enjoined Defendants**

#### **3.5.1 Issues from a Wrongful Preliminary Injunction**

##### **1. The Definition of Wrongful Preliminary Injunction**

As mentioned before, the motion for preliminary injunction is generally filed by the patentee-movant together with or shortly before/after filing the complaint of the patent infringement litigation. Before the final decision of the patent litigation on the merits, preliminary injunction provides a provisional measure for the patent owner to enjoin the defendant from continuously infringing the patent right.

In fact, the preliminary injunction order is fallible. Although the district court needs to consider the "likelihood of success on the merits" while adjudicating the motion for preliminary injunction, the court has neither time nor detailed procedures to completely ensure the patent validity and the patent infringement.<sup>299</sup> Therefore, the defendant generally does not have enough opportunities to completely raise the invalidity and non-infringement

---

<sup>297</sup> *Id.*

<sup>298</sup> *Id.*

<sup>299</sup> According to TRIPS art. 50(3), the adjudication of the preliminary injunction needs only to reach a sufficient degree of certainty that the movant is the right owner and that the movant's patent right is being infringed or that such infringement is imminent.

defenses on the preliminary injunction proceeding.<sup>300</sup> Therefore, the decisions of preliminary injunction are only a preliminary determination of the patent validity and patent infringement in the patent infringement cases. Since the decision of granting preliminary injunction is fallible<sup>301</sup>, it is possible to be revoked by the following judicial decision by holding patent invalidity, non-infringement, or other reasons. This article defines the wrongful preliminary injunction to be the preliminary injunction which had been granted and compulsorily executed but was revoked later by the final judicial decision.

As long as the preliminary injunction is granted and compulsorily executed by the district court, the defendant can no longer manufacture, sell, or use the patented product or use the patented process. Therefore, the wrongfully-enjoined defendants generally suffer significant injuries as a result of the wrongful preliminary injunction. Hence, a legal issue arises: the patentee-movant's liability for wrongful preliminary injunction.

## 2. The Bond Requirement of Preliminary Injunction Under the TRIPS Agreement

To protect the defendants and to prevent abuse of patent rights, the TRIPS agreement requests the members to authorize the judicial authorities to order the patent holder to provide a security or equivalent assurance in order to execute the granted preliminary injunction.<sup>302</sup> Regarding the indemnification of the wrongfully-enjoined defendants, where the preliminary injunction is revoked or where it is subsequently found that there has been no patent infringement, the TRIPS agreement requests the members to authorize the judicial authorities

---

<sup>300</sup> See J.H. Reichman, *Comments: Enforcing the Enforcement Procedures of the TRIPS Agreement*, 37 VA. J. INT'L L. 335, 341 Fn 29 (1997), mentioning that "This article (TRIPS Agreement, art. 50(1)) obliges states to allow local judiciaries to order "provisional measures" even without a prior hearing of the alleged infringers..."

<sup>301</sup> TRIPS art. 50(4): "Where provisional measures have been adopted *inaudita altera parte*, the parties affected shall be given notice, without delay after the execution of the measures at the latest. A review, including a right to be heard, shall take place upon request of the defendant with a view to deciding, within a reasonable period after the notification of the measures, whether these measures shall be modified, revoked or confirmed."

<sup>302</sup> TRIPS art. 50(3): "The judicial authorities shall have the authority to require the applicant to provide any reasonably available evidence in order to satisfy themselves with a sufficient degree of certainty that the applicant is the right holder and that the applicant's right is being infringed or that such infringement is imminent, and to order the applicant to provide a security or equivalent assurance sufficient to protect the defendant and to prevent abuse."

to order the patent owner, upon request of the defendant, to provide the defendant appropriate compensation for any injury caused by the preliminary injunction<sup>303</sup>. In addition, TRIPS agreement requests the members to authorize the judicial authorities to provide adequate compensation and expenses including appropriate attorney's fee to the wrongfully-enjoined defendant if the patent holder abused the enforcement procedures to request the injunctive relief.<sup>304</sup>

However, the TRIPS agreement does not regulate the factors causing the patentee-movant of a wrongful preliminary injunction to be liable or the appropriate compensation for the injuries caused by the wrongful preliminary injunction. This article uses a comparative study and an empirical study to demonstrate that different kinds/degrees of liability are imposed on patentee-movants in different parts of the world, focusing on the United States, PRC and Taiwan.

### **3.5.2 The Compensations to the Wrongfully-enjoined Defendants-- A Comparative Study**

#### **1. The United States**

Pursuant to Rule 65 (a)<sup>305</sup> of the Federal Rules of Civil Procedure of the United States, the district court may issue a preliminary injunction. Further, Rule 65 (d) (1)<sup>306</sup> requests

---

<sup>303</sup> TRIPS art. 50(7): "Where the provisional measures are revoked or where they lapse due to any act or omission by the applicant, or where it is subsequently found that there has been no infringement or threat of infringement of an intellectual property right, the judicial authorities shall have the authority to order the applicant, upon request of the defendant, to provide the defendant appropriate compensation for any injury caused by these measures."

<sup>304</sup> TRIPS art. 48(1): "The judicial authorities shall have the authority to order a party at whose request measures were taken and who has abused enforcement procedures to provide to a party wrongfully enjoined or restrained adequate compensation for the injury suffered because of such abuse. The judicial authorities shall also have the authority to order the applicant to pay the defendant expenses, which may include appropriate attorney's fees."

<sup>305</sup> Rule 65 (a) of the Federal Rules of Civil Procedure: "(1) Notice: The court may issue a preliminary injunction only on notice to the adverse party; (2) Consolidating the Hearing with the Trial on the Merits: Before or after beginning the hearing on a motion for a preliminary injunction, the court may advance the trial on the merits and consolidate it with the hearing. Even when consolidation is not ordered, evidence that is received on the motion and that would be admissible at trial becomes part of the trial record and need not be repeated at trial. But the court must preserve any party's right to a jury trial."

<sup>306</sup> Rule 65 (d) (1) of the Federal Rules of Civil Procedure: "Every order granting an injunction and every restraining order must: (A) state the reasons why it issued; (B) state its terms specifically; and (C) describe in

that every order granting an injunction must state the reasons why it is issued and its terms specifically, and describe in reasonable detail the act or acts restrained or required.

Regarding the indemnification to the defendant, Rule 65(c) states that to post a security bond is the prerequisite to issue a preliminary injunction<sup>307,308</sup>, in order to ensure that the movant will be able to pay damages that the defendant incurs from the wrongful preliminary injunction.<sup>309,310</sup> The bond assures that the wrongfully-enjoined defendant may be compensated for injuries suffered at the preliminary injunction, without further litigation to claim for damages and without regard to the possible insolvency.<sup>311</sup>

That said, there are other subsequent legal issues. Is the wrongfully-enjoined defendant automatically entitled to the bond when the defendant prevails in the underlying infringement litigation? Shall the defendant still prove the damages? Shall the defendant prove that the damages were proximately caused by the injunction?

Concerning the first issue of whether the wrongfully-enjoined defendant is automatically entitled to the bond when the defendant prevails in the underlying infringement litigation, there are two kinds of approaches in practice in the United States. First, *Coyne-Delany Co. v. Capital Dev. Bd.*<sup>312</sup> in the Seventh Federal Circuit and some other

---

reasonable detail — and not by referring to the complaint or other document — the act or acts restrained or required.”

<sup>307</sup> Rule 65 (c) of the Federal Rules of Civil Procedure: “65(c) Security. No restraining order or preliminary injunction shall issue except upon the giving of security by the applicant, in such sum as the court deems proper, for the payment of such costs and damages as may be incurred or suffered by any party who is found to have been wrongfully enjoined or restrained.”

<sup>308</sup> See Note: *Recovery for Wrongful Interlocutory Injunctions Under Rule 65(c)*, 99 HARV. L. REV. 828, 829 (1986).

<sup>309</sup> *Coyne-Delany Co. v. Capital Dev. Bd.*, 717 F. 2d 385, 390-91 (7<sup>th</sup> Cir. 1983).

<sup>310</sup> In *Edgar v. MITE Corp.*, 457 U.S. 624, 649 (1982) (Stevens, J., concurring in part and concurring in the judgment), Justice Stevens demonstrated the purpose of the injunction bond as: “Since a preliminary injunction may be granted on a mere probability of success on the merits, generally the moving party must demonstrate confidence in his legal position by posting bond in an amount sufficient to protect his adversary from loss in the event that future proceedings prove that the injunction issued wrongfully.”

<sup>311</sup> *The Continuum Company, Inc. v. Incepts, Inc., ABS Ventures II, and ABA Excelsior II*, 873 F.2d 801, 803 (5<sup>th</sup> Cir. 1989).

<sup>312</sup> *Coyne-Delany Co. v. Capital Dev. Bd.*, 717 F. 2d 385 (7<sup>th</sup> Cir. 1983).

cases<sup>313</sup> held that the wrongfully-enjoined prevailing defendant is automatically entitled to damages on the injunction bond unless there is at least one good reason for not asking the movant (the plaintiff on the merits, generally the patentee) to pay the damages in the specific case.<sup>314</sup> The reasoning of *Coyne-Delany* has the following four respects: (1) it is implied by the text of Rule 65 (c); (2) it makes the law more predictable; (3) it discourages the patent owner to seek for preliminary injunction on flimsy grounds<sup>315</sup>; and (4) the bond compensated only a small part of the defendant's damages.<sup>316</sup> *Coyne-Delany* further held that a good reason for not awarding damages to the wrongfully-enjoined defendant is that the defendant failed to mitigate damages.<sup>317</sup>

On the contrary, some other courts, e.g., the Fifth Circuit in *H & R Block, Inc. v. McCaslin*<sup>318</sup> held that the district court has its discretion in denying to award the injunction bond to the wrongfully-enjoined defendant unless the patentee-movant obtained the preliminary injunction in bad faith.<sup>319</sup> The Federal Circuit in the famous design patent case *Hupp v. Siroflex of Am., Inc.*<sup>320</sup> cited *H & R Block* to hold that the court does not need to automatically award the amount of the injunction bond to the wrongfully-enjoined defendant<sup>321</sup>, and thus concluded that the district court's decision not to award the injunction bond to the wrongfully-enjoined defendant was affirmed.

In a very recent case, the First Circuit held that the wrongfully-enjoined defendants were not automatically entitled to the bond, but need to prove their real damages by reason of

---

<sup>313</sup> For example, *Adolph Coors Co. v. A & S Wholesalers, Inc.*, 561 F.2d 807, 814 (10<sup>th</sup> Cir.1977); *Middlewest Motor Freight Bureau v. United States*, 433 F.2d 212, 241 n. 4, 243 (8<sup>th</sup> Cir.1970); and *Atomic Oil Co. v. Bardahl Oil Co.*, 419 F.2d 1097, 1100-03 (10<sup>th</sup> Cir.1969).

<sup>314</sup> *Supra* note 309, at 391.

<sup>315</sup> *Id.* at 392.

<sup>316</sup> *Id.*

<sup>317</sup> *Id.*

<sup>318</sup> *H & R Block, Inc. v. McCaslin*, 541 F. 2d 1098, 1099 (5<sup>th</sup> Cir. 1976).

<sup>319</sup> *Id.*

<sup>320</sup> *Hupp v. Siroflex of Am., Inc.*, 122 F. 3d 1456 (Fed. Cir. 1997).

<sup>321</sup> *Id.* at 1467.

the issuance and execution of the preliminary injunction.<sup>322</sup> With respect to the issue of how to prove the real damages, the First Circuit noted that the wrongfully-enjoined defendant needs only to establish that the predicted harm (as predicted by the court issuing the preliminary injunction) is the actual harm, by approximately estimating the lost revenue by reason of the preliminary injunction. Thus, the First Circuit held that the defendant's proof of damages does not need to be to mathematical certainty.<sup>323</sup>

With regard to the issue of whether the wrongfully-enjoined defendant needs to prove that the damages were proximately caused by the injunction, recently the U.S. Court of Appeals for the Second Circuit in *Nokia Corp. v. InterDigital Inc.*<sup>324</sup> held that the wrongfully-enjoined defendants are entitled to a rebuttable presumption in favor of recovery against the bond for provable damages.

In 2007, InterDigital filed a complaint with the International Trade Commission ("ITC") against Nokia alleging that Nokia had infringed some of its patents. Later, Nokia sued InterDigital in the Southern District Court of New York and moved for preliminary injunction to stay or terminate the ITC's investigation against Nokia. The district court allowed the preliminary injunction and required Nokia to post a \$500,000 bond. InterDigital appealed the preliminary injunction order to the Second Circuit, and the Second Circuit vacated and remanded the case to the district court. Later, the district court dismissed Nokia's complaint.<sup>325</sup> Accordingly, the preliminary injunction became a wrongful injunction.

By alleging that it incurred substantial legal fees and expenses in connection with its

---

<sup>322</sup> *Global NAPs, Inc. v. Verizon New Eng., Inc.*, 489 F. 3d 13, 24 (1<sup>st</sup> Cir. 2007) ("Perhaps if there had been a demonstration that Verizon had failed to mitigate its damages, GNAPs would have had a stronger case that Verizon was not entitled to all of the damages it had suffered."); *see also* *Nintendo of Am., Inc. v. Lewis Galoob Toys, Inc.*, 16 F. 3d 1032, 1036 (9<sup>th</sup> Cir. 1994) ("...we join what appears to be the majority and hold there is a rebuttable presumption that a wrongfully enjoined party is entitled to have the bond executed and recover provable damages up to the amount of the bond.").

<sup>323</sup> *Id.*

<sup>324</sup> *Nokia Corp. v. InterDigital Inc.*, 645 F. 3d 553, 556-57 (2<sup>nd</sup> Cir. 2011).

<sup>325</sup> *Id.* at 555-56.



effort to comply with the preliminary injunction order to stay the ITC proceedings, InterDigital moved to recover against the injunction bond posted by Nokia. The remedy amount sought by InterDigital exceeded the amount of the posted bond.<sup>326</sup>

Nevertheless, the district court denied InterDigital's motion to Recover Against the Preliminary Injunction Bond in March 2010, holding that InterDigital had failed to show that their attorney's fees and expenses were proximately caused by the preliminary injunction. On appeal, InterDigital contended that the district court erred in the following two points. First, the district court should apply a rebuttable presumption in favor of recovery against the bond, but it wrongfully had shifted the burden of establishing entitlement to recovery to InterDigital. Second, the district court erroneously held that InterDigital failed to establish the damages proximately caused by the preliminary injunction.<sup>327</sup>

On appeal, the Second Circuit confirmed that wrongfully-enjoined defendants are entitled to a rebuttable presumption in favor of recovery against the bond posted by the movant for provable damages on the ground of the following reasons. First, the Second Circuit cited the text of the Rule 65 (c) of the Federal Rules of Civil Procedure of the United States and emphasized that the existence of the presumption is significantly implied by the text which allows a court to issue a preliminary injunction order only if the movant provides in an amount that the court thinks to be proper to pay the damages and costs suffered by the wrongfully-enjoined defendant.<sup>328</sup>

Second, the Second Circuit quoted the judgment opinion in *Continuum Co., Inc. v. Incepts, Inc.*<sup>329</sup>, noting that the purpose of the injunction bond is to assure the wrongfully-enjoined defendant that it may readily be awarded damages from the bond without

---

<sup>326</sup> *Id.* at 556.

<sup>327</sup> *Id.*

<sup>328</sup> *Id.* at 558.

<sup>329</sup> *Supra* note 311, at 803.

regard to the possible insolvency of the plaintiff and most importantly without further litigation for claim for damages.<sup>330</sup> In addition, the Second Circuit quoted *Instant Air Freight Co. v. C.F. Air Freight, Inc.*<sup>331</sup> to emphasize that the injunction bond can be deemed as an agreement between the court and the movant, in which the court and the movant agree to the amount of the injunction bond to serve as the price of a wrongful injunction.<sup>332</sup>

Third, the Second Circuit noted that the First<sup>333</sup>, Seventh<sup>334</sup>, Ninth<sup>335</sup>, Eleventh<sup>336</sup> and D.C. Circuits<sup>337</sup> followed the same rule. In conclusion, the Second Circuit confirmed that wrongfully-enjoined defendants are entitled to a rebuttable presumption in favor of recovery against the bond posted by the movant for damages.<sup>338</sup>

Another issue ensues: whether a wrongfully-enjoined defendant can obtain damages in excess of the bond for a wrongful preliminary injunction by proving the real harms. The Ninth Circuit held in *Buddy System, Inc. v. Exer-Genie, Inc.*<sup>339</sup> that there can be no compensation for damages suffered by a wrongful preliminary injunction absent from a bond; the movant's liability is limited by the terms of the bond if the bond is posted.<sup>340</sup> Likewise, the Supreme Court cited *Buddy Systems* in *W.R. Grace & Co. v. Local Union 759* and mentioned that "a party injured by the issuance of an injunction later determined to be erroneous has no action for damages in the absence of a bond."<sup>341</sup>

---

<sup>330</sup> *Supra* note 324, at 557.

<sup>331</sup> *Instant Air Freight Co. v. C.F. Air Freight, Inc.*, 882 F.2d 797, 805 n. 9 (3<sup>rd</sup> Cir.1989).

<sup>332</sup> *Supra* note 324, at 557-58.

<sup>333</sup> *Supra* note 322, at 23 ("We adopt the majority rule that there is a rebuttable presumption that a wrongfully enjoined party is entitled to have the security executed so as to recover provable damages up to the amount of the security.").

<sup>334</sup> *Supra* note 309, at 392 ("In deciding whether to withhold costs or injunction damages the district court [is] to be guided by the implicit presumption in Rule 65(c) in favor of awarding them.").

<sup>335</sup> *Nintendo of Am., Inc. v. Lewis Galoob Toys, Inc.*, 16 F.3d 1032, 1036 (9<sup>th</sup> Cir.1994) ("We join what appears to be the majority and hold there is a rebuttable presumption that a wrongfully enjoined party is entitled to have the bond executed and recover provable damages up to the amount of the bond.").

<sup>336</sup> *Ala. ex rel. Siegelman v. U.S. Envtl. Prot. Agency*, 925 F.2d 385, 390 (11<sup>th</sup> Cir.1991).

<sup>337</sup> *Nat'l Kidney Patients Ass'n v. Sullivan*, 958 F.2d 1127, 1134 (D.C.Cir.1992) ("A defendant injured by a wrongfully issued preliminary injunction is presumptively entitled to recovery on the injunction bond.").

<sup>338</sup> *Supra* note 324, at 558.

<sup>339</sup> *Buddy System, Inc. v. Exer-Genie, Inc.*, 545 F. 2d 1164, 1167 (9<sup>th</sup> Cir. 1976).

<sup>340</sup> *Id.*

<sup>341</sup> *W.R. Grace & Co. v. Local Union 759*, Intern. Union of United Rubber, Cork, Linoleum and Plastic

Accordingly, it is a well-settled rule that the movant's liability is limited to the amount of the posted bond if the preliminary injunction is later determined to be erroneous but not malicious. In other words, the wrongfully-enjoined defendant is unable to obtain damages in excess of the bond unless the patentee-movant was acting in bad faith.<sup>342</sup> The Fifth Circuit was thus of the opinion that one of the functions of the bond is to provide the plaintiff with notice of the maximum amount of its potential liability, because the amount of the bond is the ceiling of the damages the defendant may obtain for the wrongful injunction if plaintiff was acting in good faith.<sup>343</sup> From this respect, to request a patentee-movant to post a bond is to protect the patentee-movant.

An empirical study shows that the bonds ordered by the courts are between US \$400,000 and \$400 million.

(1) Canon Inc. v. GCC International Ltd.

As mentioned, Canon sued GCC alleging patent infringement and filed a motion for preliminary injunction.<sup>344</sup> After adjudication, the district court granted a preliminary injunction and issued an order on the condition that Canon should post a bond in a amount of US \$400,000.<sup>345</sup>

(2) Abbott Laboratories, v. Andrx Pharmaceuticals, Inc.

Abbott sued Andrx alleging patent infringement and moved for a preliminary injunction at the United States District Court for the Northern District of Illinois. The district court granted the preliminary injunction by holding that Abbott had established the likelihood of infringement and Andrx had failed to prove that the '718 patent, the '616 patent and the '407

---

Workers of America, 461 U.S. 757, 770 FN 14 (1983).

<sup>342</sup> *Supra* note 309, at 391.

<sup>343</sup> *Supra* note 311, at 803.

<sup>344</sup> *Supra* note 35, at 246.

<sup>345</sup> *Id.* at 257.

patent were invalid.<sup>346</sup> Abbott was ordered to post a bond in the amount of \$20 million.

(3) Sanofi-Synthelabo v. Apotex

Sanofi sued Apotex alleging patent infringement and also filed a motion for preliminary injunction at the United States District Court for the Southern District of New York. The district court applied the four-factor test in reaching the decision and then granted the preliminary injunction order.<sup>347</sup> The court ordered Sanofi to post a bond in the amount of \$400 million by calculating Apotex's potential lost profits and market share.<sup>348</sup>

(4) Abbott Laboratories v. Sandoz, Inc.

As introduced, Abbott sued Sandoz alleging patent infringement and moved for a preliminary injunction at the United States District Court for the Northern District of Illinois. After adjudication, the district court granted Abbott's motion for preliminary injunction,<sup>349</sup> and ordered Abbott to post a bond in the amount of \$40 million.<sup>350</sup>

2. China

Under the 2009 Chinese Patent Law, the patentee is liable for defendant's damages resulting from the wrongful preliminary injunction.<sup>351</sup> When the defendant prevails in the underlying litigation, the people's court can award the posted bond to the wrongfully-enjoined defendant to compensate for injuries suffered at the preliminary injunction without further litigation.

The *Jiangsu Baite Import & Export Trading Co., Ltd. and Jiangsu Huaian Kangbaite Carpet Co., Ltd. v. ChanYou Su* case<sup>352</sup> in 2008 is an example. ChanYou Su (hereinafter

---

<sup>346</sup> *Supra* note 50.

<sup>347</sup> *Supra* note 53.

<sup>348</sup> *Id.* at 349.

<sup>349</sup> *Supra* note 59.

<sup>350</sup> *Supra* note 60, at 1363.

<sup>351</sup> 2009 Chinese Patent Law art. 66, sec. 5.

<sup>352</sup> *Jiangsu Baite Import & Export Trading Co., Ltd. and Jiangsu Huaian Kangbaite Carpet Co., Ltd. v.*

“Su”) sued Jiangsu Baite Import & Export Trading Co., Ltd. (hereinafter “Baite”) and Jiangsu Huaian Kangbaite Carpet Co., Ltd. (hereinafter “Kangbaite”) at the Nanjing Intermediate People’s Court in 2004 alleging patent infringement, and also filed a motion for preliminary injunction against Baite’s and Kangbaite’s activities of manufacturing and selling the accused products. After adjudication, the Nanjing Intermediate People’s Court granted and issued a preliminary injunction order to enjoin Baite and Kangbaite from manufacturing and selling the accused products.<sup>353</sup>

However, the patent-in-dispute was held invalid by the Patent Re-examination Board of SIPO later. Accordingly, the preliminary injunction was revoked by the Jiangsu High People’s Court in 2006. Baite and Kangbaite filed a lawsuit against Su at the IP Court at the Nanjing Intermediate People’s Court in 2006, claiming for the damages from the wrongful preliminary injunction. After adjudication, the Nanjing Intermediate People’s Court held that Su was liable to Baite’s and Kangbaite’s loss due to the wrongful preliminary injunction, and awarded damages to the amount of RMB \$2,003,315.3.<sup>354</sup> Su appealed, but the Jiangsu High People’s Court affirmed the decision of the Nanjing Intermediate People’s Court.<sup>355</sup>

### 3. TAIWAN

Section 3, Article 22 of the Procedure Law for Adjudicating IP Cases states that “when the grounds for an application for an injunction maintaining the temporary *status quo* are demonstrated in the preliminary showing, the court may still order the applicant to provide a bond for granting the injunction”. Accordingly, it is the discretion of the courts to determine whether to request the movants to post a bond, so to post a bond is not a requirement for a movant-patentee to obtain a preliminary injunction. Nevertheless, the courts in Taiwan

---

ChanYou Su, Su-Ming-3-Final No. 0071 (Jiangsu High People’s Court, 2008).

<sup>353</sup> *Id.*

<sup>354</sup> Jiangsu Baite Import & Export Trading Co., Ltd. and Jiangsu Huaian Kangbaite Carpet Co., Ltd. v. ChanYou Su, Ning-Ming-3-First No. 382 (Nanjing Intermediate People’s Court, 2006).

<sup>355</sup> *Supra* note 352.

generally request the movant-patentees to post a bond to secure the defendants, even if the movant-patentees have shown the preliminary evidence to prove the essentiality of granting a preliminary injunction.

According to Articles 531, 533, and 538-4 of the Civil Procedure Law, the movant shall compensate the defendant for any losses incurred from the preliminary injunction if: (1) where the movant herself or himself moves for revocation of the preliminary injunction; (2) where the movant has failed to file the underlying litigation within the designated period of time; or (3) where a preliminary injunction is revoked by reason of being improper *ab initio*. According to Article 538-3 of the Civil Procedure Law, however, if the movant can prove his or her non-negligence, the court has the discretion to mitigate or even release the movant's liability.<sup>356</sup> Accordingly, the law shifts the burden of proving non-negligence to the movant.

However, all of the three circumstances mentioned above are difficult to be satisfied. In details, the first circumstance is difficult to be satisfied because it is rare for a movant to move for revocation of the preliminary injunction by herself or himself. The second circumstance is rare to be met because few movants will fail to file the underlying litigation within the designated period of time. According to Taiwan's court precedent, the third circumstance can be satisfied only when the preliminary injunction is revoked in the interlocutory appeal proceedings to the preliminary injunction decision.<sup>357</sup>

The *Santa Electronics v. Hon-Hai* case<sup>358</sup> is an example regarding that the preliminary injunction is revoked in the interlocutory appeal proceedings to the preliminary injunction decision. Hon Hai filed a motion for preliminary injunction against Santa Electronics at the Shi-Lin District Court in 2006. After the adjudication without examining the likelihood of

---

<sup>356</sup> 2003 Civil Procedure Law art. 538-3 states that "where a ruling for an injunction maintaining a temporary status quo is revoked by reason of the provision of Article 531, and the movant is thus held liable for damages, upon movant's proof of no fault on his/her part, the court may in its discretion lessen or discharge the applicant's liability".

<sup>357</sup> For example, IP Court—(2010) Ming-Kung-Shan No. 3.

<sup>358</sup> *Santa Electronics v. Hon-Hai Precision Ind. Co., LTD*, 2008-Min-Ta-Shang 2 (IP Court, 2008).

success on the merits, the Shi-Lin District Court granted and issued a preliminary injunction order. Before compulsorily executing the preliminary injunction order, Hon Hai announced to the public that the preliminary injunction against Santa Electronics had been granted, such that Santa Electronics' clients stopped purchasing the accused products from Santa Electronics. However, the preliminary injunction was revoked by the court of appeal and the Supreme Court later.<sup>359</sup>

Later, Santa Electronics filed a lawsuit against Hon Hai at the Ban-Chiao District Court in 2007, claiming damages for the sales loss during the execution period of preliminary injunction on the legal ground of Articles 531 and 533 of the Civil Procedural Law<sup>360</sup>. Although the Ban-Chiao District Court dismissed the case, Santa Electronics appealed to the IP Court. After adjudication, the IP Court held that the original preliminary injunction order had been wrongful, so Santa Electronics should be awarded a damage to compensate the sales loss during the period of the preliminary injunction in the amount of NT 3,160,000.<sup>361</sup>

However, if the wrongfully-enjoined defendant prevails in the underlying infringement litigation so as to revoke the preliminary injunction, the third circumstance is not satisfied.<sup>362</sup> Accordingly, in case the preliminary injunction is revoked on the reason that the wrongfully-enjoined defendant prevails in the underlying infringement litigation, Articles 531, 533, and 538-4 of the Civil Procedure Law are not sufficed, so the movant does not need to compensate the defendant for any losses incurred from the preliminary injunction.

---

<sup>359</sup> *Id.*

<sup>360</sup> Article 531 of the Civil Procedural Law states that “Where a provisional attachment ruling is revoked either by reason of being improper *ab initio* or by reason of the provisions of the fourth paragraph of Article 529 or the third paragraph of Article 530, the creditor shall compensate the debtor for any losses incurred from the provisional attachment or the provision of a countersecurity.

Where an action has been initiated with regard to the claim secured by the provisional attachment, the court of first instance shall, on the debtor's motion made before the conclusion of the oral argument, order the creditor to make the compensation provided in the preceding paragraph in the judgment on the principal case. The court shall inform the debtor of the availability of such motion if he/she has not done so”, and article 531 of the Civil Procedural Law states that “The provisions pertaining to provisional attachment shall apply *mutatis mutandis* to provisional injunction except as otherwise provided in Article 535 and Article 536”.

<sup>361</sup> *Supra* note 358.

<sup>362</sup> *Id.*

### 3.5.3 Wrongfully-enjoined Defendants are Commonly Under-compensated in Taiwan

As mentioned above, in the United States the movant's liability is limited to the amount of the posted bond if the preliminary injunction is later determined to be erroneous but not malicious. Therefore, the wrongfully-enjoined defendant is generally unable to obtain damages in excess of the posted bond unless the patentee-movant was acting in bad faith. However, a scholar pointed out that the amount of the bond is generally under-estimated, because the court determines the bond at the very early stage of the patent dispute and it is quite hard for the defendant to argue and prove the expected harms and costs before the preliminary injunction is issued.<sup>363</sup>

Although the wrongfully-enjoined defendants are not automatically entitled to the bond and the movant's liability is limited to the amount of the posted bond when the defendant prevails in the underlying litigation in the United States, at least the wrongfully-enjoined defendants are entitled to a rebuttable presumption in favor of recovery against the bond for provable damages. Most importantly, when the wrongfully-enjoined defendants prevail in the underlying litigation and prove the harms during the preliminary injunction, they can be directly awarded the bond in the same lawsuit, without the need to file another lawsuit to claim for the damages.

Moreover, although the movant's liability is also limited to the amount of the bond and the wrongfully-enjoined defendants are not entitled to a rebuttable presumption in favor of recovery against the bond for provable damages in China, at least when the wrongfully-enjoined defendants in China prevail in the underlying litigation and prove the harms during the preliminary injunction, they can be directly awarded the bond in the same lawsuit, without the need to file another lawsuit to claim for the damages.

---

<sup>363</sup> Ofer Grosskopf and Barak Medina, *Remedies for Wrongfully-Issued Preliminary Injunctions: The Case for Disgorgement of Profits*, 32 SEATTLE U.L. REV. 903, 908 (2009).



In contrast, in Taiwan, when the wrongfully-enjoined defendant prevails in the underlying infringement litigation, the court of the underlying infringement litigation has no discretion to award the bond to the wrongfully-enjoined defendant directly. In other words, a wrongfully-enjoined defendant in Taiwan needs to file another lawsuit to claim for damages even if the patentee-movant has posted a bond.

However, it is very difficult for a wrongfully-enjoined defendant in Taiwan to win the lawsuit claiming for damages. In order to win the lawsuit claiming for damages, the wrongfully-enjoined defendant in Taiwan needs to prove that: (1) the patentee-movant has the intent or is negligent; (2) to conduct an illegal activity; (3) to harm the wrongfully-enjoined defendant; and (4) there is a proximate causation between the patentee-movant's illegal activity and the injury suffered by the wrongfully-enjoined defendant.<sup>364</sup>

Before late 2010, none of the wrongfully-enjoined defendants in the patent-related preliminary injunction cases were awarded the bonds posted by the patentee-movants after the wrongfully-enjoined defendants prevailed in the underlying infringement litigations. This dissertation demonstrates that this phenomenon has been existing for a long time and thus directs the patent preliminary injunction to be abused in Taiwan. The reasons have the following four respects. First, it is quite hard for the wrongfully-enjoined defendants to prove the intent or negligence of the patentee-movants. The patentee-movants generally contend that they have neither intent nor negligence because they found patent infringement and moved for a preliminary injunction on the ground of the Patent Law, the Civil Procedure Law and the Procedure Law for Adjudicating IP Cases.

Second, it is still difficult for the wrongfully-enjoined defendants to prove that the patentee-movants conducted an illegal activity. The patentee-movants again contend that

---

<sup>364</sup> Civil Law art. 184, sec. 1 states that "A person who, intentionally or negligently, has wrongfully damaged the rights of another is bound to compensate him for any injury arising therefrom. The same rule shall be applied when the injury is done intentionally in a manner against the rules of morals."

they moved for a preliminary injunction on the ground of the Patent Law, the Civil Procedure Law and the Procedure Law for Adjudicating IP Cases and the preliminary injunction orders were issued by the courts, and thus assert that it shall never be illegal to conduct an activity based on laws and court's decision.

Third, sometimes the injury of the wrongfully-enjoined defendant is difficult to prove. It may be possible to prove the injury if the accused product had been entered into the market but later was enjoined by the preliminary injunction order, by counting the sales loss during the period of the wrongful preliminary injunction. However, if the accused product (for example, a generic drug under the clinic trial) had not yet been released to the market but was enjoined by the wrongful preliminary injunction, it would be difficult for the wrongfully-enjoined defendant to prove the injury during the preliminary injunction.

Fourth, even if the wrongfully-enjoined defendants are able to prove the injury during the preliminary injunction, it is still difficult for them to prove proximate causation between the patentee-movant's illegal activity and the injury suffered by the wrongfully-enjoined defendant.

For those reasons, before late 2010, none of the wrongfully-enjoined defendants in the patent-related preliminary injunction cases in Taiwan were awarded the bond after the wrongfully-enjoined defendants prevailed in the underlying infringement litigations.

For example, Takeda Pharmaceutical Company Limited. (hereinafter "Takeda") is the patent owner of Taiwan Patent no. 135,500 (hereinafter "the '500 patent"). Takeda filed a motion for preliminary injunction against China Chemical & Pharmaceutical Co., Ltd. (hereinafter "CCPC") at the Taipei District Court, alleging that CCPC's Glitos Product with the ingredient Pioglitazone infringed the '500 patent. After reviewing the motion, the Taipei District Court denied the preliminary injunction by holding that the '500 patent lacked

novelty and CCPC's Glitos Product did not infringe the '500 patent.<sup>365</sup> On appeal, the Taiwan High Court noted that the preliminary injunction proceeding does not need to consider substantial legal relationship such as patent validity and infringement, and that only the purposes of preventing material harm and preventing imminent danger should be considered in the preliminary injunction proceeding. Accordingly, the Taiwan High Court reversed and granted a preliminary injunction by requesting Takeda to post an NT\$123 million bond.<sup>366</sup> The preliminary injunction order was compulsorily executed on June 6, 2008 to enjoin CCPC from manufacturing, selling, and importing the accused product.<sup>367</sup>

Both Takeda and CCPC then appealed. The Supreme Court affirmed, and further held that the court may consider allowing CCPC to post a counter-bond to lift the compulsory execution of the preliminary injunction.<sup>368</sup> Based on the opinion of the Supreme Court, CCPC filed a motion for posting a counter-bond and lifting the execution of the preliminary injunction at the IP Court, and the IP Court granted.<sup>369</sup> Accordingly, the compulsory execution of the preliminary injunction was lifted on Nov. 13, 2008.<sup>370</sup> From June to November, the compulsory execution of the preliminary injunction persisted for around 5 months.

At the same time, Takeda filed a lawsuit against CCPC at the IP Court alleging patent infringement. However, the IP Court (the first instance) disfavored Takeda by holding that the validity of the '500 patent was doubtful and CCPC's Glitos Product did not infringe the '500 patent.<sup>371</sup> Takeda appealed, but the IP Court (the second instance) affirmed the decision of the first instance.<sup>372</sup>

---

<sup>365</sup> 97-Tai-Kan-561 (Supreme Court, 2008).

<sup>366</sup> *Id.*

<sup>367</sup> 98-Ming-Ta-Suit-1 (IP Court, 2009).

<sup>368</sup> *Supra* note 365.

<sup>369</sup> *Supra* note 367.

<sup>370</sup> *Id.*

<sup>371</sup> 97-Ming-Chuan-Suit-5 (IP Court, 2008).

<sup>372</sup> 97-Ming-Chuan-Shan-20 (IP Court, 2008).

After prevailing in the infringement litigation, CCPC filed a lawsuit against Takeda at the IP Court, claiming for damages caused by the 5-month wrongful preliminary injunction. CCPC asserted that Takeda knew well that CCPC's Glitos Product did not infringe the '500 patent but abused the court proceedings to harm CCPC in a manner against the rules of morals.<sup>373</sup> On the other hand, Takeda argued<sup>374</sup> that the preliminary injunction was moved on the ground of the Civil Procedure Law and granted by the Taipei District Court, and thus asserted that it shall be legitimate to exercise a right standing on the regulations in the Civil Procedure Law.<sup>374</sup>

After adjudication, the IP Court held that Takeda was not liable to CCPC's loss because CCPC was unable to prove that Takeda had intent or was negligent in harming CCPC's rights. The IP Court also held that Takeda's motion for preliminary injunction, for the purposes of preventing material harm and preventing imminent danger, was legitimate and did not violate the rules of morals. Therefore, the IP Court concluded that there should be no liability for damages resulting from a preliminary injunction granted by the court.<sup>375</sup>

### **3.5.4 A Milestone Case in Taiwan and Comments**

#### **1. The Genovate v. Takeda Case**

Taiwan's IP Court issued a milestone case in late 2010, holding that the patentee-movant was liable because the patentee had intentionally or negligently used a wrongful infringement assessment report to obtain the preliminary injunction so as to injure the defendant. This leading case shows that the patentee-movant needs to recover the harms suffered by the wrongfully-enjoined defendant due to a wrongful preliminary injunction.

In this case, Takeda filed a motion for preliminary injunction against Genovate

---

<sup>373</sup> *Supra* note 367.

<sup>374</sup> *Id.*

<sup>375</sup> *Id.*

Biotechnology Co. Ltd. (hereinafter “Genovate”) at the Taichung District Court on June 29, 2004, alleging that Genovate’s Vippar Product infringed the ‘500 patent because the active ingredients of Genovate’s Vippar Product are the same with those of Takeda’s Actos Product. The documents submitted by Takeda to the Taichung District Court as evidences for preliminary injunction were a patent certificate, a patent infringement assessment report and the abstract of Vippar’s clinical trial proposal. After reviewing the documents<sup>376</sup>, the Taichung District Court granted the preliminary injunction to enjoin Genovate from manufacturing, selling, offering for sale, using, or importing the Vippar Product.<sup>377</sup> Takeda applied to compulsorily execute the preliminary injunction order on Aug. 4, 2004 by posting a bond of NT\$ 430,020,000.

At the same time, DOH had allowed Genovate’s application for drug registration of the Vippar Product on April 4, 2005, and was about to issue the drug permit license. However, the Hsin-Chu District Court<sup>378</sup> noticed DOH on April 20, 2005 that Genovate’s Vippar Product was under the effect of preliminary injunction order so the issuance of the drug permit license should be suspended. For this reason, DOH notified Genovate on June 7, 2005 that the issuance of the drug permit license was suspended due to the notice letter from the Hsin-Chu District Court.

At the same time, Takeda filed a lawsuit against Genovate at the Taichung District Court alleging patent infringement. After adjudication, the Taichung District Court dismissed Takeda’s suit by holding that the Vippar Product did not infringe the ‘500 patent.<sup>379</sup> The court found no infringement on the reason that claim 1 of the ‘500 patent is a combination drug comprising of (a) insulin sensitivity enhancer (such as pioglitazone

---

<sup>376</sup> The Taichung District Court adjudicated the preliminary injunction only by reviewing the documents provided by Takeda. Genovate had no chance to defense.

<sup>377</sup> The preliminary injunction became a final decision after the Taichung High Court and the Supreme Court’s dismissals of Genovate’s appeals.

<sup>378</sup> The Taichung District Court requested the Hsin-Chu District Court to enforce the preliminary injunction order.

<sup>379</sup> 95-Chih-Geng-1 (Taichung District Court, 2006).

hydrochloride) and (b)  $\alpha$ -glucosidase inhibitor, but Genovate's Vippar Product contained only the single drug pioglitazone hydrochloride.<sup>380</sup> Later, the decision of the Taichung District Court was affirmed by the Taichung High Court<sup>381</sup> and the Supreme Court<sup>382</sup> and thus became finalized. For this reason, the Taichung District Court vacated the preliminary injunction on April 29, 2009.

Later, Genovate filed a lawsuit against Takeda at the IP Court in 2009 claiming for the damages from the wrongful preliminary injunction.<sup>383</sup> Genovate asserted that claim 1 of the '500 patent is a combination drug comprising of (a) insulin sensitivity enhancer (such as pioglitazone hydrochloride) and (b)  $\alpha$ -glucosidase inhibitor, but Genovate's Vippar Product contained only the single drug pioglitazone hydrochloride. Genovate contended that the non-infringement is obvious to Takeda, but Takeda had used a wrongful infringement assessment report to mislead the Taichung District Court to issue the wrongful preliminary injunction order. Due to the wrongful preliminary injunction order, Genovate could not obtain the drug permit license from DOH, so Genovate was unable to sell the Vippar Product during the period of preliminary injunction. Takeda was thus liable to compensate Genovate's revenue loss on the ground of Article 184 of the Civil Law and Article 20 of the Fair Trade Law.<sup>384</sup>

On the other hand, Takeda argued that the preliminary injunction was moved on the ground of the Civil Procedure Law and granted by the Taichung District Court. It shall be legitimate to exercise a right standing on the regulations in the Civil Procedure Law.<sup>385</sup> In addition, Takeda argued that there was no causation between Genovate's loss and the

---

<sup>380</sup> *Id.*

<sup>381</sup> 97-Chih-Shan-18 (Taichung High Court, 2008).

<sup>382</sup> 98-Tai-Shan-367 (Supreme Court, 2009).

<sup>383</sup> As mentioned, the fact that the Taichung District Court vacated the preliminary injunction on April 29, 2009 does not satisfy the requirement of "where a preliminary injunction is revoked by reason of being improper *ab initio*", so the fact does not suffice the Articles 531, 533, and 538-4 of the Civil Procedure Law.

<sup>384</sup> 98-Ming-Gung-Suit-6 (IP Court, 2009).

<sup>385</sup> *Id.*

preliminary injunction moved by Takeda. Moreover, Takeda alleged that Takeda had neither intent nor was negligent in harming Genovate's rights.<sup>386</sup>

In the first instance, the IP Court held that Takeda was not liable to Genovate's loss because Genovate was unable to prove that Takeda had intent or was negligent in harming Genovate's rights. The IP Court reached the "no-intent" conclusion by reason that the preliminary injunction was legally moved by Takeda on the ground of the Civil Procedure Law and legally granted by the Taichung District Court. The IP Court found that Takeda was not negligent by reason that Takeda met the duty of care by reasonably trusting the infringement assessment report. The first instance of the IP Court also noted that there should be no liability for damages resulting from a preliminary injunction granted by the court.

Genovate appealed to the second instance of the IP Court.<sup>387</sup> On appeal, the IP Court found that Takeda ought to be fully aware of Genovate's non-infringement because claim 1 of the '500 patent is a combination drug comprising of (a) insulin sensitivity enhancer (such as pioglitazone hydrochloride) and (b)  $\alpha$ -glucosidase inhibitor, but Genovate's Vippar Product contained only the single drug pioglitazone hydrochloride. However, Takeda moved for a preliminary injunction by using the combination drug patent to enjoin Genovate from doing the clinic trial and applying drug permit license for the single drug pioglitazone hydrochloride. For this reason, the IP Court reached the conclusion that Takeda was at least negligent in harming Genovate's rights.<sup>388</sup>

To find Takeda negligent, the second instance of the IP Court further pointed out the obvious error of the infringement assessment report. On the comparison of claim 10 of the '500 patent and Genovate's Vippar drug, the infringement assessment report noted "ND (not

---

<sup>386</sup> *Id.*

<sup>387</sup> *Supra* note 357.

<sup>388</sup> *Id.*

determined)” in the claim limitation regarding the ratio between (a) insulin sensitivity enhancer (such as pioglitazone hydrochloride) and (b)  $\alpha$ -glucosidase inhibitor. However, the infringement assessment report reached the conclusion that Genovate’s Vippar drug literally infringed the ‘500 patent by finding that claim 10 of the ‘500 patent reads on Genovate’s Vippar drug. The IP Court found that it was an obvious error and thus concluded that Takeda was negligent in trusting such a wrongful assessment report.<sup>389</sup>

Finally, the second instance of the IP Court held that Takeda was liable to Genovate’s loss due to the wrongful preliminary injunction, and awarded damages to the amount of NT\$50,000,000.<sup>390</sup> Takeda appealed to the Supreme Court, but the Supreme Court affirmed the decisions of the IP Court.<sup>391</sup>

## 2. The Comments and Suggestions of this Dissertation

In conclusion, there are two key points in the *Genovate v. Takeda* case for the wrongfully-enjoined defendant to constitute the liability of the patentee-movant. First, the assessment report had an obvious error, so that the wrongfully-enjoined defendant had the chance to prove the negligence of the patentee-movant. Otherwise, it was still difficult for the wrongfully-enjoined defendant to prove the negligence.

Second, at the time the preliminary injunction order was issued and compulsorily executed, the DOH had allowed the application for drug registration and was about to issue the drug permit license. This fact gave a chance to the wrongfully-enjoined defendant to prove its injuries and the proximate causation between the wrongful preliminary injunction and its injuries. Otherwise, it was still extremely difficult for the wrongfully-enjoined defendant to prove its injuries and the proximate causation.

---

<sup>389</sup> *Id.*

<sup>390</sup> *Id.*

<sup>391</sup> 101-Tai-Shan-235 (Supreme Court, 2012).



For these reasons, this dissertation demonstrates that this case is rare in Taiwan. It is still difficult to anticipate that the wrongfully-enjoined defendant can be easily awarded the damages from the patentee-movant. Under this legal system, the patentees still have the chance to abuse the preliminary injunction proceeding in Taiwan.

In order to avoid the patentees from abusing the preliminary injunction proceeding, this dissertation suggests amending the legal system so that the wrongfully-enjoined defendants may be granted the bond more easily by shifting the burden of proving no intent or negligence to the patentee-movant.

In fact, no law amendment is needed to reach this purpose. As mentioned before, according to the precedents in Taiwan, Articles 531, 533, and 538-4 of the Civil Procedure Law (ruling the liability of movant due to a wrongful preliminary injunction) are not sufficed if the preliminary injunction is revoked on the reason that the wrongfully-enjoined defendant prevails in the underlying infringement litigation. If the courts may change their opinion so that the fact that the wrongfully-enjoined defendant prevails in the underlying infringement litigation can satisfy the requirement of “where a preliminary injunction is revoked by reason of being improper *ab initio*”, Articles 531, 533, and 538-4 of the Civil Procedure Law can thus be sufficed. At this time, the wrongfully-enjoined defendant may directly claim for damages in the infringement litigation<sup>392</sup>, although the movant may try to mitigate or even release his or her liability by proving his/her non-negligence.<sup>393</sup> At least the burden of proving non-negligence has been shifted to the movant, and the wrongfully-enjoined defendant may claim for damage without filing further lawsuit.

---

<sup>392</sup> Civil Procedure Law art. 531, sec. 2 states that “Where an action has been initiated with regard to the claim secured by the provisional attachment, the court of first instance shall, on the movant’s motion made before the conclusion of the oral argument, order the movant to make the compensation provided in the preceding paragraph in the judgment on the principal case. The court shall inform the debtor (defendant) of the availability of such motion if he/she has not done so”.

<sup>393</sup> Civil Procedure Law art. 538-3.

### 3.5.5 Conclusion

Under Taiwan's Civil Procedure Law and the Procedure Law for Adjudicating IP Cases, the court adjudicating a motion for preliminary injunction does not need to consider the substantial relationship between the patentee-movant and the defendant. However, Section 3, Article 37 of the Intellectual Property Case Adjudication Rules states that the court should consider the 4 equity factors while adjudicating a motion for preliminary injunction.

Even if the court can consider the "likelihood of success on the merits" while adjudicating a motion for preliminary injunction, the defendant generally does not have enough opportunities to completely raise the invalidity and non-infringement defenses in the preliminary injunction proceeding. Therefore, the decisions of preliminary injunction are only a preliminary determination of the patent validity and patent infringement in the patent infringement cases. This legal system gives the patentee the chance to abuse the preliminary injunction proceeding.

In order to prevent the patentees from abusing the preliminary injunction proceeding, the WTO/TRIPS Agreement requests members to authorize judicial authorities to order the patent holder to provide a security bond to execute the granted preliminary injunction. However, it is still highly possible for the preliminary injunction proceeding to be abused if it is difficult for the wrongfully-enjoined defendant to be granted the posted bond after prevailing in the underlying infringement litigation.

The wrongfully-enjoined defendants in Taiwan are not entitled to a rebuttable presumption in favor of recovery against the bond for provable damages as in the United States. Furthermore, unlike in the U.S. and in China where the wrongfully-enjoined defendant can be directly awarded the bond in the underlying infringement litigation, the wrongfully-enjoined defendant in Taiwan needs to file another lawsuit to claim for damages

during the wrongful preliminary injunction. In order to win the lawsuit claiming for damages, a wrongfully-enjoined defendant in Taiwan needs to prove that: (1) the patentee-movant has the intent or is negligent; (2) to conduct an illegal activity; (3) to harm the wrongfully-enjoined defendant; and (4) there is a proximate causation between the patentee-movant's illegal activity and the injury suffered by the wrongfully-enjoined defendant. As a result, in this legal system, few of the wrongfully-enjoined defendants in the patent-related preliminary injunction cases can be awarded the bonds posted by the patentee-movants when the defendants prevail in the underlying infringement litigations. This phenomenon directs the fact that the patentees still have the chance to abuse the preliminary injunction proceeding in Taiwan under the TRIPS Agreement.

Although the second instance of the IP Court in the *Genovate v. Takeda* case held that Takeda was liable to Genevate's loss due to the wrongful preliminary injunction, this dissertation demonstrates that this case is rare in Taiwan. It is still difficult to anticipate that the wrongfully-enjoined defendant can be easily awarded the damages from the patentee-movant.

In order to avoid the patentees from abusing the preliminary injunction proceeding, this article suggests amending the legal system so that the wrongfully-enjoined defendants may be granted to the bond more easily by shifting the burden of proving no intent or negligence to the patentee-movant.

No law amendment is needed to reach this purpose. As mentioned before, according to the precedents in Taiwan, Articles 531, 533, and 538-4 of the Civil Procedure Law are not sufficed if the preliminary injunction is revoked on the reason that the wrongfully-enjoined defendant prevails in the underlying infringement litigation. If the courts may change their opinion so that the fact that the wrongfully-enjoined defendant prevails in the underlying infringement litigation can satisfy the requirement of "where a preliminary injunction is

revoked by reason of being improper *ab initio*”, Articles 531, 533, and 538-4 of the Civil Procedure Law can thus be sufficed. At this time, the wrongfully-enjoined defendant may directly claim for damages in the infringement litigation, although the movant may try to mitigate or even release his or her liability by proving his/her non-negligence. At least the burden of proving non-negligence has been shifted to the movant, and the wrongfully-enjoined defendant may claim for damage without filing further lawsuit.

### **3.6 Rethinking the Preliminary Injunction Standards**

#### **3.6.1 Lessons from China and Taiwan**

##### 1. Too Much in China

###### (1) Review of the 48-hour Rule

Indeed, the 48-hour rule is too tough for the people’s courts to follow. Under the 48-hour rule, the courts need to make a rush decision under the time pressure, and there is neither time nor adequate procedure for the courts to substantially consider the likelihood of success on the merits and the irreparable harm. It is also hard for either party to submit an assessment report or introduce an expert witness to prove the patent infringement or non-infringement.

In order to obey the 48-hour rule, the people’s courts can only formally examine the patent infringement. From the empirical study of the courts’ decisions, the patent owners in most cases could obtain a preliminary injunction by merely showing that they had a valid patent right and the adverse party was manufacturing or preparing to manufacture the accused products. Neither infringement assessment opinion nor any substantial evidence is needed for the patent owner to prove the likelihood of infringement. Instead, the patentee-movants just need to “write down” the assertion of the likelihood of infringement in their complaint or “speak” the assertion in the oral hearing, and the courts have the discretion to determine

whether to grant a preliminary injunction. As the court's discretion tends to grant a preliminary injunction, no wonder that the grant rate of preliminary injunction was as high as 83.17% in China.<sup>394</sup> The statistics announced by the Supreme People's Court shows that the patent owners are over-protected in granting a preliminary injunction.

Without the knowledge of the likelihood of infringement, the courts' decisions of preliminary injunction have high risk to be wrongful. More particularly, the defendants in the patent preliminary injunction cases in China are always not allowed to post a counter-bond to lift the compulsory execution of the preliminary injunction. Accordingly, the wrongfully-granted preliminary injunction may result in irreparable harm to the defendants. Although the 2009 Chinese Patent Law and Rules Regarding Preliminary Injunctions allow the defendant to sue the patentee-movant to claim for damages resulting from the wrongful preliminary injunction, it is still questionable whether all harms can be compensated by the monetary remedies. For example, some irreparable harm such as the suspension of manufacture and sales, breach of contracts, losses of goodwill and credit, losses of clients' purchase orders, and the lapse of market power, are very likely not recoverable by monetary remedies. This dissertation will further address this issue in Chapter 5.

In order to promote the judgment quality of preliminary injunctions in China, this dissertation suggests abolishing the 48-hour rule, or at least relaxing the rule to one or two months. The one- or two-month period allows either party to prepare a competent legal opinion from an expert, and allows the courts to hold up an oral hearing to let the expert witnesses from either side to argue. Accordingly, the courts can obtain a better knowledge of likelihood of infringement, and thus a more accurate decision can be highly anticipated.

## (2) How to Handle Preliminary Injunction in China

---

<sup>394</sup> Do Do Wang, *supra* note 220.

From the standpoint of the patentee-movants, it is easy to obtain a preliminary injunction. Accordingly, to threaten to move for preliminary injunction is always a powerful weapon for a patent owner to force the adverse party to sit down for settlement negotiation.

Although the amount of the bond is not huge in general, the patentee-movant seeking for a preliminary injunction should always keep in mind that the defendant may sue for damages suffered during the preliminary injunction if the preliminary injunction order is found to be wrongful later. Nevertheless, the patentee-movant still stands on the advantageous position because the risk of compensating the defendant's injuries is easy to manage, i.e., only the amount of the bond.

By contrast, the risk of the defendant is relatively high. During the adjudication of preliminary injunction, patent invalidity is not a defense and the non-infringement argument is not always an efficient defense for the defendant. Furthermore, there is not possible for the defendant in any circumstances to post a counter-bond to lift the compulsory execution of preliminary injunction; as soon as the preliminary injunction is granted, the defendant can no longer manufacture or sell the accused product. Accordingly, the defendants of preliminary injunction always stand on the disadvantageous position.

Even though there is only few opportunity for the defendant to argue against patent infringement, the defendant should still try to argue against patent infringement in the oral hearing or defense briefs of preliminary injunction. According to the empirical study, the best non-infringement argument in China is to assert that at least one limitation in the patent claim is missing in the accused product.<sup>395</sup>

From the standpoint of the defendant, if the accused product is unique or significant to

---

<sup>395</sup> KEDA Industrial Co., Ltd. v. Kotai, Fo-Chung-Fa-Ming3-Gin-15 (Intermediate People's Court of Foshan, Guangdong, 2006) (mentioning that the alleged act did not infringe the patent because at least two of the following technical features, "temperature detection device" and "device for controlling temperature of water addition" in the claim, were missed by the accused products).

the company, the harm is frequently hard to be recovered by the bond even if the defendant prevails in the underlying infringement litigation. The reason is that compensation from the bond is not paid until three to four years later. If the accused product is unique or significant, the defendant may go out of business or even close down before obtaining the compensation.

Therefore, if a company is threatened by a patent owner to file a motion for preliminary injunction and finds that the accused product is unique or significant, it should cautiously assess whether the non-infringement argument is strong. If it is not, it would be better to settle with the patent owner, in order to avoid the compulsory execution of preliminary injunction.

## 2. Few but Severe (if any) in Taiwan

### (1) Under-Protection in Taiwan

Under the Procedure Law for Adjudicating IP Cases, it is not so easy for a patent owner to obtain a preliminary injunction to stop the defendant from manufacturing or selling the accused product. The patentee-movant bears the burden of showing the preliminary evidence to prove the essentiality of granting a preliminary injunction, and it is no longer possible to post a bond to substitute or supplement the shortage of showing the preliminary evidence.

Moreover, the empirical study shows that the courts tend to allow the defendant posting a counter-bond to lift the compulsory execution of preliminary injunction even if the preliminary injunction is granted. Once the defendant is allowed to post a counter-bond to lift the execution of preliminary injunction, the defendant can continue to manufacture and sell the accused products. Therefore, few patent owners can enjoin the defendant from entering the relevant market by moving for preliminary injunction in Taiwan.

However, once the court grants a preliminary injunction to the patent owner and doesn't

allow the defendant to post a counter-bond, it will be very severe to the defendant. That's because the defendant will be excluded from the market, but the injuries during the preliminary injunction can rarely be compensated even if the defendant prevails in the underlying patent infringement litigation.

## (2) How to Handle Preliminary Injunction in Taiwan

From the standpoint of the plaintiff, few preliminary injunction orders can be compulsorily executed because the defendants are generally allowed to post a counter-bond to lift the compulsory execution of preliminary injunction. Under the steady opinion of the Supreme Court, to move for preliminary injunction is not a powerful weapon for the patent owners to enforce their patent rights.

Fortunately (from the viewpoint of patentees), few of the wrongfully-enjoined defendants in the patent-related preliminary injunction cases were awarded the bonds posted by the patentee-movants after the wrongfully-enjoined defendants prevailed in the underlying infringement litigations.<sup>396</sup> In other words, the loss incurred for moving for preliminary injunction, if any, is only the attorney's fee. Therefore, although the possibility of compulsorily executing a preliminary injunction order is low, the legal risk is relatively low. This fact is helpful to the risk management of the patent holder.

In addition to prove the likelihood of infringement and irreparable harm, the patent holder may also try to prove that the injuries of the defendant under the preliminary injunction can be compensated by monetary relief even if the preliminary injunction is found to be wrongful and revoked later. It is helpful to convince the courts not to allow the defendant to post a counter-bond.

From the standpoint of the defendant, the threat from the preliminary injunctions is

---

<sup>396</sup> This issue will be further addressed in Chapter 5.



relatively low. First, the court adjudicating the preliminary injunction always needs to hold an oral hearing, so the defendant has the chance to argue for non-infringement or invalidity. Second, although the proceedings of preliminary injunctions is always frightening, the defendant is frequently allowed to post a counter-bond to lift the compulsory execution of preliminary injunction by proving its irreparable harm if the preliminary injunction is granted.

Therefore, in addition to the non-infringement defense and the invalidity defense, the defendant should try its best to prove the possible harm if the preliminary injunction is granted and compulsorily executed. Some examples of the harms acceptable by the courts are the suspension of manufacture and sales, breach of contracts, losses of goodwill and credit, losses of clients' purchase orders, and the lapse of market power.

### **3.6.2 The Preliminary Injunction should be a Drastic and Extraordinary remedy**

In general, the district court spends between two to four years to close a case of patent infringement litigation. In the United States, the district court generally spends more than two years to make the final judgment, and the party loses the first instance can always appeal to the Federal Circuit. In Taiwan, although the IP Court shortens the adjudication period to about one year, the party loses the first instance can always appeal to the second instance, and the party loses the second instance can appeal to the Supreme Court in most cases. Accordingly, a period of two to four years is generally needed for the court system to close a patent litigation case.

If the patent owner also files a motion for preliminary injunction before or at the very early stage of a case of patent infringement litigation, the district court generally needs to make a decision whether to grant a preliminary injunction in a couple of months<sup>397</sup>.

Therefore, it is reasonable to conclude that the time difference between the issuance of the

---

<sup>397</sup> In China, the district court even needs to make a decision for granting or denying a preliminary injunction in 48 hours.

preliminary injunction order and the court's final judgment on the merits is generally longer than two years.

This dissertation assumes that the court's final judgment on the merits is a *correct* judgment for the determinations of patent validity and patent infringement. Since the grant or denial of preliminary injunction was determined about two to four years ahead of the final judgment on the merits, the court adjudicating preliminary injunction is possible to make a wrongful decision.

There are two possible categories of wrongful decisions. First, the court adjudicating the preliminary injunction<sup>398</sup> had denied the preliminary injunction, but the court adjudicating the underlying infringement litigation held patent validity and patent infringement. Under this situation, theoretically, the court adjudicating the preliminary injunction should grant the preliminary injunction two to four years ahead but did not grant. The patent owner would thus suffer injuries in the absence of a preliminary injunction, such as the loss of market share, the loss of price erosion, and the loss of revenue. However, the injuries suffered by the patent owner in this situation can generally be compensated by the monetary damages. That's because in the judgment of the underlying infringement litigation, the court can always award the monetary damages during this period between the denial of preliminary injunction and the final judgment to the patent owner.

Of course, while deciding the amount of the damages, the court should count the loss of the plaintiff incurred due to not getting a preliminary injunction. For example, let's assume that the patent owner could sell 100 units of the patented products per month at the price of US\$ 10,000 per unit in the absence of the infringing products. The patent owner would thus create revenue of US\$ 1,000,000 per month by selling the patented products. However, if

---

<sup>398</sup> In Taiwan, the court adjudicating the preliminary injunction is different from the court judging patent litigation on the merits, although they are in the same district court or IP Court.

the preliminary injunction was wrongfully not granted, the infringing products could still enter into the market in the period of three years. Because the patent owner did not have the monopoly power in the market, the sales of the patented products decreased to 70 units per month, and the price was eroded to US\$ 8,000 per unit. Accordingly, the revenue per month decreased to US\$ 560,000 during the period of three years, and the patent owner had thus an injury in the amount of US\$ 440,000 per month. After waiting the final decision of the judgment on the merits for three years, the patent owner suffered an injury in the amount of US\$ 440,000 x36. The loss of revenue can be awarded in the judgment on the merits as the monetary damages, and the injuries suffered by the patent owner can thus be compensated. In order to avoid the defendant from continuously manufacturing and selling the infringing products, the patent owner can move for permanent injunction. As long as the court grants a permanent injunction to the patent owner, the infringer will be gotten out of the market and the monopoly power of the patent owner will be thus recovered. Without considering other factors influencing the sales and price, the patent owner can again sell 100 units of the patented products per month at the price of US\$ 10,000 per unit. Therefore, this dissertation concludes that the first category of wrongful preliminary injunctions may generally be cured by awarding monetary damages to the patent owner in the underlying infringement litigation, unless in some rare circumstances the loss of market share or the price erosion is not reversible.

Second, the court adjudicating the preliminary injunction had granted a preliminary injunction, but the court adjudicating the underlying infringement litigation held patent invalidity or non-infringement. Under this circumstance, the preliminary injunction theoretically should not be granted, but it was wrongfully granted. The defendant was wrongfully-enjoined and thus suffered injuries during the period of preliminary injunction.

In cases of the second category of wrongful preliminary injunctions, it is very difficult

for the wrongfully-enjoined defendant in Taiwan to be compensated for the injuries suffered during the period of preliminary injunction as mentioned above. Since few of the wrongfully-enjoined defendants in the patent-related preliminary injunction cases were awarded the bonds after the wrongfully-enjoined defendants prevailed in the underlying infringement litigations, this dissertation demonstrates that this phenomenon has been existing for a long time and directs the patent preliminary injunction to be abused in Taiwan.

In conclusion, the first category of wrongful preliminary injunctions is easy to be cured (can be compensated by monetary damages), but the second category of wrongful preliminary injunctions is quite hard to be cured (can not be compensated by monetary damages). Therefore, this dissertation suggests that preliminary injunction should be an extraordinary remedy<sup>399</sup>; the court should deny the motion for preliminary injunction if the case is not clear and the court feels hesitant to grant it<sup>400</sup>, unless the courts can conclude a significantly high likelihood of patent owner's success on the merit.

### **3.6.3 The Defendant Invented the Accused Products Independently—Under the Research of this Dissertation**

The empirical study of this dissertation shows that no defendants argued for independent invention in the preliminary injunction proceedings in the United States, Taiwan and China. Consequently, the court decisions never discussed whether to accept the independent invention defense in the preliminary injunction proceedings.

This dissertation finds the most important reason is that the independent invention defense is absolutely not accepted in the current patent practice. The defendants (and their lawyers) will look very “amateur” to patent practice if they raise an independent invention

---

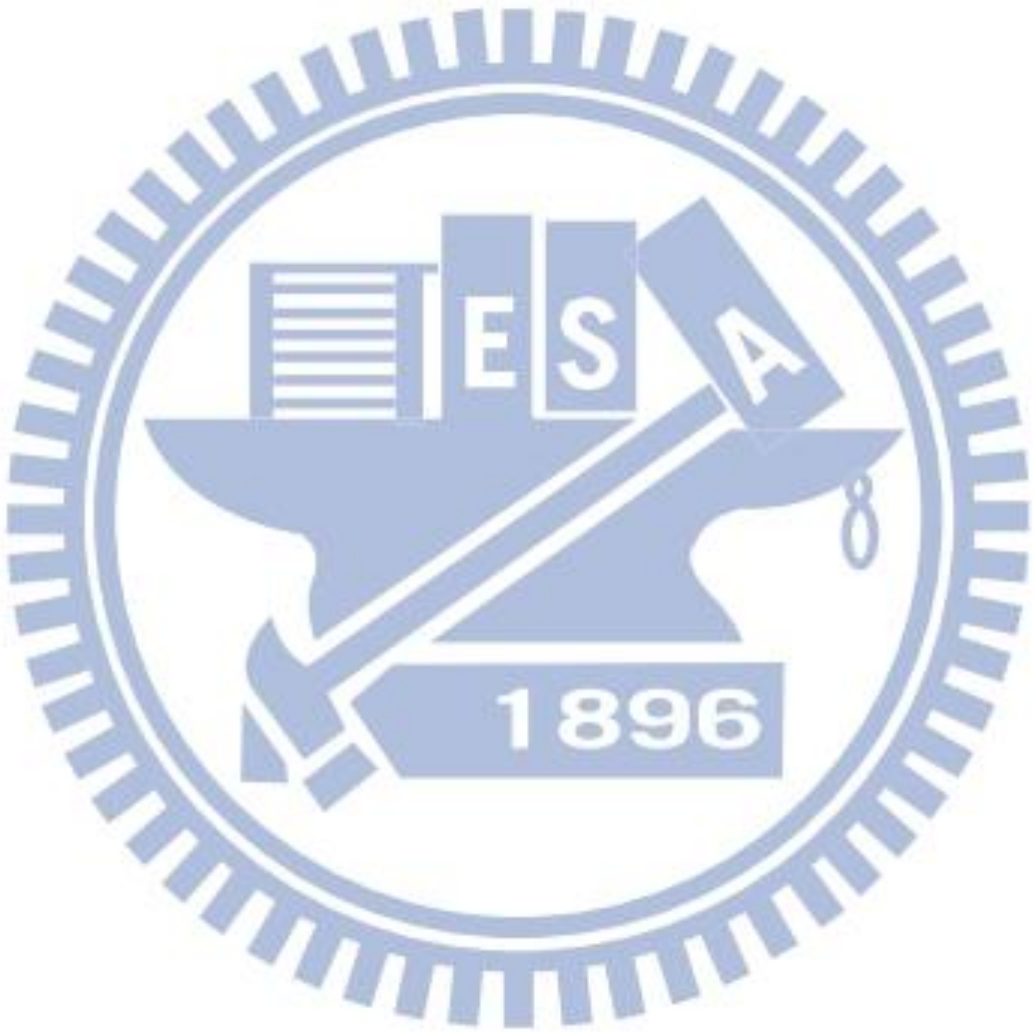
<sup>399</sup> See, *Intel Corp. v. ULSI Sys. Tech., Inc.*, 995 F. 2d 1566, 1568 (Fed. Cir. 1993)(“Preliminary injunction is a drastic and extraordinary remedy that is not to be routinely granted.”)

<sup>400</sup> See, *Bateman v. Ford Motor Co.*, 310 F. 2d 805, 808 (3d Cir. 1962)(“It has been so well stated that upon an application for a preliminary injunction to doubt is to deny.”)

defense in the preliminary injunction proceedings. Accordingly, the defendants will hesitate to argue for independent invention even if they really finished the accused products by their independent development

This dissertation notes that there is room for the defendants to assert the independent invention defense in the preliminary injunction proceedings. This dissertation will comprehensively discuss about this issue in details in Chapter 5.





## CHAPTER 4: RADICALLY-CHANGING STANDARD OF PERMANENT INJUNCTION

### 4.1 Pre-*eBay* Era

#### 4.1.1 Laws of Permanent Injunctions in the United States

Pursuant to 35 U.S.C. § 261<sup>1</sup>, a patent has the attributes of personal property.<sup>2</sup> Under 35 U.S.C. § 154 (a)(1)<sup>3</sup>, the patent owner of an apparatus patent has the right to exclude others from making, using, offering for sale, or selling the patented products throughout the United States or importing the patented products into the United States. In addition, the patent holder of a process patent has the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, the products made by the patented process.<sup>4,5</sup> If someone infringes a patent right without prior consent of the patent owner, under 35 U.S.C. § 283<sup>6</sup>, courts may grant injunctions in accordance with the principles of equity.<sup>7</sup> One commentator mentioned that a permanent injunction maintains the patent's right to exclude which is the ground of the incentives to invention in the patent

---

<sup>1</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

<sup>2</sup> 35 U.S.C. § 261: "Subject to the provisions of this title, patents shall have the attributes of personal property."

<sup>3</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

<sup>4</sup> 35 U.S.C. § 154 (a)(1): "CONTENTS.-Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof."

<sup>5</sup> See Michael S. Kramer, *Valuation and Assessment of Patents and Patent Portfolios Through Analytical Techniques*, 6 J. MARSHALL REV. INTELL. PROP. L. 463, 466 (2007).

<sup>6</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

<sup>7</sup> 35 U.S.C. 283 Injunction: "The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable."

system.<sup>8</sup>

Pursuant to Rule 65 (d) (1) of the Federal Rules of Civil Procedure of the United States, each order to grant an injunction shall state the reasons why it is issued and its terms specifically, and describe in reasonable details the act or acts restrained or required.<sup>9</sup>

#### 4.1.2 General Rule adopted by the Federal Circuit

In the proceedings of determining whether to grant a permanent injunction in the non-patent infringement cases, the Supreme Court of the United States has been considering the four equitable factors for a very long time.<sup>10</sup> However, it was an exception in the patent infringement cases before the *eBay* case<sup>11</sup>.

Before the *eBay* case, the Federal Circuit did not hold that the determination of a permanent injunction needed to consider the four equitable factors. Shortly after being established in 1982, the Federal Circuit mentioned in *Smith Int'l Inc. v. Hughes Tool Co.*<sup>12</sup> in 1983 that the patent owner should be entitled to the complete protection of his patent right once the patentee's patent-in-suit had been found valid and infringed.<sup>13</sup> Specifically, in *Richardson v. Suzuki Motor Co.* case<sup>14</sup>, the Federal Circuit created a "general rule" which meant that a permanent injunction should be granted and issued automatically once the

---

<sup>8</sup> Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 ANTITRUST L. J. 889, 904 (2011).

<sup>9</sup> Rule 65 (d) (1) of the Federal Rules of Civil Procedure: "Every order granting an injunction and every restraining order must: (A) state the reasons why it issued; (B) state its terms specifically; and (C) describe in reasonable detail — and not by referring to the complaint or other document — the act or acts restrained or required."

<sup>10</sup> Elizabeth E. Millard, *Injunctive Relief in Patent Infringement Cases: Should Courts Apply a Rebuttable Presumption of Irreparable Harm After eBay Inc. v. MercExchange, L.L.C.?* 52 ST LOUIS U. L. J., 985, 993(2008).

<sup>11</sup> The *eBay* case will be introduced and fully discussed later in this dissertation.

<sup>12</sup> *Smith Int'l Inc. v. Hughes Tool Co.*, 718 F. 2d 1573 (Fed. Cir. 1983).

<sup>13</sup> *Id.* at 1577 ("The very nature of the patent right is the right to exclude others. Once the patentee's patents have been held to be valid and infringed, he should be entitled to the full enjoyment and protection of his patent rights. The infringer should not be allowed to continue his infringement in the face of such a holding. A court should not be reluctant to use its equity powers once a party has so clearly established his patent rights.")

<sup>14</sup> *Richardson v. Suzuki Motor Co.*, 868 F. 2d 1226 (Fed. Cir. 1989).



patent-in-dispute had been held valid and infringed.<sup>15</sup>

## 4.2 Decisive *eBay* Case

### 4.2.1 Background

The Internet Website of eBay Inc. (“eBay”) and its subsidiary Half.com operate a website on the Internet which allows users to post the goods they want to sell on the Internet, wherein the goods may be sold at a pre-determined price or through an auction. MercExchange, L. L. C. (“MercExchange”) is the patent owner (assignee) of three patents: U.S. Patents No. 5,845,265 (“the ‘265 patent”), No. 6,085,176 (“the ‘176 patent”), and No. 6,202,051 (“the ‘051 patent”)(collectively, “the patents-in-suit”). After finding that the website of eBay and Half.com were infringing the patents-in-suit, MercExchange provided an offer to license the patents-in-suit to eBay and Half.com. However, MercExchange did not reach a licensing agreement with eBay and Half.com, so MercExchange sued against eBay and Half.com in the United States District Court for the Eastern District of Virginia alleging patent infringement.<sup>16</sup> The district court found that the patents-in-suit were valid and infringed by eBay and Half.com, so the district court awarded damages for both direct and induced patent infringements.<sup>17</sup>

#### 1. District Court’s Decision—Applying Traditional 4-Factor Test

In addition to claim for damages, MercExchange also filed a motion for permanent injunction to enjoin eBay and Half.com from continuously operating the auction websites. In adjudicating the motion for permanent injunction, the district court applied the traditional four-factor test<sup>18</sup>. With regard to the factor of “irreparable harm”, MercExchange argued that it would suffer irreparable harm in the absence of permanent injunction because eBay

---

<sup>15</sup> *Id.* at 1246-47.

<sup>16</sup> *MercExchange v. eBay*, 275 F. Supp. 2d 695, 695-699 (E. D. Va., 2003).

<sup>17</sup> *Id.* at 695-710.

<sup>18</sup> *Id.* at 710-715.

would infringe the patents-in-suit continuously. On the other hand, eBay asserted that MercExchange wouldn't suffer irreparable injury because of MercExchange's willingness to license the patents-in-suit to eBay. After adjudication, the district court held that this factor should be in eBay's favor by reason that MercExchange would not suffer irreparable harm in the absence of permanent injunction because of MercExchange's lack of commercial activities in practicing the patents-in-suit and willing to license the patents-in-suit to eBay and Half.com.<sup>19</sup>

In regard to the factor of "adequate remedy at law", the district court found that any harm incurred by MercExchange would be compensated by monetary damages because of MercExchange's willingness to license the patents-in-suit to eBay. For the factor of "balance of hardship", the district court noted that the court would likely tend to award the enhanced damages to MercExchange for eBay's post-verdict patent infringement, so MercExchange would be fully compensated for eBay's any post-verdict infringement in the absence of permanent injunction. In regard to the factor of "public interest", the district court held that the factor of public interest equally supported: (1) denying a permanent injunction to protect the public interest to use a patented business model which the patent owner declined to practice, and (2) granting a permanent injunction to protect the patent right of patent owner. In sum, the district court denied the motion for permanent injunction.<sup>20</sup>

## 2. Federal Circuit's Decision—Applied the General Rule

MercExchange appealed to the Court of Appeals for the Federal Circuit. The Federal Circuit cited *Richardson v. Suzuki Motor Co.*<sup>21</sup> to apply its "general rule" that a permanent injunction should be automatically granted once the patent-in-dispute was held valid and

---

<sup>19</sup> *Id.* at 710-712.

<sup>20</sup> *Id.* at 711-715.

<sup>21</sup> *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1246-47 (Fed. Cir.1989).

infringed.<sup>22</sup> In other words, under the general rule which was unique to patent disputes, courts would grant permanent injunctions against patent infringement without exceptional circumstances.<sup>23</sup> Accordingly, the Federal Circuit reversed the decision of the district court.<sup>24</sup> eBay then appealed and the Supreme Court granted certiorari to determine the appropriateness of the general rule.<sup>25</sup>

#### 4.2.2 The decision of The Supreme Court

After adjudication, the Supreme Court reached a conclusion that the district court had erred in its categorical denial of a permanent injunction, and the Federal Circuit had erred in its categorical grant of a permanent injunction.<sup>26</sup>

First of all, the Supreme Court noted that a four-factor test based on the principles of equity must be applied while considering whether to grant a permanent injunction. The Supreme Court cited *Weinberger v. Romero-Barcelo*<sup>27</sup> and *Amoco Production Co. v. Gambell*<sup>28</sup> to conclude that a patentee-plaintiff seeking for a permanent injunction must demonstrate that: (1) it has incurred an irreparable harm; (2) remedies available at law such as monetary damages are not adequate to compensate for the harm; (3) a remedy in equity is warranted while considering the balance of hardships between the patentee-plaintiff and defendant; and (4) the public interest wouldn't be disserved by a permanent injunction.<sup>29</sup>

The Supreme Court held that the Patent Law is not an exception of the principles of equity. To support this opinion, the Supreme Court cited 35 U.S.C. §283<sup>30</sup> to rule that the

---

<sup>22</sup> *MercExchange v. eBay*, 401 F. 3d 1323, 1338 (Fed. Cir. 2005).

<sup>23</sup> *Id.* at 1339.

<sup>24</sup> *Id.* at 1340.

<sup>25</sup> *MercExchange v. eBay*, 546 U.S. 1029 (U.S., 2005).

<sup>26</sup> *MercExchange v. eBay*, 547 U.S. 388, 394 (U.S., 2006).

<sup>27</sup> *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 311-313 (1982).

<sup>28</sup> *Amoco Production Co. v. Gambell*, 480 U.S. 531, 542 (1987).

<sup>29</sup> *Supra* note 26, at 391.

<sup>30</sup> 35 U.S.C. §283: “the several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable”.

Patent Law expressly states that the permanent injunctions “may” issue “in accordance with the principles of equity.”<sup>31</sup> Therefore, the permanent injunction only “may be issued” rather than “be automatically issued” like the general rule applied by the Court of Appeals.

Whether to grant a permanent injunction should base on the principles of equity rather than the general rule.

The Supreme Court also pointed out that the district court had erred in applying the four-factor test. The district court denied a permanent injunction by concluding that MercExchange would not suffer irreparable harm in the absence of permanent injunction because of MercExchange’s lack of commercial activities in practicing the patents-in-suit and its willingness to license the patents-in-suit to eBay and Half.com. However, the Supreme Court held that some patent owners such as university researchers or independent inventors might like to license their patents and still be possible to satisfy the traditional four-factor test although they do not have their own products in the market.<sup>32,33</sup> Therefore, the Supreme Court found no ground of categorically denying the possibilities for the non-practicing entities to obtain a permanent injunction. Accordingly, the Supreme Court vacated the judgment of the Court of Appeals and remanded for further trial in accordance with the opinion pointed out by this judgment.

In addition, there were two concurring opinions in this case. The first concurring opinion was drafted by Justice Roberts and joined by Justice Scalia and Justice Ginsburg. The first concurring opinion agreed with the majority’s holding that the four equity factors should be considered while determining whether to grant a permanent injunction, and a patentee’s right to exclude does not entitle the patent owner to a permanent injunction

---

<sup>31</sup> *Supra* note 26, at 391-392.

<sup>32</sup> *Id.* at 393.

<sup>33</sup> See also, Gavin D. George, *What is Hiding in The Bushes? eBay’s Effect on Holdout Behavior in Patent Thickets*, 13 MICH. TELECOMM. TECH. L. REV. 557, 566 (2007), available at <http://www.mttl.org/volthirteen/george.pdf>.

automatically.<sup>34</sup>

The second concurring opinion was drafted by Justice Kennedy and joined by Justice Stevens and Justice Souter. The second concurring opinion also agreed with the majority's holding that the four equity factors should be considered while determining whether to grant a permanent injunction.<sup>35</sup> More importantly, the second concurring opinion emphasized that the following facts should be considered while determining whether to grant a permanent injunction: (1) the patent owner does not manufacture and sell the patented products by itself, but primarily license its patents to earn the licensing fees; (2) the patented object is only a small component of the whole accused products sold by the defendant; and (3) whether the patent-in-suit is a business-model method patent.<sup>36</sup>

#### 4.2.3 The Second District Court's Decision

Following the decision of the Supreme Court and the affirmed verdict concluding that eBay willfully infringed the patents-in-suit, the district court was required to apply the four-factor test in the first instance to determine whether to grant a permanent injunction.<sup>37</sup>

Before applying the four-factor test, the district court first considered whether to apply the traditional presumption of irreparable harm upon a finding of patent validity and infringement. By reviewing the language of the Supreme Court's *eBay* decision and the relevant case law such as *Paice LLC v. Toyota Motor Corp.*<sup>38</sup>, *z4 Technology, Inc. v. Microsoft Corp.*<sup>39</sup>, and *Amoco Production Co. v. Village of Gambell.* AK<sup>40</sup>, the district court reached a conclusion that such presumption no longer exists, so the patentee-plaintiff bears the burden

---

<sup>34</sup> *Supra* note 26, at 394-395.

<sup>35</sup> *Id.* at 395.

<sup>36</sup> *Id.* at 396-397.

<sup>37</sup> *MercExchange v. eBay*, 500 F. Supp. 2d 556, 556 (E.D. Va., 2007).

<sup>38</sup> *Paice LLC v. Toyota Motor Corp.* No. 2:04-CV-211-DF, 2006 WL 2385139, at 4 (E.D. Tex., 2006) (“The *eBay* decision demonstrates that no presumption of irreparable harm should automatically follow from a finding of infringement.”).

<sup>39</sup> *z4 Technology, Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440 (E.D. Tex. 2006) (“does not imply a presumption, but places the burden of proving irreparable injury on the plaintiff”).

<sup>40</sup> *Amoco Production Co. v. Village of Gambell.* AK, 480 U.S. 531, 545 (1987).

of establishing irreparable harm in the absence of permanent injunction.<sup>41</sup>

With regard to the factor of “irreparable harm”, the district court noted that MercExchange did not establish irreparable harm in the absence of permanent injunction and thus reached a conclusion that the first factor should favor eBay.<sup>42</sup> The district court reached this conclusion by reasons that: (1) MercExchange did not practice the patents-in-suit<sup>43</sup>; (2) MercExchange had desired to license the patents-in-suit to and obtain royalties from eBay<sup>44</sup>; (3) MercExchange had never filed a motion for preliminary injunction against eBay<sup>45</sup>; (4) the ‘265 patent is a business method patent which only combines several non-unique elements disclosed in the prior art<sup>46</sup>; and (5) all claims of the ‘265 patent were found obvious by USPTO<sup>47</sup> and twice rejected in non-final office actions of the re-examination proceedings<sup>48</sup>. In conclusion, the district court disfavored in granting a permanent injunction in this factor.

In regard to the factor of “adequate remedy at law”, the district court first pointed out that this factor inevitably overlaps with the first one, and thus concluded that the monetary damage was an adequate remedy to compensate MercExchange for eBay’s willful infringement. The district court reached this conclusion primarily by reasons that MercExchange had not practiced the patents-in-suit and had desired to license the patents-in-suit.<sup>49</sup>

For the factor of “balance of the hardship”, the district court uncommonly did not determine in which party’s favor.<sup>50</sup> Considering MercExchange’s intent to license the

---

<sup>41</sup> *Supra* note 37, at 568-569.

<sup>42</sup> *Id.* at 569.

<sup>43</sup> *Id.* at 570-571.

<sup>44</sup> *Id.* at 572-573.

<sup>45</sup> *Id.* at 573.

<sup>46</sup> *Id.* at 574.

<sup>47</sup> eBay filed a re-examination proceeding to USPTO to challenge the validity of the ‘265 patent. USPTO cited KSR to find that all claims of the ‘265 patent were obvious so twice office actions to reject all claims of the ‘265 patent.

<sup>48</sup> *Supra* note 37, at 574-575.

<sup>49</sup> *Id.* at 582-583.

<sup>50</sup> *Id.* at 583.

patents-in-suit, the district court found that mere eBay's willful infringement did not establish the hardship upon the patent owner. The district court considered the facts: (1) whether eBay had designed around the '265 patent and (2) whether the '265 patent would survive reexamination, and reached the conclusion that "the court cannot confidently determine in which party's favor the balance of hardship tips."<sup>51</sup>

Lastly, the district court favored eBay in the factor of "public interest". To reach the conclusion, the business-method nature of the '265 patent was mentioned again to devalue the '265 patent. Furthermore, the district court considered that MercExchange was a 2-man patent-holding company which collected royalties for patent licenses based on the threat of patent litigation, but eBay was a very large sales website with a substantial impact on the economy of the United States.<sup>52</sup> In conclusion, the district court held that the motion for permanent injunction was denied.

### **4.3 Recent Developments after *eBay***

This dissertation conducts an empirical study to learn the recent developments of permanent injunction adjudications after *eBay*. The empirical study also notices whether the independent invention defense was raised by the defendants and whether the courts considered to accept the independent invention defenses in the permanent injunction proceedings. The empirical study is divided into the cases in which a permanent injunction was granted and the cases in which a permanent injunction was denied.

#### **4.3.1 Cases Granting a Permanent Injunction**

This dissertation finds that the cases granting a permanent injunction can be divided into three categories: (1) the patent owner is a direct competitor of the defendant; (2) the patentee is an indirect competitor of the defendant; and (3) the patent holder is a research

---

<sup>51</sup> *Id.* at 585-586.

<sup>52</sup> *Id.* at 586-587.

institute competing with other research institutes and universities in the technology market.

These three categories are introduced and analyzed as follows.

1. The Patent Owner is a Direct Competitor of the Defendant

(1) Acumed LLC v. Stryker Corp.

Acumed LLC (“Acumed”), the patent owner of U.S. Patent 5,472,444 (“the ‘444 patent”), sued Stryker Corporation, Stryker Sales Corporation, Stryker Orthopaedics, and Howmedica Osteonic Corporation (collectively, “Stryker”) in 2004, alleging that the T2 PHN provided by Stryker infringed the ‘444 patent. Simultaneously, Acumed filed a motion for permanent injunction to enjoin Stryker from continuously manufacturing and selling the T2 PHN. In February 2006, Acumed’s motion for permanent injunction was granted by the district court by applying the *general rule*.<sup>53</sup> Stryker appealed to the Federal Circuit. The Federal Circuit vacated the permanent injunction and remanded the case to the district court because the Supreme Court in *eBay* case held that the four-factor test must be applied to the cases of patent-related permanent injunction.<sup>54</sup> Thereafter, the district court applied the four-factor test and granted a permanent injunction again in November 2007.<sup>55</sup> Stryker appealed to the Federal Circuit again.

After considering the four equity factors, the Federal Circuit affirmed the permanent injunction. First, the Federal Circuit considered the first two factors, i.e. the irreparable harm factor and the lack of adequate remedy at law factor together.<sup>56</sup> On appeal, Stryker first argued that Acumed’s previous willingness to license the ‘444 patent to Smith & Nephew showed that the reasonable royalty as monetary damages was an adequate remedy. The Federal Circuit did not agree Stryker’s argument. The Federal Circuit noted that the most important attribute of a patent right is to exclude competitors from infringing the patent, and

---

<sup>53</sup> Acumed LLC v. Stryker Corp., 2006 WL 3409074 (D. Or. 2006).

<sup>54</sup> Acumed LLC v. Stryker Corp., 483 F. 3d 800 (Fed. Cir. 2007).

<sup>55</sup> Acumed LLC v. Stryker Corp., 2007 WL 4180682 (D. Or. 2007).

<sup>56</sup> Acumed LLC v. Stryker Corp., 551 F. 3d 1323, 1327-29 (Fed. Cir. 2008).



patent infringement may cause the patent owner irreparable injuries not remediable by a reasonable royalty.<sup>57</sup> Furthermore, the Federal Circuit held that the monetary damages can only compensate the injuries for the past infringement but not the future infringement. The Federal Circuit also cited *eBay*<sup>58</sup> to hold that the patent owner's past willingness to license its patent right is not enough *per se* to demonstrate lack of irreparable injury.<sup>59</sup> Accordingly, the Federal Circuit reached a conclusion that these two factors were in patentee's favor.

For the factor of balance of hardships, Stryker argued that a permanent injunction would cause hardship not only to Stryker itself but also to its clients and patients. However, the Federal Circuit did not agree with Stryker's argument and held that the balance deliberated in the factor is only between the patentee-plaintiff and the defendant, so the influences on customers and patients asserted by Stryker is irrelevant to this factor.<sup>60</sup> Accordingly, the Federal Circuit favored Acumed in this factor.

In regard to the factor of public interest, Stryker argued that the public interest was particularly important because the patients needed the T2 PHN provided by Stryker. The Federal Circuit did not agree with Stryker's argument by holding that the physicians could select non-infringing alternatives to the Polarus.<sup>61</sup> Accordingly, the Federal Circuit favored Acumed in this factor. In conclusion, the Federal Circuit affirmed the permanent injunction granted by the district court.

Because Stryker did not raise an independent invention defense in the permanent injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in the considerations of the four equity factors.

(2) O<sub>2</sub> Micro Int'l Ltd. v. Beyond Innovation Tech. Co.

---

<sup>57</sup> *Id.* at 1328.

<sup>58</sup> *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. at 393.

<sup>59</sup> *Supra* note 56, at 1328.

<sup>60</sup> *Id.* at 1329-30.

<sup>61</sup> *Id.* at 1330-31.

O<sub>2</sub> Micro Int'l Ltd. ("O<sub>2</sub> Micro") is the patent owner of the U.S. Patent nos. 6,259,615 (the '615 patent), 6,396,722 (the '722 patent), and 6,804,129 (the '129 patent). O<sub>2</sub> Micro sued Beyond Innovation Tech. Co., FSP Group and SPI Electronic Co., Ltd., and Lien Chang Electronic Enterprise Co., Ltd., (collectively, "Defendants") at the United States District Court for the Eastern District of Texas alleging patent infringement and also filed a motion for permanent injunction to enjoining Defendants from continuously manufacturing and selling the accused products.<sup>62</sup>

The district court cited *eBay* case and applied the four-factor test. With regard to the factor of irreparable injure, the district court found that O<sub>2</sub> Micro and all of three Defendants were direct competitors in the relevant market. If a permanent injunction was not granted, O<sub>2</sub> Micro would lose its market share and thus suffer irreparable injury.<sup>63</sup> Accordingly, the district court favored O<sub>2</sub> Micro in this factor.

With regard to the factor of inadequacy of legal remedies, the district court noted that the pure monetary damages were not adequate to compensate O<sub>2</sub> Micro's harms, and more particularly, all of three Defendants were foreign companies with little assurance for O<sub>2</sub> Micro to collect the awarded monetary damages. Accordingly, the district court held that this factor was in O<sub>2</sub> Micro's favor.<sup>64</sup>

Regarding the factor of balance of hardships, the district court found that O<sub>2</sub> Micro would continuously suffer irreparable harm to its business, market share, future opportunities, and general reputation in the absence of permanent injunction.<sup>65</sup> With regard to the factor of public interest, the district court found that there was no evidence showing that a permanent injunction would significantly influence the public interest. Accordingly, the district court

---

<sup>62</sup> O<sub>2</sub> Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 2007 WL 869576 (E.D. Tex. 2007).

<sup>63</sup> *Id.* at 2.

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

held that these two factors were in favor of O<sub>2</sub> Micro.<sup>66</sup>

Defendants appealed to the Federal Circuit. The most important issues in the Federal Circuit were the arguments regarding claim construction and the doctrine of equivalents, rather than the four-factor equity test. The Federal Circuit held that the claim construction conducted by the district court was correct, but the district court erred in allowing the jury to find patent infringement under the doctrine of equivalents.<sup>67</sup> Accordingly, the Federal Circuit vacated the jury verdict, the permanent injunction order and the final judgment of infringement, and remanded to the district court for a second trial.<sup>68</sup>

On the second trial, the district court found that the Defendants induced infringement of various claims of the '615 patent and the '722 patent, and thus granted a permanent injunction.<sup>69</sup> Defendants appealed again.

On appeal, with regard to the factor of irreparable harm, the Federal Circuit found that O<sub>2</sub> Micro and the Defendants were direct competitors in the market and that the Defendants' patent infringement caused O<sub>2</sub> Micro to lose its market share. Accordingly, the Federal Circuit held that this factor was in O<sub>2</sub> Micro's favor and the district court did not abuse its discretion.<sup>70</sup>

With regard to the factor of inadequate remedy at law, one of the Defendants argued that the district court's finding that it would be hard for O<sub>2</sub> Micro to collect monetary damages from the Defendants was "unfounded speculation".<sup>71</sup> However, the Federal Circuit disagreed this argument by reason that the defendant didn't have any substantial assets in the United States and all of their research, design, manufacturing and sales activities were totally

---

<sup>66</sup> *Id.* at 3.

<sup>67</sup> O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1358-66 (Fed. Cir. 2008).

<sup>68</sup> *Id.* at 1366.

<sup>69</sup> O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 2010 WL 8753254 (E.D. Tex. 2010).

<sup>70</sup> O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 449 Fed. Appx. 923, 932 (Fed. Cir. 2011).

<sup>71</sup> *Id.* at 932-933.

in Asia. Accordingly, the Federal Circuit held that this factor was in O<sub>2</sub> Micro's favor and the district court did not abuse its discretion.<sup>72</sup>

Since the remaining two factors were not challenged on appeal, the Federal Circuit did not address them in this decision. In sum, the Federal Circuit affirmed the permanent injunction granted by the district court.<sup>73</sup>

Because the Defendants did not raise an independent invention defense in the permanent injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in considering the four equity factors.

(3) Ortho-McNeil Pharmaceutical, Inc. v. Mylan Labs, Inc.

Plaintiff Ortho-McNeil Pharmaceutical, Inc. ("Ortho") is the patent owner of the U.S. Patent no. 4,513,006 ("the '006 patent"). Ortho sued Mylan Labs, Inc. ("Mylan") at the United States District Court for the District of New Jersey alleging patent infringement and filed a motion for permanent injunction. The district court held that the '006 patent was valid and Mylan infringed the '006 patent, and thus granted a permanent injunction.<sup>74</sup> Mylan appealed to the Federal Circuit, challenging the district court's claim construction, dismissal of the affirmative defense of inequitable, obviousness, and non-enablement.

The Federal Circuit held that the claim construction conducted by the district court was correct, and the district court correctly dismissed Mylan's defenses of affirmative defense of inequitable, obviousness, and non-enablement. Therefore, the permanent injunction issued by the district court was affirmed,<sup>75</sup> without considering the four-factor equity test.

Since Mylan did not raise an independent invention defense in the permanent injunction proceedings, neither the district court nor the Federal Circuit pondered whether to accept the

---

<sup>72</sup> *Id.* at 933.

<sup>73</sup> *Id.* at 934.

<sup>74</sup> Ortho-McNeil Pharmaceutical, Inc. v. Mylan Labs, Inc., 505 F. Supp 2d. 401 (N.D. Ohio 2007).

<sup>75</sup> Ortho-McNeil Pharmaceutical, Inc. v. Mylan Labs, Inc., 520 F. 3d. 1358, 1366-67 (Fed. Cir. 2008).

independent invention defense in the considerations of the four equity factors.

(4) *Tivo Inc. v. Echostar Communications Corp.*

The plaintiff Tivo is the patent owner of U.S. Patent No. 6,233,389 (“the ‘389 patent”). Tivo sued EchoStar at the United States District Court for the Eastern District of Texas and filed a motion for permanent injunction, alleging that the digital video recorders (“DVRs”) provided by EchoStar infringed several claims of the ‘389 patent.<sup>76</sup>

First, the district court considered the first two factors, i.e. “irreparable harm” and “lack of adequate remedy at law” together. The most important issue was whether Tivo would suffer irreparable harm if the motion for permanent injunction was not granted. Tivo argued that EchoStar was its direct competitor. It would lose its market share and suffer irreparable injuries to its good will, reputation and brand in the absence of injunctive relief.<sup>77</sup> On the other hand, EchoStar asserted that Tiva did not face irreparable harm because Tivo did not move for a preliminary injunction. EchoStar further argued that the price erosion was quite little, so the monetary damages were enough to compensate Tivo’s loss.<sup>78</sup>

With regard to these two factors, the district court emphasized that EchoStar was Tivo’s direct competitors. The court found that the impact of EchoStar’s ongoing infringement was influencing Tivo’s market share and the loss of market share was the most important factor in finding Tivo’s irreparable harm. Since Tivo was a new company having only a main product, losses of market share and customer base caused by the patent infringement would result in irreparable harm. Accordingly, the district court favored Tivo in these two factors.<sup>79</sup>

In regard to the factor of “balance of hardships”, EchoStar argued that monetary damages were enough to compensate Tivo if a permanent injunction was not issued, and

---

<sup>76</sup> *Tivo v. EchoStar Communications Corp.*, 446 F. Supp. 2d 664, 665 (E.D. Tex. 2006).

<sup>77</sup> *Id.* at 666-667.

<sup>78</sup> *Id.* at 668.

<sup>79</sup> *Id.* at 670.

EchoStar would suffer irreparable harm if a permanent injunction was granted. On these grounds, EchoStar asserted that Tivo faced no hardship. However, the district court did not agree EchoStar's argument, holding that this factor was in favor of issuing a permanent injunction by reason that EchoStar was Tivo's direct competitors and Tivo was only a new company having single one product. Tivo would face irreparable harm if EchoStar was allowed to continue infringing the '389 patent.<sup>80</sup>

With regard to the factor of "public interest", EchoStar argued that the DVRs at three million families would be removed if a permanent injunction was granted, so this factor should weigh against a permanent injunction.<sup>81</sup> However, the district court disagreed this argument. The district court held that this factor should be in favor of granting a permanent injunction by reason that the public interest is to maintain a strong patent system.<sup>82</sup> The district court further noted that the accused products were used only for entertainment rather than public health, so the public interest of maintaining a strong patent system was larger than the continuous use of the infringing entertainment products.<sup>83</sup> In conclusion, the court granted a permanent injunction.<sup>84</sup>

It is worth noting that EchoStar argued against willful infringement in the infringement litigation, mentioning that EchoStar had started independently inventing its own DVR technologies before the issuance of the '389 patent.<sup>85</sup> It's a very rare case in the United States that the defendant raised the independent invention defense. However, EchoStar did not raise the independent invention defense in the permanent injunction proceedings, so the court did not consider its independent invention in the consideration of the four factors.

---

<sup>80</sup> *Id.*

<sup>81</sup> *Id.* at 668.

<sup>82</sup> *Id.* at 670.

<sup>83</sup> *Id.*

<sup>84</sup> See also, Conrad Gosen, *Tivo, Inc. v. EchoStar Corp.: Providing Clarity to Contempt Proceedings in Patent Cases*, 27 BERKELEY TECH. L. J. 273, 283-284 (2012).

<sup>85</sup> *Tivo v. EchoStar Communications Corp.*, 2006 WL 6830818, at 4 (E.D. Tex).

(5)Wald v. Mudhopper Oilfield Servs., Inc.

H. Lester Wald. et al. (“Wald”) is the patent owner of U.S. Patent No. 6,655,475 (“the ’475 patent”). Wald sued Mudhopper Oilfield Services, Inc. and Matthew H. Brooks (collectively, “Oilfield”) at the United States District Court for the Western District of Oklahoma alleging willful patent infringement. After trial, the district court found the ’475 patent valid and infringed, and thus awarded damages to Wald in the amount of \$76,017.84 for the patent infringement<sup>86</sup>, and increased damages in the amount of \$152,035.68 for the willful infringement.<sup>87</sup>

Wald also filed a motion for permanent injunction. In regard to the factor of “irreparable harm”, the district court favored Wald by reasons that Wald successfully showed losses of sales, market share, the reputation for innovation and the opportunity to maintain their own products to be the industry standard as the irreparable harm.<sup>88</sup>

The district court also found that the factors of balance of hardship and public interest weighed in favor of a permanent injunction. Accordingly, the district court issued a permanent injunction.<sup>89</sup>

Because Oilfield did not raise an independent invention defense in the permanent injunction proceedings, the district court did not deliberate whether to accept the independent invention defense in the considerations of the four equity factors.

(6)Smith & Nephew, Inc. v. Synthes (U.S.A.) et al.

Smith & Nephew, Inc (“Smith & Nephew”) is the patent owner of U.S. Patent No. 5,167,663 (“the ’663 patent”) and U.S. Patent No. 5,312,406 (“the ’406 patent”). Smith & Nephew sued Synthes (U.S.A.) and Synthes-Stratec, Inc. (collectively, “Synthes”) and filed a

---

<sup>86</sup> Wald v. Mudhopper Oilfield Servs., Inc., 2006 WL 2128851, at 1 (W.D. Okla, 2006).

<sup>87</sup> *Id.*, at 6.

<sup>88</sup> *Id.* at 5.

<sup>89</sup> *Id.*.

motion for permanent injunction at the United States District Court for the Western District of Tennessee, alleging that Synthes infringed the ‘663 patent and the ‘406 Patent. After trial, the district court held that the ‘663 patent and the ‘406 Patent were valid and Synthes’ Trochanteric Fixation Nail and Proximal Femoral Nail infringed the ‘663 patent and the ‘406 Patent.<sup>90</sup>

With regard to factor of the irreparable harm, the district court favored Smith & Nephew by reasons that Smith & Nephew successfully showed flattening sale growth in the market of the accused products, direct competition existed between the accused products and Smith & Nephew’s own products, and direct negative influence on Smith & Nephew’s Products including losses of sales, market share, profit, and brand name recognition.<sup>91</sup> Especially for the losses of profits and brand name recognition, the district court held that Synthes’ continued sale of the accused products resulted in incalculable and irreparable injuries in the absence of permanent injunction.<sup>92</sup>

In regard to the factor of adequacy of remedies available at law, the district court divided the damages into two types—the tangible losses and the intangible losses. The district court noted that the tangible losses such as lost sales are relatively calculable, but the intangible losses such as the loss of goodwill, can never be ascertained accurately.<sup>93</sup>

Even for the tangible losses, the district court held that monetary damages are generally not an adequate remedy against future infringement. The district court first cited *Telequip Corp. v. The Change Exchange et al* case<sup>94</sup> to mention that the primary value of owning a patent is the right to exclude others from using the patented product.<sup>95</sup> Since the ‘663 patent and the ‘406 Patent were found valid and infringed, the district court held that the motion for

---

<sup>90</sup> Smith & Nephew, Inc. v. Synthes (U.S.A.), 466 F. Supp. 2d 978, 981-982 (W. D. Tenn., 2006).

<sup>91</sup> *Id.* at 983.

<sup>92</sup> *Id.*

<sup>93</sup> *Id.* at 983-984.

<sup>94</sup> *Telequip Corp. v. The Change Exchange et al*, 2006 U.S. Dist. LEXIS 61469, at 4 (N.D.N.Y. 2006).

<sup>95</sup> *Supra* note 90, at 984.



permanent injunction should be granted in order to prevent future violations<sup>96</sup>; otherwise, the law would provide the defendants a discretion not to obey the law.<sup>97</sup> As a result, the district court favored Smith & Nephew in this factor.

By considering that: (1) Synthes was found infringing the '663 patent and the '406 patent, and (2) the patent infringement was a continuing threat to the plaintiff Smith & Nephew, the district court favored Smith & Nephew in the factor of balance of hardship.<sup>98</sup>

With regard to the factor of “the public interest”, the district court held that a permanent injunction would increase consumer access to better and more competitive products by letting Smith & Nephew to obtain greater brand recognition. Accordingly, the district court held that this factor was in Smith & Nephew’s favor.<sup>99</sup> Consequently, the district court granted a permanent injunction.

Because Synthes did not raise an independent invention defense in the permanent injunction proceedings, the district court did not ponder whether to accept the independent invention defense in the considerations of the four equity factors.

(7) *Visto Corporation v. Seven Networks, Inc.*

Visto Corp. (“Visto”) and Seven Network, Inc. (“Seven”) were direct competitors in the mobile email market. Plaintiff Visto sued Seven at the United States District Court for The Eastern District of Texas alleging patent infringement. After trial, a jury found that Seven was liable for willful patent infringement and then awarded damages. Visto also filed a motion for permanent injunction.<sup>100</sup>

The district court quoted *eBay v. MercExchange* to apply the four-factor equity test.

---

<sup>96</sup> *Id.* at 984.

<sup>97</sup> *Id.*

<sup>98</sup> *Id.* at 984-985.

<sup>99</sup> *Id.* at 985.

<sup>100</sup> *Visto Corp. v. Seven Networks, Inc.*, 2006 WL 3741891, at 3 (E. D. Tex. 2006).

With regard to the factor of “irreparable injury”, the district court found that both parties were direct competitors in the market, and held that a patent enjoys its most important value when it is claimed against a direct competitor in the patentee’s market.<sup>101</sup> As a result, the district court held that this factor was in Visto’s favor by reason that Seven was the direct competitor of Visto in the mobile email market, so Visto would suffer irreparable injury if a permanent injunction was not granted.<sup>102</sup>

For the factor of “inadequacy of legal remedies”, the court noted that the monetary damages awarded by the jury were suitable for past damages but not for future injure which could only be approximated. Accordingly, the district court held that a permanent injunction to enjoin Seven from continuously using the Visto’s patents was a suitable remedy to avoid future infringement.<sup>103</sup>

In regard to the factor of “balancing of hardships”, the district court held that Visto’s potential revenue and good will would be influenced in the absence of permanent injunction, so this factor was in favor of Visto.<sup>104</sup> With regard to the factor of “public interest”, the district court held that the public interest would not be impacted if a permanent injunction was granted, and in fact the public interest would be implemented by granting a permanent injunction to protect the valid patent rights.<sup>105</sup> Since all of the four factors were in Visto’s favor, the district court granted and issued a permanent injunction.

Seven did not raise an independent invention defense in the permanent injunction proceedings, so the district court did not have a chance to ponder whether to accept the independent invention defense in the considerations of the four equity factors.

#### (8) 3M v. Avery

---

<sup>101</sup> *Id.* at 4.

<sup>102</sup> *Id.*

<sup>103</sup> *Id.*

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* at 5.

3M Innovative Properties Company and Minnesota Mining and Manufacturing Company (collectively, “3M”) are the patent owner of U.S. Patent No. 5,897,930 (“the ‘930 patent”). 3M sued Avery Dennison Corporation (“Avery”) at the United States District Court District of Minnesota alleging that the EZ Series Fleet Marketing Film made and sold by Avery infringed the ‘930 patent. The jury found the ‘930 patent valid and infringed, and 3M also filed a motion for permanent injunction.<sup>106</sup>

The district court quoted *eBay* to apply the traditional four-factor test. With regard to the first two factors, Avery argued that the damages awarded to 3M would fully compensate 3M, so there was no irreparable injury in the absence of permanent injunction. The district court did not agree with Avery’s argument by reason that Avery desired to deal with a patent license with 3M after lost at trial which 3M had refused to license before trial. The district court quoted *Schneider (Europe) AG v. Scimed Life Sys.*,<sup>107</sup> to hold that 3M would suffer irreparable injury which could not be compensated by monetary damages in the absence of permanent injunction.<sup>108</sup>

In regard to the factor of “balance of hardship”, the district court favored 3M by reason that 3M had suffered great harm and would continue to suffer if a permanent injunction was not granted.<sup>109</sup> For the factor of “public interest”, the district court found that the case was related to commercial graphics applied for advertising rather than about safety or public health, so this factor was in 3M’s favor.<sup>110</sup> Since all of the four factors were in 3M’s favor, the district court issued a permanent injunction.

Because Avery did not raise an independent invention defense in the permanent injunction proceedings, the district court did not deliberate whether to accept the independent

---

<sup>106</sup> 3M v. Avery, 2006 WL 2735499, at 1 (D. Minn. 2006).

<sup>107</sup> *Schneider (Europe) AG v. Scimed Life Sys.*, 852 F. Supp. 813, 861 (D. Minn. 1994).

<sup>108</sup> *Supra* note 106, at 1.

<sup>109</sup> *Id.* at 2.

<sup>110</sup> *Id.*

invention defense in considering the four equity factors.

(9) *Telequip Corp. v. Seoul Information Industrial, Inc.*

Telequip Corp. (“Telequip”) is the patent owner of U.S. Patent no. 5,830,055 (“the ‘055 patent”). Telequip sued Seoul Information Industrial, Inc (“Seoul Information”) at the United States District Court Northern District of New York in 2003 alleging patent infringement and also filed a motion for permanent injunction.<sup>111</sup>

In reaching the decision of permanent injunction, the district court quoted *eBay* case to apply the four-factor test.<sup>112</sup> The district court granted the permanent injunction but discussed shortly and briefly, likely because this case was default judgment. The district court quoted *Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*<sup>113</sup> to hold that monetary damages were not an adequate remedy against future infringement. The district court thus granted a permanent injunction.<sup>114</sup>

In this case, Seoul Information did not raise an independent invention defense in the permanent injunction proceedings, so the district court did not deliberate whether to accept the independent invention defense.

(10) *Fresenius Medical Care Holdings, Inc., et al., v. Baxter International, Inc.*

Baxter International, Inc. and Baxter Healthcare Corporation (collectively, “Baxters”) are the patent owner of U.S. Patent Nos. 5,247,434 patent (“the ‘434 patent”), the 5,744,027 patent (“the ‘027 patent”) and the 6,284,131 (“the ‘131 patent”)(collectively, the “patents-in-suit”). Fresenius Medical Care Holdings, Inc. (“Fresenius”) filed a lawsuit against Baxters at the United States District Court Northern District of California Oakland Division in 2003, seeking a declaratory judgment that the patents-in-suit were not valid and

---

<sup>111</sup> *Telequip Corp. v. Seoul Information Industrial, Inc.*, 2006 WL 2385425, at 1 (N.D.N.Y. 2006).

<sup>112</sup> *Id.* at 2.

<sup>113</sup> *Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*, 397 F. Supp. 2d 537, 546 (D. Del. 2005)(stating that “the principal value of a patent is its statutory right to exclude.”)

<sup>114</sup> *Supra* note 111, at 2.

not infringed by Fresenius's hemodialysis machines.<sup>115</sup> Baxters counterclaimed, alleging that Fresenius's hemodialysis machines infringed some claims of the '434 patent, the '027 patent and the '131 patent. After adjudication, the district court found that the patents-in-suit were valid and Fresenius's hemodialysis machines infringed some claims of the patents-in-suit. Accordingly, the district court awarded Baxters a total of U.S.\$14,266,000 in damages.<sup>116</sup>

Furthermore, Baxters filed a motion for permanent injunction to enjoin Fresenius from manufacturing and selling the hemodialysis machines.<sup>117</sup> With regard to the factor of irreparable harm, the district court cited *O<sub>2</sub> Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*<sup>118</sup> and *Novozymes A/S v. Genencor Int'l, Inc.*<sup>119</sup> to note that courts generally hold irreparable injury and thus favors in granting permanent injunctions if the infringer-defendant is a direct competitor of the patentee-plaintiff.<sup>120</sup> Since Fresenius and Baxter were "head-to-head" competitors in the relevant market, the district court favored the patent owner in this factor.<sup>121</sup>

In regard to the factor of "inadequacy of monetary damages", the district court cited *Telequip Corp. v. The Change Exchange*<sup>122</sup> and *Boehringer Ingelheim Vetmedica v. Schering-Plough*<sup>123</sup> to hold that courts routinely find that because patent's primary value is its statutory right to exclude, monetary damages are generally not adequate compensation against future patent infringement.<sup>124</sup> The district court favored the patent holder in the factor by reason that many injuries, such as loss of reputation and goodwill, could not be compensated

---

<sup>115</sup> *Fresenius Med. Care Holdings, Inc. v. Baxter Int'l Inc.*, No. 03-CV-1431, 2008 WL 928496, at 1 (N.D. Cal. 2008).

<sup>116</sup> *Id.*

<sup>117</sup> *Id.* at 2.

<sup>118</sup> *O<sub>2</sub> Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 2007 WL 869576, at 2 (E.D. Tex. 2007).

<sup>119</sup> *Novozymes A/S v. Genencor Int'l, Inc.*, 474 F. Supp. 2d 592, 613 (D. Del. 2007).

<sup>120</sup> *Supra* note 115, at 3.

<sup>121</sup> *Id.*

<sup>122</sup> *Telequip Corp. v. The Change Exchange*, 2006 WL 2385425 at 4-5 (N.D.N.Y. 2006).

<sup>123</sup> *Boehringer Ingelheim Vetmedica v. Schering-Plough*, 106 F. Supp. 2d 696, 703 (D.N.J. 2000).

<sup>124</sup> *Supra* note 115, at 4.

merely by monetary damages.<sup>125</sup>

For the factor of balance of hardship, the district court cited *MGM Well Servs., Inc. v. Mega Lift Sys. LLC*<sup>126</sup> to note that the balance of hardship generally favors the patent owner if the defendant is capable of providing non-infringing alternatives. Accordingly, the district court held this factor in Boxters's favor.<sup>127</sup>

In regard to the factor of public interest, Fresenius argued that the accused product was related to public health, so the permanent injunction should not be granted. However, the district court noted that many courts had granted permanent injunctions in cases relating to medical apparatuses if there had been non-infringing alternatives available in the market. Since Fresenius was capable of providing the non-infringing alternatives to the market, the district court favored Boxters in this factor.<sup>128</sup> In conclusion, the district court granted the motion for permanent injunction.<sup>129</sup>

It is worth noting that although the permanent injunction order had been issued on March 21, 2008, the injunction order did not become effective immediately. Instead, the permanent injunction order took effect on January 1, 2009, because Fresenius had argued that it could develop a non-infringing product by that date.<sup>130</sup> Furthermore, in order to arrange the delayed permanent injunction order, the district court ordered Fresenius to pay an ongoing royalty at the rate of 10% of the sales price for the sales of the accused hemodialysis machines before January 1, 2009.<sup>131</sup>

Fresenius appealed the injunction order to the Federal Circuit. After adjudication, the Federal Circuit vacated the permanent injunction and remanded for the district court to

---

<sup>125</sup> *Id.*

<sup>126</sup> *MGM Well Servs., Inc. v. Mega Lift Sys. LLC*, 505 F. Supp. 2d 359, 379 (S.D. Tex. 2007).

<sup>127</sup> *Supra* note 115, at 4-5.

<sup>128</sup> *Id.* at 5-6.

<sup>129</sup> *Id.* at 6.

<sup>130</sup> *Id.* at 7.

<sup>131</sup> *Id.*.

reconsider the permanent injunction because the Federal Circuit reversed the district court's grant of JMOL. The Federal Circuit also vacated and remanded the royalty awarded by the district court and remanded for the district court to reconsider the reasonableness of the original royalty rate.<sup>132</sup>

Fresenius did not raise an independent invention defense in the permanent injunction proceedings, so neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in the considerations of the four equity factors.

(11) *i4i Ltd. v. Microsoft Corp.*

*i4i Limited Partnership and Infrastructures for Information Inc.* (“*i4i*”) is a software consulting company, owning U.S. Patent No. 5,787,449 (hereinafter “the ‘449 patent”). *i4i* filed a lawsuit against Microsoft Corporation (“Microsoft”) at the United States District Court for Eastern District of Texas, alleging that the custom XML editor in some versions of Microsoft Word infringed *i4i*'s ‘449 patent.<sup>133</sup>

After a seven-day trial, the jury found that the ‘449 patent was valid and some versions of Microsoft Word infringed the ‘449 patent. As a result, the district court awarded a total of U.S.\$ 200 million in damages to *i4i*. Furthermore, because the jury found that Microsoft was liable for willful patent infringement, the district court awarded additional U.S.\$ 40 million as enhanced damages.<sup>134</sup>

Moreover, *i4i* filed a motion for permanent injunction. The district court adjudicated the motion for permanent injunction by citing *eBay* to consider the four equity factors. After adjudication, the district court granted and issued a permanent injunction order, which permanently enjoined Microsoft from performing the some specific actions<sup>135</sup> with many

---

<sup>132</sup> *Fresenius Med. Care Holdings, Inc. v. Baxter Int'l Inc.*, 582 F.3d 1288, 1304 (Fed. Cir. 2009).

<sup>133</sup> *i4i Ltd. Partnership v. Microsoft Corp.*, 670 F. Supp. 2d 568, 572-573 (E.D. Tex. 2009).

<sup>134</sup> *Id.* at 573.

<sup>135</sup> The permanent injunction joined Microsoft from (1) selling, offering to sell, and/or importing in or into

versions of Microsoft Word.<sup>136</sup> It is worth noting that the permanent injunction applied only to users who purchased or licensed Microsoft Word after the date the permanent injunction had taken effect. The permanent injunction order concluded that the permanent injunction became effective 60 days from the date of the order.<sup>137</sup>

Microsoft appealed to the Federal Circuit. With regard to the factor of “irreparable harm”, the Federal Circuit affirmed the district court’s finding that i4i had been irreparably injured by Microsoft’s infringement because Microsoft and i4i had been direct competitors in the custom XML market, and i4i lost its market share as a result of Microsoft’s infringing Word products.<sup>138</sup> The Federal Circuit cited *eBay* to hold that the district court was right to determine the irreparable harm by considering evidence of i4i’s past harm.<sup>139</sup> Accordingly, the Federal Circuit favored i4i in this factor.

For the factor of “inadequate remedies at law”, the Federal Circuit cited *Broadcom Corp. v. Qualcomm Inc.*<sup>140</sup> to rule that the difficulty in counting monetary damages is evidence for this factor that remedies at law are not adequate. In this case, the district court found that i4i had forced to change its business strategy because Microsoft’s infringing products had occupied about 80% of the custom XML market. Accordingly, the Federal Circuit concluded that any monetary damages were not adequate remedies at law to cover the injuries of i4i, such as the losses of market share, custom goodwill, and brand recognition. As a result, the Federal Circuit held that it wasn’t an abuse of discretion for the district court

---

the United States any Infringing and Future Word Products that have the capability of opening a .XML, .DOCX, or .DOCM file (“an XML file”) containing custom XML; (2)using any Infringing and Future Word Products to open an XML file containing custom XML; (3)instructing or encouraging anyone to use any Infringing and Future Word Products to open an XML file containing custom XML; (4)providing support or assistance to anyone that describes how to use any infringing and Future Word Products to open an XML file containing custom XML; and (5)testing, demonstrating, or marketing the ability of the Infringing and Future Word Products to open an XML file containing custom XML.

<sup>136</sup> *Supra* note 133, at 599-602.

<sup>137</sup> *Id.* at 602-603.

<sup>138</sup> *i4i Ltd. v. Microsoft Corp.*, 598 F3d 831, 861 (Fed. Cir. 2009).

<sup>139</sup> *Id.* at 861-862.

<sup>140</sup> *Broadcom Corp. v. Qualcomm Inc.*, 543 F. 3d 683, 703-04 (Fed. Cir. 2008).



to favor i4i in this factor.<sup>141</sup>

The Federal Circuit held that the balance of hardships favored i4i except on the limited issue of timing. The main reasons were that: (1) i4i's products based on the '499 patent were its primary products; and (2) Microsoft's infringing custom XML editor had been found to be only one of thousands of features within Microsoft's Word products, used by merely a small portion of Microsoft's clients.<sup>142</sup> In other word, the negative impact on Microsoft by a permanent injunction order would be very limited.

The Federal Circuit held that the public interest factor favored i4i because the scope of the permanent injunction was narrow, i.e., only to users who purchased or licensed Word after the date the permanent injunction became effective. The Federal Circuit concluded that the district court had not abused its discretion except as to the injunction's effective date, i.e., 60 days from the date of the order.<sup>143</sup>

Although the Federal Circuit affirmed the permanent injunction granted by the district court, the Federal Circuit found that the district court erred in ordering Microsoft to obey the permanent injunction order within 60 days. Because the district court found that Microsoft had shown its possibility to comply with the permanent injunction in 5 months, the Federal Circuit concluded that the permanent injunction's effective date should be 5 months rather than 60 days, from the date of the permanent injunction order—August 11, 2009.<sup>144,145</sup>

Microsoft did not raise an independent invention defense in the permanent injunction proceedings, so neither the district court nor the Federal Circuit pondered whether to accept the independent invention defense in the considerations of the four equity factors.

---

<sup>141</sup> *Supra* note 138, at 862.

<sup>142</sup> *Id.* at 862-863.

<sup>143</sup> *Id.* at 863.

<sup>144</sup> *Id.* at 863-864.

<sup>145</sup> *See also*, Ryan Klimczak, *i4i and the Presumption of Validity: Limited Concerns over the Insulation of Weak Patents*, 27 BERKELEY TECH. L. J. 299, 307-308 (2012).

## 2. The Patent Owner is an Indirect Competitor of the Defendant

### (1) Novozymes A/S v. Genencor Int'l, Inc.

Novozymes A/S (hereinafter “Novozymes”) is a Danish company owing the U.S. Patent No. 6,867,031 (hereinafter “the ‘031 patent”). Novozymes licensed the ‘031 patent to its wholly-owned subsidiary Novozymes of North America, Inc. (hereinafter “NZNA”), allowing NZNA to manufacture and sell the patented product (industrial enzymes) in the United States. In return for using the patented technology, NZNA needs to pay royalties at the rate of 40% of net sales to the mother company Novozymes.<sup>146</sup>

Novozymes sued Genencor International, Inc. and Enzyme Development Corporation (collectively “the Defendants”) at the United States District Court for District of Delaware in 2005, alleging infringement of the ‘031 patent and also moved for a permanent injunction. After adjudication, the court held the ‘031 patent valid and infringed, and awarded reasonable royalty damages, double damages and reasonable attorney’s fees to Novozymes.<sup>147</sup>

The district court cited *eBay* to apply for the four-factor test in adjudicating the motion for permanent injunction. In regard to the factor of irreparable harm, the district noted that Novozymes licensed the ‘031 patent to its subsidiary not only exchanging for the 40% royalty, but also expecting that the subsidiary’s value would increase with the successful sales of the patented product. Although Novozymes did not market the patented product by itself, the district court found that it had suffered and would continue to suffer irreparable harm in the absence of permanent injunction. Accordingly, the district court favored Novozymes in this factor.<sup>148</sup>

With regard to the factor of adequacy of monetary damages, the district court held in Novozymes’s favor by find that the monetary damages were not adequate to compensate

---

<sup>146</sup> Novozymes A/S v. Genencor Int'l, Inc., 474 Supp. 2d 592, 595-97 (D. Del. 2007).

<sup>147</sup> *Id.* at 595-96.

<sup>148</sup> *Id.* at 612.

Novozymes for the patent infringement because Novozymes marketed its patented technology by licensing it to a subsidiary.<sup>149</sup>

For the factor of balance of hardship, the district court favored Novozymes by reasons that: (1) Novozymes would suffer irreparable injuries from future patent infringement; and (2) the Defendants would not be harmed by a permanent injunction because they had already pulled the accused products from the market. In regard to the public interest, the district court noted that a permanent injunction would not harm the public interest. In conclusion, the district court granted a permanent injunction.<sup>150</sup>

It's worth noting that Novozymes was not a direct competitor of the Defendants. The direct competitor of the Defendants was Novozymes' subsidiary and non-exclusive licensee--NZNA. However, the district court still awarded a permanent injunction to Novozymes. This dissertation finds the key reasons are: (1) NZNA was a wholly-owned and fully-controlled subsidiary of Novozymes; (2) Novozymes licensed the '031 patent to NZNA in exchange for a 40% royalty; and (3) NZNA's successful market of the patented product in the U.S. would directly benefit NZNA and indirectly benefit Novozymes. For these reasons, we may view Novozymes as an indirect competitor of the Defendants<sup>151</sup>: if NZNA is directly and irreparably harmed by future patent infringement, Novozymes will be indirectly and irreparably harmed as well.

Accordingly, the importance of *Novozymes A/S v. Genencor Int'l, Inc.* is to expand the grant of permanent injunction from direct competitors to an indirect competitor who is the licensor of the patent-in-suit.

---

<sup>149</sup> *Id.* at 612.

<sup>150</sup> *Id.* at 612.

<sup>151</sup> Ernst Grumbles III, Rachel C. Hughey and Susan Perera, *The Three Year Anniversary of eBay v. MercExchange: A Statistical Analysis of Permanent Injunctions*, INTELL. PROP. TODAY, NOV. 2009, at 28.

The defendants did not raise an independent invention defense in the permanent injunction proceedings, so the court did not have a chance to ponder whether to accept the independent invention defense in the considerations of the four equity factors.

(2) *Broadcom Corp. v. Qualcomm Inc.*

Broadcom Corporation (“Broadcom”) is the patent owner of the U.S. Patents No. 6,847,686 (“the ‘686 patent”), No. 5,657,317 (“the ‘317 patent”), and No. 6,389,010 (“the ‘0106 patent”) (collectively “the patents-in-suit”). Broadcom sued Qualcomm Incorporated (“Qualcomm”) alleging patent infringement and moved for permanent injunction. The district court held the patents-in-suit valid and infringed, and granted a permanent injunction to enjoin Qualcomm from manufacturing and selling its CDMA 2000 chips.<sup>152</sup> Qualcomm appealed to the Federal Circuit.

With regard to the factor of irreparable harm, Qualcomm argued that Qualcomm’s CDMA 2000 chips were different to Broadcom’s WCDMA chips. Since Broadcom did not sell the CDMA 2000 chips, it could not allege injuries resulting from Qualcomm’s sales of CDMA 2000 chips. On the other hand, Broadcom argued that the CDMA 2000 chips were substitutes of the WCDMA chips sold by Broadcom, and Qualcomm itself had admitted that it competed indirectly with Broadcom.<sup>153</sup> After adjudication, the Federal Circuit favored Broadcom in this factor by noting that: (1) Qualcomm itself had admitted that it was Broadcom’s indirect competitor; and (2) the CDMA 2000 chips were substitutes of the WCDMA chips sold by Broadcom.<sup>154</sup>

Furthermore, the Federal Circuit noted that: (1) mere monetary damages were inadequate to Broadcom; and (2) the balance of hardships favored Broadcom; and (3) the

---

<sup>152</sup> *Broadcom Corp. v. Qualcomm Inc.*, No. 05-CV-467 (C.D. Cal. 2007).

<sup>153</sup> *Broadcom Corp. v. Qualcomm Inc.*, 543 F. 3d 683, 702 (Fed. Cir. 2008).

<sup>154</sup> *Id.* at 703.

public interest is to uphold patent right and to enter a permanent injunction.<sup>155</sup> Accordingly, the Federal Circuit affirmed the district court's holding of issuing a permanent injunction.

We may also view Broadcom as an indirect competitor of Qualcomm<sup>156</sup>: since WCDMA chips and CDMA 2000 chips are substitutes to each other, the denial of a permanent injunction would allow Qualcomm continuously selling the CDMA 2000 chips and thus decrease Broadcom's sales of the WCDMA chips. Accordingly, the importance of *Broadcom Corp. v. Qualcomm Inc.* is to expand the grant of permanent injunction from direct competitors to an indirect competitor who provides a substitute to the accused product, in case the accused product is a substitute of the products sold by the patent owner.

Since Qualcomm did not raise an independent invention defense in the permanent injunction proceedings, the court did not have a chance to consider whether to accept the independent invention defense in examining the four equity factors.

### 3. The Patent Owner is a Research Institute Competing with Other Research Institutes and Universities in the Technology Market

#### (1) CSIRO v. Buffalo Technology Inc.

Commonwealth Scientific and Industrial Research Organization ("CSIRO"), established in 1926, is the most important scientific research institute of the Australian Federal Government. The aims of CSIRO are to conduct strategic scientific research and to apply the research fruits to advance health, welfare, and prosperity of human beings. CSIRO conducts the scientific research at its own laboratories, and transfers the research results to the public to fund subsequent research activities by establishing start-up companies or licensing the patents to the existing companies to earn royalties.<sup>157</sup>

In 1993, CSIRO filed a patent application with the United States Patent & Trademark

---

<sup>155</sup> *Id.* at 703-04.

<sup>156</sup> Ernst Grumbles III, Rachel C. Hughey and Susan Perera, *supra* note 151, at 27.

<sup>157</sup> Commonwealth Scientific and Industrial Research Organization v. Buffalo Technology Inc. and Buffalo, Inc., 492 F.Supp.2d 600, 601 (E.D. Texas, 2007).

Office, and obtained the Patent No. 5,487,069 (“the ‘069 patent”) in 1996. The original business model of CSIRO was to license the ‘069 patent to collect licensing fees and royalties. CSIRO formed a joint venture Radiata Communications Pty Ltd. (“Radiata”) with Macquarie University in 1997, and then CSIRO licensed the ‘069 patent to Radiata. In 2001, Cisco System, Inc. (“Cisco”) acquired Radiata in stock to the amount of \$295 million and began to pay royalties to CSIRO.<sup>158</sup>

The defendants were Buffalo Technology Inc. (an US corporation) and Buffalo, Inc. (a Japanese company)(collectively “Buffalo”). In 2005, CSIRO filed a lawsuit against Buffalo at the United States District Court for Eastern District of Texas, alleging infringement of the ‘069 patent. The ‘069 patent was held valid and infringed by the district court. Furthermore, CSIRO filed a motion for permanent injunction.<sup>159</sup>

With respect to the factor of irreparable harm, CSIRO asserted that its research and development activities and licensing programs would be irreparably harmed in the absence of permanent injunction. CSIRO further argued that other companies would be encouraged not to license but to infringe the ‘069 patent if the permanent injunction against Buffalo was not granted. On the other hand, Buffalo argued that CSIRO would not suffer irreparable injuries in the absence of permanent injunction since CSIRO did not have its own products and CSIRO was not Buffalo’s competitor.<sup>160</sup> In response to Buffalo’s argument, CSIRO asserted that it did compete globally with other research institutes and universities. If a permanent injunction was not granted, CSIRO would lose or delay its funding for further researches and developments and would thus suffer irreparable harm.<sup>161</sup>

The district court first cited *eBay* to note that the Supreme Court had rejected the

---

<sup>158</sup> *Id.* at 601-602.

<sup>159</sup> *Id.* at 602.

<sup>160</sup> *Id.* at 603.

<sup>161</sup> *Id.* at 604.

conclusion that merely lack of commercial activities in practicing the patent-in-suit would be enough to establish the irreparable harm. The district court agreed with CSIRO's arguments (competing with other research institutes and universities in the technology market) and thus favored a permanent injunction in this factor.<sup>162</sup>

According to a commentator, when a non-practicing entity such as a university licenses its patents as a portion of a technology transfer project, the non-practicing entity as a patent owner would suffer irreparable injuries from patent infringement, comprising loss of client base in a technology market.<sup>163</sup> This dissertation agrees with this opinion and would like to extend this opinion to the *CSIRO* case. Based on CSIRO's argument in this case, CSIRO is competing with other research institutes and universities in the technology market; if a permanent injunction was not granted, CSIRO would lose or delay its funding so the scheduled progresses for further researches and developments would be significantly delayed. No doubt, this delay will cause CSIRO to fall behind to other competitors in the relevant technology market, and the lag in further search and development frequently results in irreparable harm to CSIRO.

Because Buffalo did not raise an independent invention defense in the permanent injunction proceedings, the district court did not deliberate whether to accept the independent invention defense in the considerations of the four equity factors.

The importance of *CSIRO v. Buffalo Technology Inc.* is to expand the grant of permanent injunction from direct competitors to a research institute competing with other research institutes and universities in the technology market.

#### 4. Short Conclusions for the Cases Granting a Permanent Injunction

In the post-*eBay* era, it is not easy for the patentee-plaintiff to obtain a permanent injunction if it is not a direct competitor of the defendant in the market of the accused

---

<sup>162</sup> *Id.* at 604-605.

<sup>163</sup> Suzanne Michel, *supra* note 8. at 906.

products. In most of the cases granting a permanent injunction, the patentee-plaintiff is a direct competitor of the defendant in the market of the accused product. A commentator thus said that the “direct competition” had become a “Market Competition” requirement.<sup>164</sup>

In fact, some cases granted a permanent injunction to “indirect competitors”. For example, the *Novozymes A/S v. Genencor Int’l, Inc.* case granted a permanent injunction to the patent owner (licensor) of the patent-in-suit. Although the patent owner did not provide the patented product by itself, it licensed the patent-in-suit to its U.S. subsidiary in exchange for a 40% royalty. If the patentee can prove that the licensee will be directly and irreparably harmed by future patent infringement, the patent owner can thus establish its indirect and irreparable harm as well.

Furthermore, the *Broadcom Corp. v. Qualcomm Inc.* case also expanded the grant of a permanent injunction from direct competitors to an indirect competitor who provides a substitute to the accused product. Since the denial of a permanent injunction would allow the defendant continuously selling the accused product and thus decrease the patentee’s sales of its own products, the patent owner may indirectly prove its irreparable harm once it can prove the substitutability between the accused products and the patentee’s own products.

In addition, the *CSIRO v. Buffalo Technology Inc.* also expanded the grant of permanent injunction from direct competitors to a research institute competing with other research institutes and universities in the technology market.

In conclusion, the “competition” seems still a need for the patent owners to obtain a permanent injunction. If the patent owner can not establish a direct competition, it may try to establish an indirect competition or at least a research competition in the technology market.

#### **4.3.2 Injunction Denied--“Creative Mechanisms” for the Cases Found Infringement but**

---

<sup>164</sup> Benjamin H. Diessel, Note: *Trolling for Trolls: The Pitfalls of the Emerging Market Competition Requirement for Permanent Injunctions in Patent Cases Post-eBay*, 310 MICHIGAN L. REV. 305, 310 (2007).



## **not Granted Permanent Injunctions**

Under the opinion of *eBay*, there must be some cases in which the damages are awarded but a permanent injunction is denied. In fact, such case holds patent valid and infringed but allows the defendants continuing to infringe the patents-in-suit. This is actually a problem raised from *eBay*. Under such situation, the courts should try to “invent” some “creative mechanisms” to overcome the problem. An empirical study conducted by this dissertation finds that there have been four kinds of “creative mechanisms” invented by the courts: (1) without providing any further remedy; (2) ordering plaintiff to file a new lawsuit; (3) providing on-going royalty; and (4) providing compulsory license and on-going royalty. They are introduced and analyzed as follows.

### 1. Without Providing any Further Remedy

#### (1) *Voda v. Cordis Corp.*

Dr. Jan K. Voda, M. D. (“Voda”) is the patent owner of the U.S. Patent No. 5,445,625 (“the ‘625 patent”), U.S. Patent No. 6,083,213 (“the ‘213 patent”), and U.S. Patent No. 6,475,195 (“the ‘195 patent”) (collectively, the “patents-in-suit”). The patents-in-suit are related to angioplasty guide catheter. Voda sued Cordis Corporation (“Cordis”) at the United States District Court for the Western District of Oklahoma, seeking damages for patent infringement and moving for a permanent injunction. The district court found some specific claims of the patents-in-suit valid and willfully infringed, so awarded damages together with prejudgment interest and enhanced damages to Voda against Cordis’s willful infringement.<sup>165</sup>

However, the district court denied Voda’s motion for permanent injunction by reason that Voda had failed to establish the irreparable harm due to the patent infringement and to prove that monetary damages were inadequate in the absence of permanent injunction.<sup>166</sup> In

---

<sup>165</sup> *Voda v. Cordis Corp.*, 2006 WL 2570614, at 1-4 (W.D. Okl, 2006).

<sup>166</sup> *Id.* at 5.

details, with regard to the factor of irreparable harm, Voda argued that the irreparable injury was presumed since the patent validity and infringement had been established. The district court disagreed with this argument by mentioning that the assumption of irreparable harm is no longer effective under *eBay*.<sup>167</sup> In regard to the factor of “monetary damages are inadequate”, Voda asserted that he had exclusively licensed his patents-in-suits to a non-party Scimed; if a permanent injunction was not granted, Cordis’s continuing patent infringement would harm his relationship with Scimed. However, the district court held that it was not adequate to justify granting a permanent injunction.<sup>168</sup>

The things happened because Cordis had indicated that it would continue to infringe the ‘625 patent. The district court thus held that it must fashion a remedy for the continuing patent infringement.<sup>169</sup> Voda asked the district court to sever monetary damages for the post-verdict patent infringement of Cordis, but the district court denied the motion for severance by reason that it was quite easy to calculate the post-verdict damages by easy mathematical calculations on the ground of Cordis’s sales.<sup>170</sup> The district court only asked Cordis to report its sales quarterly. Considering Cordis’s financial stability and company size, the district court even did not order Cordis to pay the royalty funds into a pre-determined interest-bearing escrow account.<sup>171</sup>

On appeal, Voda argued that the district court erred in violating *eBay* and precluding it from proving its entitlement to a permanent injunction by proving its exclusive licensee’s irreparable injury.<sup>172</sup> In fact, Voda had attempted to prove irreparable harm by asserting its exclusive licensee’s irreparable injury, rather than its own harm. The Federal Circuit

---

<sup>167</sup> *Id.* at 5.

<sup>168</sup> *Id.* at 6.

<sup>169</sup> *Id.*

<sup>170</sup> *Id.* (“The court sees no reason for severance of a cause of action for the post-verdict damages as there would be no issues for decision except simple mathematical calculations based on defendant’s sales. The court therefore denies plaintiff’s motion for severance.”)

<sup>171</sup> *Id.*

<sup>172</sup> *Voda v. Cordis Corp.*, 536 F.3d 1311, 1329 (Fed. Cir. 2007).

disagreed with such arguments by reasons that: (1) the Supreme Court in *eBay* mentioned only that the patent holders who license their patent rights rather than practice them *may* be qualified to meet the four-factor test for a permanent injunction; and (2) *eBay* did not eliminate the requirement that the patentee seeking a permanent injunction must prove the irreparable harm in the absence of injunction relief.<sup>173</sup> Accordingly, the Federal Circuit affirmed the district court’s denial of Voda’s motion for a permanent injunction.<sup>174</sup>

One commentator found this “Without Further Remedy” approach well. Although neither a permanent injunction nor an ongoing royalty was granted, this “Without Further Remedy” approach would still provide a large deterrent to future patent infringement.<sup>175</sup> The reason is that the defendant who was found patent infringement in the first lawsuit would bear a high risk of a finding of willful patent infringement (which would cause attorneys fees and enhanced damages) in a subsequent second lawsuit if the defendant continues to infringe the patent-in-suit after losing the first lawsuit.<sup>176</sup>

Cordis did not raise an independent invention defense in the permanent injunction proceedings, so neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in the considerations of the four equity factors.

## 2. Continuing Causes of Action—Ordering Plaintiff to File a new Lawsuit

### (1) *z4 Technologies, Inc. v. Microsoft Corp.*

Z4 Technologies, Inc. (“Z4”) is the patent owner of U.S. Patent Nos. 6,044,471 (“the ‘471 patent”) and 6,785,825 (“the ‘825 patent”). Z4 sued against Microsoft Corporation (“Microsoft”) and Autodesk, Inc. (“Autodesk”) at the United States District Court for the Eastern District of Texas Tyler Division alleging patent infringement. The jury found that

---

<sup>173</sup> *Id.*

<sup>174</sup> *Id.* at 1330.

<sup>175</sup> Bernard H. Chao, *After eBay, Inc. v. MercExchange: The Changing Landscape for Patent Remedies*, 9(2) MINN J. L. SCI. & TECH. 543, 568-569 (2008).

<sup>176</sup> *Id.* at 569.

Microsoft and Autodesk infringed the ‘471 patent and the ‘825 patent<sup>177</sup>, but failed to prove their invalidity by clear and convincing evidence. Accordingly, the jury awarded a huge amount of damages against Microsoft and Autodesk (\$115 million against Microsoft and \$18 million against Autodesk).<sup>178</sup> Z4 also filed a motion of permanent injunction seeking to enjoin Microsoft from making, selling, offering for sale, using, and importing Windows XP and Office.

The district court cited *eBay* to apply the traditional four-factor test. With regard to the factor of “irreparable harm suffered by Z4”, Z4 cited *eBay* to assert a presumption of irreparable harm since the patent validity and infringement had been confirmed by the jury. In fact, pursuant to the precedents of the Supreme Court and Federal Circuit, the presumption of irreparable harm was only applied to preliminary injunction proceedings. In order to assert the presumption, Z4 argued that the Supreme Court had indicated that the standard for a permanent injunction is the same with that for a preliminary injunction, by reason that the Supreme Court in *eBay* cited *Amoco Production Co. v. Village of Gambell Alaska*<sup>179</sup> which established the presumption of irreparable harm for preliminary injunction case.<sup>180</sup>

However, the district court did not agree with Z4’s argument. The district court noted that Z4 could not cite to any precedents which established the presumption of irreparable harm in permanent injunction cases. The Supreme Court citing *Amoco Production Co. v. Village of Gambell Alaska* in *eBay* case was not to indicate that the presumption of irreparable harm is applicable in permanent injunction proceedings. In fact, the Supreme Court in *eBay* required plaintiff to bear the burden of proving the irreparable harm. Accordingly, the district court refused to apply the presumption of irreparable harm.<sup>181</sup>

---

<sup>177</sup> The jury found that Microsoft’s Windows and Office infringed one claim of the ‘471 patent and two claims of the ‘825 patent.

<sup>178</sup> *Supra* note 39, at 438-439.

<sup>179</sup> *Amoco Production Co. v. Village of Gambell Alaska*, 480 U.S. 531, 542 (1987).

<sup>180</sup> *Supra* note 39, at 439-440.

<sup>181</sup> *Id.* at 440.

Z4 further argued that it would suffer irreparable injury in the absence of permanent injunction because there was no way to evaluate Z4's economic success but for Microsoft's patent infringement. Again, the district court did not agree with Z4's argument, noting that the infringing technology only covered a small component of Microsoft's software, and Microsoft's continued patent infringement would not influence on Z4's marketing, sales, or license of the '471 patent and the '825 patent.<sup>182</sup>

The district court further pointed out that losses of brand name recognition, profits, and market share are the injuries which are often not irreparable. However, Z4 could not prove that it would lose profits, brand name recognition and market share in the absence of permanent injunction. As a result, the district court held that this factor was in Microsoft's favor.<sup>183</sup>

For the factor of "adequacy of remedies available at law", Z4 argued that the loss of right to exclude Microsoft from making, offering for sale, selling, using, or importing the patented technology could not be compensated by monetary damages in the absence of permanent injunction, so monetary damages were not an adequate remedy for Microsoft's patent infringement. The district court did not agree with this argument, because this argument would always imply that any violation of patent right always results in injuries which can not be compensated by monetary damages.<sup>184</sup> Because the Supreme Court in *eBay* case held that the right to exclude alone is not enough to grant a permanent injunction order, the district court held that a violation of the right to exclude does not inevitably reach the conclusion that a patent owner can not be adequately compensated by remedies at law such as monetary damages without applying the four factor test.<sup>185</sup> The district court further

---

<sup>182</sup> *Id.*

<sup>183</sup> *Id.* at 440-441.

<sup>184</sup> *Id.* at 441 ("Z4's argument implies that a violation of the right to exclude under the patent act can never be remedied through money and that because any future infringement by Microsoft would violate Z4's right to exclude such a violation could also not be remedied through monetary damages.")

<sup>185</sup> *Id.*

held that monetary damages were adequate in this case because the accused product was only a small component of the patented product. Accordingly, the district court concluded that this factor should be in Microsoft's favor.<sup>186</sup>

In regard to the factor of "balance of hardship", Microsoft argued that it would suffer hardship because it would need huge resources and expense to design around the '471 patent and the '825 patent, even the accused part was only a small component of the whole Microsoft's Windows and Office. The district court agreed with this argument and held that this factor was in favor of Microsoft.<sup>187</sup>

With regard to the factor of "public interest", the district court found that Microsoft's Windows and Office were the most popular software in the world, and to re-design them needed huge resources and expense. Accordingly, the district court concluded that the public interest would be disserved if the permanent injunction was issued. In conclusion, the district court held that the permanent injunction should be denied.<sup>188</sup>

Although the district court denied the permanent injunction, Judge Davis noticed that a mechanism to compensate z4's future damages post verdict was needed. The district court thus crafted a remedy by severing z4's continuing causes of action for monetary damages caused from the denial of permanent injunction and Microsoft's continuing patent infringement.<sup>189</sup> For this purpose, the district court ordered z4 to file a complaint for the continuing cause of action within ten days, and ordered Microsoft to file an answer accordingly.<sup>190</sup> Microsoft was also ordered to file quarterly reports in the new action indicating the total sales numbers of the accused products. The district court emphasized

---

<sup>186</sup> *Id.* at 442.

<sup>187</sup> *Id.* at 443.

<sup>188</sup> *Id.* at 443-444.

<sup>189</sup> *Id.* at 444.

<sup>190</sup> *Id.* ("Therefore, the Court severs z4's causes of action for post-verdict infringement under cause number 6:06cv258 and orders z4 to file an appropriate complaint with ten days of the issuance of this Memorandum Opinion and Order. The Court orders Microsoft to file an answer to z4's complaint with the normal time allotted under the Federal Rules of Civil Procedure.")

that this was an efficient way to preserve z4's rights from future damages of Microsoft's continuing infringement and to relieve Microsoft's hardship from the issuance of permanent injunction order.<sup>191</sup>

Because Microsoft did not raise an independent invention defense in the permanent injunction proceedings, the district court did not deliberate whether to accept the independent invention defense in the considerations of the four equity factors.

A commentator said that this arrangement is better than compulsory license, because this case left the possibility to recalculate the damages if conditions significantly changed.<sup>192</sup>

This dissertation finds that this arrangement has its pro and con. The advantage of this arrangement is that, as the commentator said, the patentee has the chance to recalculate the damages resulting from the defendant's continuous infringement if conditions significantly change in the future. However, under this arrangement, the patentee needs to file another lawsuit to claim for damages, causing disadvantages to both time and money.

### 3. On-going Royalty

#### (1) Paice LLC v. Toyota Motor Corp.

Paice LLC ("Paice") is the patent owner of U.S. Patent No. 5,343,970 ("the '970 patent"). Paice sued Toyota Motor Corporation, Toyota Motor North America, Inc., and Toyota Motor Sales, U.S.A., Inc. (collectively, "Toyota") at the United States District Court for the Eastern District of Texas, alleging patent infringement by three of Toyota's vehicles—the Toyota Prius, Toyota Highlander SUV, and Lexus RX400h SUV. In the end of 2005, a jury decided that some claims of the '970 patent were valid and infringed by Toyota under the doctrine of equivalents, but did not hold willful infringement.<sup>193</sup> The jury thus

---

<sup>191</sup> *Id.* at 444-445.

<sup>192</sup> Yixin H. Tang, *The Future of Patent Enforcement after eBay v. MercExchange*, 20 HAR. J. OF LAW & TECH. 235,248 (2006).

<sup>193</sup> *Supra* note 38, at 1.

awarded Paice \$4,269,950 in monetary damages for Toyota's patent infringement.

Paice also filed a motion for permanent injunction. The district court cited *eBay* to apply the four-factor test. With regard to the factor of "irreparable harm", the district court first cited *eBay* to note that no presumption of irreparable injury should automatically follow from the determination of patent infringement.<sup>194</sup> The district court further cited *Deerfield Med. Ctr. v. City of Deerfield Beach* case<sup>195</sup> to note that irreparable injury happens only where harm can not be compensated by monetary damages.<sup>196</sup> The district court emphasized that the patentee's injuries caused by infringer's sales of infringing products can be compensated by monetary damages with the ongoing royalty set by the jury.<sup>197</sup> Although Paice argued that it had failed to license the '970 patent to others in the absence of permanent injunction, the district court noted that no evidence had showed that the denial of permanent injunction will disable the patent license.<sup>198</sup> Accordingly, the district court favored Toyota in this factor.

For the factor of "adequacy of remedies available at law", the district court cited *eBay*<sup>199</sup> to rule that the exclusive nature of the patent right alone is not sufficient to warrant a permanent injunction.<sup>200</sup> Although Paice argued that it would lose the opportunities to license the '970 patent if a permanent injunction was not granted, the district court still concluded that there had been no evidence showing that the denial of a permanent injunction would decrease other's intention to take a license of the '970 patent.<sup>201</sup>

In regard to the factor of "balance of hardship", the district court held in Toyota's favor

---

<sup>194</sup> *Id.* at 4.

<sup>195</sup> *Deerfield Med. Ctr. v. City of Deerfield Beach*, 661 F.2d 328, 338 (5<sup>th</sup> Cir. 1981).

<sup>196</sup> *Supra* note 38, at 5.

<sup>197</sup> *Id.* ("Plaintiff's losses from Defendant's sales of infringing products can be remedied via monetary damages in accordance with the reasonable royalty set by the jury").

<sup>198</sup> *Id.*

<sup>199</sup> *eBay Inc. v. MercExchange, L.L.C.*, 126 S. Ct. 1937, 1840 (U.S. 2006).

<sup>200</sup> *Supra* note 38, at 5 ("Infringing one's right to exclude alone, however, is insufficient to warrant injunction relief").

<sup>201</sup> *Id.*



by reasons that a permanent injunction would harm not only Toyota’s business and reputation, but also Toyota’s related businesses such as dealers and suppliers.<sup>202</sup> With regard to the factor of “public interest”, the district court concluded that the public interest did not weigh heavily in either party’s favor.<sup>203</sup> Accordingly, the district court denied a permanent injunction.

Moreover, to compensate Paice for Toyota’s continuing infringement, the district court awarded an “ongoing royalty” to Paice with the rate of \$25 per Prius II, Toyota Highlander, or Lexus RX400h vehicle sold by Toyota during the remaining life of the ‘970 patent.<sup>204</sup>

Both parties appealed to the United States Court of Appeals for the Federal Circuit. Toyota appealed the district court’s judgment finding that Toyota infringed claims 11 and 39 of the ‘970 patent under the doctrine of equivalents. Paice cross-appealed the district court’s determinations holding that Toyota did not literal infringe claim 15 of the ‘672 patent, claims 11 and 39 of the ‘970 patents, and claims 1 and 2 of the ‘088 patent. In addition, Paice also cross-appealed the district court’s judgment of an ongoing royalty, which allowed Toyota to continuously manufacture and sell the accused products.<sup>205</sup>

On appeal, Paice argued that the district court did not have the statutory authority to issue the “ongoing royalty order”. In regard to this argument, the Federal Circuit began with U.S.C. § 283 to mention that the most apparent restriction of U.S.C. § 283 is that the permanent injunction must be granted on the purpose of preventing the continuing violation of the patent right.<sup>206</sup> The Federal Circuit further cited *Shatterproof Glass Corp. v. Libbey Owens Ford Co.* case<sup>207</sup> to note that it may be proper to award an ongoing royalty against

---

<sup>202</sup> *Id.* at 6.

<sup>203</sup> *Id.*

<sup>204</sup> Paice LLC, v. Toyota Motor Corp., 504 F.3d 1293, 1313 (Fed. Cir. 2007).

<sup>205</sup> *Id.* at 1296.

<sup>206</sup> *Supra* note 204, at 1314.

<sup>207</sup> *Shatterproof Glass Corp. v. Libbey Owens Ford Co.*, 758 F. 2d 613, 628 (Fed. Cir. 1985).

patent infringement instead of permanent injunction under some circumstances.<sup>208</sup>

Moreover, the Federal Circuit ruled that whenever the district court found patent infringement but no permanent injunction should be granted, the district court should first allow the parties to negotiate a patent license for defendant's continuing use of the patented invention. Only when the licensing agreement can not be reached, the district court could step in to determine the ongoing royalty for the continuing infringing activities.<sup>209</sup>

Finally, the Federal Circuit vacated and remanded the portion of the district court's order which had determined the ongoing royalty at a rate of \$25 per infringing vehicle, by the reason that the district court had not provided reasoning to support the determination of the ongoing royalty rate.<sup>210</sup>

To determine the ongoing royalty rate at the second time, the district court first noted that an adjudged infringer must fully compensate the patent owner for using the patentee's property if the adjudged infringer selects to continue the patent infringement activities.<sup>211</sup> Although the district court had denied the motion for permanent injunction, the district court still considered Paice's patent right while determining the ongoing royalty rate. The district court mentioned that the determination of the ongoing royalty rate would significantly influence on Paice's bargain power to license the '970 patent.<sup>212</sup> Although the ongoing royalty rate should be fair to both sides, the district court further emphasized that it could never be forgot that Toyota had been found patent infringement but still decided to continue the infringement behavior.<sup>213</sup>

---

<sup>208</sup> *Supra* note 204, at 1314.

<sup>209</sup> *Id.* at 1314-15.

<sup>210</sup> *Id.* at 1315.

<sup>211</sup> Paice LLC v. Toyota Motor Corp., 609 F. Supp. 2d 620, 630 (E.D. Tex. 2009).

<sup>212</sup> *Id.* ("Additionally, the Court must be mindful in this case that establishing an ongoing royalty rate has a significant impact on Paice's ability to license its technology to others and effectively precludes an exclusive licensing arrangement.")

<sup>213</sup> *Id.* ("The licensing terms must be fair to both parties, but the fact that Toyota is an adjudged infringer who choose to continue infringing simply cannot be ignored.")

Finally, the district court established an ongoing royalty rate on April 17, 2009, as a percentage of wholesale vehicle price for the remaining life of the '970 patent, of 0.48% on every sold Toyota Prius, 0.32% on every sold Toyota Highlander, and 0.26% on each sold Lexus RX400h.<sup>214</sup>

Considering the fact that the patented device is only a small piece of the whole accused products, this dissertation thinks it is reasonable for the courts to deny the motion for permanent injunction. It is an important issue to determine how to calculate the on-going royalty. For the patent holders, the most important value of the patent's right to exclude is to provide them a strong bargaining power for negotiating the licensing fee and royalty rate. However, the denial of permanent injunction and award of the ongoing royalty largely decrease the patentee's bargaining power for negotiating the royalty rate. For this reason, this dissertation thinks that the determination of the ongoing royalty shall compensate the patentee's loss of bargaining power. Therefore, the rate of the ongoing royalty should be higher than the rate of the pre-verdict reasonable royalty.<sup>215</sup>

The Federal Circuit emphasized that they used the term "ongoing royalty" in this case rather than "compulsory license". In the footnote 13 of the decision's opinion, the Federal Circuit said that the ongoing royalty is different to the compulsory license, wherein the Federal Circuit defined the ongoing royalty to be a license limited to some specific defendants without any implied license for any other vehicle manufactures to use the patented invention.<sup>216</sup> On the other hand, the Federal Circuit defined the "compulsory license" to be a license under congressional authority for anybody who meets certain criteria.<sup>217</sup>

---

<sup>214</sup> *Id.* at 631.

<sup>215</sup> See also, Stephen M. Ullmer, *Paice Yourselves: A Basic Framework for Ongoing Royalty Determinations in Patent Law*, 24 BERKELEY TECH. L. J. 75, 85-86 (2009).

<sup>216</sup> *Supra* note 204, at 1313, fn 13 ("the ongoing-royalty order at issue here is limited to one particular set of defendants; there is no implied authority in the court's order for any other auto manufacturer to follow in Toyota's footsteps and use the patented invention with the court's imprimatur").

<sup>217</sup> *Id.* ("The term "compulsory license" implies that *anyone* who meets certain criteria has congressional authority to use that which is licensed").

However, Judge Rader’s concurring opinion pointed out that the Federal Circuit should request the district court to let the parties negotiate the license agreement first or at least get both parties’ permission before setting the ongoing royalty rate.<sup>218</sup> Otherwise, the ongoing royalty is actually a compulsory license.<sup>219</sup>

This dissertation finds that this arrangement has its pro and con. The advantage of this arrangement is that the patentee can be awarded the damages for the future patent infringement without filing another lawsuit to claim for damages. However, the disadvantage of this arrangement is that the patent owner has no chance to recalculate the damages even if conditions largely change in the future.

Toyota did not raise an independent invention defense in the permanent injunction proceedings, so neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in the considerations of the four equity factors.

#### 4. Compulsory License and On-going Royalty

##### (1) *Innogenetics v. Abbott Labs*

*Innogenetics, N.V.*, (“*Innogenetics*”) is the patent owner of the U.S. Patent no. 5,846,704 (“the ‘704 patent”). *Innogenetics* sued *Abbott Laboratories* (“*Abbott*”) at the United States District Court for the Western District of Wisconsin alleging patent infringement. The district court found that the ‘704 patent was valid and *Abbott* willfully infringed the ‘704 patent, so the jury awarded \$7 million in damages. Furthermore, *Innogenetics* filed a motion for permanent injunction which was granted by the district court.<sup>220</sup> On appeal, *Abbott* challenged the grant of the permanent injunction as well as the

---

<sup>218</sup> *Id.* at 1316.

<sup>219</sup> *Id.* (“Instead, this court should require the district court to remand this issue to the parties, or to obtain the permission of both parties before setting the ongoing royalty rate itself....Nonetheless, calling a compulsory license an “ongoing royalty” does not make it any less a compulsory license.”)

<sup>220</sup> *Innogenetics v. Abbott Labs*, 2007 WL 5431017, at 3 (W.D. Wis.).

other issues.<sup>221</sup>

On appeal, Abbott asserted that the district court had clear errors in its holding that Innogenetics had been irreparably injured and did not get adequate remedy by the damages of \$7 million for Abbott's patent infringement. Because the jury had counted the market entry fee of \$5.8 million and an ongoing royalty of \$1.2 million in calculating damages, Abbott argued that the plaintiff had been fully compensated for not only Abbott's past infringement but also future sales of the accused products.<sup>222</sup>

After adjudication, the Federal Circuit vacated the permanent injunction by finding that the district court had abused its discretion. To reach this conclusion, the Federal Circuit found that the jury in the district court had been told that a reasonable royalty could be comprised of both an up-front payment and ongoing royalty payment, so \$7 million in damages awarded by the district court already included not only the market entry fee of \$5.8 million but also an ongoing royalty payment of \$1.2 million.<sup>223</sup> Since the ongoing royalty had been granted by the district court, the Federal Circuit held that the patent owner had no room to assert irreparable harm by future sales.<sup>224</sup> In other word, the Federal Circuit denied the permanent injunction because the patent owner could not collect royalties for future damages and be awarded a permanent injunction at the same time. The Federal Circuit did not consider the other three factors and vacated the permanent injunction granted by the district court directly, by reason that the irreparable harm factor greatly outweighed the other three factors in this case.<sup>225</sup>

Because Abbott did not raise an independent invention defense in the permanent injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to

---

<sup>221</sup> Innogenetics v. Abbott Labs, 512 F.3d 1363, 1367-69 (Fed. Cir. 2008).

<sup>222</sup> *Id.* at 1379.

<sup>223</sup> *Id.* at 1380 (mentioning that the \$1.2 million of on-going royalty was calculated on the ground that 5 to 10 Euros per clinical test on the 190,000 tests Abbott had sold up to that point).

<sup>224</sup> *Id.*

<sup>225</sup> *Id.*

accept the independent invention defense in the considerations of the four equity factors.

The conclusion of the Federal Circuit is reasonable. That's because the defendant has paid the royalties to compensate the future sales as long as the awarded damages cover the future damages. Because the patent owner receives the ongoing royalty, it is deemed to have a license, at least an implied license to the defendant for the future sales. In fact, the Federal Circuit thought of the ongoing royalty as compulsory license, as the Federal Circuit remanded to "the district court to delineate the terms of the compulsory license".<sup>226</sup>

However, it is a notable problem for the district courts to assess the future damages in a case that the patent-in-suit was found valid and infringed but the permanent injunction was denied.<sup>227</sup> In the prior practice, the monetary damage is the remedy for the past infringement and injunctive relief is the remedy for avoid from future patent infringement.<sup>228</sup> It is an interesting topic to discuss whether the patent owner can claim for future damages.

35 U.S.C. §284<sup>229</sup> states that "Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." As the statute indicates, the damages can be calculated by counting lost profits or a reasonable royalty, and the reasonable royalty is the lower limit of the damage.<sup>230</sup> In *Aro Mfg. Co. v. Convertible Top Replacement Co.*<sup>231</sup>, the Supreme Court

---

<sup>226</sup> *Id.* at 1381 ("We remand to the district court to delineate the terms of the compulsory license, such as conditioning the future sales of the infringing products on payment of the running royalty, the 5-10 Euros per genotyping assay kit.")

<sup>227</sup> Aaron Homer, *Whatever It Is... You Can Get it on eBay... Unless You Want an Injunction—How The Supreme Court and Patent Reform Are Shifting Licensing Negotiation From the Conference Room to the Courtroom*, 49 S. TEX. L. REV. 235, 262 (2007).

<sup>228</sup> *Id.*

<sup>229</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not substantially amend this section.

<sup>230</sup> Kimberly A. Moore, Paul R. Michel, and Raphael V. Lupo, PATENT LITIGATION AND STRATEGY 593 (2003).

<sup>231</sup> *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476 (1964).

mentioned that only past damages rather than future damages may be recovered.<sup>232</sup>

Furthermore, in *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*,<sup>233</sup> the sixth Circuit indicated a four-factor test for proving lost profits which is known as *Panduit* test and has been subsequently adopted by the Federal Circuit.<sup>234</sup> The *Panduit* test requires a patent owner to establish: (1) demand for the patented product; (2) absence of acceptable non-infringing substitutes; (3) manufacturing and marketing capability to exploit the demand; and (4) the amount of the profit it would have made.<sup>235</sup> In other word, the patent owner needs to establish a “but for ” causation, which is also known as “but for test”.<sup>236,237</sup> This dissertation is just wondering whether the calculation of future damages can meet the requirements of the “but for” test.

(2) *Finisar Corp. v. DirecTV Group, Inc.*

Finisar Corporation (“Finisar”) is the patent owner of the U.S. Patent no. 5,404,505 (“the ‘505 patent”). Finisar sued The DirectTV Group, Inc., DirectTV Holdings, LLC, DirectTV Enterprises, LLC, DirectTV Operations, LLC, and DirectTV, Inc. (collectively “DirectTV”) at the United States District Court for the Eastern District of Texas alleging patent infringement. The district court found that the ‘505 patent was valid and DirectTV willfully infringed the ‘505 patent, so the jury awarded \$78.9 million in reasonable royalty damages.<sup>238</sup>

However, the district court denied Finisar’s request for a permanent injunction.<sup>239</sup>

---

<sup>232</sup> *Id.* at 507 (“But the present statutory rule is that only “damages” may be recovered. These have been defined by the Court as “compensation for the pecuniary loss he (the patentee) has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts.”).

<sup>233</sup> *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F. 2d 1152, 1156 (6<sup>th</sup> Cir. 1978).

<sup>234</sup> Kimberly A. Moore, Paul R. Michel, and Raphael V. Lupo, *supra* note 230, at 594.

<sup>235</sup> *Rite-Hite Corp. v. Kelley Co.*, 56 F. 3d 1538, *cert denied*, 516 U.S. 867 (1995).

<sup>236</sup> *Id.*

<sup>237</sup> *See* Kimberly A. Moore, Paul R. Michel, and Raphael V. Lupo, *supra* note 230, at 594 (“A patentee is entitled to lost profits if she can prove that “but for” the infringer’s conduct, she would have made the sales and earned a particular profit.”)

<sup>238</sup> *Finisar Corp. v. DirecTV Group, Inc.* 2006 WL 2037617, at 1 (E.D. Tex. 2006).

<sup>239</sup> *Id.*

Instead, the district court imposed a compulsory license with an on-going royalty of \$1.60 per Integrated Receiver Decoder and awarded Finisar \$25 million in enhanced damages.<sup>240</sup>

After that, the district court denied DirecTV's post-judgment motions for judgment as a matter of law or a new trial, too.<sup>241</sup>

On appeal, the Federal Circuit found that the district court had erred in claim construction and in ruling that the prior art did not anticipate some certain claims of the '505 patent. Therefore, the Federal Circuit remanded for a new trial on both patent validity and infringement.<sup>242</sup> Although Finisar appealed to the Supreme Court, the petition for writ of certiorari was denied.<sup>243</sup>

Because DirecTV did not raise an independent invention defense in the permanent injunction proceedings, neither the district court nor the Federal Circuit deliberated whether to accept the independent invention defense in the considerations of the four equity factors.

In fact, to order a compulsory license instead of granting a permanent injunction was not "invented" by the Judges of this case. In *Foster v. American Mach. & Foundry Co.* case<sup>244</sup> in 1974, the second Circuit affirmed the compulsory license ordered by the district court to substitute for a permanent injunction.

In *Forster*, Julius E. Foster ("Foster") is the patent owner of U.S. Patent No. 2,882,384 ("the '384 patent"). Foster sued American Mach. & Foundry Co. ("American Mach. & Foundry Co.") in 1968 alleging patent infringement and filed a motion for permanent injunction. The district court found the '384 patent valid and infringed, but denied the motion for permanent injunction. Instead, the district court ordered a compulsory licensing

---

<sup>240</sup> *Id.*

<sup>241</sup> *Finisar Corp. v. DirectTV Group, Inc.*, 2006 WL 2709206 (E.D. Tex., 2006).

<sup>242</sup> *Finisar Corp. v. DirectTV Group, Inc.*, 523 F. 3d 1323, 1326 (Fed. Cir. 2007).

<sup>243</sup> *Finisar Corp. v. DirectTV Group, Inc.*, 129 S. Ct. 745 (2008).

<sup>244</sup> *Foster v. American Mach. & Foundry Co.*, 492 F2d 1317 (2<sup>nd</sup> Cir. 1974).



on a reasonable royalty determined by the district court.<sup>245</sup>

On appeal, Foster argued that the district court had erred in denying the permanent injunction and adjudging a compulsory licensing. The second Circuit affirmed the order of the district court, mentioning that the court did not find any difficulty in agreeing with the district court that a permanent injunction would be an improper remedy in this case.<sup>246</sup> The second Circuit cited several early precedents to support their opinion as follows:

The second Circuit cited *Hoe v. Boston Daily Advertiser Corp.*<sup>247</sup> to note that the permanent injunction is NOT served as a weapon for the patent owners to enhance their negotiating power.<sup>248</sup>

The second Circuit noted that the patent owner Foster did not manufacture its own product by using the invention of the '384 patent. Accordingly, the Second Circuit cited *Nerney v. New York, N.H. & H.R. Co.*<sup>249</sup> and *American Safety Device Co. v. Kurland Chemical Co.*<sup>250</sup> to note that it is inequitable if a permanent injunction imposes irreparable hardship on the defendant but has no benefit to the patent owner.<sup>251</sup>

More particularly, the Second Circuit held that the compulsory license is beneficial to the patent owner under the condition that the patent owner cannot prove the necessity for a permanent injunction.<sup>252</sup>

However, a commentator said that the compulsory licensee was not fair to the patent

---

<sup>245</sup> Foster v. American Mach. & Foundry Co., 297 F. Supp. 512 (S.D.N.Y. 1968).

<sup>246</sup> *Supra* note 244, at 1324.

<sup>247</sup> Hoe v. Boston Daily Advertiser Corp., 14 F. 914 (C.C.Mass.1883).

<sup>248</sup> *Supra* note 244, at 1326 (“It is not intended as a club to be wielded by a patentee to enhance his negotiating stance”).

<sup>249</sup> Nerney v. New York, N.H. & H.R. Co., 83 F.2d 409, 410-411 (2 Cir. 1936).

<sup>250</sup> American Safety Device Co. v. Kurland Chemical Co., 68 F.2d 734 (2 Cir. 1934).

<sup>251</sup> *Supra* note 244, at 1326 (“the court could properly conclude that to impose irreparable hardship on the infringer by injunction, without any concomitant benefit to the patentee, would be inequitable”).

<sup>252</sup> *Id.* (“Here the compulsory license is a benefit to the patentee who has been unable to prevail in his quest for injunctive relief. To grant him a compulsory royalty is to give him half a loaf. In the circumstance of his utter failure to exploit the patent on his own, that seems fair.”).

owner because the grant of compulsory licensee left no possibility of recalculating damages if condition significantly changed.<sup>253</sup>

This dissertation finds that this arrangement has its pro and con. The advantage of this arrangement is that the patentee can be awarded the damages for the future patent infringement without filing another lawsuit to claim for damages. However, the disadvantage of this arrangement is that the patent owner has no chance to recalculate the damages even if conditions largely change in the future.

#### 4.3.3 Review of the Four *eBay* Factors

##### 1. Irreparable Harm Suffered by Plaintiff

Generally, Plaintiff's irreparable harm means plaintiff's harm can not be repaired if a permanent injunction is not granted.<sup>254</sup> Since the way to "repair" or "cover" the plaintiff's harm is to compensate by money, this factor is generally considered together with the second factor "*Adequacy of Remedies Available at Law*". A commentator stated that the factor of irreparable harm is prospective, while the factor of adequacy of damage is retrospective.<sup>255</sup>

There are some issues about the adjudication of this factor. For example, does the "presumption of irreparable of harm" still work after *eBay* case? What are courts' concerns while considering this factor? This dissertation tries to find the answers by analyzing the results of the empirical study mentioned above.

##### (1) Empirical Study of the U.S. Cases

In *Acumed v. Stryker* case, the defendant Stryker argued that the patentee Acumed's previous willingness to license the '444 patent to Smith & Nephew had showed that the

---

<sup>253</sup> Yixin H. Tang, *The Future of Patent Enforcement after eBay v. MercExchange*, 20 HAR. J. OF LAW & TECH. 235,248 (2006).

<sup>254</sup> See, e.g., *Wald et al. v. Mudhopper Oilfield Svcs., Inc. et al.*, 2006 U.S. Dist. LEXIS 51669, at 16 (W.D. Okla. 2006) ("often suffered when the injury can[not] be adequately atoned for in money... or when the district court cannot remedy [the injury] following a final determination on the merits.").

<sup>255</sup> Michael W. Carroll, *Patent Injunctions and the Problem of Uniformity Cost*, 13 MICH. TELECOMM. TECH. L. REV. 421, 432 (2007), available at <http://www.mttl.org/volthirteen/carroll.pdf>.

reasonable royalty as monetary damages was an adequate remedy. However, this argument was not accepted by the Federal Circuit. The Federal Circuit held that a patentee's previous willingness to license his or her patent was not sufficient for the defendant to establish lack of irreparable harm.<sup>256</sup>

In the *O<sub>2</sub> Micro Int'l Ltd. v. Beyond Innovation Tech. Co.* case, the Federal Circuit found that O<sub>2</sub> Micro and the Defendants were direct competitors in the market and that the Defendants' patent infringement caused O<sub>2</sub> Micro to lose its market share. Accordingly, the Federal Circuit held that this factor was in O<sub>2</sub> Micro's favor and the district court did not abuse its discretion.<sup>257</sup> From this point of view, the most significant sub-factor concerned by the court was the direct competition.

In the *Tivo Inc. v. Echostar Communications Corp.* case, the district court favored the patent owner in this factor by reason that: (1) the plaintiff was a relatively new company having only one main product; (2) the defendant was the direct competitor of the plaintiff; (3) the defendants' continued patent infringement would decrease plaintiff's market share and result in long-term loss; and (4) loss of market share as a result of the patent infringement would cause severe injuries to the plaintiff.<sup>258</sup> Again, the direct competition was the most significant sub-factor for the court to consider in this factor.

In the *Wald v. Mudhopper Oilfield Servs., Inc.* case, the district court favored the patentee Wald because Wald had successfully showed losses of market share, sales, the reputation for innovation and the opportunity to maintain their own products to be the industry standard as the irreparable harm.<sup>259</sup>

In the *Smith & Nephew, Inc. v. Synthes (U.S.A.) et al.* case, the district court favored

---

<sup>256</sup> *Supra* note 56, at 1328.

<sup>257</sup> *Supra* note 70, at 932.

<sup>258</sup> *Supra* note 76, at 670.

<sup>259</sup> *Supra* note 86, at 5.

Smith & Nephew because Smith & Nephew had successfully showed flattening sale growth in the market of the accused products, direct competition existed between the accused products and Smith & Nephew's own products, and direct negative impact on Smith & Nephew Products including loss of sales, market share, profits, and brand name recognition.<sup>260</sup> Especially for the loss of profits and brand name recognition, the district court held that Synthes' continued sale of the accused products would cause incalculable injuries in the absence of permanent injunction.<sup>261</sup>

In the *Visto Corporation v. Seven Networks, Inc.* case, the district court found that both parties in this case were direct competitors in the market, and noted that “[i]ntellectual property enjoys its highest value when it is asserted against a direct competitor in the plaintiff’s market.”<sup>262</sup> The district court held that this factor was in Visto’s favor, because Visto would suffer irreparable injury if the permanent injunction was not granted. Again, the direct competition was the most significant sub-factor.

In the *i4i Ltd. v. Microsoft Corp.* case, the Federal Circuit affirmed the district court’s finding that i4i had been irreparably injured by Microsoft’s infringement because Microsoft and i4i had been direct competitors in the custom XML market, and i4i had lost its market share because of Microsoft’s infringing Word products.<sup>263</sup> The Federal Circuit held that the district court was right to determine the irreparable harm by considering evidence of i4i’s past harm, so favored i4i in this factor.<sup>264</sup> Again, the direct competition was the most significant sub-factor.

(2)“Direct Competition” is the Most Important Sub-factor in Evaluating whether there are Irreparable Harms

---

<sup>260</sup> *Supra* note 90, at 983.

<sup>261</sup> *Id.*

<sup>262</sup> *Supra* note 100, at 4.

<sup>263</sup> *Supra* note 138, at 861.

<sup>264</sup> *Id.* at 862.

It is worth noting that the most important sub-factor or even the single one sub-factor causing the courts to favor the plaintiffs in the “irreparable harm” factor is whether the plaintiff and the defendant are “direct competitors”.<sup>265</sup> In courts’ opinions, if the plaintiff and the defendant are direct competitors in the market, the defendant’s continued patent infringement will result in loss of sales, loss of market share, loss of profit, and/or loss of brand name recognition of the plaintiff. Because such losses causing by the future infringement can not be calculated or estimated in advance, they will result in irreparable harm in the absence of permanent injunction.

Since the defendant is definitely the player in the market, the key feature is thus whether the patent owner has his or her products manufactured by using the patented technologies. This finding can fully explain why the permanent injunctions are generally not granted to the non-practicing entities<sup>266</sup>, because the non-practicing entities and the defendants are not direct competitors in the market.<sup>267</sup>

---

<sup>265</sup> See also, Rebecca A. Hand, Note, *eBay v. MercExchange: Looking at the Cause and Effect of a Shift in the Standard for Issuing Patent Injunctions*, 25 CARDOZO ART. & ENT. L.J. 461, 479 (2007); Jeremy Mulder, Note, *The Aftermath of eBay: Predicting When District Courts Will Grant Permanent Injunctions in Patent Cases*, 22 BERKELEY TECH. L.J. 67, 80 (2007); Benjamin H. Diessel, *supra* note 164, at 310.

<sup>266</sup> The non-practicing entities will be defined and discussed in details later in this Chapter.

<sup>267</sup> Rachel M. Janutis, *The Supreme Court’s Unremarkable Decision in eBay Inc. v. MercExchange, L.L.C.* 14 LEWIS & CLARK L. REV. 597 , 604 (2010).

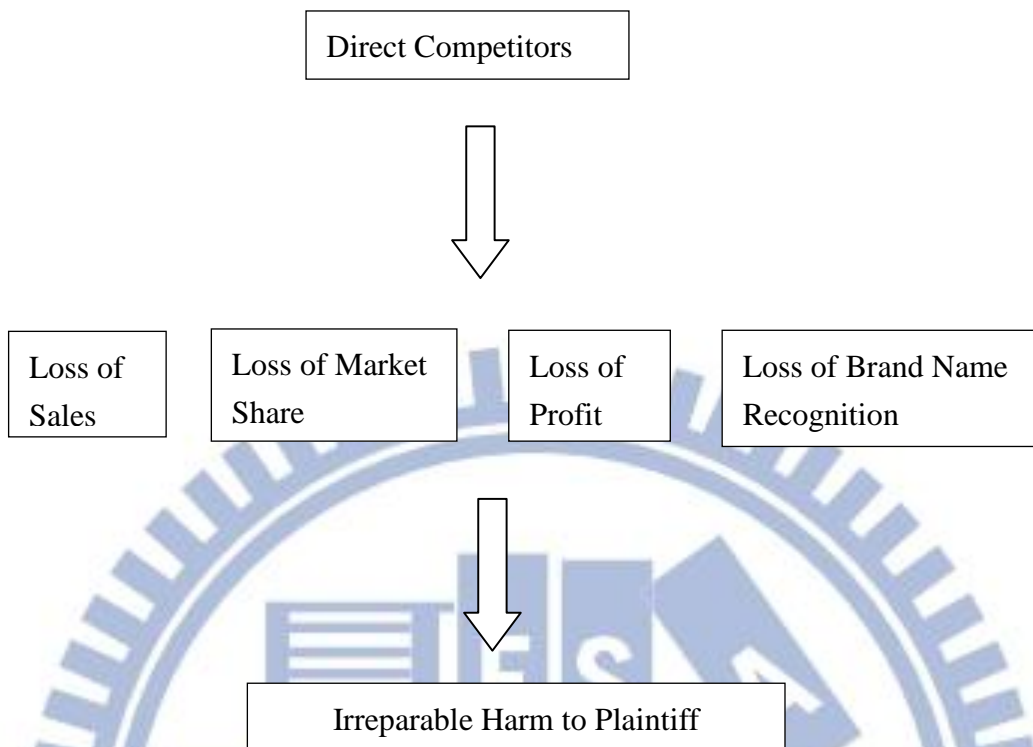


Figure 1: process flow for determining the factor of irreparable harm

It's worth noting that some cases granted a permanent injunction to "indirect competitors". For example, the *Novozymes A/S v. Genencor Int'l, Inc.* case granted a permanent injunction to the patent owner (licensor) of the patent-in-suit. Although the patent owner did not provide the patented product by itself, it licensed the patent-in-suit to its U.S. subsidiary in exchange for a 40% royalty. Furthermore, the *Broadcom Corp. v. Qualcomm Inc.* case also expanded the grant of a permanent injunction from direct competitors to an indirect competitor who provides a substitute to the accused product. Since the denial of a permanent injunction would allow the defendant continuously selling the accused product and thus decrease the patentee's sales of its own products, the patent owner may indirectly prove its irreparable harm once it can prove the substitutability between the accused products and the patentee's own products. In addition, the *CSIRO v. Buffalo*

*Technology Inc.* also expanded the grant of permanent injunction from direct competitors to a research institute competing with other research institutes and universities in the technology market.

In conclusion, the “competition” seems still a need for the patent owners to obtain a permanent injunction. If the patent owner can not establish a direct competition, it may try to establish an indirect competition or at least a research competition in the technology market.

### (3) “Presumption of Irreparable Harm” is no Long Valid

The *eBay* decision illustrates that no presumption of irreparable harm should automatically follow from a finding of patent validity and infringement.<sup>268</sup> According to the result of the empirical study, presumption of irreparable harm was rejected by all the cases, such as *z4*, *Paice*, and *Voda*.

It’s worth noting that both royalty and licensing fee are calculable and can be compensated by monetary damages, so the lost royalty and lost licensing fee should not be sufficient to establish irreparable harm.<sup>269</sup>

## 2. Adequacy of Remedies Available at Law

### (1) Empirical Study of the U.S. Cases

In fact, this factor is highly related to the first factor, and many courts considered these two factors together in the opinions.

In *Acumed v. Stryker* case, the Federal Circuit favored the patent owner by reasons that:

(1) the plaintiff and the defendant were direct competitors; and (2) the monetary damages established adequate compensation only for Stryker’s past infringement but not its future

---

<sup>268</sup> *eBay v. MercExchange*, 547 U.S. 388, 393-394 (2006).

<sup>269</sup> Aaron Homer, *Whatever It Is... You Can Get it on eBay...Unless You Want an Injunction—How The Supreme Court and Patent Reform Are Shifting Licensing Negotiation From the Conference Room to the Courtroom*, 49 S. TEX. L. REV. 235, 263 (2007).

infringement.<sup>270</sup> However, the Federal Circuit did not point out the possible types of irreparable harm resulting from the future infringement.

In the *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.* case, one of the Defendants argued that the district court's finding that it would be hard for O<sub>2</sub> Micro to collect monetary damages from the Defendants was "unfounded speculation".<sup>271</sup> However, the Federal Circuit disagreed this argument by reason that the Defendants didn't have any substantial assets in the United States and all of their research, design, manufacturing and sales activities were totally in Asia. Accordingly, the Federal Circuit held that this factor was in O<sub>2</sub> Micro's favor.<sup>272</sup>

In the *Tivo Inc. v. Echostar Communications Corp.* case, the district court found that the plaintiff and the defendant were direct competitors and thus held that the impact of defendant's infringement could not be remedied by merely monetary damage.<sup>273</sup>

In the *Visto Corporation v. Seven Networks, Inc.* case, the court noted that the monetary damages awarded by the jury were suitable for past injury but not for future injure which could only be approximated. Accordingly, the district court held that a permanent injunction to enjoin Seven, which was a direct competitors of Visto, from continuously using the Visto's patents was a suitable remedy to avoid future infringement.<sup>274</sup>

In the *i4i Ltd. v. Microsoft Corp.* case, the Federal Circuit cited *Broadcom Corp. v. Qualcomm Inc.* to note that the difficulty in counting monetary damages is evidence for this factor that remedies at law are not adequate. In this case, the district court found that Microsoft was a direct competitor of i4i and thus i4i had forced to change its business strategy because Microsoft's infringing products had occupied about 80% of the custom XML market.

---

<sup>270</sup> *Supra* note 56, at 1328.

<sup>271</sup> *Supra* note 70, at 932-933.

<sup>272</sup> *Id.* at 933.

<sup>273</sup> *Supra* note 76, at 670.

<sup>274</sup> *Supra* note 100, at 4.



Accordingly, the Federal Circuit concluded that any monetary damages were not adequate remedies at law to cover the suffering of i4i, such as the loss of market share, brand recognition, and custom goodwill.<sup>275</sup>

## (2) Preliminary Analysis of the U.S. Cases

It is again worth noting that the most important sub-factor causing the courts to favor the plaintiffs in the “adequacy of damages” factor is whether the plaintiff and the defendant are “direct competitors”. According to courts’ opinion, if the plaintiff and the defendant are direct competitors in the market, plaintiff’s injuries resulting from the defendant’s future patent infringement are quite hard to be calculated, so mere monetary damages cannot compensate plaintiff’s harms. Accordingly, courts in the U.S. tend to find that any monetary damages are not adequate remedies at law to cover the suffering of the patentee-plaintiff, such as the loss of market share, brand recognition, and custom goodwill, if the plaintiff and the defendant are direct competitors but a permanent injunction is not granted.

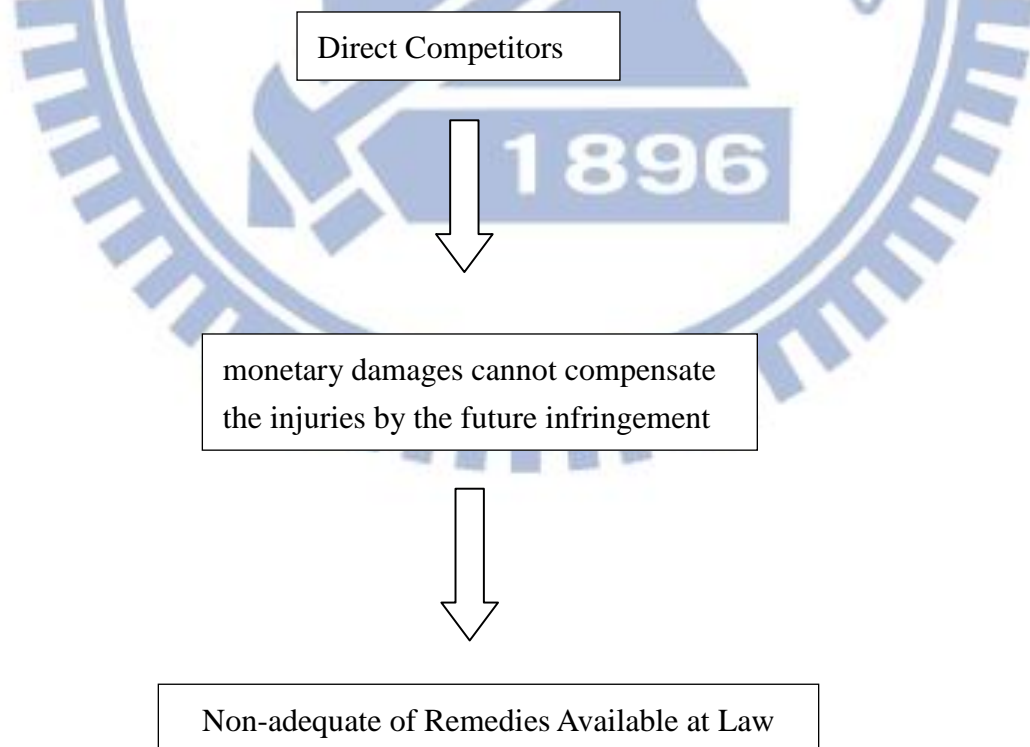


Figure 2: process flow for determining the factor of non-adequate of remedies

<sup>275</sup> *Supra* note 138, at 862.

### 3. The Balance of Hardships

#### (1) Empirical Study of the U.S. Cases

In *Acumed v. Stryker* case, the defendant Stryker argued that a permanent injunction would cause hardship not only for Stryker itself, but also for its clients and patients. However, the Federal Circuit did not agree with Stryker's argument and held that the balance deliberated in the factor is only between the patentee-plaintiff and the defendant, so the influences on customers and patients asserted by Stryker is irrelevant to this factor.<sup>276</sup>

In the *Tivo Inc. v. EchoStar Communications Corp.* case, EchoStar argued that monetary damages were enough to compensate EchoStar if a permanent injunction was not issued. On the other hand, EchoStar would suffer irreparable harm if a permanent injunction was granted. However, the district court did not agree EchoStar's argument, holding that this factor was in favor of issuing a permanent injunction because Tivo would face ongoing irreparable harm as EchoStar's infringement continues.<sup>277</sup>

In the *Visto Corporation v. Seven Networks, Inc.* case, the district court held that Visto's good will and potential revenue would be influenced in the absence of permanent injunction, so this factor was in favor of Visto.<sup>278</sup>

In the *i4i Ltd. v. Microsoft Corp.* case, the Federal Circuit held that the balance of hardships favored i4i except on the limited issue of timing. The main reason was that Microsoft's infringing custom XML editor had been found to be merely one of thousands of features with Microsoft's Word products, used by only a small portion of Microsoft's clients.<sup>279</sup>

#### (2) Preliminary Analysis of the U.S. Cases

---

<sup>276</sup> *Supra* note 56, at 1329-30.

<sup>277</sup> *Supra* note 76, at 670.

<sup>278</sup> *Supra* note 100, at 4.

<sup>279</sup> *Supra* note 138, at 862-863.

In practice, this factor is also highly related to the first two factors. Many courts favored the patentee-plaintiff in this factor only because plaintiff would face ongoing irreparable injury as the defendant continues to infringe the valid patent-in-suit.<sup>280</sup> Accordingly, the courts will generally favor the plaintiffs in this factor if the defendants' continuous infringements will cause irreparable injuries to the plaintiffs.

It can be also concluded that the courts are likely to favor the plaintiffs in this factor if the plaintiff and the defendant are direct competitors. That is because the relationship of direct competitors will generally cause irreparable harms to the plaintiff, and the plaintiff's irreparable harms will commonly direct to hardship of the plaintiff.

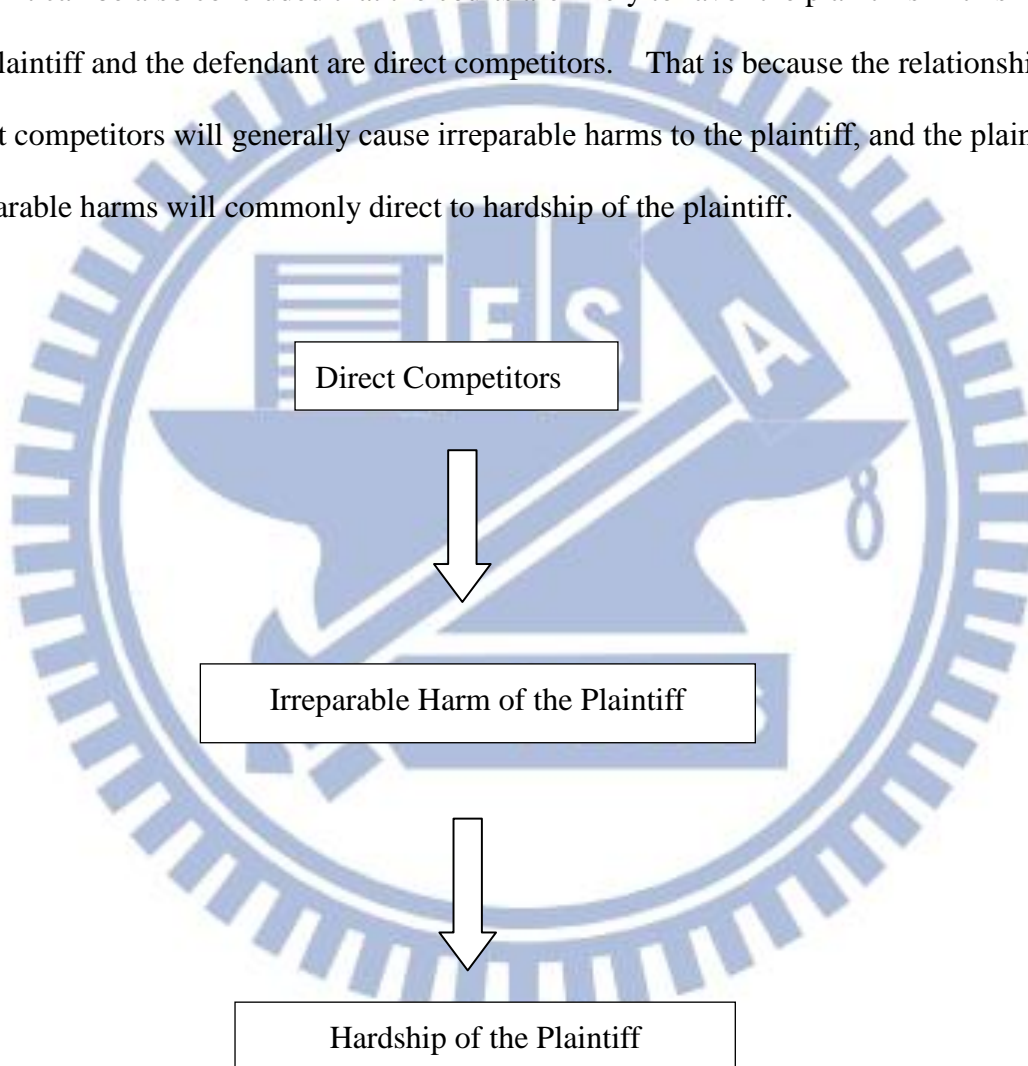


Figure 3: process flow for determining the factor of balance of hardship

Further, this factor will likely tend to favor the patent owner too if the infringing

---

<sup>280</sup> *Supra* note 76, at 670.

element is merely one of thousands of features of the infringing products and used by only a small portion of the defendant's customers. That's because the impact and hardship of a permanent injunction on the defendant will be relatively small.

#### 4. The Public Interest

##### (1) Empirical Study of the U.S. Cases

In *Acumed v. Stryker* case, the Stryker argued that the public interest was particularly important because the patients needed the T2 PHN provided by Stryker. The Federal Circuit did not agree Stryker's argument, holding that the physicians using the accused product could select alternatives to avoid from patent infringement.”<sup>281</sup>

In the *Tivo Inc. v. EchoStar Communications Corp.* case, EchoStar argued that DVRs in three million families would be removed if a permanent injunction was granted. The district court disagreed this argument. The district court held that this factor should be in favor of granting a permanent injunction by reason that the public interest is to maintain a strong patent system.<sup>282</sup> The district court further noted that the infringing products were used for entertainment rather than public health, so the public interest of maintaining a strong patent system was larger than the continuous use of the infringing entertainment products.<sup>283</sup>

In the *Visto Corporation v. Seven Networks, Inc.* case, the district court held that the public interest would not be influenced if a permanent injunction was granted, and actually the public interest would be implemented by granting a permanent injunction to protect the valid patent rights.<sup>284</sup>

In the *i4i Ltd. v. Microsoft Corp.* case, the Federal Circuit held that the public interest factor favored i4i because the scope of the permanent injunction was narrow, i.e., only to

---

<sup>281</sup> *Supra* note 56, at 1330-31.

<sup>282</sup> *Supra* note 76, at 670.

<sup>283</sup> *Id.*

<sup>284</sup> *Supra* note 100, at 5.

users who purchased or licensed Word after the date the permanent injunction took effect.

The Federal Circuit concluded that the district court had not abused its discretion except as to the injunction's effective date, i.e., 60 days from the date of the order.<sup>285</sup>

## (2) Preliminary Analysis of the U.S. Cases

Generally, the determination of this factor is highly dependent to the industrial field of the patented products. In most of the industrial fields such as machines, 3C products, semiconductors, the courts will favor to grant a permanent injunction because the public interest here is to maintain a strong patent system to protect the investment of the industries. Even in the pharmaceutical field, it is still possible for the court to favor the patentee if the physicians using the infringing product could select alternatives to avoid from patent infringement.

This factor also tends to favor the patent owner if the scope of the permanent injunction is only to the defendant's customers who purchase the infringing products after the effective date of the permanent injunction. That's because the impact of the permanent injunction on the public interest will be relatively small.

With respect to this factor, the concurring opinion by Judge Kennedy in *eBay* raised the issue of small component. According to Judge Kennedy, the monetary damages may be already enough for the patent owners to recover their injuries for the patent infringement, if the patented invention is only a small component of the commercialized products.<sup>286</sup>

---

<sup>285</sup> *Supra* note 138, at 863.

<sup>286</sup> *Supra* note 26, at 396-397 (“When the patented invention is but a small component of the product the companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest.”)

## **4.4 Key Elements Considered by the Courts While Determining Permanent Injunction**

### **4.4.1 Direct Competitors or Lack of Commercial Activity—Influencing on the Factors of Irreparable Harm, Adequacy of Damages and Balance of Hardship**

As mentioned above, whether the plaintiff and the defendant are direct competitors is the most important element for the courts to determine whether to grant a permanent injunction.<sup>287,288</sup>

First, if the plaintiff and the defendant are direct competitors in the market, the defendant's patent infringement will cause losses of sales, market share, profit, and/or brand name recognition of the plaintiff. Since such losses resulting from the future infringement can not be calculated or estimated in advance, such losses will cause irreparable harm in the absence of permanent injunction.

Second, if the plaintiff and the defendant are direct competitors in the relevant market, mere monetary damages cannot compensate plaintiff's injuries resulting from the future infringement of the defendant. Accordingly, the courts in the U.S. found that any monetary damages are not adequate remedies at law to cover the suffering of plaintiff, such as losses of market share, brand recognition, and custom goodwill, if the plaintiff and the defendant are direct competitors but the permanent injunction is not granted.

Third, the courts are likely to favor the plaintiffs in the balance of hardships factor if the plaintiff and the defendant are direct competitors. That is because the relationship of direct competitors will cause irreparable harms and thus lead to hardships to the plaintiff.

---

<sup>287</sup> Bernard H. Chao, *After eBay, Inc. v. MercExchange: The Changing Landscape for Patent Remedies*, 9(2) MINN J. L. SCI. & TECH. 543, 549 (2008).

<sup>288</sup> Rachel M. Janutis, *The Supreme Court's Unremarkable Decision in eBay Inc. v. MercExchange, L.L.C.* 14 LEWIS & CLARK L. REV. 597, 604 (2010).

Since the defendant is definitely the player in the relevant market, the key feature is thus whether the patent owner has commercialized the patent. Indeed, the *eBay* case touched this issue. In adjudicating the motion for permanent injunction, the district court applied the traditional four-factor test,<sup>289</sup> and concluded that MercExchange would not suffer irreparable harm in the absence of permanent injunction because of MercExchange's lack of commercial activity in practicing the '265 patent.<sup>290</sup>

The Supreme Court pointed out that the district court erred in applying the four-factor test. The Supreme Court held that some patent owners such as university researchers might like to license their patents and still be possible to satisfy the traditional four-factor test although they do not have their own products in the market.<sup>291</sup> Therefore, the Supreme Court found no basis of categorically denying the opportunities of the non-practicing entities to obtain the permanent injunction.

Nevertheless, the empirical study on Section 3 of this chapter shows that few non-practicing entities have been awarded a permanent injunction in the post *eBay* era. Unless the patent owners is actually making or selling the patented products by themselves, it is very hard for them to establish the irreparable harm and to prevent others from manufacturing and selling the accused products.

---

<sup>289</sup> *Supra* note 16, at 711.

<sup>290</sup> *Id.* at 712.

<sup>291</sup> *Id.* at 393.

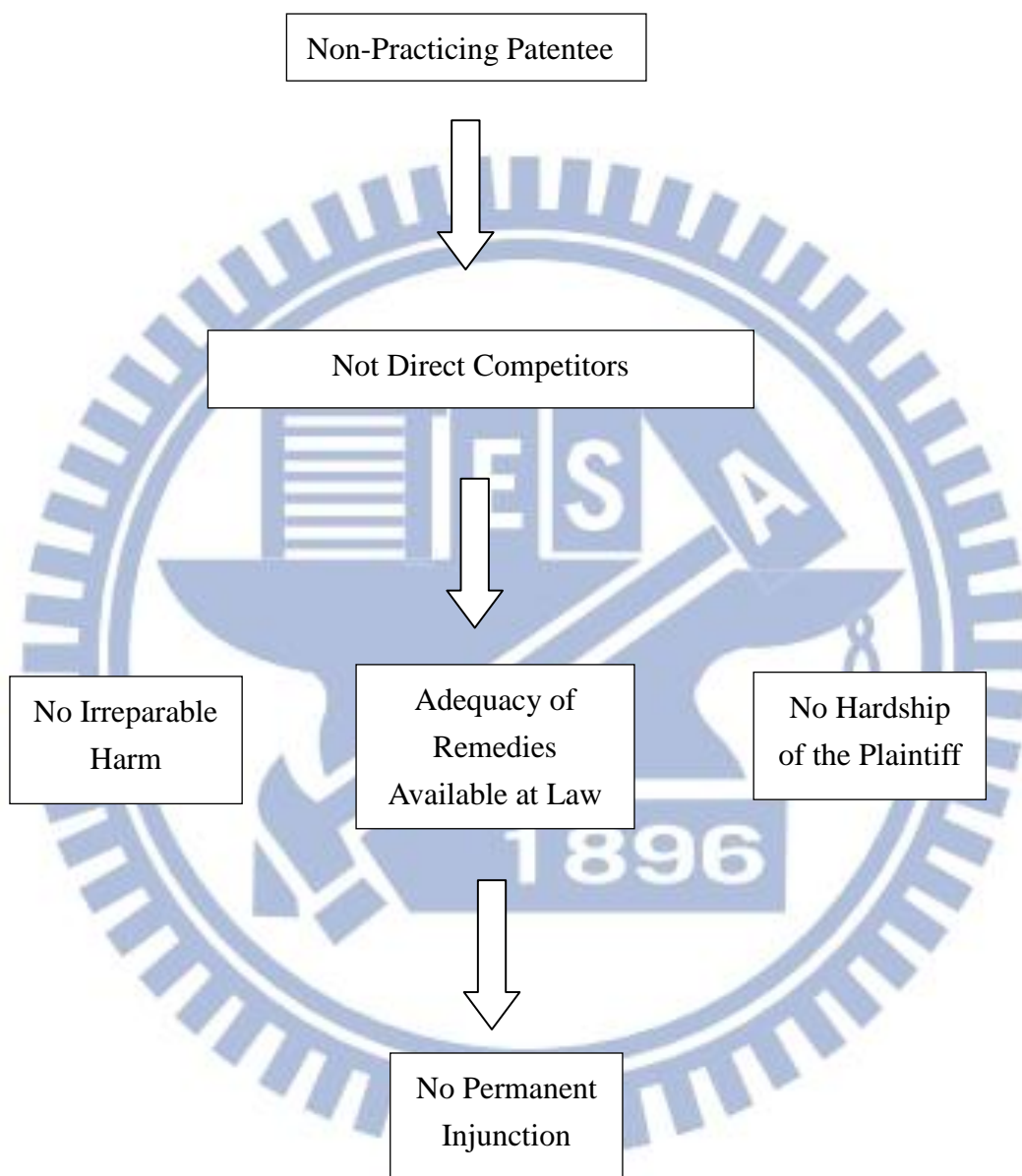


Figure 4: process flow for determining NPE's motion for permanent injunction



#### 4.4.2. Desire to License and Obtain Royalties—Influencing on the Factors of Irreparable Harm, Adequacy of Damages and Balance of Hardship

As early as in 1996, the Federal Circuit in *Polymer Techs., Inc. v. Bridwell* case<sup>292</sup> concluded that willingness to license would rebut the presumption of irreparable harm in patent cases.<sup>293</sup>

In the adjudication of *eBay* in the first instance, MercExchange's desire to obtain royalties led the district court to weigh against entry of a permanent injunction on all the factors of irreparable harm<sup>294</sup>, adequate remedy at law<sup>295</sup>, and balance of hardships<sup>296</sup>. The district court applied the traditional four-factor test and reached a conclusion that MercExchange would not suffer irreparable harm in the absence of permanent injunction because of MercExchange's lack of commercial activity in practicing the '265 patent and willing to license the '265 patent to eBay and Half.com.<sup>297</sup>

The Supreme Court pointed out that the district court erred in applying the four-factor test. The Supreme Court held that although some patent holders might like to license their patents which are still possible to satisfy the traditional four-factor test.<sup>298,299</sup> Accordingly, the Supreme Court found no legal ground for categorically denying the patent owners having the desire to license their patents to be awarded to a permanent injunction.<sup>300</sup>

---

<sup>292</sup> *Polymer Techs., Inc. v. Bridwell*, 103 F. 3d 970 (Fed. Cir. 1996).

<sup>293</sup> *Id.* at 974.

<sup>294</sup> *Supra* note 16, at 712 ("The defendants next argue that there was evidence adduced at trial proving that the plaintiff is willing to license or sell its patents. On this point, the defendants are correct.")

<sup>295</sup> *Id.* at 713.

<sup>296</sup> *Id.* at 714.

<sup>297</sup> *Id.* at 712.

<sup>298</sup> *Supra* note 26, at 393.

<sup>299</sup> See also, Gavin D. George, *What is Hiding in The Bushes? eBay's Effect on Holdout Behavior in Patent Thickets*, 13 MICH. TELECOMM. TECH. L. REV. 557, 566 (2007), available at <http://www.mttl.org/volthirteen/george.pdf>.

<sup>300</sup> *Supra* note 26, at 393.

#### 4.4.3 Business Model Patents—Influencing on the Public Interest Factor

In the adjudication of *MercExchange v. eBay* in the first instance, the business-method nature of the '265 patent was concerned by the district court in considering the factor of public interest. Although it is always an important public interest to protect the valid patent rights, the district court said that it is equally important to protect the public's interest in using a patented business model which the patent owner does not have the intent to practice. Accordingly, the district court did not favor either party in this factor.<sup>301</sup> One commentator thus stated that the district courts were provided discretion to deploy injunctive relieves for patent infringement that are sensitive to various technologies and industries.<sup>302</sup>

Under this opinion, it would be quite difficult for the patent owner of a business model patent to obtain a permanent injunction. In fact, the Federal Circuit did not agree with this opinion, mentioning that a growing concern about the business method patents is not an important public interest to justify the unusual step of denying a permanent injunction.<sup>303</sup>

The majority opinion of the Supreme Court did not touch this issue. However, the concurring opinion by Judge Kennedy clearly pointed out his position on this issue. Judge Kennedy alleged that the business method patents are generally not of much economic and legal significance; and more particularly, some of the business method patents are potentially vague and invalid. Accordingly, Judge Kennedy mentioned that such nature of the business method patents may affect the determination under the four-factor test.<sup>304</sup>

#### 4.4.4 Not Moved for a Preliminary Injunction—Influencing the Factor of Irreparable

---

<sup>301</sup> *Supra* note 16, at 714.

<sup>302</sup> *Supra* note 255, at 421.

<sup>303</sup> *Supra* note 22, at 1339 (“a general concern regarding business-method patents, however, is not the type of important public need that justifies the unusual step of denying injunctive relief.”)

<sup>304</sup> *Supra* note 26, Kennedy, J. concurring (“In addition injunctive relief may have different consequences for the burgeoning number of patents over business methods, which were not of much economic and legal significance in earlier times. The potential vagueness and suspect validity of some of these patents may affect the calculus under the four-factor test.”)

## **Harm**

In the adjudication of *eBay* in the first instance, the district court found that MercExchange did not think it would suffer irreparable harm in the absence of injunctive relief because MercExchange had not moved for a preliminary injunction in the early stage of the patent dispute.<sup>305</sup>

Under this opinion, it's hard for the patent owner to establish an irreparable harm in the permanent injunction proceedings if the patent owner did not move for a preliminary injunction in the early stage of the patent dispute.

### **4.4.5 Patented Invention is only a Small Component of the Whole Accused**

#### **Product—Influencing on the Factors of Adequacy of Damages and Balance of Hardship**

The concurring opinion by Judge Kennedy in *eBay* raised the issue of “small component”. According to Judge Kennedy, monetary damages may be already enough for the patent owners to recover their injuries for the patent infringement, if the patented invention is only a small component of the whole accused products.<sup>306</sup> One commentator pointed out that this consideration is an economic perspective; in order not to over compensate, the courts should be very carefully to grant a permanent injunction for a patent merely contributing little to the accused products.<sup>307</sup>

This opinion was adopted by the district court in the *Paice v. Toyota* case. In that case, the jury found that Toyota's accused vehicles infringed claims 11 and 39 of the '970 Patent, and then the plaintiff moved for a permanent injunction to enjoin Toyota from selling Prius, Highlander and RX400h.<sup>308</sup> With regard to the factor of adequacy of monetary damages,

---

<sup>305</sup> *Supra* note 16, at 712.

<sup>306</sup> *Supra* note 26, at 396-397.

<sup>307</sup> *Supra* note 287, at 559.

<sup>308</sup> *Supra* note 193, at 1.

Toyota argued that the subject matter of the infringed claims of the '970 Patent is only a “small component” of the overall accused vehicle, so the contribution of Paice’s patented technology to the accused vehicles is related minor while being compared to the value of the whole vehicles.<sup>309</sup> On the other hand, Paice argued that the infringed claims formed the “heart” of the accused vehicles.<sup>310</sup>

The district court disagreed with Paice’s argument. The district court mentioned that the subject matter of the infringed claims was related to the hybrid transmissions of the accused vehicles which were only small parts of the whole vehicles. Accordingly, the district court held that the uncertainty from future damages calculations could be removed by determining a reasonable royalty rate, and thus favored Toyota in the factor of “remedies available at law are inadequate”.<sup>311</sup>

Another commentator is of the opinion that the “small component” matter is also related to the factor of Balance of Hardships.<sup>312</sup> Since the patent is a small component, this commentator pointed out that the majority parts of the accused product are likely patented inventions owned by, or licensed to, the defendants. If a permanent injunction is granted, the patent owner is unjustly enriched.<sup>313</sup>

In conclusion, if the patented invention is only a small part of the entire accused product, the motion for a permanent injunction is not likely to be granted.

#### **4.4.6 Patent-in-Suit is almost Expired—Influencing on the Factor of Adequacy of Damages**

While determining whether to grant a permanent injunction, the courts need to consider

---

<sup>309</sup> *Id.* at 2.

<sup>310</sup> *Id.* at 4.

<sup>311</sup> *Id.* at 5.

<sup>312</sup> *Supra* note 255, at 435-37.

<sup>313</sup> *Id.* at 437.

how long the patent term is left.<sup>314</sup> If the patent term is still left more than 10 years, it is generally very difficult to count its potential market value, so the monetary damages are basically not adequate to compensate the patentee's injuries in the absence of permanent injunction. By contrast, if the patent is almost expired, for instance only one year left, the market value of the patent-in-suit is generally low.<sup>315</sup> At least, the losses of market share and sales income of the patent owner are relatively possible to be calculated. In this circumstance, the patentee's injuries resulting from the continuing infringement can be compensated by monetary damages, so the courts generally tend to deny a permanent injunction.

#### **4.4.7 The Defendant Invented the Accused Products Independently—Under the Research of this Dissertation**

The empirical study of this dissertation shows that no defendants argued for independent invention in the permanent injunction proceedings in the United States. Consequently, the court decisions never discussed whether to accept the independent invention defense in the permanent injunction proceedings.

This dissertation finds the most important reason is that the independent invention defense is absolutely unacceptable in current patent practice. Defendants (and their lawyers) will look very “amateur” to patent practice if they raise the independent invention defense in permanent injunction proceedings. Accordingly, the defendants will hesitate to argue for independent invention even if they finished the accused products by independent development

This dissertation notes that there is room for the defendants to assert the independent invention defense in the permanent injunction proceedings. This dissertation will comprehensively discuss about this issue in Chapter 5.

---

<sup>314</sup> *Id.* at 432.

<sup>315</sup> *Id.*

## 4.5 Influences on Non-Practicing Entities after *eBay*

### 4.5.1 Introduction to Non-Practicing Entities

Perhaps the term of “patent troll” is the most impressed term in recent patent practice. Legal issues coming from “patent trolls” attracted many legal scholars to draft articles to discuss about them.<sup>316</sup>

In fact, a more “academic” and “neutral” description of the patent troll is the “Non-Practicing Entity”. In patent practice area, a non-practicing entity is defined as a patent holder who does not practice nor has any intention to practice the patented technology, but enforces his or her patent right to make money.<sup>317</sup>

Since the patents are generally broad and dense spread in almost industries, it is hard to imagine that a new developed product would not fall into other’s patent rights, especially the 3C and electronics products. Accordingly, a company with its own products generally feels hesitant (or at least cautiously) to file patent lawsuits against its competitors, because the competitors may file a countersuit against the company alleging patent infringement. In fact, the “terrifying-balance” is the most important scheme to limit the numbers of patent

---

<sup>316</sup> J.P. Mello, *Technology Licensing and Patent Trolls*, 12 B.U. J. SCI. & TECH. L. 388 (2006); Jason Rantanen, *Slaying the Troll: Litigation as an Effective Strategy Against Patent Threats*, 23 SANTA CLARA COMPUTER & HIGH TECH. L. J., 159-210 (2006); Mark A. Lemley, *Are Universities Patent Trolls*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611, 611 (2007-2008); Jeremiah S. Helm, *Why Pharmaceutical Firms Support Patent Trolls: The Disparate Impact of *Ebay v. Mercexchange* on Innovation*, 13 MICH. TELECOMM. & TECH. L. REV. 331 (2006-2007); Damian Myers, *Reeling in the Patent Troll: Was *Ebay v. Mercexchange* Enough*, 14 J. INTELL. PROP. L. 333 (2006-2007); McDonough, James F., *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L. J. 189 (2006); Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809 (2006-2007); Jeremiah Chan and Matthew Fawcett, *Footsteps of the Patent Troll*, 10 INTELL. PROP. L. BULL. 1 (2005-2006); Marc Morgan, *Stop Looking under the Bridge for Imaginary Creatures: A Comment Examining Who Really Deserves the Title Patent Troll*, 17 FED. CIR. B.J. 165 (2008); Christopher A. Cotropia, *The Individual Inventor Motif in the Age of the Patent Troll*, 12 YALE J.L. & TECH. 52 (2009-2010); Raymond P. Niro, *Who Is Really Undermining the Patent System - Patent Trolls or Congress*, 6 J. MARSHALL REV. INTELL. PROP. L. 185 (2006-2007); Gregory d'Incelli, *Has *Ebay* Spelled the End of Patent Troll Abuses - Paying the Toll: The Rise (and Fall) of the Patent Troll*, 17 U. MIAMI BUS. L. REV. 343 (2008-2009); Olivia E. Marbutt, *Strategies for Combating Patent Trolls*, 17 J. INTELL. PROP. L. 367 (2009-2010); David A. II Fitzgerald, *Saving Alternative Dispute Resolution in Patent Law: Countering the Effects of the Patent Troll Revolution*, 23 OHIO ST. J. ON DISP. RESOL. 345 (2007-2008).

<sup>317</sup> See, Anne Layne-Farrar and Klaus M. Schmidt, *Licensing Complementary Patents: “Patent Trolls,” Market Structure, and “Excessive” Royalties*, 25 BERKELEY TECH. L. J. 1121, 1122 (2010).

litigations.

However, the non-practicing entities do not have their own products. They do not fear of being countersued, and they have no need to cross-license with other patent holders.<sup>318</sup> Accordingly, many non-practicing entities are very aggressive to file lawsuits alleging patent infringement.<sup>319</sup> Before filing lawsuit, the non-practicing entities generally send a cease & desist letter to the potential infringers to warn the coming lawsuits and permanent injunctions as a threat<sup>320</sup>, and then offer a patent license with a fee schedule a little bit less than the expense of a patent litigation.<sup>321</sup> Many potential infringers unwillingly accepted the license with very large anger.

This is why the non-practicing entities are seriously criticized and called as “patent trolls”. A commentator criticized that the patent trolls acquire patents without the intention to practice the patented invention, and then wait for the potential infringers to use the patented technologies and fall into the patent rights.<sup>322</sup> Another commentator even said that the patent troll threatens the integrity of the innovation scheme.<sup>323</sup>

On the other hand, a minority of commentators view positive to the non-practicing entities. One commentator views the transaction between the non-practicing entity and the original inventor as a division of cooperative labor, in which the inventor is charging of conducting the technology development and the non-practicing entity is responsible to enforce

---

<sup>318</sup> See, Anne Layne-Farrar and Klaus M. Schmidt, *Licensing Complementary Patents: “Patent Trolls,” Market Structure, and “Excessive” Royalties*, 25 BERKELEY TECH. L. J. 1121, 1123 (2010).

<sup>319</sup> Miranda Jones, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not The Same: How eBay v. Mercexchange Affects The Patent Right of Non-Practicing Entities*, 14 GEO. MASON L. REV. 1035, 1037 (2007).

<sup>320</sup> Paul M. Schoenhard, *Who Took My IP? - Defending the Availability of Injunctive Relief for Patent Owners*, 16 TEX. INTELL. PROP. L. J. 187, 188 (2008).

<sup>321</sup> Miranda Jones, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not The Same: How eBay v. Mercexchange Affects The Patent Right of Non-Practicing Entities*, 14 GEO. MASON L. REV. 1035, 1045 (2007).

<sup>322</sup> James M. Fischer, *The “Right” To Injunctive Relief For Patent Infringement*, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 2 (2007).

<sup>323</sup> Robert P. Merges, *The Trouble With Trolls: Innovation, Rent-seeking, and Patent Law Reform*, 24 BERKELEY TECH. L. J. 1583, 1614 (2009).

the patent right.<sup>324</sup>

Although the Supreme Court found no ground of categorically denying the possibilities for the non-practicing entities to obtain the permanent injunctions as mentioned, it is a fact that few non-practicing entity obtained a permanent injunction after *eBay*. It is an issue how the non-practicing entities are influenced by *eBay*.

#### **4.5.2. Few Permanent Injunction Granted to Non-Practicing Entities after *eBay***

From the empirical study on Section 3 of this Chapter, this dissertation finds that the most important sub-factor or even the single one sub-factor causing the courts to favor the plaintiffs in the irreparable harm factor is whether the plaintiff and the defendant are “direct competitors”. If the plaintiff and the defendant are direct competitors in the relevant market, the defendant’s patent infringement will generally cause losses of sales, market share, profit, and/or brand name recognition of the plaintiff. Because such losses resulting from the future infringement can not be calculated or estimated in advance before a trial, such losses will result in irreparable harm in the absence of permanent injunction.

By contrast, since the non-practicing entities do not commercialize the patents-in-suit, it is no way for them to assert that they will suffer losses of sales, market share, profit, or brand name recognition due to the patent infringement. The only possible injury for the non-practicing entities to assert is the loss of licensing fee, but it is generally calculable. Because it is much harder for the non-practicing patent owners to establish irreparable harm, they are getting harder to be awarded the permanent injunction as a remedy of patent infringement.<sup>325</sup> That is the reason why few non-practicing entity can obtain a permanent injunction after the *eBay* case.

---

<sup>324</sup> Miranda Jones, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not The Same: How eBay v. Mercexchange Affects The Patent Right of Non-Practicing Entities*, 14 GEO. MASON L. REV. 1035, 1036 (2007).

<sup>325</sup> Yixin H. Tang, *The Future of Patent Enforcement After eBay v. MercExchange*, 20 HARV. J. L. & TECH., 235, 249 (2006).



Indeed, permanent injunction is the largest threat to the potential infringers, so the threat to permanent injunction is through as an essential bargaining power of the patent holders to negotiate patent licensing. However, *eBay* significantly lessened the threat of permanent injunction, so the potential infringers' incentive to license, especially from the non-practicing patent owners, will be largely reduced.<sup>326</sup>

In fact, science and technology developments are very competitive<sup>327</sup>, and the non-practicing entities with their own research and development, such as universities, government-funded institutes and some private sectors, are essential engines for scientific and technical researches. To totally deny the injunctive relief moved by the non-practicing entities having their own research and development may discourage the progress of science and useful arts. This dissertation thinks that the treatments of non-practicing entities having their own research and development should be differentiated from those of the non-practicing entities without their own innovation. The differentiations between these two groups will be discussed in details in the next sub-section.

#### 4.5.3 Pure Trolls v. R&D-Based NPEs

Some commentators divided the non-practicing entities into two categories: "pure trolls" and "R&D-based non-practicing entities".<sup>328</sup> The pure trolls do not have their own research activities, and generally acquire patents from other entities.<sup>329</sup> The pure trolls generally do not own many patents but file many patent infringement litigations.<sup>330</sup> The primary profits of pure trolls are to collect damages from the patent infringement

---

<sup>326</sup> *Id.* at 250.

<sup>327</sup> Robert P. Merges, *Property Rights Theory and The Commons: The Case of Scientific Research*, collected in *SCIENTIFIC INNOVATION, PHILOSOPHY, AND PUBLIC POLICY* 145, 148 (1996).

<sup>328</sup> Cheng, Y.C., Y. H. Lan and S.J. Liu, *Patent Market Dynamics: In View of the Business Models of Non-Practicing Entities*, presented at the 1st International Conference on Management of Intellectual Property and Strategy [MIPS2012], at 3 (2012).

<sup>329</sup> See, Robert P. Merges, *The Trouble With Trolls: Innovation, Rent-seeking, and Patent Law Reform*, 24 *BERKELEY TECH. L. J.* 1583, 1587 (2009).

<sup>330</sup> Cheng, Y.C., Y. H. Lan and S.J. Liu, *supra* note 328, at 3.

litigations.<sup>331</sup>

A famous scholar prepared a brief of Amicus Curiae for the Supreme Court in the *eBay* case on behalf of Yahoo, suggesting that the decision of the Federal Circuit applying the general rule should be reversed.<sup>332</sup> The scholar focused his argument on the “patent trolls”, which was defined as “non-producing, non-research and development (R&D) performing patent holders”<sup>333</sup>, like the pure trolls defined in this dissertation. The scholar pointed out that the most essential weapon of the patent trolls is the threat of a permanent injunction, seeking and often receiving financial settlements in the amount of largely exceeding the real monetary value of the patent-in-dispute.<sup>334</sup>

On the other hand, the R&D-based non-practicing entities, called “patent pioneers” by another commentator<sup>335</sup>, generally obtain patents from their own research and development activities, including most universities, research institutes, and think tanks.<sup>336</sup> The R&D-based non-practicing entities generally own lots of patents but do not file many patent infringement litigations, and generally make money from the technology transfers, patent licenses and patent assignments.<sup>337,338</sup>

Another commentator divided the non-practicing entities into two groups: (1) the entities licensing the patents as a portion of a technology transfer project; and (2) the entities merely licensing the patents but not engaging in technology transfer.<sup>339</sup> This dissertation

---

<sup>331</sup> Robin M. Davis, *Failed Attempts to Dwarf the Patent Trolls: Permanent Injunctions in Patent Infringement Cases Under the Proposed Patent Reform Act of 2005 and eBay v. MercExchange*, 17 CORNELL J. L. & PUB. POL'Y 431, 432 (2008).

<sup>332</sup> Robert P. Mergers, *Introductory Note to Brief of Amicus Curiae in eBay v. MercExchange*, 21 BERKELEY TECH. L. J. 997, 1016 (2005).

<sup>333</sup> *Id.* at 997.

<sup>334</sup> *Id.* at 1005.

<sup>335</sup> Robin M. Davis, *Failed Attempts to Dwarf the Patent Trolls: Permanent Injunctions in Patent Infringement Cases Under the Proposed Patent Reform Act of 2005 and eBay v. MercExchange*, 17 CORNELL J. L. & PUB. POL'Y 431, 437 (2008).

<sup>336</sup> *Id.*

<sup>337</sup> Cheng, Y.C., Y. H. Lan and S.J. Liu, *supra* note 328, at 3.

<sup>338</sup> Mark A. Lemley, *supra* note 316, at 611.

<sup>339</sup> Suzanne Michel, *supra* note 8, at 906-907.

finds that this classification is quite similar to the classification of R&D-based NPEs and pure trolls: the entities in the first group are generally the R&D-based NPEs, and the entities in the second group are generally the pure trolls.

The commentator asserted that the entities in the first group would suffer irreparable injuries from patent infringement, including loss of reputation as an innovator and loss of client base in the relevant technology market.<sup>340</sup> This is exactly the situation in the *CSIRO* case. Based on *CSIRO*'s argument in this case, *CSIRO* is competing with other research institutes and universities in the technology market; if the permanent injunction was not granted, *CSIRO* would lose or delay its funding so the scheduled progresses for further researches and developments would be significantly delayed. No doubt, this delay will cause *CSIRO* to fall behind to other competitors in the relevant technology market, and the lag in further search and development frequently results in irreparable harm to *CSIRO*.

On the other hand, the commentator mentioned that the entities in the second group would not suffer irreparable injuries in the absence of permanent injunction because they only seek for the innocent companies which have used the patented technologies and endeavor to wrest "rent" for their use.<sup>341</sup>

This dissertation notes that the treatments of R&D-based NPEs should be differentiated from the pure trolls. The differential considerations of granting a permanent injunction between these two groups will be discussed in details in the next sub-section.

#### **4.5.4 The differential Considerations of Granting a Permanent Injunction between R&D-based NPEs and Pure Trolls**

From the empirical study of this dissertation, the pure trolls are largely influenced by *eBay*. Since the pure trolls are not likely possible to obtain a permanent injunction after

---

<sup>340</sup> *Id.* at 906.

<sup>341</sup> *Id.* at 907.

*eBay*, the pure trolls have lost the most essential bargaining power of licensing negotiation, and only the monetary damages are left to the pure trolls as the patent remedies.

In regard to the monetary damages, 35 U.S.C. §284<sup>342</sup> states:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.<sup>343</sup>

In applying this section, the patentee-plaintiff needs to bear the burden of affirmatively proving its “lost profits”.<sup>344</sup> In calculating the “lost profits” as monetary damages for patent infringement, the Sixth Circuit in *Panduit Corp. v. Stahlin Brothers Fibre Works, Inc.*<sup>345</sup> stated that the patentee-plaintiff needs to affirmatively prove the following four factors: (1) demand for the patented commodity; (2) absence of acceptable non-infringing substitutional products; (3) the patentee's manufacturing and marketing capability to achieve the demand; and (4) the profit amount that she or he would have made.<sup>346</sup>

Since the pure trolls do not have their own products, there are no so-called “marketplace”, “plaintiff’s production”, “plaintiff’s marketing capacity”, and “non-infringing substitutes”. Accordingly, the pure trolls can only assert the “reasonable royalty” as monetary damages.

In determining the amount of reasonable royalty, the court in *Georgia-Pacific Corp. v. United States Plywood Corp.*<sup>347</sup> established a “hypothetical license approach”.<sup>348</sup> Under this

---

<sup>342</sup> This section was not substantially amended in the Leahy-Smith America Invents Act, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011).

<sup>343</sup> U.S. Patent Act, 35 U.S.C. §284.

<sup>344</sup> Laura B. Pincus, *The Computation of Damages in Patent Infringement Actions*, 5 *HARD. J. L. & TECH.* 95, 100 (1991).

<sup>345</sup> *Supra* note 233, at 1156.

<sup>346</sup> *Id.*

<sup>347</sup> *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

approach, the reasonable royalty generally approximates to the amount which a business license negotiation would reach. Accordingly, a commentator stated that the infringer would have an incentive to infringe rather than to negotiate the patent license in advance under the “hypothetical license approach”, because the infringer would only need to pay the amount of damages that he or she should pay for the business license.<sup>349</sup> Accordingly, since the pure trolls lost injunctive reliefs as their most powerful weapon to force patent licensing after *eBay*, the pure trolls are largely influenced by *eBay*.

On the other hand, the R&D-based NPEs may not be largely influenced by *eBay* by the following three reasons. First, CSIRO, as a R&D-based NPE, obtained a permanent injunction although it is a non-practicing entity. Although CSIRO has no its own product and no direct competition with the defendant, CSIRO is in fact competing with other research institutes and universities in the technology market. If a permanent injunction was not granted, CSIRO would lose or delay its funding so the scheduled progresses for further researches and developments would be significantly delayed, and the lag in further search and development frequently results in irreparable harm to CSIRO. This dissertation thinks that this is a very good argument for the R&D-based NPEs to establish irreparable harm in the future motions for permanent injunction.

Second, the primary profits of the R&D-based NPEs come from technology transfer and patent licensing rather than patent infringement litigation.<sup>350</sup> Many R&D-based NPEs own strong fundamental technologies and fully integrated patent portfolio, so others (the potential licensees) have motivation to be licensed without the threat of injunctive relief. Since the original purpose of R&D-based NPEs is to collect royalty and licensing fee, this dissertation suggests that the R&D-based NPEs may claim for a compulsory license and

---

<sup>348</sup> *Supra* note 344, at 122.

<sup>349</sup> *Id.* at 124.

<sup>350</sup> Cheng, Y.C., Y. H. Lan and S.J. Liu, *supra* note 328, at 3.

on-going royalty while litigating instead of moving for permanent injunction.

Third, if the R&D-based NPE has licensed the patent-in-suit to other entity in exchange for a royalty like the *Novozymes A/S v. Genencor Int'l, Inc.* case, it may claim that the direct harm to the licensee is the indirect harm to the patent owner. If the RD-based NPE can prove that the licensee will be directly and irreparably harmed by future patent infringement, it has a high possibility to establish its indirect and irreparable harm as well.

In sum, this dissertation concludes that the pure trolls are significantly influenced by the *eBay* case. However, the negative impact of the *eBay* case on the R&D-based NPEs is limited. In the motion for permanent injunction, the R&D-based NPEs can assert CSIRO's argument first. Even if it is not successful, the R&D-based NPEs may request for a compulsory license and on-going royalty which may substantially meet their purposes of enforcing the patent rights.

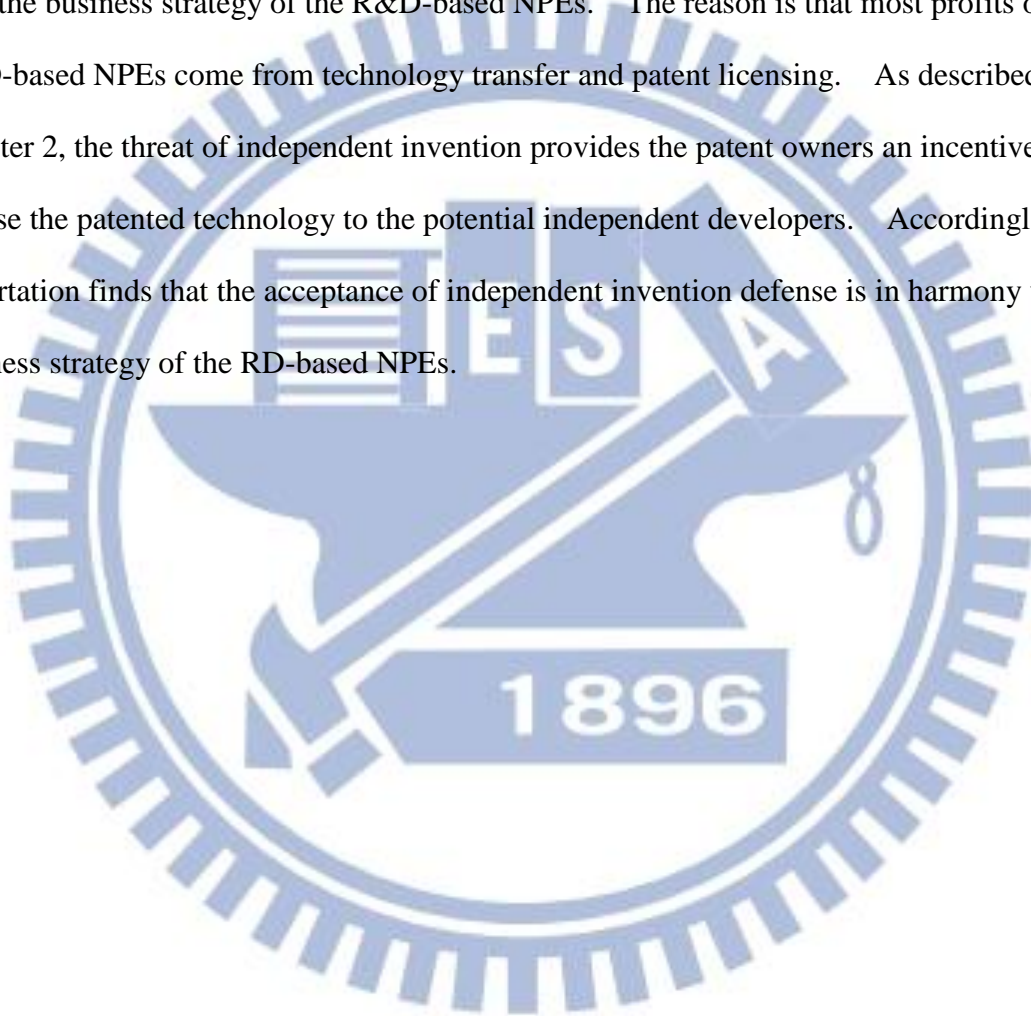
#### **4.5.5. When NPEs Meet Independent Developers**

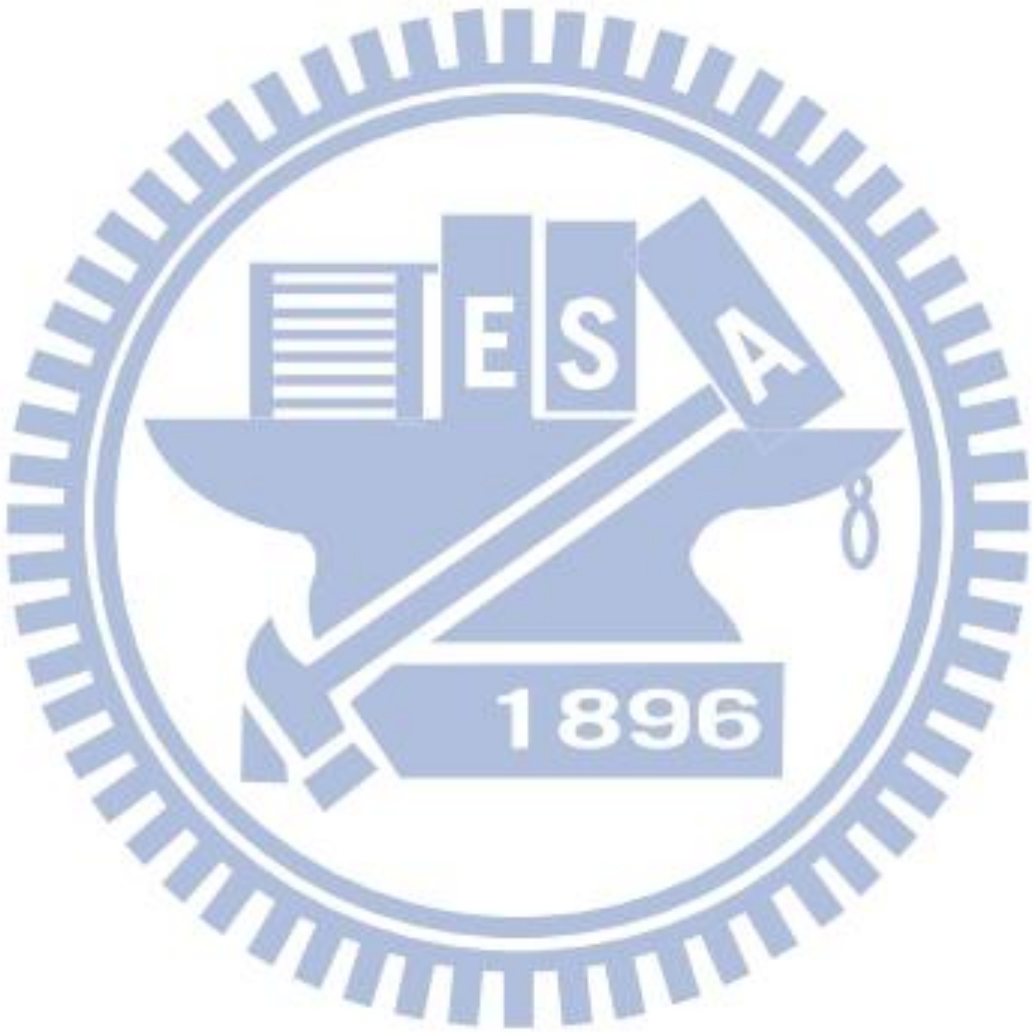
Since the pure trolls generally file lawsuits to earn money, the acceptance of independent invention defense will definitely conflict with the business strategy of the pure trolls.

On the other hand, the R&D-based NPEs conduct fundamental researches and developments, and they generally take the lead in research and development. After completing fundamental research and development, the R&D-based NPEs apply for patents for the inventions which will be early published 18 months later from the filing dates of the patent applications. After the patent application is laid open, everyone may have access to the patent specification on the Internet, so any potential infringer may have no room to raise the independent invention defense.

Accordingly, it is very hard for the potential infringers to claim for independent invention, unless an infringer's progress of R&D does not lag behind the patent owner for as long as 18 months. Accordingly, this dissertation notes that the acceptance of independent invention defense will not largely influence the R&D-based NPEs.

In fact, the acceptance of independent invention defense does not substantially conflict with the business strategy of the R&D-based NPEs. The reason is that most profits of the R&D-based NPEs come from technology transfer and patent licensing. As described in Chapter 2, the threat of independent invention provides the patent owners an incentive to license the patented technology to the potential independent developers. Accordingly, this dissertation finds that the acceptance of independent invention defense is in harmony with the business strategy of the RD-based NPEs.







## **CHAPTER 5: APPLYING INDEPENDENT INVENTION DEFENSE TO PATENT INJUNCTION PROCEEDINGS**

This dissertation suggests considering the independent invention defense in patent-related disputes. A historical perspective, a constitutional perspective, an empirical perspective, and an economic perspective of considering the independent invention defense will be introduced in Sections 1 to 4, respectively. In Section 5, this dissertation will suggest practically implementing the independent invention defense in the adjudications of preliminary injunction and permanent injunction.

### **5.1 Historical Perspective: The Form and Strength of Patent Right are Drifting in Patent History**

#### **5.1.1 Patent Right was a “Monopoly of Sale” in Early Patent Law of the United Kingdoms**

##### **1. Letter Patent Before the Statute of Monopolies**

In early ages of England, the King had the power to issue “Letter Patent”, which was the open letters marked with the King’s Great Seal<sup>1</sup>, to grant a favored person a “monopoly of sale” to commercialize a specific product. The first Letter Patent was issued by Henry VI in 1449 to grant a 20-year monopoly of making stained glasses.<sup>2,3</sup>

In fact, grant of the Letter Patent at that time was not for the purpose of encouraging new inventions. Instead, the primary purpose of granting a Letter Patent was to encourage the trade persons to introduce manufactures and skills from the European Continent to England.<sup>4</sup> Accordingly, the aim of granting a Letter Patent was to promote importation trades rather than to promote inventions.

---

<sup>1</sup> History of Patents, *available at* <http://www.ipo.gov.uk/p-history.htm> (last visited Oct. 11, 2012).

<sup>2</sup> *Id.*

<sup>3</sup> Peter D. Rosenberg, PATENT LAW FUNDAMENTALS 1-47 (2nd ver. 1997).

<sup>4</sup> CHRISTINE MACLEOD, INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT SYSTEM,

Later, however, the King/Crowns of England abused the power to issue the Letter Patents.<sup>5</sup> Consequently, almost of the goods, including daily commodities (such as salt, soap, glass, paper, and iron)<sup>6</sup> were monopolized by some specific “favored” persons. “Monopoly of sale” caused that only the privileged person granted with the Letter Patent could merchandise the product, so the person had the position to solely determine the price of the product. The monopolies of the dairy commodities finally resulted in high dairy expenditure, so the dairy lives of the civilian were significantly influenced. This phenomenon effected serious complaints from the civilian.<sup>7</sup>

In 1602, a court in *Darcy v. Allin* case<sup>8</sup>, a very early milestone case in English law, held that the grant of a monopoly to produce any article was not proper.<sup>9</sup> The plaintiff of this case was Edward Darcy who had obtained a monopoly to import and sell all playing cards in the market of England from Queen Elizabeth. The defendant T. Allin made and sold his own playing cards in the market as a direct competitor of Edward Darcy. Edward Darcy sued T. Allin to prevent from Allin’s direct competition.<sup>10</sup>

The court held that the monopoly granted by Queen Elizabeth was invalid by the following reasons. First, the court found that the monopoly of sale was to promote idleness because the monopoly enjoined the skilled persons from practicing their trades to compete with the monopolist. Furthermore, the court noted that the monopoly of sale injured not only the trade person in the relevant market, but also each person desiring to use the goods, by reason that the monopolist had the monopoly position to lift the price but had no incentive to improve or maintain the quantities of the goods. Although Queen Elizabeth had granted the

---

1660-1800 10 (2002).

<sup>5</sup> Tudors and Stuarts, *available at* <http://www.ipo.gov.uk/tpyes/patent/p-about/p-what/p-history/p-history-todor.htm> (last visited Oct. 11, 2012).

<sup>6</sup> *Id.*

<sup>7</sup> *Supra* note 4, at 14-15.

<sup>8</sup> *Darcy v. Allin*, 77 Eng. Rep. 1260 (Queen’s Bench, 1602).

<sup>9</sup> Chris Dent, “*Generally Inconvenient*”: *The 1624 Statute of Monopolies as Political Compromise*, 33 MELBOURNE UNIVERSITY L. R. 415, 419-420 (2009).

<sup>10</sup> *Supra* note 8.

monopoly with the intention to promote the public interest, the court found that Queen Elizabeth had been deceived because the monopoly was applied only for the monopolist's private interest. Furthermore, the court noted that it was dangerous to permit a trade to be monopolized, especially that there had been no law to allow the grant of monopoly.<sup>11</sup>

This case is called "The Case of Monopolies"<sup>12</sup> and becomes the significant ground of modern antitrust law<sup>13</sup>. The endless debates to criticize the monopolies of sale finally stimulated the codification of the Statute of Monopolies in England in 1623 which will be discussed below.

## 2. The Statute of Monopolies

The Statute of Monopolies was stipulated in 1623 to provide an "Act concerning Monopolies and Dispensations with Penal Laws, and the Forfeitures thereof."<sup>14</sup> Although the Statute of Monopolies provided the first patent act around the world<sup>15</sup>, the main purpose of the Statute of Monopolies was not to promote the progress of technology. Instead, the Statute of Monopolies was a compromise<sup>16</sup> to restrain the King or Crown's power of issuing the Letter Patent.<sup>17</sup>

Under the Statute of Monopolies, the King of England still had the power to issue the Letter Patent to provide the monopoly on a certain product. However, the King could only issue the Letter Patents to the true and first inventor or inventors.<sup>18</sup> For the persons other

---

<sup>11</sup> *Id.*

<sup>12</sup> Chris Dent, *supra* note 9, at 420 fn 30.

<sup>13</sup> Daniel A. Crane, *Lochnerian Antitrust*, 1 NYU JOURNAL OF LAW AND LIBERTY 496 506 (2005).

<sup>14</sup> Statute of Monopolies 1623, 1623 c.3 21\_Ja\_1, with the title: "An Act concerning Monopolies and Dispensations with Penal Laws, and the Forfeitures thereof".

<sup>15</sup> Fritz Machlup and Edith Penrose, *The Patent Controversy in the Nineteenth Century*, 10 J. ECONOMIC HISTORY 1, 2 (1950).

<sup>16</sup> Chris Dent, *supra* note 9, at 438.

<sup>17</sup> Martin J. Adelman, Randall R. Rader, John R. Thomas, and Harold C. Wegner, *CASES AND MATERIALS ON PATENT LAW* 9 (2<sup>nd</sup> ed. 2003).

<sup>18</sup> The sixth paragraph of the Statute of Monopolies ruled that: "Provided alsoe That any Declaracion before mencioned shall not extend to any tres Patents and Graunt of Privilege for the tearme of fowerteene yeares or under, hereafter to be made of the sole working or makinge of any manner of new Manufactures within this Realme, to the true and first Inventor and Inventors of such Manufactures, which others at the tyme of makinge

than the first true inventors, the King had no power to grant the Letter Patents. Furthermore, the term of the Letter Patents was limited to 14 years under the Statute of Monopolies.<sup>19</sup>

### **5.1.2 Patent Rights were Substantive “Rights to Manufacture, Sell, and Use” in Early Patent Laws<sup>20</sup>**

#### 1. Early Patent Laws in the U.S.

##### (1) 1790 Patent Law

The Senate and House of Representatives of the United States of America enacted the first Patent Statute in 1790 (hereinafter the “1790 Patent Law”).<sup>21</sup> The title of the 1790 Patent Law showed that it is “an Act to promote the progress of useful arts”. The allowable subject matters in the 1790 Patent Law were the manufacture, engine, machine, or device, or any improvement therein. The invention should be useful and not known or used before the application in order to meet the requirements of patentability. To file the patent application, the inventor (or applicant) should describe the invention clearly, truly, and fully. The patent application should be examined by the Secretary of State, the Secretary for the department of war, and the Attorney General of the United States.<sup>22</sup>

If the patent application met all of the requirements mentioned above, the applicant could be granted the “sole and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention or discovery” for any term not exceeding fourteen years.<sup>23</sup>

According to the 1790 Patent Law, the patent right is a sole and exclusive right and

---

such tres Patents and Graunts shall not use, soe as alsoe they be not contrary to the Lawe nor mischievous to the State, by raisinge prices of Commodities at home, or hurt of Trade, or generallie inconvenient; the said fourteene yeares to be accomplished from the date of the first tres Patents or Grant of such priviledge hereafter to be made, but that the same shall be of such force as they should be if this Act had never byn made, and of none other ”.

<sup>19</sup> *Id.*

<sup>20</sup> Adam Mossoff, *Exclusion and Exclusive Use in Patent Law*, 22 HARV. J. L & TECH. 321, 341 (2009).

<sup>21</sup> 1790 Patent Law, Ch. 7, 1 Stat. 109-112 (April 10, 1790).

<sup>22</sup> 1790 Patent Law, Sec. 1.

<sup>23</sup> *Id.*

liberty to make, construct, use and vend to others to be used. Indeed, it was a substantive “practice right” to “make”, “construct” and “use” the patented products, rather than a negative “exclusive right” in the current patent systems only to exclude others from marking, constructing, or using the patented products.

## (2) 1793 Patent Law

The Senate and House of Representatives of the United States of America amended the Patent Statute in 1793 (hereinafter the “1793 Patent Law”).<sup>24</sup> The 1793 Patent Law clearly limited the patent applicant should be the citizen of the United States. The allowable subject matters in the 1793 Patent Law changed to be machine, manufacture or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter.<sup>25</sup> Like the 1790 Patent Law, the invention should be useful and not known or used before the application in order to meet the requirements of patentability in the 1793 Patent Law.<sup>26</sup>

If the patent application met all of the requirements mentioned above, the applicant could be granted the “the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery” for any term not exceeding fourteen years.<sup>27</sup>

According to the 1793 Patent Law, the patent right was a full and exclusive right and liberty to make, construct, use and vend to others to be used. It was again a substantive practice right to “make”, “construct” and “use” the patented products, rather than merely a negative “exclusive right” to exclude others from marking, constructing, or using the patented products.

---

<sup>24</sup> 1793 Patent Law, Ch. 11, 1 Stat. 318-323 (February 21, 1793).

<sup>25</sup> 1793 Patent Law, Sec. 1.

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

### (3) 1836 Patent Law and the Case Law under this statute

The Senate and House of Representatives of the United States of America amended the Patent Statute in 1836 (hereinafter the “1836 Patent Law”).<sup>28</sup> The title of the 1836 Patent Law showed that it was “an Act to promote the progress of useful arts, and to repeal all acts and parts of acts heretofore made for that purpose”. The 1836 Patent Law clearly limited the patent applicant should be the citizens of the United States or some specific alien<sup>29</sup>. The allowable subject matters in the 1836 Patent Law changed to be machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter.<sup>30</sup> The invention should be useful and new, not known or used by others before his or their discovery or invention thereof, and not, at the time of his application for a patent, in public use or on sale.<sup>31</sup>

According to the 1836 Patent Law, the patent application should contain a short description or title of the invention and correctly indicate its nature and design.<sup>32</sup> The written description requirement in the 1836 Patent Law was already detailed. The patent applicant should describe the invention in “full, clear, and exact terms, avoiding unnecessary prolixity<sup>33</sup>, as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same”.<sup>34</sup> More particularly, if the invention was related to a machine, the patent applicant should fully explain the principle and the several modes in which the applicant had contemplated the application of the principle by which it may be distinguished from other inventions.

---

<sup>28</sup> 1836 Patent Law, Ch. 357, 5 Stat. 117 (July 4, 1836).

<sup>29</sup> 1836 Patent Law, sec. 12, which granted the patent right only to the citizens of the United States and the alien who shall have been resident in the United States one year next preceding, and shall have made oath of his intention to become a citizen thereof.

<sup>30</sup> 1836 Patent Law, Ch. 357, sec. 6

<sup>31</sup> *Id.*

<sup>32</sup> 1836 Patent Law, Ch. 357, sec. 5

<sup>33</sup> 1836 Patent Law, Ch. 357, sec. 6.

<sup>34</sup> *Id.*

Once the patent application met the aforementioned requirements, the applicant would obtain a “full and exclusive right and liberty of making, using, and vending to others to be used, the said invention”.<sup>35</sup> The patent right was assignable to grant others to make and use the patented invention.<sup>36</sup>

According to the 1836 Patent Law, the patent right was a full and exclusive right and liberty to make, use and vend to others to be used. Hence, it was again a substantive practice right to “make”, and “use” the patented products, rather than a negative “right to exclude” others from making, constructing, or using the patented products. Furthermore, the “right to make” and “right to use” can even assign to others.

The 1836 Patent Law was applied in the *Wilson v. Rousseau* case<sup>37</sup> by the Supreme Court. In this case, the Supreme Court cited the 1836 Patent Law to hold that patent owner had “the exclusive right to make and use, and vend to others to be used, the said invention or improvement”.<sup>38</sup>

Until 1852, however, the Supreme Court seemed not to comply with the 1836 Patent Law in the *Bloomer v. McQuewan* case<sup>39</sup>. The Supreme Court held in this case that the patent right “consists altogether in the right to exclude everyone from making, using, or vending the thing patented without the permission of the patentee”.<sup>40</sup> It is a surprise to find that the patent right ruled in this opinion of the Supreme Court was quite similar with the wording in the current Patent Law. Moreover, the Supreme Court further mentioned that “This is all that he (the patent owner) obtains by the patent”.<sup>41</sup> Persuade to the opinion above, the Supreme Court seemed to rule that the patent right is only a negative “right to

---

<sup>35</sup> 1836 Patent Law, Ch. 357, sec. 5.

<sup>36</sup> 1836 Patent Law, Ch. 357, sec. 11.

<sup>37</sup> *Wilson v. Rousseau*, 45 U.S. 4 How. 646, 646 (1846).

<sup>38</sup> *Id.*

<sup>39</sup> *Bloomer v. McQuewan*, 55 U.S. 14 How. 539, 539 (1852).

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

exclude” rather than a substantive “right to make” or a “right to use”, although it was not in accordance with the 1836 Patent Law.<sup>42</sup>

#### (4) 1870 Patent Law and the Case Law under it

The Senate and House of Representatives of the United States of America amended the Patent Statute in 1870 (hereinafter the “1870 Patent Law”).<sup>43</sup> The title of the 1870 Patent Law showed that it was “An Act to revise, consolidate, and amend the Statutes relating to Patents and Copyrights”. The 1870 Patent Law clearly limited the patent applicant should be the citizens of the United States.<sup>44</sup> The allowable subject matters in the 1870 Patent Law changed to be machine, manufacture, or composition of matter, or any new and useful improvement thereof.<sup>45</sup> The invention should be useful and new, not known or used by others in the United States, and not patented, or described in any printed publication in the United States or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned.<sup>46</sup>

According to the 1870 Patent Law, the patent application should contain a short title or description of the invention and correctly indicate its nature and design.<sup>47</sup> The written description requirement in the 1870 Patent Law was already detailed. The patent applicant should describe the invention in “full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same”.<sup>48</sup> More particularly, if the invention is related to a composition of matter, the patent applicant should furnish specimens of

---

<sup>42</sup> Mossoff, *supra* note 20, at 341.

<sup>43</sup> 1870 Patent Law, Ch. 230, 16 Stat. 198-217 (July 8, 1870).

<sup>44</sup> The 1870 Patent Law, sec. 40.

<sup>45</sup> The 1870 Patent Law, sec. 24.

<sup>46</sup> *Id.*

<sup>47</sup> The 1870 Patent Law, sec. 22.

<sup>48</sup> The 1870 Patent Law, sec. 26.



ingredients and of the compositions, sufficient in quantity for the purpose of experiment.<sup>49</sup>

Once the patent application met the aforementioned requirements, the applicant would obtain an “exclusive right to make, use and vend the said invention or discovery throughout the United States and the Territories thereof”.<sup>50</sup> Furthermore, the patent right was assignable to grant others to make and use the patented invention.<sup>51</sup>

According to the 1870 Patent Law, the patent right was an exclusive right to make, use and vend the patented invention. It is again a substantive practice right to “make”, “use”, and “vend” the patented products, rather than a negative “right to exclude” others from making, using, or vending the patented products. The “right to make” and “right to use” can even assign to others.

In the *Adams v. Burke* case<sup>52</sup> in 1873, the patent had been originally granted to Merrill & Horner for a certain improvement in coffin lids in 1863. According to the Supreme Court of the United States, Merrill & Horner were awarded an “exclusive right of making, using, and vending to others to be used, the said improvement”.<sup>53</sup> Thereafter, Merrill & Horner assigned the patent to Lockhart & Seelye in 1865, and then Lockhart & Seelye further assigned the patent to Adams, the plaintiff of this case.<sup>54</sup>

Adams filed a lawsuit against Burke at the District of Massachusetts, alleging patent infringement and seeking for damages and injunctive relief. The District of Massachusetts dismissed the lawsuit, and then Adams appealed to the Circuit Court. The Circuit Court affirmed the decision of the District of Massachusetts. Adams thus appealed to the Supreme Court.<sup>55</sup> The Supreme Court first pointed out that the patent right contains certain

---

<sup>49</sup> The 1870 Patent Law, sec. 28.

<sup>50</sup> The 1870 Patent Law, sec. 22.

<sup>51</sup> The 1870 Patent Law, sec. 36.

<sup>52</sup> *Adams v. Burke*, 84 U.S. 17 Wall. 453, 453 (1873).

<sup>53</sup> *Id.* at 454.

<sup>54</sup> *Id.*

<sup>55</sup> *Id.* at 453-454.

“substantive rights”, such as “the right to manufacture”, “the right to sell”, and “the right to use”, and each of the substantive rights can be separately granted or conferred by the patent owner.<sup>56</sup>

Accordingly, persuade to the opinion of the Supreme Court, the patent right was not only a negative right to exclude, but also a bundle of substantive rights, such as the right to manufacture, the right to sell, and the right to use.

## 2. Early Patent Laws in Taiwan

The first patent statute of the Republic of China was enacted in 1944 (hereinafter the “1944 Patent Law”). Under Article 42 of the 1944 Patent Law, the patent right was to allow the patent owner manufacturing or using the invention.<sup>57</sup> If a patent was regarding to a process, the patent right covered the products directly made by using the patented process. It is clear that the patent right at this stage was the “right to manufacture” and the “right to use”, rather than the right to exclude others from manufacturing or using the patented products without the prior consent of the patent owner.

The patent statute of the Republic of China was amended in 1959 (hereinafter the “1959 Patent Law”). Under Article 42 of the 1959 Patent Law, a patent right was to allow the patent owner manufacturing, selling or using the invention.<sup>58</sup> If the patent was regarding to a process, the patent right covered the products directly made by using the patented process. It is obvious that the patent right at this stage was again a substantive “right to manufacture, sell, and use”, rather than a negative “right to exclude” others to manufacture, sell, or use the patented products without the prior permission of the patent holder.

The patent statute was amended again in 1986 (hereinafter the “1986 Patent Law”).

---

<sup>56</sup> *Id.* at 456 (“The right to manufacture, the right to sell, and the right to use are each substantive rights, and may be granted or conferred separately by the patentee.”)

<sup>57</sup> Under the 1944 Patent Law, the apparatus patent right covers only manufacturing and using.

<sup>58</sup> Under the 1959 Patent Law, the apparatus patent right covers only manufacturing, selling and using.

The Article 42 of the 1986 Patent Law again retained that the patent right for an apparatus patent was to allow the patent owner manufacturing, selling or using the invention.

Nevertheless, the patent right of a process claim was changed. Although the patent right of a process patent still covered the product directly made by using the patented process, but a permission from a third party was needed for the patent owner of a process patent to use the patented process or to manufacture, sell, or use the product made directly by using the patented process if the product had been patented by the third party. Accordingly, under the 1986 Patent Law, the process patent right is not a substantial right to use. The “right to use” of a process patent should be restricted by the prior apparatus patent, if any.

The patent statute was amended again in 1994 (hereinafter the “1994 Patent Law”), in which the Article 56 changed the patent right from a “right to manufacture”, a “right to sell” and a “right to use” to a “right to exclude”. Section 1, Article 56 of the 1994 Patent Law stipulated that the patent owner of an apparatus patent has the right to exclude others from manufacturing, selling, using, or importing the patented products without his or her prior consent. Accordingly, the patent owner is no longer entitled to the “right to manufacture”, the “right to sell” and the “right to use” under the 1994 Patent Law.

Similarly, Section 2, Article 56 of the 1994 Patent Law stipulated that the patent owner of a process patent has the right to exclude others from using the patented method, or using, selling, or importing the products made directly from the patented method without his or her prior permission.

In sum, from the 1994 Patent Law, the patent right was changed from a “substantive right” (such as a right to manufacture, sell, or use) to a negative “right to exclude”.

### 3. Manufacture and Sales of the Patented Products were not Patent Infringement

If the patent right is a right to exclude (like the rule in the current patent law) rather

than the rights to manufacture and sell the patented product, the patent owner of a derivative patent can not manufacture or sell his or her patented product if the claim scope of the derivative patent falls into the claim scope of the original patent. Please refer to the explanations and empirical study set forth in Chapter 2 of this dissertation for more details.

For example, let's assume that *Company A* had applied and obtained an original patent whose claim 1 is comprised of the combination of four elements a, b, c, and d. *Company A* is then entitled to a right to exclude others from manufacturing or selling any product containing the combination of four elements a, b, c, and d in the absence of *Company A*'s prior consent.

Later, let's assume that *Company B* had applied and obtained a derivative patent which is comprised of the combination of five elements a, b, c, d, and e. Since the patent right is only a right to exclude but not the rights to manufacture or sell under the current patent system, *Company B* can only exclude others from manufacturing or selling the products with the combination of five elements a, b, c, d, e, but *Company B* has no rights to manufacture or sell the products with the combination of five elements a, b, c, d, e. That's because the products with the combination of five elements a, b, c, d, e actually contain the combination of four elements a, b, c, and d. To manufacture or sell the products with the combination of five elements a, b, c, d, e will absolutely manufacture or sell the products with the combination of four elements a, b, c, and d. If *Company B* manufactures or sells the products with the combination of five elements a, b, c, d, e, *Company B* infringes *Company A*'s original patent even though *Company B* is the patent owner of the derivative patent.

By contrary, if the patent right is the rights to manufacture and sell, the patent owner can manufacture and sell the patented products as long as she obtains a patent right. Accordingly, the patent owner can still manufacture and sell the patented products even if the patented products fall into others' patent scope. In other word, to own a patent right will be

an affirmative defense against patent infringement in the patent infringement litigation.

Let's continue the example mentioned above. Under the system that the patent right is a substantive practice right, once *Company B* obtains the derivative patent right which is comprised of the combination of five elements a, b, c, d, e, *Company B* obtains the right to manufacture and sell the patented products with the combination of five elements a, b, c, d, and e. Even though the products manufactured or sold by *Company B* contain the combination of four elements a, b, c, d which has been patented by *Company A*, *Company B* does not infringe *Company A*'s patent right at all.

Accordingly, from the defendant's point of view, the patent right in the "substantive right to manufacture and sell" system is stronger than the right in the "negative right to exclude" system.

#### 4. The Grant of a Derivative Patent will Diminish the Patent Scope of an Original Patent

In case the patent right is a right to exclude rather than the rights to manufacture and sell the patented product, the grant of a derivative patent will not influence the patent scope of an original patent.

For example, let's continue the example above that *Company A* had applied and obtained an original patent which is comprising of the combination of four elements a, b, c, and d. *Company B* had applied and obtained a derivative patent which is comprised of the combination of five elements a, b, c, d, and e. Since the patent right is only a right to exclude but not the rights to manufacture or sell, *Company B* can only exclude others from manufacturing or selling the products with the combination of five elements a, b, c, d, e, but has no rights to manufacture or sell the products with the combination of five elements a, b, c, d, e. If *Company B* manufactures or sells the products with the combination of five elements

a, b, c, d, e, *Company B* still infringes *Company A*'s original patent even if *Company B* is entitled to the derivative patent right. From this point of view, the grant of *Company B*'s derivative patent will not diminish the patent scope of *Company A*'s original patent.

By contrary, if the patent right is the rights to manufacture and sell, the patent owner can manufacture and sell the patented products as long as she obtains a patent right. Accordingly, the patent owner can still manufacture and sell the patented products even if the patented products fall into others' patent scope. Since *Company B* is entitled to the derivative patent right which is comprised of the combination of five elements a, b, c, d, e, *Company B* obtains the right to manufacture and sell the patented products. Even if the products manufactured or sold by *Company B* contain the combination of four elements a, b, c, d which were patented by *Company A*, *Company B* does not infringe *Company A*'s patent right at all. From this point of view, *Company A*'s original patent is "dug" a hole by *Company B*'s derivative patent.

Accordingly, from the defendant's point of view, the patent right in the "substantive right to manufacture and sell" system is weaker than the right in the "negative right to exclude" system.

##### 5. The Preliminary Thought of the Rights to Manufacture and Sell

This dissertation finds that there are some advantages to establish a patent system in which the patent right is a substantive practice right rather than a negative right to exclude. First of all, if the patent right is the rights to manufacture or sell, the patent owner of the original patent will be forced to further develop more and more derivative inventions, in order not to be dug a hole in her original patent.

Second, if the patent right is the rights to manufacture and sell, the direct competitors of the original patent's patentee will be also encouraged to develop derivative inventions based

on the original patent. If the direct competitors can develop a derivative invention and further obtain a derivative patent, he or she can manufacture and sell the patented products without concerning the threat of the original patent. Accordingly, the derivative invention will be thus encouraged.

Unfortunately, since the patent right has changed from a substantive practice right to a negative right to exclude, such advantages are no longer existed.

As shown in the empirical study in Chapter 2, many defendants in Taiwan's patent litigation practice tried to raise the "possession of patent defense" against patent infringement. It's obvious that the "possession of patent defense" is based on the old patent system in which the patent right was a substantive practice right rather than a negative right to exclude. Since the patent right has changed from a substantive practice right to a negative right to exclude, the empirical study shows that no "possession of patent defense" was accepted by courts in Taiwan.

### **5.1.3 Patent Right Changed to "Right to Exclude" in the Last Half of 1900's**

The Senate and House of Representatives of the United States of America amended the Patent Statute in 1952 (hereinafter the "1952 Patent Law").<sup>59</sup> The title of the 1952 Patent Law is "Patents".

Section 154 (a) of the 1952 Patent Law<sup>60</sup> mentions that "Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the

---

<sup>59</sup> 1952 Patent Law, Ch. 950, 66 Stat. 792 (July 19, 1952).

<sup>60</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not substantially amend this section.

United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof”. Section 271 (a) of the 1952 Patent Law<sup>61</sup> mentions that “Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent therefor, infringes the patent”.

The Senate Report No. 82-1979 mentioned that the wording changing the patent right to “the right to exclude others from making, using, or selling” is to follow the language used by the Supreme Court to make the meaning clearer.<sup>62</sup> According to Professor Stefan A. Riesenfeld’s article<sup>63</sup>, the language of the Supreme Court is from: *United States v. American Bell Telephone Co.*<sup>64</sup>, *Motion Picture Patents Co. v. Universal Film Mfg. Co.*<sup>65</sup>, *Crown Die & Tool Co. v. Nye Tool & Machine Works*<sup>66</sup>, and *Special Equipment Co. v. Coe.*<sup>67</sup> Since the language of the Supreme Court (such as “the right to exclude others from making, using or vending his invention”) is different to the language of law at that time, Professor Riesenfeld said that the language of the Supreme Court had been in deviation from the language of law at

---

<sup>61</sup> The Leahy-Smith America Invents Acts, Public Law 112-29, 125 Stat. 284 (Sept. 16, 2011) did not amend this section.

<sup>62</sup> Senate Report No. 82-1979 (1952), available at <[http://www.ipmall.info/hosted\\_resources/lipa/patents/patentact/senate\\_report\\_1979.htm](http://www.ipmall.info/hosted_resources/lipa/patents/patentact/senate_report_1979.htm)> (last visited Jan. 8, 2013).

<sup>63</sup> Stefan A. Riesenfeld, *The New American Patent Act in the Light of Comparative Law: Part II*, 102 U. PA. L. REV. 723, 746-747, fn 166 (1954).

<sup>64</sup> *United States v. American Bell Telephone Co.*, 167 U.S. 224, 239 (1897)(“In this respect the government and its officers are acting as the agents of the people, and have, under the authority of law vested in them, taken from the people this valuable privilege, and conferred it as an exclusive right upon the patentee.”).

<sup>65</sup> *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 510 (1917)(“it provided that 'every patent shall contain . . . a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery throughout the United States, and the territories thereof.”).

<sup>66</sup> *Crown Die & Tool Co. v. Nye Tool & Machine Works*, 261 U.S. 24, 35 (1923)(“The Court held that the Government did not confer on the patentee the right himself to make, use or vend his own invention, . . . The Court further held that in its essence all that the Government conferred by the patent was the right to exclude others from making, using or vending his invention”).

<sup>67</sup> *Special Equipment Co. v. Coe*, 324 U.S. 370, 378 (1945)(“The patent grant is not of a right to the patentee to use the invention, for that he already possesses. It is a grant of the right to exclude others from using it.”).



that time, and had found confirmation by the Congress.<sup>68</sup>

Obviously, under the 1952 Patent Law, the patent right was changed from a substantive practice right (to “make”, “use”, and “vend” the patented products) to a negative “right to exclude” others from making, using, or selling the patented products.<sup>69</sup> Furthermore, Section 283 of the 1952 Patent Law stated that “The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable”, which ruled that the injunctive relieves are the specific practice of the negative right to exclude.

In the proceedings of determining whether to grant a permanent injunction in the non-patent infringement cases, the Supreme Court of the United States has been considering the four equitable factors for a very long time.<sup>70</sup> However, it was an exception in the patent infringement cases before the *eBay* case.

As described in Chapter 4, before the *eBay* case, the Federal Circuit did not consider the four equitable factors in the determination of a permanent injunction. Shortly after being established in 1982, the Federal Circuit mentioned in *Smith Int’l Inc. v. Hughes Tool Co.*<sup>71</sup> in 1983 that the patent owner should be entitled to the complete protection of his patent right once the patentee’s patent-in-suit had been found valid and infringed.<sup>72</sup> Specifically, in *Richardson v. Suzuki Motor Co.* case<sup>73</sup>, the Federal Circuit created a “general rule” which

---

<sup>68</sup> Riesenfeld, *supra* note 63, at 746-747.

<sup>69</sup> Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CAL. L. REV. 2187, 2222 (2000).

<sup>70</sup> Elizabeth E. Millard, *Injunctive Relief in Patent Infringement Cases: Should Courts Apply a Rebuttable Presumption of Irreparable Harm After eBay Inc. v. MercExchange, L.L.C.?* 52 ST LOUIS U. L. J., 985, 993(2008).

<sup>71</sup> *Smith Int’l Inc. v. Hughes Tool Co.*, 718 F. 2d 1573 (Fed. Cir. 1983).

<sup>72</sup> *Id.* at 1577 (“The very nature of the patent right is the right to exclude others. Once the patentee’s patents have been held to be valid and infringed, he should be entitled to the full enjoyment and protection of his patent rights. The infringer should not be allowed to continue his infringement in the face of such a holding. A court should not be reluctant to use its equity powers once a party has so clearly established his patent rights.”)

<sup>73</sup> *Richardson v. Suzuki Motor Co.*, 868 F. 2d 1226 (Fed. Cir. 1989).

meant that the permanent injunction should be granted and issued automatically once the patent-in-suit had been held valid and infringed.<sup>74</sup>

#### **5.1.4 Patent Right is Still the “Right to Exclude” under the Current Patent Laws but has been Weakened by *eBay***

The historical review above shows that the patent right as the right to exclude is not absolute or indisputable. In fact, the patent right “became” a right to exclude as late as in 1952. More particularly, after *eBay*, the concept of the patent’s right to exclude has been significantly modified.

##### 1. The Patent Right is Still a “Right to Exclude” but has been Weakened by *eBay*

Although the patent right under the current patent law is still a right to exclude, the patent right has been weakened by the *eBay* case. Under the opinion of the *eBay* case, the courts should apply the four-factor test to determine whether to grant a permanent injunction. However, according to the empirical study in Chapter 4 of this dissertation, the most significant element for the patent owner to be granted a permanent injunction is whether the plaintiff and the defendant are direct competitors in the relevant market. To be considered as a direct competitor of the defendant, the patent owner needs to sell its own patented product. If the patent owner does not have its own product, the patent owner is rarely possible to be considered as a direct competitor of the defendant and has little opportunity to obtain a permanent injunction.

##### 2. The Patent Right is Slightly pushed forward to the Rights to manufacture and sell

Under the opinion of the *eBay* case, the patent right is not a “pure” right to exclude. Instead, some ideas of substantive “right to manufacture and sell” were implemented into the patent system again. First, if the patent owner has its own product, the motion for a

---

<sup>74</sup> *Id.* at 1246-47.

permanent injunction is almost likely to be granted to protect its manufacture and sale rights. Second, if the patent owner dose not have its own product, a permanent injunction is not likely to be granted because the patent owner dose not have any manufacture or sale needed to be protected. Accordingly, this dissertation finds that the patent right is slightly advanced forward to a right to manufacture and sell by *eBay*.

### 5.1.5 Short Conclusions

The strength of patent right is significantly drifting in patent history, which can be divided into at least four stages: a monopoly for sale, a substantive right to practice, a negative right to exclude with a general rule in the permanent injunction proceedings, and a negative right to exclude but weakened by *eBay*. At the stage of “a substantive right to practice” from 1790 to 1952, the patent right was a right to manufacture, sell, and use in which manufacture and sale of the patented products were not patent infringement. In other word, “possession of a patent” is a defense to patent infringement at this stage. This legal development may explain why “possession of a patent defense” and “independent invention defense” become a “common sense” of the persons.

Under the 1952 Patent Law of the United States, the patent right was changed from a substantive practice right to a negative “right to exclude” others from marking, using, or selling the patented products. In 1983, the Federal Circuit created a “general rule” under which a permanent injunction should be granted automatically once the patent-in-suit is found valid and infringed. Patent right was weakened by the *eBay* case in 2006, under which the courts should apply the four-factor test to determine whether to grant a permanent injunction. According to the empirical study in Chapter 4, the most significant element for a permanent injunction is whether the plaintiff and the defendant are the direct competitors in the relevant market, which brought some concepts of substantive “right to manufacture and sell” into the patent system again. Although a patent right is still a “right to exclude” after *eBay*, it has

been largely weakened by *eBay* and is slightly pushed forward to a substantive practice right.

Potential independent developers will be motivated to independently develop their own technologies if a patent right is a substantive practice right. As soon as an independent developer independently completes an invention and obtains a patent right after filing a patent application, he can commercialize the patented technology without worrying about other's patent rights since his patent right is a substantive practice right.

Accordingly, the trends to weaken the patent's right to exclude and to slightly push the patent right forward to a substantive practice right are in harmony with the acceptance of the independent invention defense. Therefore, theoretically/historically speaking, it could be an option to consider the independent invention defense to the adjudication of preliminary injunction and permanent injunction. This dissertation will discuss in details about the possible implementation of the independent invention defense to the adjudication of preliminary injunction and permanent injunction in Section 5 of this Chapter.

## **5.2 Constitutional Perspective: Easily Granted Injunctions may be Harmful to the Progress of Useful Art and the Freedom to Speech**

### **5.2.1 Easily Granted Injunctions may be Harmful to the Progress of Useful Arts**

1. U.S. Constitutions: The Patent System is to Promote the Progress of Science and Useful Arts

The Constitution of the United States empowered the Congress to promote the progress of science and useful arts by securing for limited times to inventors (or patent owners) the exclusive right to their respective discoveries.<sup>75</sup> According to the opinion of the Supreme Court of the United States, the patent law promotes the progress of science and useful art by

---

<sup>75</sup> U.S. CONST. art. 1, §8, cl. 8: "The Congress shall have power . . .to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries..."

offering a right of exclusion for a limited period of time to be an incentive to researchers to risk the huge expenses of research and development.<sup>76</sup> On the other hand, the Supreme Court in the *Bonito Boat, Inc. v. Thunder Craft Boats, Inc.* case<sup>77</sup> mentioned that the Constitution includes not only a grant of power but also certain limitations to the execution of the power.

It's very clear that the patent protection to the inventors (or patentees) is only a measure for achieving the purpose; the purpose of the patent law is to promote the progress of useful art.<sup>78</sup> In other word, the real function of the patent system is to add to the sum of useful knowledge.<sup>79</sup> According to the opinion of the Supreme Court, the Constitution reflects a balance between the needs to provide incentive to invent and the avoidance of monopolies which impede the progress of useful art.<sup>80</sup> Therefore, instead of merely protecting the patent owner's right and benefit, the patent system is designed to balance the patentee's right to exclude and the public's productive use of science and technology.<sup>81</sup>

## 2. Over-protection of Patent Right will Inhibit the Progress of Science and Useful Art

The progress of science and technology relies on the disclosure, distribution, share, accumulation, and derivative invention of the research fruits. There is no doubt that the patent system can stimulate the researches to invent and disclose their research conclusions by drafting the patent specifications and filing patent applications. Accordingly, a commentator mentioned that a permanent injunction maintains the patent's right to exclude which is the ground of the incentives to invention in the patent system.<sup>82</sup>

---

<sup>76</sup> *Kewanee Oil Co. v. Bicron Corp. et al*, 416 U.S. 470, 480 (1974).

<sup>77</sup> *Bonito Boat, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 146 (1989).

<sup>78</sup> *Great Allantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 154 (1950), Justice DOUGLAS concurring ("The purpose is "To promote the Progress of Science and useful Arts...." The means for achievement of that end is the grant for a limited time to inventors of the exclusive right to their invention.")

<sup>79</sup> *Id.* at 152.

<sup>80</sup> *Supra* note 8, at 146.

<sup>81</sup> James M. Fischer, *The "Right" To Injunctive Relief For Patent Infringement*, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 28 (2007).

<sup>82</sup> Suzanne Michel, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 ANTITRUST

However, patent protection with injunctive relief measures generally inhibits the distribution, share, accumulation, and derivative invention of the research fruits.<sup>83</sup> Therefore, the commentator further emphasized that a permanent injunction or its threat may result in patent holdups which force the manufactures to unwillingly pay royalties on the ground of their switching expenses but not the real worth of the patented technologies.<sup>84</sup>

Accordingly, to absolutely and one-dimensionally protect the patent's right to exclude may not be always good to the developments of sciences and technologies.<sup>85</sup> Therefore, a commentator stated that the patent system allowing the patentee to exclude others from using the invention for research is inconsistent with the traditional scientific norms.<sup>86</sup> Although the purpose of the patent law is to promote the progress of science and useful arts, another commentator stated that many patents are likely to restrain the scientific searches and thus to hinder the progress of science and useful arts.<sup>87</sup> The two concurrences in *eBay* found this issue, and tried to limit the permanent injunction to prevent the patent holder from capturing the infringer's profits.<sup>88</sup>

### 3. Total Denial of the Independent Invention Defense will Inhibit the Progress of Science and Useful Arts

---

L. J. 889, 904 (2011).

<sup>83</sup> ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 133 (3<sup>rd</sup> ed. 2000).

<sup>84</sup> *Id.*

<sup>85</sup> See also, Robert P. Mergers, *Property Rights Theory and the Commons: The Case of Scientific Research*, in *SCIENTIFIC INNOVATIONS, PHILOSOPHY, AND PUBLIC POLICY* 145, 145-147 (1996); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anti-commons in Biomedical Research*, 280 *SCIENCE* 698, 698-699 (1998); Lisa Larrimore Ouellette, *Do Patents Disclose Useful Information?* 25 *HARV. J. L & TECH.* 545, 546 (2012); John M. Golden, *Innovation Dynamics, Patents, and Dynamic-Elasticity Tests for the Promotions of Progress*, 24 *HARV. J. L & TECH.* 47, 48 (2010); Arti Kaur Rai, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 *NW. U.L.REV.* 77, 78 (1999).

<sup>86</sup> See Kevin Sandstrom, *How Much do We Value Research and Development?: Broadening the Experimental Use Exemption to Patent Infringement in Light of Integra Liefsciences I, Ltd v. Merck KGaA*, 331 *F.3D* 860 (*Fed. Cir.* 2003), 30 *WM. MITCHELL L. REV.* 1059, 1096 (2004).

<sup>87</sup> Peter Yun-hyoung Lee, *Inverting the Logic of Scientific Discovery: Applying Common Law patentable Subject Matter Doctrine to Constrain Patents on Biotechnology Research Tool*, 19 *HARV. J. OF L.& TECH.* 79, 80 (2005).

<sup>88</sup> James M. Fischer, *The "Right" To Injunctive Relief For Patent Infringement*, 24 *SANTA CLARA COMPUTER & HIGH TECH. L.J.* 1, 29 (2007).

The current patent system is a “winner-takes-all” game. A patent right is only granted to the person first to file the patent application even if two or more persons or companies separately filed patent applications for an identical invention. Under the current patent system which does not allow the “independent invention” defense in the patent infringement litigation, as soon as the first competitor is awarded a patent right, other persons or companies including the independent developer can no longer practice the patented invention without the first competitor’s prior permission.

This rule is very disadvantageous to the independent developer. Since the technology was developed by the independent developer himself, the independent developer needed to spend the development expenses no less than the patent owner. However, the independent developer can not use the technology developed by himself because the technology has been patented by other entity. If the independent developer wants to use the patented technology, he needs to pay extra royalty or licensing fee to the patent owner, which is roughly identical to or even higher than the development expenses. As a result, the independent developer should pay at least twice of the development expenses in order to practice the technology developed by himself.

Subsequently, whenever a company finds that it loses the lead in technology development, the best policy for the company is to give up research activities in order to avoid wasteful duplication, rather than to catch up. This dissertation finds that it is absurd to establish a patent system to encourage a second-lead company to give up its research activities. This dissertation finds that the total denial of the independent invention defense will inhibit the progress of science and useful Art.

Accordingly, this dissertation will discuss in details the application of independent invention defense in the adjudications of preliminary injunction and permanent injunction in Section 5 of this Chapter.

## 5.2.2. Easily Granted Injunctions may be Harmful to the Freedom to Express

1. Freedom to Express is Extensively Protected Around the World, but Injunctive Relief may harm the Freedom to Express

The first Amendment to the United States Constitution<sup>89</sup> protects the freedom to express, including the freedoms of press, speech and assembly.<sup>90</sup> The Supreme Court in the *Gitlow v. New York* case<sup>91</sup> held that the freedoms of speech and of press are the fundamental personal rights which shall be protected by the due process.<sup>92</sup> In light of the dissemination of ideas, the Second Circuit of United States Court of Appeals in the *UNITED STATES of America v. Mary Frances CARRIER* case<sup>93</sup> held that the free trade in ideas is very important in a democracy.<sup>94</sup>

Since the freedom to express is protected by the First Amendment, generally courts in the United States do not tend to grant preliminary injunction to enjoin from free speech.<sup>95</sup> Consequently, preliminary injunction against speech is rarely granted.<sup>96</sup>

2. Balance between the Protections of Patent's right to Exclude an the Freedom to Express

However, the freedom to express under the First Amendment is not an absolute right. The United States District Court, W.D. Arkansas in the *Knights of Ku Klux Klan and Nathan*

---

<sup>89</sup> The first Amendment to the United States Constitution: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

<sup>90</sup> William Burnham, *INTRODUCTION TO THE LAW AND LEGAL SYSTEM OF THE UNITED STATES* 355 (2002).

<sup>91</sup> *Gitlow v. New York*, 268 U.S. 652 (1925).

<sup>92</sup> *Id.* at 666.

<sup>93</sup> *UNITED STATES of America v. Mary Frances CARRIER*, 672 F.2d 300 (1982).

<sup>94</sup> *Id.* at 305.

<sup>95</sup> Andrew Beckerman-Rodau, *Prior Restraints and Intellectual Property: The Clash between Intellectual Property and the First Amendment from an Economic Perspective*, 12 *Fordham Intell. Prop. Media & Ent. L.J.* 1, 26 (2001).

<sup>96</sup> *Id.* at 27.



*Robb, v. Rkansas State Highway and Transportation* case<sup>97</sup> held that the freedom to express shall be subordinated to other social interests.<sup>98</sup> The Supreme Court of the United States held that copyright's limited monopolies are in harmony with freedom to express in *Eldred v. Ashcroft*<sup>99</sup>, and held that some limitation on expression is intended and intrinsic effect of copyright in *Colan v. Holder*<sup>100</sup>.

The protection of patent's right to exclude is also an important social interest. The incentive to invest in research and development will be largely decreased if no injunctive relief enjoining from patent infringement is granted. Accordingly, the protection of freedom to practice/use technologies shall be limited and thus balanced with the protection of patent's right to exclude.<sup>101</sup>

This dissertation notes that technology can be divided into self-invented technologies and others' technologies. The freedom to use self-invented technologies is more worthy to be protected than the freedom to use others' technology. The simplest reason is that people need to invest money, human power and time to generate and use self-inventing technologies, but to use (or pirate) others' technologies is cost free. Accordingly, the adjudication of patent's injunctive relief measures (including preliminary injunction and permanent injunction) dose not need to consider the freedom to use others' technologies, but does need to consider the freedom to use self-invented technologies.

Again, this dissertation will discuss in details the application of independent invention defense in the adjudications of preliminary injunction and permanent injunction in Section 5 of this Chapter.

---

<sup>97</sup> *Knights of Ku Klux Klan and Nathan Robb, v. Rkansas State Highway and Transportation*, 807 F. Supp. 1427 (1992).

<sup>98</sup> *Id.* at 1433.

<sup>99</sup> *Eldred v. Ashcroft*, 537 U.S. 186, 190 (2003).

<sup>100</sup> *Colan v. Holder*, 132 S. Ct. 873, 889 (2012).

<sup>101</sup> Andrew Beckerman-Rodau, *supra* note 95, at 28.

## **5.3 Empirical Perspective: The Wrongfully-enjoined Defendant is Generally Under-compensated**

### **5.3.1 The Decision of Granting Preliminary Injunction is Fallible**

As described in Chapter 3, the decision of granting a preliminary injunction is fallible. A preliminary injunction will be revoked and become a wrongful injunction if the patent-in-dispute is found invalid or non-infringed in the underlying patent infringement litigation. However, once a preliminary injunction is granted and compulsorily executed by a court, the defendant can no longer manufacture, sell, or use the patented product or use the patented process. Therefore, the wrongfully-enjoined defendants generally suffer significant injuries as a result of the wrongful preliminary injunction.

### **5.3.2. The Wrongfully-enjoined Defendants are Generally Under-compensated**

However, the wrongfully-enjoined defendants are generally under-compensated. As discussed in Chapter 3, the movant's liability is limited to the amount of the posted bond if the preliminary injunction is later determined to be erroneous but not malicious in the United States. The wrongfully-enjoined defendant is generally unable to obtain damages in excess of the posted bond unless the patentee-movant was acting in bad faith. However, a scholar pointed out that the amount of the bond is generally under-estimated, because the court determines the bond at the very early stage of the patent dispute and it is quite hard for the defendant to argue and prove the expected harms and costs before the preliminary injunction is issued.<sup>102</sup>

Although the wrongfully-enjoined defendants are not automatically entitled to the bond and the movant's liability is limited to the amount of the posted bond when the defendant prevails in the underlying litigation in the United States, at least the wrongfully-enjoined

---

<sup>102</sup> Ofer Grosskopf and Barak Medina, *Remedies for Wrongfully-Issued Preliminary Injunctions: The Case for Disgorgement of Profits*, 32 SEATTLE U.L. REV. 903, 908 (2009).

defendants are entitled to a rebuttable presumption in favor of recovery against the bond for provable damages. Most importantly, when the wrongfully-enjoined defendants prevail in the underlying litigation and prove the harms during the preliminary injunction, they can be directly awarded the bond in the same lawsuit, without the need to file another lawsuit to claim for the damages.

Accordingly, it is a well-settled rule that the movant's liability is limited to the amount of the posted bond if the preliminary injunction is later determined to be erroneous but not malicious. In other words, the wrongfully-enjoined defendant is unable to obtain damages in excess of the bond unless the patentee-movant was acting in bad faith.<sup>103</sup> The Fifth Circuit was thus of the opinion that one of the functions of the bond is to provide the plaintiff with notice of the maximum amount of its potential liability, because the amount of the bond is the ceiling of the damages the defendant may obtain for the wrongful injunction if plaintiff was acting in good faith.<sup>104</sup> From this respect, to request a patentee-movant to post a bond is to protect the patentee-movant.

The situation is even worse in Taiwan. When the wrongfully-enjoined defendant prevails in the underlying infringement litigation, the court of the underlying infringement litigation in Taiwan has no discretion to award the bond to the wrongfully-enjoined defendant directly. In other word, a wrongfully-enjoined defendant in Taiwan needs to file another lawsuit to claim for damages even if the patentee-movant has posted a bond.

However, it is very difficult for a wrongfully-enjoined defendant in Taiwan to prevail in the following lawsuit to claim for damages. That is because the wrongfully-enjoined defendants in Taiwan are not entitled to a rebuttable presumption in favor of recovery against the bond as in the United States. In order to win the lawsuit claiming for damages, a

---

<sup>103</sup> *Coyne-Delany Co. v. Capital Dev. Bd.*, 717 F.2d 385, 3991 (7<sup>th</sup> Cir. 1983).

<sup>104</sup> *The Continuum Company, Inc. v. Incepts, Inc., ABS Ventures II, and ABA Excelsior II*, 873 F.2d 801, 803 (5<sup>th</sup> Cir. 1989)

wrongfully-enjoined defendant in Taiwan needs to prove that: (1) the patentee-movant has the intent or is negligent; (2) to conduct an illegal activity; (3) to harm the wrongfully-enjoined defendant; and (4) there is a proximate causation between the patentee-movant's illegal activity and the injury suffered by the wrongfully-enjoined defendant.<sup>105</sup> The empirical study in Chapter 3 shows that the possibility for the wrongfully-defendant to win the lawsuit claiming for damages approaches to zero. The reasons are as follows.

First, it is quite hard for the wrongfully-enjoined defendants to prove the patentee-movants' intent or negligence. The patentee-movants generally argue that they have neither intent nor negligence because they had found patent infringement and moved for a preliminary injunction on the ground of the Patent Law, the Civil Procedure Law and the Procedure Law for Adjudicating IP Cases.

Second, it is still difficult for the wrongfully-enjoined defendants to prove that the patentee-movants conducted an illegal activity. The patentee-movants again contend that they moved for a preliminary injunction on the ground of the Patent Law, the Civil Procedure Law and the Procedure Law for Adjudicating IP Cases and the preliminary injunction orders were issued by the courts, and argue that it shall never be illegal to conduct an activity based on laws and court's decision.

Third, sometimes the injury of the wrongfully-enjoined defendant is difficult to prove. It may be possible to prove the injury if the accused product had been entered into the market but later was enjoined by the preliminary injunction order, by counting the sales loss during the period of the wrongful preliminary injunction. However, if the accused product (for example, a generic drug under the clinic trial) had not yet been released to the market but was enjoined by the wrongful preliminary injunction, it would be difficult for the

---

<sup>105</sup> Civil Law art. 184, sec. 1 states that "A person who, intentionally or negligently, has wrongfully damaged the rights of another is bound to compensate him for any injury arising therefrom. The same rule shall be applied when the injury is done intentionally in a manner against the rules of morals."

wrongfully-enjoined defendant to prove the injury during the preliminary injunction.

Fourth, even if the wrongfully-enjoined defendants are able to prove the injury during the preliminary injunction, it is still difficult for them to prove proximate causation between the patentee-movant's illegal activity and the injury suffered by the wrongfully-enjoined defendant.

Since the wrongfully-enjoined defendants are generally under-compensated, courts should be cautious in granting a preliminary injunction to prevent causing irreparable injuries to the defendants. This dissertation finds that to accept the independent invention defense in the adjudication of injunctive reliefs, especially in preliminary injunction, is a good way to balance between the protection of patent rights and the need to exercise caution to prevent causing irreparable harm to the defendants. Again, this dissertation will discuss the implementation of independent invention defense in the injunction proceedings in Section 5 of this Chapter.

## **5.4 Economic Perspective: The Independent Invention Defense is a Win-win-win Policy**

### **5.4.1. Independent Invention is a Waste in the Current Patent System**

The current patent system is a game of “winner-takes-all”. The patent right will be granted to the person first to file the patent application if more than two persons or companies separately filed patent applications for an identical invention. Since the independent invention defense is not allowed in current patent infringement litigation, once the first person (or company) obtains the patent right, others including the independent developer can not practice the patented technologies without the first person (or company)'s prior permission. Accordingly, two famous scholars William M. Landes and Richard A. Posner in their book mentioned that the denial of independent invention defense would cause patent races and the

rent-seeking costs.<sup>106</sup> Because the patent owner may become a monopoly on the patented products, social costs will be imposed in that the patent owner provides too little monopolized products at a high price but in low quantities.<sup>107</sup>

This rule is very disadvantageous to the independent developer. Since the technology was developed by the independent developer himself or herself, the independent developer needed to spend the development expenses as much as the patent owner. However, the independent developer can not use the technology developed by himself. If the independent developer wants to use the patented technology, he or she needs to pay an extra licensing fee to the patent owner, which is roughly identical to or even higher than the development expenses. Accordingly, the independent developer should pay at least twice of the development expenses in order to practice the technology developed by himself.

Subsequently, the current patent law encourages people or companies not to continue the research activity if cannot take the lead in technology development. In this circumstance, the best way for the second or third company is to stop further researching and developing and save money for paying licensing fee. Otherwise, the chasing development will be a waste.

Applying William M. Landes and Richard A. Posner's theory that that the denial of independent invention defense would cause patent races and the rent-seeking costs,<sup>108</sup> this dissertation suggests a hypothetical scenario in Chapter 1 in which *Companies A, B* and *C* are three direct competitors in the same market. *Company A* and *Company B* competed with each other to independently develop the same technology for the same commercial product. Each of them spent US \$100 million to develop the same technology and reached the same

---

<sup>106</sup> WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 295-296 (2003).

<sup>107</sup> ROBERT COOTER & THOMAS ULEN, *supra* note 83, at 128.

<sup>108</sup> WILLIAM M. LANDES & RICHARD A. POSNER, *supra* note 106, at 295-296.

research achievement. We assume that *Company A* completed the technology development and filed a patent application for the technology first. After the patent examination of the patent authority, *Company A* obtained a patent right.

Because the current patent system does not accept the independent invention defense in the patent infringement litigation, *Company B* can not use the self-invented technology without *Company A*'s prior consent. In order to be authorized to use the patented technology, *Company B* needs to beg for *Company A*'s license and pay a licensing fee to *Company A*. The licensing fee is generally equivalent to or even higher than the development expenses. For simplicity, we assume that the licensing fee is US \$100 million. Accordingly, *Company B* needs to pay a total of US \$200 million to use the self-invented technology, wherein US \$100 million is the development expense and the other US \$100 million is the licensing fee.

On the other hand, *Company C* knew well that it did not lead in the technology development. Therefore, *Company C* selected to "save money" from the beginning and not to develop the technology by itself. After *Company A* had obtained the patent right, *Company C* tried to negotiate and pay the licensing fee, assuming in the amount of US \$100 million as high as the licensing fee of *Company B*, to get the patent licensing from *Company A*.

In conclusion, *Company B* paid a total of US \$200 million, but *Company C* paid only US \$100 million to use the patented technology, in case *Company A* wants to license the patent to both of them. If *Company A* does not want to license to the *Company B* and *Company C*, both of them can not use the patented technology. In this circumstance, *Company C* loses nothing because it did not pay any expenses for technology development. However, *Company B* will lose US \$100 million of the self-invention expenses. Please refer to the Table 1 in Chapter 1 for more details.

It is clear that *Company B* is poorer than *Company C* in both circumstance; the current patent systems in the world encourage people or enterprises to act as *Company C* rather than *Company B*. In other word, “chasing” development like *Company B* did is a waste of research resources. The current patent law encourages people or companies to stop further researching and to save money for paying licensing fee to the patent owner, in case they find they cannot take the lead in technology development. If they continue to do the research and development, it would be evaluated as repeated research and development, and it is predestined to be a waste.

It’s really difficult to imagine that people built a patent system encouraging the second-ranking company not to continue its research activities. This dissertation believes that this situation is controversy to the purpose of patent law to promote the progress of science and technology. However, it is an inevitable result from the denial of independent invention defense. Accordingly, this dissertation finds the necessity of considering the independent invention defense in the patent infringement litigation.

#### **5.4.2 The Independent Invention Defense is a Win-win-win to Improve the Patent System**

As mentioned in Chapter 2, the independent invention defense is a win-win-win way to improve the patent system.

If the independent invention is accepted by the courts, firstly, the patent owners can license the patent right to the potential independent developers with a licensing fee/royalty enough to cover the investment cost for developing the patents. In details, the independent invention defense conveys a message to the patent owners that if you do not agree to license your patent rights, the potential independent developers will independently invent the patented technology and directly compete with the patent owners in the relevant markets. As noted by Stephen M. Maurer and Suzanne Scotchmer, the threat of independent invention



incentivizes the patent owners to provide a patent license to the potential independent developers in a licensing fee/royalty equivalent to the investment cost of independent invention.<sup>109</sup> Accordingly, the potential independent developers are motivated to pay the licensing fee/royalty instead of developing by themselves which are almost equivalent to the invention investment for the patented technology, so the patent owner can recover the invention investment by collecting the licensing fee/royalty.<sup>110</sup>

Secondly, since the patent owner has the incentive to license the patent to the potential independent developers in a licensing fee/royalty equivalent to the investment cost of independent invention, the potential independent developers are motivated to pay the licensing fee/royalty instead of developing by themselves. Subsequently, the potential independent developers may avoid from wasteful duplication<sup>111</sup> and obtain a license to practice the patented technology without risking R&D failure.

Thirdly, the market price will be much lower than the monopoly price, so the social benefit is generated. In details, once the patent owner desires to license the patent right to the potential independent developer, the potential independent developer can practice the patented technology and thus enter into the market. Subsequently, the price of the patented products will be lower than the monopoly price, so the deadweight loss may be significantly reduced and the social profit will be generated.

In fact, the parallel research or so-called independent invention is not only possible but also very common.<sup>112</sup> For example, Werner Heisenberg and Erwin Schrödinger parallel finished their researches of quantum mechanism in 1926. From the aspect of providing an incentive to innovate, this dissertation can partly agree with the invention stimulation

---

<sup>109</sup> Stephen M. Maurer & Suzanne Scotchmer, *The Independent Invention Defense in Intellectual Property*, 69 *ECONOMICA* 535, 535 (2002).

<sup>110</sup> *Id.* at 536.

<sup>111</sup> *Id.* at 540-42.

<sup>112</sup> Carl Shapiro, *Prior User Rights*, 96 *AM. ECON. REV.* 92, 92 (2006).

theory.<sup>113</sup> This dissertation agrees that the fruits of hard-working developments are quite easy to be duplicated by the free riders in the absence of patent rights. The duplication expenses of the free riders are generally much lower than the development expenses of the original developers. The low cost enables the free riders get into the market with a low price, causing that the investment expenses of the original developers can not be covered. As a result, the motivation for the original development will be thus much lowered.<sup>114</sup>

However, the independent developer is not a free rider. The independent developer uses its own expenses to separately and independently invent, so the cost of the independent developer is roughly equivalent to the cost of the patent owner. Therefore, the independent developer does not have the ability to enter into the market with the price much lower than the patent owner, so as not to harm the patent owner as the free riders.

On the other hand, if the independent developer can not assert the independent invention defense in the patent infringement litigation, the independent developer will be “punished” as the free riders. The position of the independent developer is even poorer than that of the free rider because the independent developer has paid the R&D expenses but the free rider has not. It’s not only unfair to the independent developer, but also encouraging the potential independent developer not to independently invent but to counterfeit the patented products.

#### **5.4.3 The Acceptance of Independent Invention Defense Will Provides a Better Position for an Independent Developer than a Free Rider**

Since the independent invention defense is a win-win-win way, this dissertation finds

---

<sup>113</sup> However, this dissertation does not agree the argument that “the patent’s exclusive right is the only way to stimulate the innovation”.

<sup>114</sup> Rebecca S. Eisenberg, *Patent and The Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017, 1026 (1989).

that the acceptance of the independent invention defense directs to the conclusion that the position of *Company B* may be better than that of *Company C* in the previous hypothetical scenario. Please also refer to Table 3 as below for further explanation.

	Company A	Company B	Company C
R&D?	✓ (first)	✓ (second)	X
cost for R&D?	✓ (US \$100 M)	✓ (US \$100 M)	X
filed a patent?	✓ (first)	✓ (second)	X
got a patent?	✓	X	X
gain or lose while <i>Company A</i> not to license	- US \$100 M + patent	- US \$100 M	0
gain or lose while <i>Company A</i> licenses in US \$100 million	+US \$100 M + patent	- US \$200 M + market	- US \$100 M + market
Acceptance of IID but <i>Company A</i> denies to license	- US \$100 M + patent	- US \$100 M (RD) + market	0
Acceptance of IID and <i>Company A</i> licenses in US \$100 million	+US \$0 + patent	- US \$100 M (market) + market	0

Table 3: a hypothetical scenario to point out the conclusion of accepting the independent invention defense

If the independent invention defense is accepted but *Company A* still decides not to

license the patent to *Company B*, *Company B* will choose to invent independently and argue for independent invention defense in the underlying patent infringement litigation. In this circumstance, *Company A* paid US \$100 million to obtain a patent right, but cannot exclude *Company B* from the market because *Company B* can assert independent invention defense in the litigation. Although *Company B*, which had paid US \$100 million to invent independently, did not obtain a patent right, at least *Company B* can enter into the market by asserting independent invention defense. *Company C* can not enter into the market because *Company C* can not assert for independent invention defense. Accordingly, *Company B*'s position will become better than *Company C*'s position if *Company B*'s market value is larger than the R&D expenses.<sup>115</sup>

As mentioned, the threat of independent invention prompts *Company A* to provide a patent license to *Company B* in a licensing fee equivalent to the investment cost of independent invention, i.e. US \$100 million. *Company B* is then motivated to pay the licensing fee in US \$100 million instead of developing by themselves in order not to risk R&D failure. In this circumstance, *Company A*'s R&D expenses can be compensated by receiving the licensing fee in US \$100 million from *Company B*. *Company B* can enter into the market by paying the licensing fee. *Company C* can not enter into the market because *Company C* does not pay the licensing fee and can not assert for independent invention defense. Again, *Company B*'s position will become better than *Company C*'s position if *Company B*'s market value is larger than the licensing fee.<sup>116</sup>

Therefore, this dissertation finds that the acceptance of the independent invention defense directs to the conclusion that the position of an independent developer may be better than the position of a free rider. This is the primary purpose this dissertation wants to

---

<sup>115</sup> Generally *Company B*'s market value is larger than the R&D expenses; otherwise, *Company B* will not select to invent independently.

<sup>116</sup> Generally *Company B*'s market value is larger than the licensing fee; otherwise, *Company B* will not select to be licensed to the patent.

achieve.

## **5.5 Considering Independent Invention in Adjudicating Injunctive Relief**

### **5.5.1 Burden of Proving Independent Invention**

In this section, this dissertation is suggesting considering the independent invention defense in the adjudications of preliminary injunction and permanent injunction.

First, the independent invention defense should be an affirmative defense, so the defendant needs to bear the burden of proving the fact his or her independent invention.<sup>117</sup> In details, the defendant arguing for independent invention needs to prove that he or she does not access to the patented products or the specification of the patent-in-dispute. Once the patented products have been released to the market, every person may access to the patented products from the market; once the patent-in-dispute is laid open or issued, each person may access to the specification of the patent-in-suit on the public patent database. Accordingly, it would be very hard for the defendant to claim for independent invention in the preliminary injunction or permanent injunction proceedings once the patented products are released to the market or the patent-in-dispute is laid open or issued.

Since the patent-in-dispute always has been issued at the time of the patent holder moves for a preliminary injunction or a permanent injunction, there wouldn't be many cases in which the defendants can successfully claim for independent invention, unless the defendant may provide conclusive and convincing to prove the fact of independent invention.

---

<sup>117</sup> Michelle Armond, *Introducing The Defense of Independent Invention to Motions for Preliminary Injunctions in Patent Infringement Lawsuits*, 91 CAL. L. REV. 117, 140 (2003).

## **5.5.2 Considering Independent Invention Defense in Adjudicating Motion for**

### **Preliminary Injunction**

In this sub-section, this dissertation tries to implement the independent invention defense in the consideration of each factor of preliminary injunction as follows.

#### **1. Likelihood of the Patentee's Success on the Merits**

With regard to this factor, the courts need to consider both the likelihoods of patent validity and patent infringement. As independent invention is nothing to do with the patent validity, the courts would not consider independent invention in this factor unless the independent invention defense is accepted to be a defense to patent infringement.

This dissertation pointed out three possible implementations of the independent invention defense against patent infringement in Chapter 2. The first one is to assert that the independent invention is not covered by the effect of the patent right, by analogizing to the independent creation defense in the copyright law or the prior user's right in the patent law. The second one is to consider the independent invention while determining whether the defendant is liable of willful infringement. However, unless the independent invention defense is accepted by the courts, it has no chance to be considered in this factor.

Fortunately, the empirical study in Chapter 3 shows that a preliminary injunction will not be granted unless all of the four factors are in patentee-movant's favor. Although the defendants may not claim for independent invention in this factor, they may still argue for independent invention in other three factors. A defendant still has a high chance of prevailing in the preliminary injunction proceedings if courts hold in favor of the defendants in other three factors, as discussed below.

#### **2. Irreparable Harm if the Injunction is not Granted**

The independent invention defense in this dissertation means an argument that the accused product or accused process was independently developed by the defendant herself or himself rather than copied from the patent-in-suit. In other words, the defendant neither copied the patented product made by the patent owner, nor made the accused product by referring to the patent specification of the patent-in-suit.<sup>118</sup>

Accordingly, the independent developer is not a free rider, whose definition is one who obtains the patented technologies by counterfeiting the patented invention (from the patented products or from the patent specifications) without compensating the patent owner for the investments in labor, fund, and time.<sup>119</sup> Because the free riders do not need to pay the R&D expenses, they may provide the counterfeits at a price much lower than the price of the patented products. Generally, the free riders harm the patent owners significantly because the low price directs to price erosion and thus decreases the patentee's revenues.

However, the cost of the independent developer is roughly equivalent to that of the patent owner because the independent developer uses its own expenses to separately and independently invent its own technologies. Hence, the products provided by the independent developer should be priced roughly as high as the patented products. Accordingly, the independent developer generally has no ability to enter the market with a price much lower than the price of the patent owner, so the price erosion and loss of revenue resulting from the independent invention would be much lower than such effects caused by the free riders.

For this reason, the independent developer does not harm the patent owner as much as the free riders. Even though the patent owner is still harmed by the independent developer, such as loss of market share, such harm is relatively small and possible to be estimated.

---

<sup>118</sup> See also Michelle Armond, *Introducing The Defense of Independent Invention to Motions for Preliminary Injunctions in Patent Infringement Lawsuits*, 91 CAL. L. REV. 117, 139 (2003).

<sup>119</sup> Miranda Jones, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not The Same: How eBay v. Mercexchange Affects The Patent Right of Non-Practicing Entities*, 58 GEO. MASON L. REV. 1036, 1044 (2007).

Therefore, there is room for courts to favor the defendant in this factor by reason that the independent developer's activities cause no or merely little irreparable harm to the patent owner.

### 3. Balance of Hardships between the Parties

As mentioned, the cost of the independent developer is roughly equivalent to that of the patent owner, so the independent developer does not have the ability to harm the patent owner as the free riders by entering the market at a price much lower than the patent holder's price. Therefore, the price erosion and loss of revenue resulting from the independent developer would be much lower than such effects caused by the free rider. The harm caused by the independent developer to the patent owner, if any, will be much lower and likely to be estimated and compensated by monetary damages. Accordingly, the hardship of the patent owner wouldn't be significant if a preliminary injunction is not granted.

On the other hand, if the independent developer can not assert the independent invention defense in the preliminary injunction proceedings, the independent developer will be "punished" as the free riders. The position of the independent developer is even poorer than that of the free rider because the independent developer has paid the R&D expenses but the free rider has not. Once the preliminary injunction is granted and compulsorily executed, the defendant's business related to the accused products is temporarily, or even permanently, destroyed. Defendant's expenses for the independent invention will become valueless and thus wasteful. It's not only unfair to the independent developer, but also encouraging the potential independent developer not to independently invent but to counterfeit the patented products.

In conclusion, if the defendant can prove that the accused product was developed by independent invention, it is possible for a court to hold that the hardship of the patent owner is



relatively small in the absence of preliminary injunction, but the hardship of the defendant is relatively large if a preliminary injunction is granted. Accordingly, the courts should have the chance to favor the defendant in this factor if the defendant is an independent developer.

#### 4. Public Interest

The independent developer is neither a counterfeiter nor a free rider. Since the independent developer has paid its own expenses to do R&D independently, the cost of the independent developer is approximately as high as that of the patent owner. If the independent invention defense is not acceptable, however, the independent developer will be punished as a counterfeiter or a free rider.

In order not to be punished as a counterfeiter or a free rider, each enterprise needs to conduct a patent search at any stages of developing any product. According to the following reasons, the standard of duty of care to conduct the patent search is significantly high. Firstly, there are so many patents issued in the patent databases of the developed countries, such as the United States, Japan, China, and EPO. To do the patent search is thus always a huge work.

Secondly, it is not possible for the enterprises to search and find out all of the patents which are needed to be concerned. One reason is that any patent applications need to be kept in secret in the patent authority before being issued or published. There is no way for anybody to search and find out the patent applications in secret, so it is a natural and non-conquerable limitation of the patent search work. The other major reason is that the patent applicants are allowed to define any terminologies they want in their patent specifications, so it is not possible for the enterprises to “guess” all of the keywords while conducting the patent searches.

Accordingly, if the independent invention defense is not accepted, any enterprise needs

to engage many experts and to pay much money to conduct the patent searches. The cost for conducting the patent searches will be quite high but the outcome is generally very limited.

Furthermore, if the patent search finds no threatening patent, the independent developer will assume no prior patent and starts to conduct the independent research and development. However, if there is an existed patent which is not found in the patent search, the research and development conducted by the independent developer will be a wasteful duplication under current patent law. If the patent owner files a lawsuit against the independent developer, the independent developer will be punished as a counterfeiter or a free rider. Therefore, the current patent laws discourage people to do research and development if they can not lead in the field.

It is worth re-noting that the purpose of the patent system is to promote the progress of science and technology. It's actually questionable whether the current patent laws can promote the progress of useful technology by encouraging people not to do research and development if they lose the lead in the field. In fact, few people or companies know well whether his or her invention is leading or chasing, because the patent search is quite limited as mentioned before. Accordingly, in order to encourage people to do research and development, no matter leading invention or chasing invention, to accept the independent invention defense is considerable.

As long as the independent invention defense is accepted, the threat of independent invention provides the patent owners an incentive to license the patented technology to the potential independent developers, as noted by Maurer and Scotchmer.<sup>120</sup> They further mentioned that to accept the independent invention defense can reduce the wasteful duplication.<sup>121</sup> That's because the patent owners are motivated to provide the patent license

---

<sup>120</sup> Stephen M. Maurer & Suzanne Scotchmer, *supra* note 109, at 535.

<sup>121</sup> *Id.* at 540-42.

with reasonable licensing fee under the threat of independent invention. As soon as the potential independent developers can obtain the patent license with reasonable licensing fee, they will be motivated to pay the licensing fee instead of conduct an independent invention.<sup>122</sup> As soon as the potential independent developer is licensed to enter into the market, the market price will become lower than the monopoly price.

For these reasons, to accept the independent invention defense is win-win-win and beneficial to the public interest. Courts have room to favor the defendant in this factor if the defendant is an independent developer.

## 5. Conclusion

As noted in Chapter 3.6.2, the preliminary injunction should be a drastic and extraordinary remedy which shall not be routinely granted. In this sub-section, this dissertation illustrates that there is certainly room for courts to favor the defendant in the last three factors if the defendant is an independent developer, no need to amend the laws to consider the arguments of independent invention in the preliminary injunction proceedings. Especially. Although the courts may not favor the independent developer in the first factor, fortunately, the empirical study in Chapter 3 shows that a preliminary injunction will not be granted unless all of the four factors are in patentee-movant's favor. A defendant still has a high chance of prevailing in the preliminary injunction proceedings if courts hold in favor of the defendants in other three factors.

With regard to the second and third factors, this dissertation notes that the R&D expenses and goods prices of the independent developer are approximately as high as those of the patent owner, so the independent developer is unlikely to harm patentee's revenue and market share as much as a counterfeits. Even though the patent owner is still harmed by the

---

<sup>122</sup> *Id.* at 541.

continuing patent infringement of the independent developer, such harm is relatively small and estimable. Courts may award the monetary damages for the pre-trial patent infringement to the patent owner by simply calculating the injuries suffered by the patent owner. On the other hand, if a preliminary injunction is granted, the independent developer will be “punished” as the free riders. The position of the independent developer is even poorer than that of the free rider because the independent developer has paid the R&D expenses but the free rider has not. Once the preliminary injunction is granted and compulsorily executed, the defendant’s business related to the accused products is temporarily, or even permanently, destroyed. Defendant’s expenses for the independent invention will become valueless and thus wasteful. It’s not only unfair to the independent developer, but also encouraging the potential independent developer not to independently invent but to counterfeit the patented products.

In regard to the last factor, this dissertation points out that it is a win-win-win policy and beneficial to the public interest to accept the independent invention defense in patent dispute. This dissertation notes that there is certainly room for courts to favor the defendant in the preliminary injunction proceedings if the defendant is an independent developer.

### **5.5.3 Considering Independent Invention Defense in Adjudicating Motion for Permanent Injunction**

#### **1. Irreparable Harm if the Injunction is not Granted**

As mentioned, the independent developer is neither a free rider nor a counterfeiter, so the R&D cost and the product price of the independent developer are roughly equivalent to those of the patent owner. Accordingly, the independent developer generally does not harm the patent holder as much as the free rider which enters into the market at a significantly lower price.

Therefore, the price erosion and loss of revenue resulting from the independent invention would be much lower than the effects caused by the free riders. Even though the patent owner is still harmed by the independent developer, such harm is relatively small and estimable.<sup>123</sup> Therefore, there is room for courts to favor the defendant in this factor by reason that the independent developer's activities cause no or merely little irreparable harm to the patent owner.

## 2. Remedies Available at Law

As mentioned, since the cost and goods price of the independent developer are roughly as high as those of the patent owner, and the independent developer is not likely to harm patentee's revenue and market share as much as the free rider. In general, the patentee's loss of market share may be roughly estimated, so the monetary damages are generally enough to compensate the injuries of the patent owner caused by the independent developer.

Therefore, in consideration of the independent invention defense, courts have room to hold in dependent's favor in examining this factor.

The court may award the monetary damages for future patent infringement to the patent owner by the following two ways. Firstly, like the way in the *z4 Technology, Inc. v. Microsoft Corp.* case<sup>124</sup>, the court may sever the patentee's continuing causes of action for monetary damages caused from the denial of permanent injunction and the defendant's continuing patent infringement, and order the patent owner to file a complaint for the continuing cause of action. The court should order the defendant to file an answer and file a report monthly or quarterly in the new action indicating the total sales numbers or sales revenue of the accused products.

---

<sup>123</sup> See also, Michelle Armond, *supra* note 117, at 146.

<sup>124</sup> *z4 Technology, Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 440 (E.D. Tex. 2006) (“does not imply a presumption, but places the burden of proving irreparable injury on the plaintiff”).

Secondly, like the way in the *Paice LLC v. Toyota Motor Corp.* case<sup>125</sup>, the court may order the patent holder and the defendant to negotiate a patent licensing agreement. If the patentee and the defendant can reach an agreement for the rate of the on-going royalty, the defendant needs to pay the on-going royalty periodically on time in exchange for continuously practicing of the patented technology. If they cannot reach an agreement for the rate of the on-going royalty, the court could step in to determine the rate of the ongoing royalty for the defendant's continuing infringing activities.

### 3. Balance of Hardships between the Parties

As mentioned, the price erosion and loss of revenue resulting from the independent invention would be much lower than the effects caused by the illegal activity of the free riders or counterfeiters. If the defendant is an independent developer, the hardship of the patent owner is relatively limited in the absence of permanent injunction.

On the other hand, if the independent developer can not assert the independent invention defense in permanent injunction proceedings, the independent developer will be "punished" as the free riders. Once the permanent injunction is granted and compulsorily executed, the defendant's business related to the accused products will be totally and permanently destroyed. Accordingly, defendant's expenses, man power, and time for the independent invention will become valueless and thus wasteful.

Therefore, if the defendant can prove that the accused product was developed by independent invention, it is possible for courts to hold that the hardship of the patent owner is relatively small without granting the permanent injunction, but the hardship of the defendant is relatively large if the permanent injunction is granted. Accordingly, the courts should have good reasons to favor the defendant in this factor if the defendant is an independent

---

<sup>125</sup> *Paice LLC v. Toyota Motor Corp.* No. 2:04-CV-211-DF, 2006 WL 2385139, at 4 (E.D. Tex., 2006) ("The *eBay* decision demonstrates that no presumption of irreparable harm should automatically follow from a finding of infringement.").

developer.

#### 4. Public Interest

As mentioned, if the independent invention defense is not acceptable, the independent developer will be punished as a counterfeiter. In order not to be punished as a counterfeiter, each enterprise needs to conduct a full-scale and overall patent search for any product at any stage of technology development, but the cost and uncertainty to conduct the patent search are significantly high.

Furthermore, under the current law which denies the independent invention defense, any chasing research and development are not discouraged. In fact, since the patent search is limited and uncertain, few enterprises know well whether their inventions are leading or chasing. This fact generally confuses the enterprises and directs them to pay more expenses and efforts to conduct the worthless patent search. From this point of view, the patent system denying the independent invention defense leads to many valueless and wasteful patent searches with negative influence on the research activities and public interest. The industries may make a much larger progress and thus promote the public interest if they need not pay any attention to conduct such a wasteful and meaningless patent search.

Accordingly, to accept the independent invention defense will be beneficial to the public interest. In order to encourage people to do research and development, no matter leading invention or chasing invention, the courts shall consider accepting the independent invention defense in this factor.

#### 5. Conclusion

In this sub-section, this dissertation notes that there is certainly room for courts to favor a defendant in all of the four factors if the defendant is an independent developer. The key argument is that the R&D cost and goods price of the independent developer are roughly as

high as those of the patent owner, so the independent developer is not likely to harm patentee's revenue and market share as much as a free rider or a counterfeits, even the patent owner and the defendant are direct competitors in the market. Even though the patent owner is still harmed by the continuing patent infringement of the independent developer, such harm is relatively small and possible to be assessed. Furthermore, this dissertation points out that it is beneficial to the public interest to accept the independent invention defense in patent dispute.

The court may award the monetary damages for future patent infringement to the patent owner by the following two options: (1) to order the patent owner to file a complaint for the continuing cause of action, and to order the defendant to file an answer and file a report monthly or quarterly in the new action indicating the total sales numbers or sales revenue of the accused products; (2) to order both parties to negotiate a patent licensing agreement, and to step in to determine the rate of the ongoing royalty for the defendant's continuing infringing activities if the patent licensing agreement is not reached.



## CHAPTER 6: CONCLUSION

The purpose of the patent law is to promote the progress of science and technology, and patent protection to the patent owner is only a measure in achieving that purpose. The measures must be in harmony with the purpose itself. If one manner of patent protection conflicts with the purpose of promoting the progress of science and useful art, such manner of patent protection should be unconstitutional.

Under the present patent systems around the world, independent invention is not a defense to patent infringement. The empirical study in Chapter 2 shows that “independent invention defense” and “possession of patent defense” are unacceptable in practice in Taiwan. However, it is interesting to find that numerous defendants argued against patent infringement by raising such defenses. This phenomenon more or less reflects that such defenses are a “common sense” of the persons, even for lawyers who do not focus on patent practice. In other words, with regard to the issue of independent invention defense, the current patent systems in the world are inconsistent with people’s intuition.

Relative to copyright and trade secret, which do not exclude others from independent creation, the patent’s right to exclude, by denying the independent invention defense, is much stronger than the rights to exclude provided by a copyright and a trade secret. This dissertation finds that the denial of independent invention defense in patent infringement litigation has the following two disadvantages: (1) every company bears a burdensome, time-consuming and costly duty to conduct patent searches in order to avoid infringing others’ patent rights; and (2) for a company losing its lead in technology development, its best patent strategy is to give up research activities in order to avoid wasteful duplication, rather than to catch up. This dissertation aims at reexamining a patent’s right to exclude and exploring how to balance a patentee’s right to exclude and the public’s use of science and technology,

particularly in preliminary injunction and permanent injunction proceedings.

This dissertation conducts an empirical study to learn the recent developments of preliminary injunction adjudications in Chapter 3, which shows that: (1) although the precedents of the Federal Circuit rule that no single factor should dominate and the district courts must weigh and measure each factor against other factors, a preliminary injunction would not be granted unless all of the four factors are in patentee-movant's favor; and (2) no defendant raised the independent invention defense in the preliminary injunction proceedings in the United States, China, and Taiwan. Accordingly, there is no chance for courts to consider whether to accept the independent invention defense in examining the four equity factors.

Similarly, this dissertation conducts an empirical study to learn the recent developments of permanent injunction adjudications after *eBay* in Chapter 4, which shows that: (1) "competition" is the most important sub-factor in evaluating "irreparable harm", "adequacy of remedies available at law", and "balance of hardships"; (2) a patentee's desire to license the patent-in-suit will influence the evaluation of "irreparable harm", "adequacy of remedies available at law", and "balance of hardships"; (3) the business model nature of a patent will influence the evaluation of "public interest"; (4) the fact that a patentee did not move for a preliminary injunction will influence the evaluation of "irreparable harm"; (5) the fact that a patented product is only a small component of the whole accused product will influence the evaluation of "adequacy of remedies available at law" and "balance of hardships"; (6) the fact that a patent-in-suit is almost expired will influence the evaluation of "adequacy of remedies available at law"; and (7) no defendants raised the independent invention defense in the preliminary injunction proceedings in the United States, although a defendant did argue for independent invention in fighting against willful patent infringement. Consequently, the court decisions never discussed whether to accept the independent invention defense in the

permanent injunction proceedings.

This dissertation finds the most important reason is that the independent invention defense is absolutely unacceptable in current patent practice. Defendants (and their lawyers) will look very “amateur” to patent practice if they raise the independent invention defense in preliminary injunction or permanent injunction proceedings. Accordingly, the defendants will hesitate to argue for independent invention even though they finished the accused products by independent development.

This dissertation suggests considering the independent invention defense in preliminary injunction and permanent injunction proceedings from historical, constitutional, empirical, and economic approaches.

First, from a historical perspective, this dissertation finds that the form and strength of patent right is drifting in patent history, which can be divided into at least four stages: a monopoly for sale, a substantive right to practice, a negative right to exclude with a general rule in the permanent injunction proceedings, and a negative right to exclude but weakened by *eBay*. At the stage of “a substantive right to practice” from 1790 to 1952, a patent right was a right to manufacture, sell, and use in which manufacture and sale of the patented products were not patent infringement, no matter whether the patented products fall into others' patent rights. In other words, “possession of a patent” is a defense to patent infringement at that stage. This legal development may explain why “possession of a patent defense” and “independent invention defense” become a “common sense” of the persons.

Under the 1952 Patent Law of the United States, the patent right was changed from a substantive practice right to a negative “right to exclude” others from making, using, or selling the patented products. In 1983, the Federal Circuit created a “general rule” which meant that the permanent injunction should be automatically granted once the patent-in-suit

had been held valid and infringed. However, the patent right was weakened by the *eBay* case in 2006, under which the courts should apply the four-factor test to determine whether to grant a permanent injunction. According to the empirical study in Chapter 4, the most significant element for a permanent injunction is whether the plaintiff is the direct competitor of the defendant, which brought some concepts of substantive “right to manufacture and sell” into the patent system again. Although a patent right is still a “right to exclude”, it has been largely weakened by *eBay* and is slightly pushed forward to a substantive practice right.

Since potential independent developers will be motivated to independently develop their own technologies if a patent right is a substantive right to manufacture and sell, the trends to weaken the patent’s right to exclude and to slightly push the patent right forward to a substantive practice right are in harmony with the acceptance of the independent invention defense. Therefore, theoretically/historically speaking, it could be an option to raise the independent invention defense to the adjudications of preliminary injunction and permanent injunction.

Second, from a constitutional perspective, this dissertation finds that easily granted injunctions may be harmful to the progress of useful art and the freedom to express. This dissertation finds that the patent system is designed to balance the patentee’s right to exclude and the public’s use of science and technology, rather than merely to protect the patent owner’s right and benefit. In fact, the progress of science and technology relies on the disclosure, distribution, share, accumulation, and derivative invention of the research fruits, but patent protection with injunctive relief measures generally inhibits the distribution, share, accumulation, and derivative invention of the research fruits. Under current patent system in which the independent invention defense is unacceptable, whenever a company finds that it has lost the lead in technology development, the best policy for the company is to give up research activities in order to avoid wasteful duplication, rather than to catch up. This

dissertation finds that it is absurd to establish a patent system to encourage a second-lead company to give up its research activities. Therefore, this dissertation finds that the total denial of the independent invention defense will inhibit the progress of science and useful art.

Freedom to express is extensively protected around the world, but injunctive relief may harm it. Since the freedom to express is not an absolute right and shall be subordinated to other social interests, the protection of freedom to practice/use technologies shall be limited and balanced with the protection of patent's right to exclude. This dissertation notes that technology can be divided into self-invented technologies and others' technologies. The freedom to use self-invented technologies is more worthy to be protected than the freedom to use others' technology. The simplest reason is that people need to invest money, human power and time to generate self-invented technologies, but to use (or pirate) others' technologies is cost free. Accordingly, this dissertation thinks that the adjudications of patent's injunctive relief measures (including preliminary injunction and permanent injunction) do not need to consider the freedom to use others' technologies, but do need to consider the freedom to use self-invented technologies.

Third, from an empirical perspective, this dissertation finds that the wrongfully-enjoined defendant is generally under-compensated. A preliminary injunction will be revoked and become a wrongful injunction if the patent-in-dispute is found invalid or non-infringed in the underlying patent infringement litigation. However, once a preliminary injunction is granted and compulsorily executed by a court, the defendant can no longer manufacture, sell, or use the patented product or use the patented process. Therefore, the wrongfully-enjoined defendants generally suffer significant injuries as a result of a wrongful preliminary injunction.

However, the wrongfully-enjoined defendants are generally under-compensated. From the empirical study and comparative analysis in Chapter 3, the movant's liability is

limited to the amount of the posted bond if the preliminary injunction is later determined to be erroneous but not malicious. The wrongfully-enjoined defendant is generally unable to obtain damages in excess of the posted bond. However, the amount of the bond is generally under-estimated because courts determine the bond at a very early stage of a patent dispute, making it difficult for the defendant to argue and prove the expected harms and costs before the preliminary injunction is issued.<sup>1</sup> The situation is even worse in Taiwan. The empirical study in Chapter 3 shows that the possibility for the wrongfully-defendant to win the lawsuit claiming for damages is nearly zero.

Since the wrongfully-enjoined defendants are generally under-compensated, courts should be cautious in granting preliminary injunction to prevent causing irreparable injuries to defendants. This dissertation finds that to accept the independent invention defense in the adjudication of injunctive relieves, especially in preliminary injunction, is a good way to balance between the protection of patent rights and the need to exercise caution to prevent causing irreparably harm to defendants.

Lastly, from an economical perspective, this dissertation finds that the independent invention defense allows a patentee recover his invention expenses, allows the independent developer to obtain a patent license and avoid wasteful duplication, and also enhances social benefits (hereinafter “Win-Win-Win Policy”). If the independent invention defense is accepted by courts, the threat of independent invention prompts patent owners to provide a patent license to potential independent developers in a licensing fee/royalty equivalent to the investment cost of independent invention.<sup>2</sup> Accordingly, potential independent developers are motivated to pay licensing fee/royalty instead of developing by themselves, so a patent

---

<sup>1</sup> Ofer Grosskopf and Barak Medina, *Remedies for Wrongfully-Issued Preliminary Injunctions: The Case for Disgorgement of Profits*, 32 SEATTLE U.L. REV. 903, 908 (2009).

<sup>2</sup> Stephen M. Maurer & Suzanne Scotchmer, *The Independent Invention Defense in Intellectual Property*, 69 ECONOMICA 535, 535 (2002).

owner can recover the invention investment by collecting the licensing fee/royalty<sup>3</sup> and the potential independent developers may obtain the license to practice the patented technology without risking wasteful duplication and R&D failure. Furthermore, since potential independent developers can practice the patented technology and enter into the market, the market price will be much lower than the monopoly price, therefore bringing social benefits.

This dissertation suggests considering the independent invention defense when examining the four factors of preliminary injunction. This dissertation illustrates that there is certainly room for courts to favor a defendant in the last three factors if the defendant is an independent developer. Although courts may not favor the independent developer in the first factor, fortunately, the empirical study in Chapter 3 shows that a preliminary injunction will not be granted unless all of the four factors are in patentee-movant's favor. A defendant still has a high chance of prevailing in the preliminary injunction proceedings if courts hold in favor of the defendant in other three factors.

With regard to the second and third factors, this dissertation notes that the R&D expenses and goods prices of the independent developer are approximately as high as those of the patent owner, so the independent developer is unlikely to harm patentee's revenue and market share as much as a counterfeits. Even though the patent owner is still harmed by the continuing patent infringement of the independent developer, such harm is relatively small and estimable. Courts may award the monetary damages for the pre-trial patent infringement to the patent owner by simply calculating the injuries suffered by the patent owner. In regard to the last factor, this dissertation points out that it is a Win-Win-Win Policy and beneficial to public interest to accept the independent invention defense in patent dispute.

This dissertation also suggests considering the independent invention defense when

---

<sup>3</sup> *Id.* at 536.

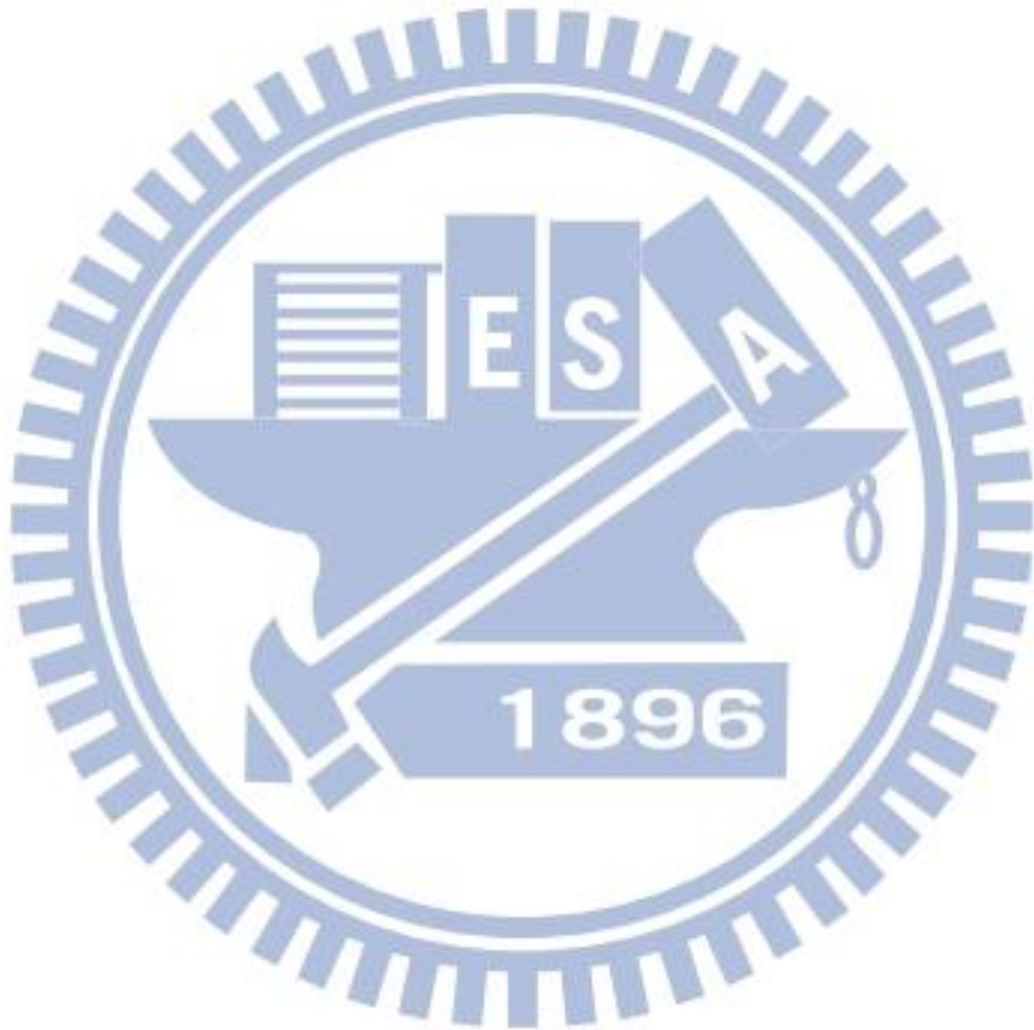
examining the four factors of permanent injunction. This dissertation illustrates that there is certainly room for courts to favor a defendant in all of the four factors if the defendant is an independent developer. The key argument is that the independent developer is unlikely to harm patentee's revenue and market share as much as a free rider or a counterfeits because the R&D cost and goods price of the independent developer are roughly as high as those of a patent owner. Even if the patent owner is still harmed by the continuing patent infringement of the independent developer, such harm is relatively small and estimable. Furthermore, this dissertation concludes that it is beneficial to public interest to accept the independent invention defense in patent dispute.

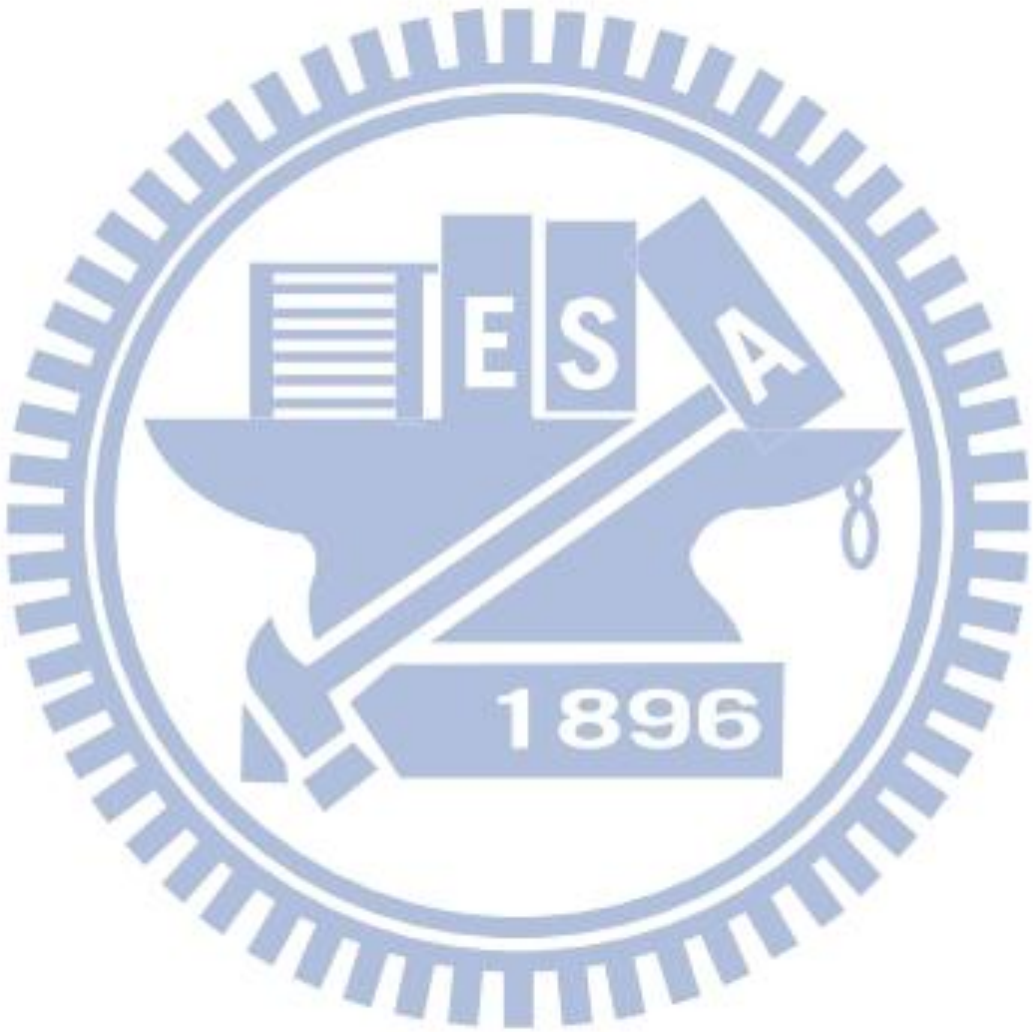
Courts may award monetary damages for future patent infringement to a patent owner by the following two options: (1) to order the patent owner to file a complaint for the continuing cause of action, and to order the defendant to file an answer and file a monthly or quarterly report in the new action indicating the total sales numbers or sales revenue of the accused products; or (2) to order both parties to negotiate a patent licensing agreement, and to step in to determine the rate of the ongoing royalty for the defendant's continuing infringing activities if a patent licensing agreement is not reached.

This dissertation also finds that R&D-based NPEs conduct fundamental research and development and generally take the lead in research and development. After completing fundamental research and development, the R&D-based NPEs apply for patents for the inventions which will be published 18 months later from the filing dates of the patent applications. After the patent application is laid open, everyone may have access to the patent specification on the Internet, so any potential infringer may have no room to raise the independent invention defense, unless an infringer's progress of R&D does not lag behind the patent owner for as long as 18 months. Accordingly, this dissertation finds that the acceptance of independent invention defense will not largely influence R&D-based NPEs.



Most profits of R&D-based NPEs come from technology transfer and patent licensing, so the acceptance of independent invention defense is in harmony with the business strategy of R&D-based NPEs because the threat of independent invention also provides patent owners an incentive to license patented technology.





## Reference:

### Books:

ADELMAN, MARTIN J. , RADER, RANDALL R., THOMAS, JOHN R. & WEGNER, HAROLD C.,  
CASES AND MATERIALS ON PATENT LAW (2003).

FRIEDMAN, DAVID, LAW'S ORDER (2000).

BURNHAM, WILLIAM, INTRODUCTION TO THE LAW AND LEGAL SYSTEM OF THE UNITED STATES  
(2003).

COOTER, ROBERT & ULEN, THOMAS, LAW AND ECONOMICS 133 (3<sup>rd</sup> ed. 2000).

DRAHOS, PETER, A PHILOSOPHY OF INTELLECTUAL PROPERTY (1996).

GUELLEC, DOMINIQUE, THE ECONOMICS OF THE EUROPEAN PATENT SYSTEM: IP POLICY FOR  
INNOVATION AND COMPETITION (2007).

LANDES, WILLIAM M. & POSNER, RICHARD A., THE ECONOMIC STRUCTURE OF INTELLECTUAL  
PROPERTY LAW (2003).

MACLEOD, CHRISTINE, INVENTING THE INDUSTRIAL REVOLUTION: THE ENGLISH PATENT  
SYSTEM, 1660-1800 (2002).

MOORE, KIMBERLY A., MICHEL, PAUL R. & LUPO, RAPHAEL V., PATENT LITIGATION AND  
STRATEGY (2003).

ROSENBERG, PETER D., PATENT LAW FUNDAMENTALS (1997).

### Articles:

Alexander, Randal S., *China's Struggle to Maintain Economic Viability While Enforcing  
International and Domestic Intellectual Property Rights*, 4 J. MARSHALL REV. INTELL.  
PROP. L. 608 (2005).

Armond, Michelle, *Introducing The Defense of Independent Invention to Motions for  
Preliminary Injunctions in Patent Infringement Lawsuits*, 91 CAL. L. REV. 117 (2003).

Bai, J. Benjamin, Wang, Peter J. & Cheng, Helen, *What Multinational Companies Need to*

- Know About Patent Invalidation and Patent Litigation in China*, 5 NW. J. OF TECH. & INTELL. PROP., 448 (2007).
- Beck, Roger L., *The Prospect Theory of the Patent System and Unproductive Competition*, in RESEARCH IN LAW AND ECONOMICS 194 (1983).
- Beckerman-Rodau, Andrew, *Prior Restraints and Intellectual Property: The Clash between Intellectual Property and the First Amendment from an Economic Perspective*, 12 Fordham Intell. Prop. Media & Ent. L.J. 1 (2001).
- Blair, Roger D., Thomas F. Cotter, *Strict Liability and Its Alternatives in Patent Law*, 17 BERKELEY TECH. L.J. 799 (2002).
- Carroll, Michael W., *Patent Injunctions and the Problem of Uniformity Cost*, 13 MICH. TELECOMM. TECH. L. REV. 421 (2007).
- Cheng, Y.C., Lan, Y. H. & Liu, S.J., *Patent Market Dynamics: In View of the Business Models of Non-Practicing Entities*, presented at the 1st International Conference on Management of Intellectual Property and Strategy [MIPS2012] (2012).
- Chan Jeremiah, et. al, *Footsteps of the Patent Troll*, 10 INTELL. PROP. L. BULL. 1 (2005-2006).
- Chao, Bernard H., *After eBay, Inc. v. MercExchange: The Changing Landscape for Patent Remedies*, 9(2) MINN J. L. SCI. & TECH. 543 (2008).
- Coleman, Deborah A., *Antitrust Issues in the Litigation and Settlement of Infringement Claims*, 37 AKRON L. REV. 263 (2004).
- Cotropia, Christopher A., *The Individual Inventor Motif in the Age of the Patent Troll*, 12 YALE J.L. & TECH. 52 (2009-2010).
- Crane, Jennifer A., *Riding The Tigers: A Comparison of Intellectual Property Rights in the United States and The People's Republic of China*, 7 CHI.-KENT J. INTELL. PROP. 95 (2008).
- Davis, Robin M., *Failed Attempts to Dwarf the Patent Trolls: Permanent Injunctions in Patent Infringement Cases Under the Proposed Patent Reform Act of 2005 and eBay v.*

- MercExchange*, 17 CORNELL J. L. & PUB. POL'Y 431 (2008).
- Dent, Chris, “*Generally Inconvenient*”: *The 1624 Statute of Monopolies as Political Compromise*, 33 MELBOURNE UNIVERSITY L. R. 415 (2009).
- Diessel, Benjamin H., Note: *Trolling for Trolls: The Pitfalls of the Emerging Market Competition Requirement for Permanent Injunctions in Patent Cases Post-eBay*, 310 MICHIGAN L. REV. 305 (2007).
- d'Incelli, Gregory, *Has Ebay Spelled the End of Patent Troll Abuses - Paying the Toll: The Rise (and Fall) of the Patent Troll*, 17 U. MIAMI BUS. L. REV. 343 (2008-2009).
- Eisenberg, Rebecca S., *Patent and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017 (1989).
- Fischer, James M., *The “Right” To Injunctive Relief For Patent Infringement*, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1 (2007).
- Fitzgerald, David A. II, *Saving Alternative Dispute Resolution in Patent Law: Countering the Effects of the Patent Troll Revolution*, 23 OHIO ST. J. ON DISP. RESOL. 345 (2007-2008).
- Gallini, Nancy T, *The Economics of Patents: Lessons from Recent U.S. Patent Reform*, 16 J. ECONOMIC PERSPECTIVES 131 (2002).
- George, Gavin D., *What is Hiding in the Bushes? eBay’s Effect on Holdout Behavior in Patent Thickets*, 13 MICH. TELECOMM. TECH. L. REV. 557 (2007).
- Golden, John M., *Innovation Dynamics, Patents, and Dynamic-Elasticity Tests for the Promotions of Progress*, 24 HARV. J. L & TECH. 47 (2010).
- Gosen, Conrad, *Tivo, Inc. v. EchoStar Corp.: Providing Clarity to Contempt Proceedings in Patent Cases*, 27 BERKELEY TECH. L. J. 273 (2012).
- Grosskopf, Ofer et.al, *Remedies for Wrongfully-Issued Preliminary Injunctions: The Case for Disgorgement of Profits*, 32 SEATTLE U.L. REV. 903 (2009).
- Grumbles III,Ernst, et.al, *Three Year Anniversary of eBay v. MercExchange: A Statistical Analysis of Permanent Injunctions*, INTELL. PROP. TODAY, NOV. 2009.

- Hand, Rebecca A., Note, *eBay v. MercExchange: Looking at the Cause and Effect of a Shift in the Standard for Issuing Patent Injunctions*, 25 CARDOZO ART. & ENT. L.J. 461, 479 (2007).
- Heller, Michael A. & Eisenberg, Rebecca S., *Can Patents Deter Innovation? The Anti-commons in Biomedical Research*, 280 SCIENCE 698 (1998).
- Helm, Jeremiah S., *Why Pharmaceutical Firms Support Patent Trolls: The Disparate Impact of Ebay v. Mercexchange on Innovation*, 13 MICH. TELECOMM. & TECH. L. REV. 331 (2006-2007).
- Homer, Aaron, *Whatever it is... You can get it on eBay...Unless You Want an Injunction—How the Supreme Court and Patent Reform are Shifting Licensing Negotiations from the Conference Room to the Courtroom*, 49 S. TEX. L. REV. 235 (2007).
- Janutis, Rachel M., *The Supreme Court's Unremarkable Decision in eBay Inc. v. MercExchange, L.L.C.* 14 LEWIS & CLARK L. REV. 597 (2010).
- Jones, Miranda, *Permanent Injunction, A Remedy by Any Other Name Is Patently Not The Same: How eBay v. Mercexchange Affects The Patent Right of Non-Practicing Entities*, 58 GEO. MASON L. REV. 1036 (2007).
- Kesan, Jay P. et.al., *Re-engineering Patent Law: The Challenge of New Technologies: Part 1: Administrative Law Issues: Patents as Incomplete Contrasts: Aligning Incentives for R&D Investment with Incentives to Disclose Prior Art*, 2 WASH. U. J.L. & POL'Y 23 (2000).
- Kitch, Edmund W., *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265 (1977).
- Klimczak, Ryan, *i4i and the Presumption of Validity: Limited Concerns over the Insulation of Weak Patents*, 27 BERKELEY TECH. L. J. 299 (2012).
- Kramer, Michael S., *Valuation and Assessment of Patents and Patent Portfolios Through Analytical Techniques*, 6 J. MARSHALL REV. INTELL. PROP. L. 463 (2007).

- Lanjouw, Jean O. et. al, *Tilting the Table? The Use of Preliminary Injunctions*, 14 J. L. & ECON. 573 (2001).
- Layne-Farrar, Anne & Schmidt, Klaus M., *Licensing Complementary Patents: "Patent Trolls," Market Structure, and "Excessive" Royalties*, 25 BERKELEY TECH. L. J. 1121 (2010).
- Lee, Peter Yun-hyoung, *Inverting the Logic of Scientific Discovery: Applying Common Law patentable Subject Matter Doctrine to Constrain Patents on Biotechnology Research Tool*, 19 HARV. J. OF L.& TECH. 79 (2005).
- Lemley, Mark A., *Should Patent Infringement Require Proof of Copying?*, 105 MICH. L. REV. 1525 (2007).
- \_\_\_\_\_, *Are Universities Patent Trolls*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611, 611 (2007-2008).
- Machlup, Fritz et.al, *The Patent Controversy in the Nineteenth Century*, 10 J. ECONOMIC HISTORY 1 (1950).
- Magliocca, Gerard N., *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809 (2006-2007).
- Manzo, Edward D., *Injunctions in Patent Cases After eBay*, 7 J. MARSHALL REV. INTELL. PROP. L. 44 (2007).
- Marbutt, Olivia E., *Strategies for Combating Patent Trolls*, 17 J. INTELL. PROP. L. 367 (2009-2010).
- Maurer, Stephen M. & Scotchmer, Suzanne, *The Independent Invention Defense in Intellectual Property*, 69 ECONOMICA 535 (2002).
- May, Matthew J., *Patent Reform, Injunctions, and Equitable Principle; A Triangle of Changes for the Future*, J. MARSHALL REV. INTELL. PROP. L. 671 (2007).
- Merges, Robert P., *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CAL. L. REV. 2187 (2000).
- McDonough, James F., *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L. J. 189 (2006).
- Mello, J.P., *Technology Licensing and Patent Trolls*, 12 B.U. J. SCI. & TECH. L. 388 (2006).
- Mergers, Robert P., *Property Rights Theory and the Commons: The Case of Scientific*

- Research, in SCIENTIFIC INNOVATIONS, PHILOSOPHY, AND PUBLIC POLICY* (1996).
- \_\_\_\_\_, *Introductory Note to Brief of Amicus Curiae in eBay v. MercExchange*, 21 BERKELEY TECH. L. J. 997 (2005).
- \_\_\_\_\_, *The Trouble With Trolls: Innovation, Rent-seeking, and Patent Law Reform*, 24 BERKELEY TECH. L. J. 1583 (2009).
- Michel, Suzanne, *Bargaining for RAND Royalties in the Shadow of Patent Remedies Law*, 77 ANTITRUST L. J. 889 (2011).
- Millard, Elizabeth E., *Injunctive Relief in Patent Infringement Cases: Should Courts Apply a Rebuttable Presumption of Irreparable Harm After eBay Inc. v. MercExchange, L.L.C.?* 52 ST LOUIS U. L. J., 985 (2008).
- Morgan, Marc, *Stop Looking under the Bridge for Imaginary Creatures: A Comment Examining Who Really Deserves the Title Patent Troll*, 17 FED. CIR. B.J. 165 (2008).
- Mossoff, Adam, *Exclusion and Exclusive Use in Patent Law*, 22 HARV. J. L & TECH. 321 (2009).
- Mulder, Jeremy, Note, *The Aftermath of eBay: Predicting When District Courts Will Grant Permanent Injunctions in Patent Cases*, 22 BERKELEY TECH. L.J. 67 (2007).
- Myers, Damian, *Reeling in the Patent Troll: Was Ebay v. Mercexchange Enough*, 14 J. INTELL. PROP. L. 333 (2006-2007).
- Niro, Raymond P., *Who Is Really Undermining the Patent System - Patent Trolls or Congress*, 6 J. MARSHALL REV. INTELL. PROP. L. 185 (2006-2007).
- O'Donnell, S. W., *Unified Theory of Antitrust Counterclaims in Patent Litigation*, 9 VA J. L. & TECH. 1 (2004).
- Orozco, David, *Will India and China Profit from Technological Innovation?*, 5 NW. J. OF TECH. & INTELL. PROP., 425 (2007).
- Ottoz, Elisabetta et.al, *The Independent Invention Defense in a Cournot Duopoly Model*, ECONOMICS BULLETIN, Vol. 12, No. 5 (2004).



- Ouellette, Lisa Larrimore, *Do Patents Disclose Useful Informations?* 25 HARV. J. L & TECH. 545 (2012).
- Pincus, Laura B., *The Computation of Damages in Patent Infringement Actions*, 5 HARD. J. L. & TECH. 95 (1991).
- Pohl, Christian, *Die Voraussetzungen der patentrechtlichen Zwangslizenz*, 1998.
- Powell, Thomas Reed, *The Exclusive Right of the Patentee--Should the Right or Power To Exclude Others Be Dependent on Sale or Licensing by the Patentee?*, 58 HARV. L. REV. 726 (1945).
- Rai, Arti Kaur, *Regulating Scientific Research: Intellectual Property Rights and the Norms of Science*, 94 NW. U.L.REV. 77 (1999).
- Rantanen, Jason, *Slaying the Troll: Litigation as an Effective Strategy Against Patent Threats*, 23 SANTA CLARA COMPUTER & HIGH TECH. L. J., 159-210 (2006).
- Reichman, J.H., *Comments: Enforcing the Enforcement Procedures of the TRIPS Agreement*, 37 VA. J. INT'L L. 335 (1997).
- Riesenfeld, Stefan A., *The New American Patent Act in the Light of Comparative Law: Part II*, 102 U. PA. L. REV. 723, 746 (1954).
- Royce, John R. et.al, *Preliminary Injunctions and Damage Rules in Patent Law*, Journal of Economics & Management Strategy 16:2, 385 (2007).
- Sanders, Barkev S. et.al., *Attitudes of Assignees Toward Patented Inventions*, 2 PAT, TRADEMARK & COPYRIGHT J. RES. & EDUC. 463 (1958).
- Sandstrom, Kevin, *How Much do We Value Research and Development?: Broadening the Experimental Use Exemption to Patent Infringement in Light of Integra Liefsciences I, Ltd v. Merck KGaA*, 331 F.3D 860 (Fed. Cir. 2003), 30 WM. MITCHELL L. REV. 1059 (2004).
- Schoenhard, Paul M., *Who Took My IP? - Defending the Availability of Injunctive Relief for Patent Owners*, 16 TEX. INTELL. PROP. L. J. 187 (2008).

Shapiro, Carl, *Prior User Rights*, 96 AM. ECON. REV. 92 (2006).

Tang, Yixin H., *The Future of Patent Enforcement After eBay v. MercExchange*, 20 HARV. J. L. & TECH. 236 (2006).

Ullmer, Stephen M., *Paice Yourselves: A Basic Framework for Ongoing Royalty Determinations in Patent Law*, 24 BERKELEY TECH. L. J. 75 (2009).

U.S.: China Has High Rate of Intellectual Property Infringement, April 29, 2005,  
<http://usinfo.state.gov/usinfo/Archive/2005/Apr/29-580129.html>.

Vermont, Samson, *Independent Invention as a Defense to Patent Infringement*, 105 MICH. L. REV. 475 (2006).

Yu, Peter K., *Three Questions That Will Make You Rethink the U.S.-China Intellectual Property Debate*, 7 J. MARSHALL REV. INTELL. PROP. L. 412 (2008).

## **Cases:**

### **1. U.S. Cases**

3M v. Avery, 2006 WL 2735499 (D. Minn. 2006).

Abbott Laboratories v. Sandoz, Inc., 500 F. Supp. 2d 807 (N.D. III 2007) (Preliminary Injunction Order).

Abbott Laboratories v. Sandoz, Inc., 544 F. 3d 1341 (Fed. Cir. 2008).

Abbott Labs. v. Andrx Pharms. Inc., 473 F. 3d 1196 (Fed. Cir. 2007).

Abbott Labs. v. Teva Pharms. Inc., 452 F.3d 1331 (Fed. Cir. 2006).

Abbott Labs. v. Andrx Pharms., Inc., 452 F. 3d 1331 (Fed. Cir. 2006).

Acumed LLC v. Stryker Corp., 2006 WL 3409074 (D. Or. 2006).

Acumed LLC v. Stryker Corp., 483 F. 3d 800 (Fed. Cir. 2007).

Acumed LLC v. Stryker Corp., 2007 WL 4180682 (D. Or. 2007).

Acumed LLC v. Stryker Corp., 551 F. 3d 1323 (Fed. Cir. 2008).

Adams v. Burke, 84 U.S. 17 Wall. 453 (1873).

Adolph Coors Co. v. A & S Wholesalers, Inc., 561 F.2d 807 (10<sup>th</sup> Cir. 1977).

Ala. ex rel. Siegelman v. U.S. Env'tl. Prot. Agency, 925 F.2d 385 (11<sup>th</sup> Cir. 1991).

Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F. 3d 1343 (Fed. Cir. 2001).

American Safety Device Co. v. Kurland Chemical Co., 68 F.2d 734 (2<sup>nd</sup> Cir. 1934).

Amoco Production Co. v. Gambell, 480 U.S. 531, 542 (1987).

Apple Inc., v. Samsung Elecs. Co., 2011 WL 7036077 (N.D.Cal. 2011).

Apple Inc., v. Samsung Elecs. Co., 678 F. 3d 1314, 1333 (Fed. Cir. 2012).

Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476 (1964).

Atomic Oil Co. v. Bardahl Oil Co., 419 F.2d 1097, 1100-03 (10<sup>th</sup> Cir.1969).

Automated Merchandising System v. Crane Co., 357 Fed.Appx. 297, 2009 WL 4878643  
(C.A.Fed. (W.Va.) 2009).

Bateman v. Ford Motor Co., 310 F. 2d 805, 808 (3<sup>rd</sup> Cir. 1962).

Bio-Technology Gen. Corp. v. Genentech, Inc., 80 F. 3d 1553 (Fed. Cir. 1996).

Bloomer v. McQuewan, 55 U.S. 14 How. 539 (1852).

Boehringer Ingelheim Vetmedica v. Schering-Plough, 106 F. Supp. 2d 696 (D.N.J. 2000).

Bonito Boat, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146 (1989).

Broadcom Corp. v. Qualcomm Inc., No. 05-CV-467 (C.D. Cal. 2007).

Broadcom Corp. v. Qualcomm Inc., 543 F. 3d 683 (Fed. Cir. 2008).

Buddy System, Inc. v. Exer-Genie, Inc., 545 F. 2d 1164 (9<sup>th</sup> Cir. 1976).

Canon, Inc. v. GCC Int'l Ltd., 450 F.Supp.2d 243, 254 (S.D.N.Y.2006).

Canon, Inc. v. GCC Int'l Ltd., 2007 U.S. App. LEXIS. 26584 (Fed. Cir. 2007).

Chamberlain Group, Inc. v. Lear Corp., Inc., 2007 WL 1017751 (N.D.Ill. 2007)(Preliminary  
Injunction Order).

Chamberlain Group, Inc. v. Lear Corp., Inc., 516 F.3d 1331 (Fed. Cir. 2008).

Colan v. Holder, 132 S.Ct. 873 (2012).

Commonwealth Scientific and Industrial Research Organization v. Buffalo Technology Inc.

and Buffalo, Inc., 492 F.Supp.2d 600 (E.D. Texas, 2007).

Coyne-Delany Co. v. Capital Dev. Bd., 717 F. 2d 385 (7<sup>th</sup> Cir. 1983).

Cybor Corp. v. FAS Tech., Inc., 138F.3d 1448 (Fed.Cir.1998) (en banc).

Deerfield Med. Ctr. v. City of Deerfield Beach, 661 F. 2d 328 (5<sup>th</sup> Cir. 1981).

eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006).

eBay Inc. v. Bidder's Edge, Inc., 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

Eldred v. Ashcroft, 537 U.S. 186 (2003).

Eli Lilly & Co. v. Premo Pharm. Labs., Inc., 630 F.2d 120 (3<sup>rd</sup> Cir.1980).

Erico Int'l Corp. v. Doc's Mktg., Inc., 2006 WL 1174259 (N.D.Ohio 2006)(Initial Order).

Erico Int'l Corp. v. Doc's Mktg., Inc., 2007 WL 108450 (N.D.Ohio 2007)(Reconsideration Order).

Erico Int'l Corp. v. Doc's Mktg., Inc., 516 F.3d 1350 (Fed. Cir. 2008).

Finisar Corp. v. DirectTV Group, Inc. 2006 WL 2037617 (E.D. Tex. 2006).

Finisar Corp. v. DirectTV Group, Inc., 2006 WL 2709206 (E.D. Tex., 2006).

Finisar Corp. v. DirectTV Group, Inc., 523 F. 3d 1323 (Fed. Cir. 2007).

Finisar Corp. v. DirectTV Group, Inc., 129 S. Ct. 745 (2008).

Forest City Daly Housing, Inc. v. Town of North Hempstead, 175 F. 3d 144, 153 (2<sup>nd</sup> Cir. 1999).

Foster v. American Mach. & Foundry Co., 492 F2d 1317 (2<sup>nd</sup> Cir. 1974).

Foster v. American Mach. & Foundry Co., 297 F. Supp. 512 (S.D.N.Y. 1968).

Fresenius Med. Care Holdings, Inc. v. Baxter Int'l Inc., No. 03-CV-1431, 2008 WL 928496 (N.D. Cal. 2008).

Fresenius Med. Care Holdings, Inc. v. Baxter Int'l Inc., 582 F. 3d 1288 (Fed. Cir. 2008).

Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116 (S.D.N.Y. 1970).

Gitlow v. New York, 268 U.S. 652 (1925).

Global NAPs, Inc. v. Verizon New Eng., Inc., 489 F. 3d 13 (1<sup>st</sup> Cir. 2007).

Graham v. John Deere Co., 383 U.S. 1 (1966).

Great Allantic & Pacific Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147 (1950).

H & R Block, Inc. v. McCaslin, 541 F. 2d 1098, 1099 (5<sup>th</sup> Cir. 1976).

Hoe v. Boston Daily Advertiser Corp., 14 F. 914 (C.C.Mass.1883).

Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp., 397 F. Supp. 2d 537 (D. Del. 2005).

Hupp v. Siroflex of Am., Inc., 122 F. 3d 1456 (Fed. Cir. 1997).

Hybritech Inc. v. ABBOTT Lab., 849 F. 2d 1446 (Fed. Cir. 1988).

i4i Ltd. Partnership v. Microsoft Corp., 670 F. Supp. 2d 568, 572-573 (E.D. Tex. 2009).

i4i Ltd. v. Microsoft Corp., 598 F.3d 831, 861 (Fed. Cir. 2009).

Impax Labs., Inc. v. Aventis Pharms., Inc., 235 F. Supp. 2d 390, 392 (D. Del. 2002).

In Edgar v. MITE Corp., 457 U.S. 624, 649 (1982).

Innogenetics v. Abbott Labs, 2007 WL 5431017 (W.D. Wis. 2007).

Innogenetics v. Abbott Labs, 512 F.3d 1363 (Fed. Cir. 2008).

Instant Air Freight Co. v. C.F. Air Freight, Inc., 882 F.2d 797, 805 n. 9 (3<sup>rd</sup> Cir.1989).

Intel Corp. v. ULSI Sys. Tech., Inc., 995 F. 2d 1566 (Fed. Cir. 1993).

Johnson & Johnson Orthopaedics, Inc. v. Minnesota Min. & Mfg. Co., 715 F. Supp. 110 (D. Del. 1989).

Kewanee Oil Co. v. Bicon Corp. et al, 416 U.S. 470 (1974).

Knights of Ku Klux Klan and Nathan Robb, v. Rkansas State Highway and Transportation, 807 F.Supp. 1427 (1992)

MercExchange v. eBay, 275 F. Supp. 2d 695 (E.D.Va.,2003).

MercExchange v. eBay, 401 F. 3d 1323 (Fed. Cir. 2005).

MercExchange v. eBay, 546 U.S. 1029 (U.S. 2005).

MercExchange v. eBay, 547 U.S. 388 (U.S. 2006).

MercExchange v. eBay, 500 F. Supp. 2d 556 (E.D. Va., 2007).

Middlewest Motor Freight Bureau v. United States, 433 F.2d 212 (8<sup>th</sup> Cir.1970).

Microsoft Corp. v. i4i Ltd. Partnership, 564 U.S. \_\_\_\_ (2011).

MGM Well Servs., Inc. v. Mega Lift Sys. LLC, 505 F. Supp. 2d 359 (S.D. Tex. 2007).

Nat'l Kidney Patients Ass'n v. Sullivan, 958 F.2d 1127 (D.C.Cir.1992).

Nerney v. New York, N.H. & H.R. Co., 83 F.2d 409 (2<sup>nd</sup> Cir. 1936).

Nintendo of Am., Inc. v. Lewis Galoob Toys, Inc., 16 F. 3d 1032 (9<sup>th</sup> Cir. 1994).

Nokia Corp. v. InterDigital Inc., 645 F. 3d 553 (2<sup>nd</sup> Cir. 2011).

Novartis Corp. v. Teva. Pharm. USA, Inc., 2007 WL 1695689 (D.N.J. 2007).

Novozymes A/S v. Genencor Int'l, Inc., 474 F. Supp. 2d 592 (D. Del. 2007).

O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 2007 WL 869576 (E.D. Tex. 2007).

O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351 (Fed. Cir. 2008).

O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 2010 WL 8753254 (E.D. Tex. 2010).

O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 449 Fed. Appx. 923 (Fed. Cir. 2011).

Ortho-McNeil Pharmaceutical, Inc. v. Mylan Labs, Inc., 505 F. Supp 2d. 401 (N.D. Ohio 2007).

Ortho-McNeil Pharmaceutical, Inc. v. Mylan Labs, Inc., 520 F. 3d. 1358 (Fed. Cir. 2008).

Paice LLC v. Toyota Motor Corp. No. 2:04-CV-211-DF, 2006 WL 2385139 (E.D. Tex., 2006).

Paice LLC, v. Toyota Motor Corp.,504 F.3d 1293 (Fed. Cir. 2007).

Paice LLC v. Toyota Motor Corp., 609 F. Supp. 2d 620 (E.D. Tex. 2009).

Panduit Corp. v. Stahlin Brothers Fibre Works, Inc., 575 F. 2d 1152 (6<sup>th</sup> Cir. 1978).

Pfizer, Inc. v. Teva Pharms. USA, Inc., 429 F.3d 1364 (Fed.Cir.2005).

Polymer Technologies, Inc. v. Bridwell, 103 F. 3d 970 (Fed. Cir. 1996).

Procter & Gamble Co. v. Ultreo. Inc., 574 F. Supp. 2d 339 (S.D.N.Y. 2008).

Purdue Pharma L.P. v. Boehringer Ingeheim GmbH, 237 F. 3d 13593 (Fed. Cir. 2001).

Ranbaxy Labs. Ltd. v. Abbott Labs., Abbott Labs. v. Andrx Pharms. Inc., Nos. 04 C 8078, 05 C 1490 (N.D. Ill Nov. 10, 2005)(Preliminary Injunction Order).

Richardson v. Suzuki Motor Co., 868 F. 2d 1226 (Fed. Cir. 1989).

Rite-Hite Corp. v. Kelley Co., 56 F. 3d 1538, *cert denied*, 516 U.S. 867 (1995).

Roper Corp. v. Litton Sys., Inc., 757 F.2d 1266, 1271 (Fed.Cir.1985).

Sanofi-Synthelabo v. Apotex, 488 F.Supp.2d 317 (S.D.N.Y. 2006)(Preliminary Injunction Order).

Sanofi-Synthelabo v. Apotex, Inc., 470 F. 3d 1368 (Fed. Cir. 2006).

Schneider (Europe) AG v. Scimed Life Sys., 852 F. Supp. 813 (D. Minn. 1994).

Shatterproof Glass Corp. v. Libbey Owens Ford Co., 758 F. 2d 613 (Fed. Cir. 1985).

Smith Int'l Inc. v. Hughes Tool Co., 718 F. 2d 1573 (Fed. Cir. 1983).

Smith & Nephew, Inc. v. Synthes (U.S.A.), 466 F. Supp.2d 978 (W.D.Tenn. 2006).

Symbol Technologies Inc. v. Janam Technologies LLC, 729 F.Supp.2d 646 (D.Del. 2010).

Telequip Corp. v. Seoul Information Industrial, Inc, 2006 WL 2385425 (N.D.N.Y. 2006).

Telequip Corp. v. The Change Exchange, 2006 WL 2385425 (N.D.N.Y. 2006).

The Continuum Company, Inc. v. Inceptis, Inc., ABS Ventures II, and ABA Excelsior II, 873 F.2d 801 (5<sup>th</sup> Cir. 1989).

Tivo v. EchoStar Communications Corp., 446 F. Supp. 2d 664 (E.D. Tex. 2006).

Tivo v. EchoStar Communications Corp., 516 F.3d 1290 (Fed. Cir. 2008).

Tivo v. EchoStar Communications Corp., 2006 WL 6830818 (E.D. Tex).

Torspo Hockey Int'l, Inc. v. Kor Hockey Ltd., 491 F. Supp. 2d 871 (D. Minn. 2007).

UNITED STATES of America v. Mary Frances CARRIER, 672 F.2d 300 (1982).

Visto Corp. v. Seven Networks, Inc., 2006 WL 3741891 (E.D.Tex. 2006).

Voda v. Cordis Corp. 536 F. 3d 1311 (Fed. Cir. 2008).

Voda v. Cordis Corp., 2006 WL 2570614 (W.D. Okl, 2006).

Wald v. Mudhopper Oilfield Servs., Inc., 2006 WL 2128851 (W.D. Okla, 2006).

Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982).

Wellman Inc. v. Eastman Chemical Company, 2008 WL 4449608 (D.Del. 2008).

W.R. Grace & Co. v. Local Union 759, Intern. Union of United Rubber, Cork, Linoleum and

Plastic Workers of America, 461 U.S. 757 (1983).

Wilson v. Rousseau, 45 U.S. 4 How. 646 (1846).

z4 Technology, Inc. v. Microsoft Corp., 434 F. Supp. 2d 437 (E.D. Tex. 2006).

## **2. Taiwan Cases**

61-Tai-Kan-506 (Supreme Court, 1972).

92-Chih-3 (Miao-Li District Court, 2003).

92-Chih-3 (Tainan District Court, 2003).

92-Chih-25 (Tainan District Court, 2003).

92-Suit-363 (Tao-Yuan District Court, 2003).

93-Chih-16 (Chang-Hwa District Court, 2004).

93-Tai-Kan-937 (Supreme Court 2004).

93-Tai-Kan-323 (Supreme Court 2004).

94-Chih-45 (Taipei District Court, 2005).

94-Chih-6 (Kaohsiung District Court, 2005).

94-Tai-Kan-792 (Supreme Court 2005).

94-Chih-27 (Taipei District Court, 2005).

95-Chih-1 (Chia-Yi District Court, 2006).

95-Chih-25 (Taichung District Court, 2006).

95-Chih-53 (Taichung District Court, 2006).

95- Chih-Geng-1 (Taichung District Court, 2006).

95-Tai-Kan-780 (Supreme Court, 2006).

95-Tai-Kan-156 (Supreme Court, 2006).

95-Tai-Kan-161 (Supreme Court, 2006).

95-Tai-Kan-231 (Supreme Court, 2006).

95-Tai-Kan-575 (Supreme Court, 2006).



95-Tai-Kan-523 (Supreme Court, 2006).  
95-Tai-Kan-566 (Supreme Court, 2006).  
95-Tai-Kan-462(Supreme Court, 2006).  
95-Tai-Kan-575 (Supreme Court, 2006).  
95-Tai-Kan-522 (Supreme Court, 2006).  
95-Tai-Kan-268 (Supreme Court, 2006).  
95-Tai-Kan-241 (Supreme Court, 2006).  
95-Tai-Kan-522 (Supreme Court, 2006).  
95-Tai-Kan-621 (Supreme Court 2006).  
96-Tai-Kan-266 (Supreme Court, 2007).  
96-Tai-Kan-327 (Supreme Court, 2007).  
96-Tai-Kan-266 (Supreme Court, 2007).  
96-Tai-Kan-266 (Supreme Court, 2007).  
96-Tai-Kan-667 (Supreme Court, 2007).  
96-Tai-Kan-183 (Supreme Court, 2007).  
96-Tai-Kan-154 (Supreme Court, 2007).  
96-Tai-Kan-667 (Supreme Court, 2007).  
97-Min-Ta-Shang- 2 (IP Court, 2008).  
97- Chih-Shan-18 (Taichung High Court, 2008).  
97- Tai-Kan-561 (Supreme Court, 2008).  
97-Ming-Chuan-Suit-5 (IP Court, 2008).  
97-Ming-Chuan-Shan-20 (IP Court, 2008).  
97-Min-Zhuan-Kang-19 (IP Court, 2008).  
98- Tai-Shan-367 (Supreme Court, 2009).  
98- Ming-Ta-Suit-1 (IP Court, 2009).  
98- Ming-Gung-Suit-6 (IP Court, 2009).

98-Tai-Kang-713 (Supreme Court, 2009).

99-Ming-Kung-Shan-3 (IP Court, 2010).

98-Ming-Chung-Shan-30 (IP Court Court, 2011).

99-Ming-Chang-Sue-215 (IP Court, 2011).

### **3. China Cases**

Der-Chung-Ming4-Injunction No. 66 (Intermediate People's Court of Derchou, Sandung, 2006).

Fo-Chung-Fa-Ming3-Gin No.15 (Intermediate People's Court of Foshan, Guangdong, 2006).

Fo-Chung-Fa-Ming3-Gin No.7 (Intermediate People's Court of Foshan, Guangdong, 2007).

Fo-Chung-Fa-Ming3-Gin No.14 (Intermediate People's Court of Foshan, Guangdong, 2006).

Fo-Chung-Fa-Ming3-Gin No.19 (Intermediate People's Court of Foshan, Guangdong, 2005).

Fo-Chung-Fa-Ming3-Gin No.21 (Intermediate People's Court of Foshan, Guangdong 2005).

Fo-Chung-Fa-Ming3-Gin No.15 (Intermediate People's Court of Foshan, Guangdong, 2005).

Fo-Chung-Fa-Ming3-Gin No.13 (Intermediate People's Court of Foshan, Guangdong, 2005).

Ning-Ming-3-First-382 (Nanjing Intermediate People's Court, 2006).

Su-Injunction No. 0001 (JiangSu High People's Court, 2005).

Su-Ming-3-Final-0071 (Jiangsu High People's Court, 2008).

Wu-Zhi-Injunction No. 19 (Intermediate People's Court of WuHand, Huba, 2006).

### **Others:**

History of Patents, *available at* <<http://www.ipo.gov.uk/p-history.htm>> (last visited Oct. 11, 2012).

Senate Report No. 82-1979 (1952), *available at*

<[http://www.ipmall.info/hosted\\_resources/lipa/patents/patentact/senate\\_report\\_1979.htm](http://www.ipmall.info/hosted_resources/lipa/patents/patentact/senate_report_1979.htm)>(last visited Jan. 8, 2013).

TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND

POLICY: A REPORT BY THE FEDERAL TRADE COMMISSION, Fed. Trade Comm'n (October 2003), Ch. 2, at 20, at <<http://www.ftc.gov/os/2003/10/innovationrpt.pdf>>.

Tudors and Stuarts, *available at*

<<http://www.ipo.gov.uk/tpyes/patent/p-about/p-what-is/p-history/p-history-todor.htm>>

(last visited Oct. 11, 2012).

Wang, DoDo, *The Supreme People's Court mentioned that "Judicial Protection of Intellectual Property Rights is getting Wide and Strong,"* <

<http://wr.cccv.cn/1181/dyn20071018172550799.shtm> (2007.10.18)>.

