Patent Trolls in the US, Japan, Taiwan and Europe (Digest)

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This article is a digested version of the original report prepared during our class subject of University of Washington School of Law. Therefore the content of this article is only a summary of the original report to provide the key issues mentioned therein. For detailed information regarding this research, please refer to CASRIP Newsletter (Vol. 13, Issue 2) which includes the original report.\(^1\) Because the original report was made in this February, please note that some information provided in this report might be a little out of date. Finally, we would like to extend our gratitude to Professor Toshiko Takenaka for giving us the opportunity of this fascinating research.

1 Introduction

The term "patent troll" has recently come to public attention. This can be partly attributed to three high-profile cases. In each case, the plaintiff is a small organization that does not offer a product or service and sued the defendant for infringement.

1.1 MercExchange v. eBay

In 1998, Thomas Woolston founded MercExchange after receiving his first patent of an online auction system but ran out of money and laid off its employees.\(^2\) eBay operates an online auction and shopping site and recorded sales of $4.55 billion in 2005.\(^3\) MercExchange filed suit against eBay, alleging willful infringement of patents which covered facilitation of online auctions.\(^4\) The jury delivered a verdict for MercExchange and awarded $35 million damages which were later reduced by the trial court to $29 million.\(^5\) The trial court also denied MercExchange’s motion for a permanent injunction.\(^6\) On appeal, the Federal Circuit reversed the trial court’s denial of the motion.\(^7\) eBay appealed to the U.S. Supreme Court, which granted certiorari\(^8\) The

\(^3\) Hoover's In-Depth Company Records, Mar. 2, 2006, available at 2006 WLNR 3541856.
\(^6\) Id.
\(^7\) Id. at 1339. ("We therefore see no reason to depart from the general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances.")
Court vacated and remanded to apply the traditional four-factor test correctly (This comment is complemented of this digested paper).\(^9\)

1.2 Eolas v. Microsoft

Eolas was founded in 1994 by Dr. Michael Doyle as a spin-off from the University of California.\(^{10}\) It is the assignee of a patent of a method for displaying browser plug-ins.\(^{11}\) Eolas sued Microsoft for patent infringement, alleging that Microsoft’s Internet Explorer browser incorporated its invention.\(^{12}\) The jury found for Eolas and awarded $520 million damages. The trial court enjoined Microsoft from distributing Internet Explorer, but the injunction was stayed upon appeal to the Federal Circuit. The Federal Circuit remanded the case.\(^{13}\) However, the court upheld the district court’s holding that 35 U.S.C. § 271(f) covered software code on golden master disks that Microsoft exported to foreign original equipment manufacturers (OEMs).\(^{14}\) Therefore, Microsoft was thus liable for each copy of Windows loaded onto machines by the foreign OEMs.\(^{15}\)

1.3 NTP v. RIM

RIM is based in Ontario, Canada, and had sales of $1.35 in 2005 billion with handheld email device called BlackBerries.\(^{16}\) NTP was founded in 1992 by inventor Thomas J. Campana Jr. and patent attorney Donald E. Stout for the purpose of licensing Campana’s set of patents relating to wireless email transmission.\(^{17}\)

NTP sued RIM for patent infringement in 2001.\(^{18}\) In 2002, the jury found in favor of NTP and awarded approximately $23 million damages. In 2003, the USPTO announced that it would re-examine five NTP patents.\(^{19}\) Later that year, the trial court entered final judgment in favor of NTP and awarded increased monetary damages totaling $53.7 million and also entered a permanent injunction against RIM.\(^{20}\) The injunction was stayed pending appeal to the Federal Circuit.

In 2005 the two parties appeared to reach a $450 million agreement to settle the dispute.\(^{21}\) However, that agreement collapsed later that year.\(^{22}\) After rehearing the case, the Federal Circuit partially reversed the trial court’s findings.\(^{23}\) The Federal

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9) eBay Inc. v. MercExchange LLC, 126 S.Ct. 1837 (2006) (“That test requires a plaintiff to demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law are inadequate to compensate for that injury; (3) that considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.”)


12) See Eolas Technologies Inc. v. Microsoft Corp., 399 F.3d 1325, 1328-32 (Fed. Cir. 2005) for the factual and procedural background.

13) 399 F.3d at 1332.

14) Id.

15) Id. at 1332.


22) Simon Avery, Collapse of RIM’s patent deal with NTP stuns investors, Toronto Globe and Mail, June 11, 2005, at B5.

23) 418 F.3d at 1325-26.
Circuit vacated the injunction and remanded. Back in the district court, the court refused to stay the court proceedings pending re-examination by the USPTO. RIM appealed to the US Supreme Court, which denied certiorari.

Entering 2006, the trial judge indicated his belief that the parties should have already settled the dispute, but delayed a ruling on the injunction issue. Taking the hint, RIM and NTP settled, with RIM agreeing to pay NTP $612.5 million for a perpetual license.

2 Predecessors to Patent Trolls

2.1 Submarine Patents

There were ancient trolls who arguably abused the U.S. patent law system through the use of so-called "submarine patents." A submarine patent is defined in Wikipedia as "an informal legal term for a patent published long after the original application was filed. Like a submarine, it stays under water, i.e. unpublished, for long, then emerges, i.e. is granted and published, and surprises the whole market." In the U.S., because of the lack of patent publication system and patent term's issue date base count, the applicant enjoyed an unpublished term using continuation applications. Currently, the emergence of submarine patents becomes less because of improvements to U.S. patent laws. They are adoption of a patent publication system and the changing of the patent term's filing date basis.

2.2 Examples of submarine patents

There are some examples of submarine patents. They are Lemelson case (USP 4,118,730) which submerged 38 years, Hyatt case (USP4,942,516) which submerged 21 years, Williamson (USP4,621,410) case which submerged 20 years and Gould case (USP4,704,583) which submerged 28 years. Whether they submerged intentionally or not, they must have surprised the world. The most famous predecessor to a modern patent troll is Lemelson.

2.3 Lemelson

Lemelson filed patent applications which included barcode system in 1950s. When the U.S. automobile industry announced its employment of barcode system in 1989, he filed many divisional applications which claimed the barcode system with capable lawyer. After issue of patents, Japanese and European automobile industries paid huge royalties. Though Ford brought a declaratory relief action, the motion was denied and U.S. automobile companies paid royalties. It is estimated that Lemelson got $1.5 billion from over a thousand companies.

He passed away in 1997. In 1999, Symbols and other barcode reader manufacturers brought a suit for declaratory judgment. At first, the district court deferred to the Ford case and denied it. Nevertheless, the Federal Circuit remanded and the district court concluded that Lemelson's patents were unenforceable due to prosecution laches. The
judgment is said to indicate the end of "submarine patent era."

3 Definition of a patent troll

The term "patent troll" was first coined by Peter Detkin, a former assistant general counsel for Intel, in 1991. According to his experiences in dealing with these new breed of entrepreneurs, he gave them a name "patent troll" and defined a patent troll as "somebody who tries to make a lot of money off a patent that they are not practicing and have no intention of practicing and in most cases they never practiced at all." There are still some other terms which also refer to patent troll such as "patent extortionist", "patent parasite", "patent pirate", or "patent speculator.

However, Detkin is now a managing director of Intellectual Ventures LLC, which is a patent holding company and which some observers fear could itself be a patent troll. Probably with the intention to get rid of the bad image of patent troll, he is now saying that the term patent troll could be broadly used as to mean any plaintiff you don't like. Following the rule of such broad definition, Detkin said, University of California, Intel, IBM or even Thomas Edison could be a patent troll.

Patent trolls come with various types. First, they could be the companies who purchase controversial patents for purpose of asserting them against industry, like Acacia Technologies. Second, patent trolls could be a company that originally sold products, but has either completely or largely closed their operation, such as Mosaid or Patriot. Further, patent trolls could be the agents that assert patent on behalf of patent owners such as IP Value Management. Lastly, patent trolls could be the form of Law firms, such as Robin, Kaplan, Miller & Ciresi in Minneapolis or Makool Smith, PC in Dallas.

4 Business Model of Patent Trolls

The basic business model can still be ascertained according to actions of patent trolls in various types. Generally, patent troll will accuse a company of infringing a patent and offer a license for a royalty at first. If the target company does not agree, patent troll will just sue them.

Typically, patent trolls have no incentive to reach business solution because they do not make any product. Sometimes, patent trolls focus on

34) Id.
35) Id.
40) Id.
41) Id.
47) Supra note 10, at 2
48) Id.
certain big companies with high revenue like Microsoft. Sometimes, they just send blackmails around against all companies, including manufacturers, distributors or retailers in certain industry. Under some circumstances, patent trolls might do nothing at all at the first place and wait secretly for development of same technology by others.\(^{49}\)

Companies that hold patent(s) on industry standard technology could be grouped under patent trolls occasionally because they are basically in the business of suing people for money. The most notable example is Rambus.\(^{50}\) Rambus sued several memory manufacturers including IFX, Micron and Hynix for patent infringement.\(^{51}\) The companies contended that Rambus improperly influenced a standard-setting organization to adopt technology for which Rambus held patents. Micron filed a complaint against Rambus alleged that Rambus intentionally concealed information through false testimony.\(^{52}\) The disputes are still ongoing.

Another case involving standard technology is Forgent Networks.\(^{53}\) Forgent’s patent covers the technology relating JPEG image compression.\(^{54}\) Forgent has launched a patent infringement lawsuit against 31 major computer and electronics vendors.

Analogously, in the Unisys controversy, people characterize it as a troll because Unisys did not invent and does not own the Graphics Interchange Format (GIF).\(^{55}\) When GIF was first developed and released by CompuServe, no one realized that Unisys owned the patent of LZW data compression which is used in the common GIF file image format.\(^{56}\) No action was taken for years until GIF got popular, then the commercial graphics programs providers were required to pay license fee to Unisys.

5 Industry Perspectives

5.1 Introduction

Since the patent system is very important to industry, almost every industry may suffer the patent troll issue to varying degrees. However, in major cases of patent trolls suing companies, the issue seems most prominent in Information Technology (IT) industry. On the other hand, the Bio and Pharmaceutical industries seem less concerned with this issue. This difference in reaction to patent trolls issue and proposed patent reform among industries may be caused by the difference in character of industries.

5.2 IT industry

The scenario of how patent trolls became prominent in IT industry may be as follows. At the time of IT boom in late 1990s, patent applications to the USPTO increased rapidly.\(^{57}\) As a result, workloads of examiners may have increased. In addition to this increase, since IT is a relatively new field to be examined in the USPTO, accumulation of prior art data may be insufficient. These factors may have caused a decline in patent quality and patents

\(^{50}\) See Rambus Inc., http://www.rambus.com/about/overview.aspx
\(^{54}\) Jennifer Reingold, Patently Aggressive, 2006 WLNR 48629
\(^{55}\) See Unisys, http://www.unisys.com/about__unisys/lzw
\(^{56}\) The GIF Controversy, http://www.cloanto.com/users/mcb/19950127gif.html
may have been issued inappropriately. And when the IT boom collapsed in 2001, many IT companies went into bankruptcy, and gave up their patents in lower price. It is said that the move of collecting patents from such companies have spread among patent trolls at this time.\(^{58}\)

Additionally, some of the characteristics of IT industry may be attractive to patent trolls. First, it is easier to enter into business. Second, certain products in this field often embody hundreds of patented or patentable features within a single product.\(^{59}\) So, even though the infringement was for the only one element of the product, patent trolls often use the threat of a permanent injunction to shut down an entire product.\(^{60}\) Third, in the IT industry, cross licensing is common because it is difficult and expensive to evaluate the infringement of all related patent.\(^{61}\) But many of patent trolls do not manufacture products so they don't respond to cross licensing offer.\(^{62}\) Last, they may not conduct careful prior art search because small businesses lacks resources and there may be too many patents involved.

5.3 Bio and Pharmaceutical industry

Some of the characteristics of BIO/Pharmaceutical industry keep away patent trolls. First, it is difficult to newly enter into business because the cost for R&D is enormous. Second, they rely heavily on a patent granted for a very few, highly important discoveries.\(^{63}\) So they do not ordinarily license them but rather, use patents more offensively. Third, they may conduct sufficient prior art search because they spend an enormous amount of money for a single patent and many times, companies in this industry are sophisticated and can afford research. And because not so many patents are involved in product, prior art searches may be easier.

5.4 IT v. Bio/Pharmaceutical

When we see the reaction to the Patent Reform Act per industry, it is often described as IT v. BIO and Pharmaceutical because they take opposite sides with regard to some of the proposed revisions. Over the recent patent reform movement, IT industry is trying to change the system in the way to counter the patent trolls. However, BIO and Pharmaceutical industries do not want such modifications because they think that it will make their patents unstable and weak.

5.5 Other industries

In other industries, troll issue may be of relatively low priority. For example, General Electric seems to have patents in broad area including IT and BIO or Pharma, and the vice president of the company testified at the hearing that they consider that limitations on the ability to obtain permanent


\(^{62}\) Chisum, supra note 60, at 340.

\(^{63}\) Id.
injunctions would weaken their patents.\(^{64}\)

6 Industry responses to patent trolls

Responses to the perceived threat posed by patent trolls can be categorized as either reactive or proactive.

6.1 Reactive Strategies

A company that receives a letter claiming infringement has the choice of filing a declaratory judgment action in the hopes of getting a verdict/finding of non-infringement.\(^{65}\) However, a company is likely to be somewhat hamstrung by the personal jurisdiction requirements of the US legal system. Generally, a company is subject to personal jurisdiction in the US wherever it does business. This poses a problem for the company that desires to sue the patent troll in the company's forum. Because patent trolls tend to be "virtual companies" or companies without extensive production or manufacturing facilities, they are almost certainly subject only to suit in state in which they are registered.

In a 2005 case, plaintiff Overstock.com attempted to get a Utah federal district court to agree that it had personal jurisdiction over a patent troll whose only contact with the state had been to send out letters either offering a license or threatening suit.\(^{66}\) The court quoted Detkin's definition of a patent troll\(^{67}\) and noted that "[d]efendant Furnace Brook appears to fall squarely within that category. The court thus posed the question this way: "whether patent trolls should be subject to more general jurisdiction, perhaps as a way of deterring coercive baseless litigation."\(^{68}\) After a review of the relevant authorities, however, the court declined to allow personal jurisdiction over the defendant on that basis alone. The court granted the defendant's motion to dismiss, stating that "any change in the case law must be left to the Federal Circuit and any change in the governing statutes must be left to Congress."\(^{69}\)

The same result did not occur in the case of OpenLCR.com, Inc. v. Rates Technology, Inc.\(^{70}\) In that case plaintiff OpenLCR.com, Inc. sought a declaratory judgment. Despite strong Federal Circuit precedent that would seem to indicate a finding of no personal jurisdiction\(^{71}\), the court denied the defendant's motion to dismiss, stating that "any change in the case law must be left to the Federal Circuit and any change in the governing statutes must be left to Congress."\(^{69}\)

Id. at *3.


67) See n. 33, supra.

68) Overstock at *3.

69) Id. at *1.


71) See Red Wing Shoe Co. v. Hockerson-Halberstadt, Inc., 148 F.3d 1355 (Fed.Cir. 1998) (holding that there was no personal jurisdiction over a defendant patentee in a declaratory judgment action where the patentee's only contacts with the forum were three cease-and-desist letters sent to the plaintiff).

72) 112 F.Supp.2d at 1234.

73) Id. at 1228. (The court cited PDK Labs, Inc. v. Friedlander, 103 F.3d 1105, 1109 (2d Cir.1997) for support on this point. In that case, the defendant was an early patent troll: he had a patent for a method of producing weight loss by administering a specific product, but did not market a product for the general public.)
bad-faith enforcement of patent rights."

6.2 Proactive Strategies

Companies have adopted several proactive strategies to ward off patent trolls. First, they have promulgated the Patent Reform Act of 2005, which is arguably pro-patent infringer. Second, companies are filing more patent applications in the attempt to boost their portfolios. They believe that a large patent portfolio may either scare off a patent troll or reduce the asserted patent's expectation value. Or they may be attempting to document prior use of a patented invention. These stated reasons likely do not fully account for the phenomenon of increased patent applications at the USPTO, however. This is because one of the common complaints about patent trolls is that cross licensing is ineffective because patent trolls do not produce anything and thus would not infringe upon any patents. If this is true, then a larger patent portfolio would only be a partial defense to a patent troll, as explained above.

Intellectual property law firms are spearheading an effort to share resources and information about how to defend against the threat posed by patent trolls. Several law firms sponsored a recent conference entitled "Strategies for Managing Patent Assertions" that discussed how corporations could strategically defend against patent trolls. Companies are also banding together to share litigation costs and resources. Moreover, many companies in the high-tech industry are members of either the Business Software Alliance or the Information Technology Industry Council, both of which lobby Congress on patent reform.

7 Aspects of the US patent law system that facilitate patent trolls

If trolls thrive in the US patent system, as has been hypothesized, what are the aspects of the system that facilitate trolling? This section will discuss some of the most prominent, as well as whether or not they plausibly explain the patent troll phenomenon.

7.1 Liberal approach to patentability

One reason put forth is that the US patent system's liberal approach allows one to patent nearly any process or method. A line of cases interpreting 35 U.S.C. § 101, beginning with Diamond v. Chakrabarty in 1980 and ending with Ex Parte Lundgren in 2005, has removed many barriers to patentability for process patents. The result of this evolution in the case law is that nearly any method or process is patentable (provided the other requirements for patentability are met, of course). Theoretically, this forces companies to carefully navigate the "patent thicket" in developing new

74) Id. at 1229.
76) Id. (Noting that a patent arsenal "can encourage trolls to move on to easier marks.")
77) Id. (Stating that aggressively building a patent portfolio helps document business processes which can help prove prior use of a patented method and thus defeat infringement claims.)
78) The number of US patent applications has been steadily increasing. In 2004, the latest year for which statistics are available, there were 382,139 applications, a 21% increase since 2000. See U.S. Patent Statistics Chart, Calendar Years 1963 - 2004, available at http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm.
81) Seee.g. Ex parte Lundgren, Appeal No. 2003-2088 (BPAI 2005) (holding that there is no independent technological arts requirement).
products and technologies. However, at least with respect to software patents, acceptance of this view begs the question: If software patents were more of a detriment to innovation than an asset, wouldn’t software companies advocate for exclusion of software processes and methods from patent protection? A recent law review article examined the claim that software patents hinder innovation and rejected it, based upon evidence of research and development spending and upon the actual structure and practices of the software industry.  

7.2 Abuse of the continuation process

As discussed in Section 2.1, supra, abuses of the continuation process resulting in submarine patents definitely occurred. However, the 1995 GATT-TRIPS treaty requires a patent term of 20 years from filing date. The passage of the conforming legislation effectively ends the possibility of abusing the continuation process for all patents filed after June 8, 1995. That said, submarine patents can still surface.

7.3 Plain meaning approach to claim construction

Another reason put forth is that the "plain meaning" approach to claim construction allows patent holders to obtain broader meanings to claim terms. However, the Federal Circuit held that courts should look primarily to patent specifications and prosecution history when determining the meaning of a patent's claims.

7.4 Too few patent examiners

Does the USPTO have enough examiners? In 2005, the USPTO hired 978 new patent examiners, and plans to hire approximately 1000 in 2006. It's difficult to say what an optimal rate of examination or number of hours to spend on an application should be. However, to the extent that too few examiners poses a problem by lessening patent quality, the USPTO clearly is taking steps to resolve it.

7.5 Ability to get a permanent injunction

Chisum writes that courts could award an injunction against further infringement since the adoption of the Patent Act of 1819 and that "[f]rom the early days of the patent system into the nineteenth and early twentieth centuries, injunctive relief was generally granted as a matter of course." In the case of Continental Paper Bag Co. v. Eastern Paper Bag Co., the Supreme Court affirmed the ability of a patentee to obtain an injunction against infringement.

7.6 Rampant Forum Shopping

As noted above, registered organizations are generally subject to suit wherever they do business. For most large companies this means they can be sued nationwide. Companies have protested having to defend infringement lawsuits in patent "rocket-dockets" such as those of Texas and Virginia, likely because the relative speed of these forums precludes them from using tactical methods to delay and thus add to the cost of the litigation. The Patent Reform Act incorporates a

83) See Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193 (Fed. Cir. 2002) (panel decision) (holding that dictionaries and other sources may be used to inform the meaning of claim terms).
84) Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005).
87) 210 U.S. 405 (1908).
provision for change of venue, but if this fails to pass, companies will continue to be subject to suit nationwide.

7.7 Treble Damages

Companies have also protested that the ability to receive treble damages provides an unbalanced incentive to bring patent lawsuits. The Federal Circuit has held that the decision to increase damages is a two-step process: first, there must be willful infringement, and second, the totality of the circumstances must allow for it. Willful infringement is a high bar. Thus it’s unclear if this truly stimulates patent troll lawsuits.

7.8 Low threshold for nonobviousness

It has also been stated that the threshold for nonobviousness is so low in the US that many undeserving patents are granted. Without going too much into the current standard for nonobviousness, two arguments against this assertion can be made. First, simply because some arguably obvious patents are being granted doesn’t mean that all patents or even those held by patent trolls are obvious. Second, a point similar to the one that was argued in Section 7.1 can be made here: doesn’t the low standard benefit all applicants, presuming it is equally applied?

7.9 High Reversal Rate of the Federal Circuit

Another explanation put forth to explain patent trolling is that the Federal Circuit’s high reversal rate adds to the uncertainty of the patent system. This uncertainty supposedly favors patent trolls. This is a debatable assumption. If a patent troll prevails at a Markman hearing or at trial, would its victory also be subject to reversal?

Above-mentioned reasons have been put forth by various commentators at one time or another to explain how the US patent system facilitates patent trolls. It is our opinion that of all these reasons, none of these truly explain how the US patent system facilitates patent trolls.

8 Patent Trolls in Japan

8.1 The domestic case

There is no serious concern for patent trolls in Japan. One reason is that there is only one famous domestic patent troll case. ADC Tech. K.K. v. NTT DoCoMo, Heisei 15 (Wa) 28554, (Tokyo D. Ct., Oct. 1, 2004) is arguably said as a patent troll case. ADC is a patent holding company founded by a patent attorney. NTT is Japan’s premier mobile communication company. In 1999, ADC purchased a patent application which arguably included the idea of mobile phone with two screens. After the issue of the patent, ADC warned NTT. Then, NTT brought the action for declaratory judgment. Soon after, the JPO received opposition to the grant of the patent and decided to revoke the patent. Finally, the Tokyo District Court also held in favor of NTT.

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88) See, e.g., BlackBerry Blues, n. 26, supra (noting that RIM counsel Jones Day had a reputation for "constantly seeking tactical advantages through continuances and motions.").


90) See, e.g., http://www.patentysilly.com/, an entire website devoted to patents that are silly and/or spurious in the author’s opinion.


8.2 Reasons which keeps away trolls with comparison of US

8.2.1 Higher judicial stability

In Japan, the trial - appeal differential rate of civil patent infringement cases is 18%. The low rate indicates the judicial consistency in Japan.

Forum shopping among District Courts is a big problem in U.S. On the other hand, there are only two district courts which deal patent cease in Japan. The Japanese consolidated jurisdiction is an advantage for judicial stability or consistency.

In U.S., recently people have come to doubt the decisions of Federal Circuit, such as the certiorari granted in the KSR v. Teleflex case. On the other hand, as the IP division in Tokyo High Court becomes established IP High Court in 2005, people look for more stability which is backed by accumulation of specialties.

8.2.2 More reasonable damages

In the U.S., the triple damages and entire market value rule enlarge the damage of the patent infringement. They also enlarge unpredictability. On the other hand, an infringer usually owes just compensation of the damage in Japan.

8.2.3 More effective administrative proceedings

In U.S., the reexamination is challenged only with writing prior art consisting of patents or printed publications. On the other hand, the trial for invalidation is challenged with almost all grounds in Japan. The wide challengeable-ranges at JPO contribute to reduce defective patents.

9 The situation in Taiwan

In Taiwan, there are no domestic patent troll cases. One of the reasons might be that the technology licensing transaction has not yet matured and been well-established in Taiwan. Moreover, Taiwan is a comparatively small market which refers to a small base for royalty collecting for patent troll. Also, from the cultural perspective, people tend to solve dispute in amicable way instead of filing lawsuit according to Chinese old time course of dealing. Accordingly, the way that patent trolls use litigation as a threat for collecting licensing royalty is rare in Taiwan.

The unfavorable legal system for patent troll might also be one of the reasons. Unlike U.S. legal system, there is no special jurisdiction for patent cases in Taiwan. The validity and enforceability issues shall go to administrative court and infringement issues go to civil court. When a
motion of invalidity or unenforceability is filed in administrative court, the judge of civil court may suspend the on-going patent infringement case at issue.\textsuperscript{105} The reason for such holding is not only because that the validity or enforceability of patent is the premised subject to patent infringement, but also under the purpose to avoid the contradiction between different courts and waste of legal resources. The disadvantage for patent owner is that once the accused infringer keep having different third parties file the motion of invalidity or unenforceability in administrative court, the proceeding of patent infringement case could be pending and have no decision for a long time. Other reason for the long time process is that there is no special procedure like summary judgment or Markman hearing in Taiwan which were designed to shorten the trial process of patent case. Also, because there is no discovery process in Taiwan legal system, it would be hard for patentee to obtain evidences to prove the infringement by accused infringer. Moreover, due to the lack of professional technical knowledge of judge and clear evidences provided by patentee, the civil court judges make their decision mostly relies on technical expert’s written report only. Therefore, there are no specific rules set in patent litigations for patent owners to follow.

As to injunction, the U.S. patent trolls usually threaten the accused infringers by filing a motion for injunctive relief.\textsuperscript{106} However, in Taiwan, when a patentee files a motion for injunctive relief, the accused infringer can always file the motion of reverse injunction asserting to stop the interference against their current sale and manufacturing.\textsuperscript{107} By such reverse injunction, a patentee may not be able to stop the manufacture of accused products successfully and will thus fail his purpose of frightening against accused infringer.

In Taiwan, losing party will bear the whole court costs.\textsuperscript{108} Therefore, patentee needs to carefully consider the quality of their patent before filing the suit.

In addition, before 2004, patent infringer in Taiwan shall bear the criminal liability and most patent infringement cases therefore went to criminal court and follow criminal procedure. However, the rate which accused infringers to be held guilty is rare.\textsuperscript{109} This statistical data in some way shows that the legal system disfavors to patentee accordingly.

Lastly, U.S. patent trolls sometimes assert their patent right by sending cease and desist letters to all related parties such as customers, distributors or retailers maliciously. However, in Taiwan, if such behavior truly affects the market and economic order, the patentee could be fined by Taiwan Fair Trade Commission in accordance with Fair Trade Law.

All the above-mentioned indicate the direct or indirect reasons why there are no patent trolls in Taiwan domestically. However, even if there is no distinct case domestically; Taiwanese IT industry on the other hand seriously suffers by foreign patent trolls asserting their US patent rights. The main reason is because that Taiwan is one of top IT suppliers in the world with high market share on chip foundry services, notebook PCs, LCD monitors and other computer components.\textsuperscript{110} Confronted with the challenges by U.S. patent trolls, some IT companies go straight into settlements because of the fear with unfamiliar legal system and costly legal fees. Others are taking delaying tactic and wait for the upcoming judgments on other cases involving the claiming patent trolls.

\textsuperscript{105} §182, Minsh ShuSongfa (Law of Civil Procedure, Republic of China)
\textsuperscript{106} 35 U.S.C. § 283
\textsuperscript{107} Id. note 40, §538
\textsuperscript{108} Id. §79
\textsuperscript{110} Bruce Einhom ET AL., Why Taiwan Matters, Business Week, May 16, 2005
10 Patent trolls in Europe

10.1 Current situation in Europe

In Europe, some European companies are being sued by U.S. patent troll-like company. For example, German chip manufacturer Infineon Technologies entered into settlement with Rambus with regard to U.S. patent.

However, it seems that the patent troll issue is not so prominent so far. As for the European-based patent troll, there seems not so many. One example is the BTG. It is British company in the patent licensing business. They filed suit against Amazon.com and Barnesandnoble.com based on U.S. patent acquired from Infonautics, which is a Swiss software development company.

10.2 European patent system - software patents

In Europe, business patent and software patent are not allowed according to European Patent Convention (EPC). However, with the background of growing commercial value of software and pressure from large software companies, EPO started to issue patent to software by practice and case law. In 2002, EU software patent directive was presented. This directive introduced "process claim" and if it passed, EU accession states had to harmonize their national law in such way. There were certain struggles and changes regarding this directive and last year, European parliament rejected. But this issue still seems controversial.

10.3 European litigation system

There are some differences in litigation system in Europe and these differences may be keeping away patent trolls from Europe for now.

In Europe, patent litigation is dealt in each country because there is no community patent court. This different litigation system may make things difficult for patent trolls with strategy of taking small amount of money from many different companies because it is difficult and expensive to deal with different system in each country.

Some of the factors in European litigation system that may be not attractive to patent trolls are as follows.

First, contingency fees are not allowed. This may be less attractive to law firm type patent trolls because it is one of the important source of income and the factor that encourage them for the troll business.

Second, European countries takes loser-pay system. In U.K., litigation cost including attorney fee is basically paid by losing party in civil cases.

111) http://www.btgplc.com/ BTG announced that they would change business "to focus solely on early-stage opportunities in the life-science sector". They maintain the patent infringement suit against Amazon.com etc.
113) http://www.infonautics.ch/
115) Id.
116) Id.
117) Id.
118) Morag Macdonald, Beware of the troll, September 26, 2005 http://www.thelawyer.com/cgi-bin/item.cgi?id=116783&d=pdf&h=pdf&f=pdf
Considering that the litigation cost in U.S. is very high, these two factors may encourage companies to threaten by patent trolls to pay royalty rather than spending higher cost of litigation they may not recover even if they win.\(^{123}\)

Third, litigation costs are relatively smaller than in US.\(^{122}\) This may be less attractive to patent trolls because as mentioned above, in U.S., higher litigation costs incentivize companies to pay royalty rather than fighting against patent trolls. However, there is other side for this factor. It may also incentivize patent trolls to take actions in Europe.\(^{123}\)

### 11 Patent Reform Act

Congressman Lamar Smith (R-TX) introduced the Patent Reform Act of 2005 on June 8, 2005.\(^{124}\) The Act is the result of proposals put forth by the Business Software Alliance with the goal of curbing costly litigation.\(^{125}\) The PRA has gone through two revisions, the latest being an industry coalition print on September 1, 2005.\(^{126}\) An article in the Intellectual Property Law Bulletin analyzes the provisions of the Patent Reform Act that are relevant to the patent troll issue.\(^{127}\) Some of these aspects and others are discussed below, based upon the latest revision.

#### 11.1 Apportionment of damages

Essentially the PRA would require the court to calculate damages based upon the value added by the claimed invention alone, and not in combination with other non-claimed elements. This is clearly directed at producing lower valuations than have been seen in patent troll cases.\(^{128}\)

#### 11.2 Duty of candor codified

The PRA would also codify a duty of candor for patent applicants in front of the USPTO. It would also create a rebuttable presumption that fraudulent conduct by an attorney was known to and approved by the applicant.

#### 11.3 Treble damages and willful infringement

The PRA would elevate the standards for notice of infringement by requiring that the notice include the patent, the claims, and the infringing product or process. It would also preclude a finding of willfulness if the infringer had an informed good faith belief that it was not infringing.

#### 11.4 Venue

The industry coalition print would require "transfer of venue to a more appropriate forum in certain patent cases."\(^{129}\)

#### 11.5 Prior user rights

The "prior user rights" defense would be expanded to apply to all manufacturers of all inventions. It could be used as soon as a defendant

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121) Macdonald, *supra* note 118
122) *Id.*
123) Macdonald, *supra* note 118
127) See Chan, *supra* n. 80.
128) See, *e.g.*, *Eolas* at 1332 (noting that the jury awarded a royalty rate of $1.47 per unit of infringing product).
began "substantial preparations for commercial use."

11.6 Injunction

The original bill contained a provision modifying the standard for granting an injunction. It would require a court to consider the fairness of an injunction in view of the interest of the parties. The injunction could be stayed pending appeal upon showing that the stay would not result in irreparable harm to the patent owner. However, the latest version of the PRA has removed this provision.

11.7 Post-grant opposition on statutory validity

The PRA also would establish a post-grant opposition system.

Upon review of these provisions, it is clear that the PRA would tip the balance towards infringers and away from patent trolls. As of this writing, passage of the PRA is uncertain.

11.8 Other reforms

Other reforms have been proposed to deal with the problems posed by patent trolls.

11.9 Open post-grant review on equitable issues

A 2005 Duke Law Review article proposed requiring the USPTO to conduct an open post-grant review in two instances: at the time when the renewal fee for a patent is due and whenever a patent is sold. The author noted that "some troll-like behavior is necessary to protect legitimate patent enforcers" and theorized that an open review would be flexible enough to weed out the good trolls from the bad trolls. Although reasonable in theory, it's difficult to imagine the author's suggestion in practice.

11.10 Securitization of Patent Rights

In addition to the exclusive right granted by Congress to patent owner, patent rights could be treated as investable assets. The idea of a Patent Investment Trust ("PIT") was proposed by Elizabeth Ferrill. According to her proposal, a tax-advantaged corporation will be set up to trade and license patents and make patent rights into securities, tradable on exchanges. The patent owner may have more efficient monetization of patent right and thus allow patent rights holders to diversify their holdings and level the playing field for small inventors. Base on the similar rationale, Ocean Tomo is one actual example which makes IP tradable. Ocean Tomo is a Chicago merchant bank that specializes in intellectual capital.

11.11 Loser-pays

Chisum writes that "[t]he general rule in litigation is that each party bears its own costs, including attorney fees. This is known as the 'American rule.' In other countries the prevailing party routinely receives attorney fees from the losing
party. This is known as 'English rule.' Currently, a court may award attorney fees to the victor only in "exceptional cases." Adoption of the English rule could have a beneficial effect upon the patent litigation system.

12 Conclusions

Some conclusions can be drawn from the above discussion of patent trolls in the U.S., Japan, Taiwan and Europe.

First, the label "patent troll" is commonly used by a party that wishes to paint the opposing party in a negative light. Patent troll is a pejorative term and if an alleged infringer can make the label stick on a patentee, it may gain an advantage in litigation and in public opinion.

Second, the incidence of patent trolls is lower in the surveyed regions than in the U.S. It's unclear what factors are responsible for this, but it is our opinion that prevalent amongst these has to be the loser-pays system that each country or region has and the lower damages available to patentees.

Third, patent trolls may merely be a transitory phenomenon. The internet boom produced a large number of companies that later went bankrupt and sold their assets.

Fourth, patent trolls may actually promote innovation. Much is said of the constitutional requirement of the U.S. patent law system: "To promote the Progress of ... [the] useful Arts." However, much less is said of the means by which that goal is to be achieved: "[B]y securing for limited Times to ... Inventors the exclusive Right to their ... Discoveries." Whether patent trolls truly advance innovation depends on how you read those together. If you read them as saying that "by securing" inventors' rights, it follows that the progress of the useful arts is promoted, then patent trolls must be seen as advancing innovation in the US system. This is because patent trolls vigorously protect inventors' rights.

136) Chisum at 1279 (citing Rohm & Haas Co. v. Crystal Chem. Co., 736 F.2d 688, 690 (Fed. Cir. 1984)).
138) U.S. Const., Art I, Sec. 8, Cl. 8.
139) Id.