LEGAL UPDATE

TECHNOLOGY LICENSING AND PATENT TROLLS

J.P. Mello*

I. INTRODUCTION

In *The Godfather*, Vito Corleone made an offer that could not be refused. 1 Today, some companies contend that they receive similar offers from other businesses seeking to assert patent rights. At least one target company described certain forms of patent assertion as extortion.2 Patent asserters objected to the term “patent extortionist.”3 In response, target companies adopted the slightly less pejorative term “patent troll” to refer to the most aggressive patent asserters.4

This paper focuses on the tension between patent trolls and target companies. In Part II, this paper analyzes the growth of the patent trolling industry. Part III summarizes the business methods that patent trolls use to select and exert influence over target companies. Finally, Part IV identifies technology licensing strategies that target companies can use to defend themselves against patent trolls.


3 *Id.* After an Intel representative referred to TechSearch as “patent extortionists”, TechSearch filed a defamation suit against Intel. *Id.*

4 Brenda Sandburg, *Battling the Patent Trolls*, THE RECORDER, July 30, 2001, LEXIS, Nexis Library, RECRDR File. Commentators do not agree on a definition of patent troll. Thomas S. Kim & Michael D. Stein, *Patent Value: Increased Interest Extends Beyond ‘Trolls’*, THE LEGAL INTELLIGENCER, July 25, 2005, LEXIS, Nexis Library, LGLINT File. The broadest definition describes a patent troll as an entity that extracts profits from its patents by offering a target company the option to purchase a license or face litigation. *Id.* However, this definition does not distinguish legitimate licensing practices from aggressive patent enforcement. *Cf.* Sandburg, *supra* (T.J. Rodgers, president and CEO of Cypress Semiconductor Corp., noting that patent enforcement motivations can be categorized as the “good, the bad and the ugly,” with a good company going on the offensive to enforce a patent that is critical to its business). This paper defines the term patent troll narrowly as an entity that purchases patents from third parties in a speculative manner and aggressively asserts these patents to generate revenue for itself. *See* Kim & Stein, *supra*.
II. THE FLIGHT TO PATENT TROLLING

By any measure, the United States patent system is growing. Amid the growth of the patent system, patent trolls have generated tremendous revenue through both licensing and litigation. For example, Lemelson Medical, Education & Research Foundation has earned an estimated $1.2 billion in licensing revenue since 1988. Litigation awards can be equally impressive: a district court awarded over $500 million to Eolas Technologies in a suit that it brought against Microsoft.

The potential for large payoffs attracts new players to the patent trolling industry. Patent trolls are no longer just small companies and individual inventors that lack the financial backing to follow through on the threat of litigation. For example, Intellectual Ventures raised approximately $300 million from private investors that include Microsoft, Nokia, and Sony. In exchange, these investors receive a return on investment as well as access to Intellectual Ventures' patent portfolio. By contrast, Acacia Technologies is traded on the Nasdaq exchange. Acacia’s litigation and licensing revenues

---


6 See Kim & Stein, supra note 4 (“In addition to licensing revenue, patent litigation awards have also highlighted the immense value of patents . . . .”).

7 Id.

8 Id.

9 Even Peter Detkin, the man who coined the term patent troll, has been lured into joining a patent trolling company. Since 2002, Detkin has worked for a patent trolling company called Intellectual Ventures. See Thomas Kellner, Patent Stalker, Forbes, Nov. 14, 2005, Lexis, Nexis Library, Forbes File (describing Peter Detkin’s role in acquiring patents for Intellectual Ventures).

10 See Kim & Stein, supra note 4 (“[L]arge companies felt that they had an upper hand versus the individual inventor/small company-patent asserter because many of the asserters likely did not have the funds . . . to fight a patent litigation battle. That has changed with the patent asserters of today, which have . . . greater funds at their disposal.”).


12 See Kellner, supra note 9 (“The investors have free access to the portfolio . . . and anyone else will be expected to negotiate licensing fees or, presumably, face a lawsuit.”).

provide the return on investment to stockholders.\textsuperscript{14} With more sophistication and funding, patent trolls pose an increasingly potent threat to target companies in various industries.

III. PATENT TROLLS USE PATENT RIGHTS AND ASYMMETRICAL BARGAINING POWER TO GENERATE PROFITS

As a patent troll becomes more sophisticated and attracts outside funding, it becomes just like other businesses. Namely, the patent troll becomes responsible to a group of investors. To ensure adequate returns for these investors, successful patent trolls generally use similar business models. First, the patent troll obtains economically valuable patent rights. Next, the patent troll identifies target companies. Finally, the patent troll uses asymmetrical bargaining power to extract licenses from these target companies. By using this prototypical business model, the patent troll minimizes risk (i.e., out-of-pocket expenses) while maximizing revenue – all of which maximize returns for investors.

A. Patent Trolls obtain economically valuable patent rights

Patent rights with most economic value to a patent troll have three defining characteristics. First, the patent right must exist in a technology field in which other businesses compete.\textsuperscript{15} The patent troll depends on these competing entities for its licensing revenue.\textsuperscript{16} Second, the patent troll seeks a broad right that will allow it to target several companies,\textsuperscript{17} and potentially increase the likelihood that the patent troll will prevail at trial.\textsuperscript{18} Third, the patent troll must acquire the right at a minimal cost.\textsuperscript{19} These three characteristics – competition,

\textsuperscript{14} See Gene C. Marcial, \textit{How the Blackberry Flap Helps Acacia}, \textit{Business Week}, Dec. 19, 2005 at 95 (Acacia will be profitable in 2006 with licensing revenues of $50 million to $60 million).

\textsuperscript{15} See discussion \textit{infra} Part II.B.

\textsuperscript{16} Cf. Marcial, \textit{supra} note 14 at 95 (outlining Acacia’s business strategy of asserting its digital media patents against cable-TV and internet companies).

\textsuperscript{17} See Brad Stone, Patent Problems, \textit{Newsweek}, Oct. 13, 2004 available at http://www.msnbc.msn.com/id/6241971/site/newsweek/print/1/displaymode/1098 (last visited Dec. 23, 2005) (Forgent Networks has acquired a patent that seems to cover the compression algorithm used in the JPEG format).

\textsuperscript{18} See F. Scott Kieff, \textit{The Case for Registering Patents and the Law and Economics of Present Patent-Obtaining Rules}, 45 B.C. L. Rev 55, 102 (2003) (“[A] broad patent claim is strong on offense because it covers more and, therefore, is more likely to be infringed”). \textit{But see id.} (“[B]ut [a broad patent] also is weak on defense because it may cover something in the prior art or fail to be supported by a sufficiently detailed disclosure in the rest of the patent, and, therefore, is more likely to be invalid.”).

\textsuperscript{19} Many patent trolls attempt to purchase patent rights at bankruptcy auctions. \textit{See Lisa
broad patent rights, and distressed patent sales – abound in the technology, software, and pharmaceutical and biotechnology sectors. Not surprisingly, patent trolls target companies in these sectors most often.20

Each of these industries contains several competing companies. Moreover, companies in these industries spend the most on R&D21 in an attempt to gain/increase market share. Companies in these industries are more likely to depend on continued sales and licensing to support in-house R&D efforts that will eventually mature into the next generation of products. By threatening to interrupt the R&D cycles of these companies, patent infringement suits also threaten to erode the market shares – i.e., competitiveness – of companies in these industries.

In addition to being a wellspring of industrial competition, these high-tech sectors are also likely sources of broad patent rights. A recent flood of patent applications has stretched the resources of the United States Patent and Trademark Office (“USPTO”).22 Not only has the number of patent applications increased, but so has the percentage of patent applications approved.23 Some commentators assert that this higher approval rate signals a decline in the quality of patents.24 Although this phenomenon spans all


23 See A PATENT SYSTEM supra note 5 at 52-53 (Estimates of USPTO patent approval rates range from 66% approval to 97% approval, depending on the methodology used).

24 See id. at 47 (noting that some observers feel that “the USPTO too frequently . . . issues patents for inventions that do not conform to generally accepted standards for patentability. . . .”).
industries, the problem of bad patents is particularly acute where the range of patentable subject matter has expanded in recent years to include software, business methods, and genomics.\footnote{Id.}

Finally, within these industries, patent trolls can obtain inexpensive patent rights. Since the dot-com collapse, bankruptcy auctions have been a fruitful source of electronics and software patent rights.\footnote{See Lerer, supra note 19 (“When the dot-coms came crashing down, many in the IP world suspected that the bankrupt companies held hidden treasures. And by 2003, a second wave of prospectors had emerged.”).} Patent trolls also acquire patent rights from distressed small companies or individual inventors who require capital for solvency or other research interests.\footnote{See e.g. Kellner, supra note 9 (describing Intellectual Ventures’ purchase of patent rights owned by Net Perceptions, a distressed software company in liquidation mode).}

\section*{B. Patent Trolls Target Specific Types of Companies}

After acquiring valuable patent rights, a patent troll must select target companies to approach with licensing “offers.” In general, a patent troll selects target companies that would lose the most in a costly patent infringement suit. Target companies fall into at least one of three categories.

Companies that cannot afford the cost or stigma of litigation compose the first group. Patent litigation costs too much for some companies.\footnote{See James Bessen & Michael J. Meurer, Lessons for Patent Policy from Empirical Research on Patent Litigation, 9 LEWIS & CLARK L. REV. 1, 2 (2005) (Patent litigation has a median estimated cost of $2 million for suits with $1-$25 million at stake).} For others, the stigma of a patent infringement suit can limit the company’s ability to attract investors.\footnote{See Sandburg, supra note 4 (some patent trolls threaten to sue startups for infringement just before the startup undergoes its initial public offering).} For both types of companies, litigation itself is an obstacle to fighting a patent troll in court. These companies tend to license the patent troll’s technology instead.

A second group of targets includes companies that cannot afford to pay monetary damages if the patent troll prevails in court. Absent an established royalty\footnote{See Hanson v. Alpine Valley Ski Area, Inc., 718 F.2d 1075, 1078 (Fed. Cir. 1983) (“For a royalty to be ‘established,’ it ‘must be paid by such a number of persons as to indicate a general acquiescence in its reasonableness by those who have occasion to use the invention.’” (quoting Rude v. Westcott, 130 U.S. 152, 165 (1889))).} for licensing the asserted patent, a court will apply the willing buyer-willing seller rule\footnote{Id. at 1079. Under the willing buyer-willing-seller rule, the royalty rate is an amount that the patent assessor and the alleged infringer would have agreed to in a hypothetical licensing negotiation held prior to the beginning of the allegedly infringing activity. Id. To}
this rule, a target company with large amounts of actual profits and a large volume of past sales of potentially infringing products risks large losses if it loses a court battle with a patent asserter. This type of company cannot afford to pay substantial monetary damages and, will instead pay a license fee to a patent troll.

A third group of target companies includes companies that cannot afford the business impact of a permanent injunction. If a patent troll wins at trial, a court will usually issue a permanent injunction to shut down the product manufacturing of the target company. A permanent injunction causes problems for a target company that relies on revenue from the continued sale of the allegedly infringing product. Furthermore, an injunction puts the patent troll in a position to demand very high royalty rates. Rather than risk an injunction that would halt production, target companies will often pay the licensing fee demanded by the patent troll.

The Supreme Court may soon resolve the question of the patent troll’s

construct the hypothetical willing buyer-willing seller negotiation, the court will consider the relevant market factors existing just prior to the alleged infringement:

Where a willing licensor and licensee are negotiating for a royalty, the negotiations do not occur in a vacuum of pure logic. They involve a marketplace confrontation of the parties, the outcome of which depends upon, e.g., their relative bargaining strength, the anticipated amount of profits that the prospective licensor thinks he would lose as a result of licensing the patent as compared to the anticipated royalty income, the anticipated amount of net profits that the prospective licensee thinks he will make, the commercial past performance of the invention in terms of public acceptance and profits, and the market to be tapped.


32 Hartness Int’l, Inc. v. Simplimatic Eng’g Co., 819 F.2d 1100, 1112 (Fed. Cir. 1987) (“The . . . method, most commonly used [to determine damages] when actual profits cannot be proved is to award damages based on ‘reasonable royalty.’”).

33 As part of the monetary damage calculation, the running royalty rate will be multiplied by the volume of past infringing sales. See e.g. Georgia-Pacific Corp. v. U.S. Plywood-Champion Papers Inc., 446 F.2d 295, 300 (2d Cir. 1971) (The court calculated a reasonable royalty of $35.65 per thousand square feet and found Georgia-Pacific liable for $570,000 because it sold 16,000,000 square feet of the infringing product).

34 See e.g. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1247 (Fed. Cir. 1989) (“It is the general rule that an injunction will issue when infringement has been adjudged, absent a sound reason for denying it.”).

power over this third group of companies. It recently heard oral arguments\textsuperscript{36} to
decide the issue of whether “a district court must, absent exceptional
circumstances, issue a permanent injunction after a finding of [patent]
infringement.”\textsuperscript{37} If the Supreme Court abandons the \textit{per se} rule of permanent
injunctions against patent infringers, patent trolls will have less influence over
the third target group.\textsuperscript{38}

Nevertheless, patent trolls will remain a powerful threat to target companies
in the foreseeable future. The patent troll will continue to purchase
economically valuable patent rights and assert those rights against selected
target companies. In particular, the patent troll will leverage its asymmetrical
bargaining position to extract licensing fees from these target companies. This
asymmetrical bargaining strategy is discussed in detail in the following section.

\textbf{C. Patent Trolls Use Asymmetrical Bargaining Power to Extract Licenses}

Once the patent troll has acquired patent rights, it will typically send
“offers” to several target companies in an industry.\textsuperscript{39} In the initial offer letter,
the patent troll will assert that its patent applies to the target company’s
business\textsuperscript{40} and offer a license to the target company.\textsuperscript{41} However, the initial
offer letter is unlikely to include a threat of suit.\textsuperscript{42} The patent troll seeks to
make the target company aware of the license offer, but it also wants to avoid
declaratory judgment.\textsuperscript{43}

When it makes its initial license offer, the patent troll’s superior bargaining
power over a target company manifests itself in two ways. First, the patent
troll has a relatively predetermined financial risk when it litigates.\textsuperscript{44} Second,

\textsuperscript{36} \textit{See} eBay Inc. v. MercExchange L.L.C., 401 F.3d 1323 (Fed. Cir. 2005), \textit{cert. granted},
74 U.S.L.W. 3321 (U.S. Nov. 28, 2005)

\textsuperscript{37} Petition for Writ of Certiorari, \textit{eBay}, No. 05-130 (U.S. July 25, 2005) (emphasis
added).

\textsuperscript{38} \textit{See} Petra Pasternak, \textit{Closing the Patent Litigation Spigot}, \textit{The Recorder}, Dec. 19,
2005, LEXIS, Nexis Library, RECRDR File (“By removing the threat of injunctions, some
patent lawyers say, such a ruling would encourage alleged infringers to fight longer and
harder. As a result, patent holders are likely to be more thoughtful and selective in the cases
they choose to pursue.”).

\textsuperscript{39} \textit{See e.g.} Dee DePass, \textit{Strength in Numbers}, Star Tribune, Sept. 26, 2005, at 1D (Solaia
sent demand letters to several members of the industry in Minnesota alone).

\textsuperscript{40} Tracey Steiner & Stephen Guth, \textit{Beware Patent Trolls}, \textit{Nat’l Rural Electr. Cooperative Ass’n Mgmt. Q.},

\textsuperscript{41} \textit{Id.}

\textsuperscript{42} \textit{Id.}

\textsuperscript{43} \textit{Id.}

\textsuperscript{44} \textit{See} Bessen & Meurer, \textit{supra} note 28 at 2 (listing the median litigation and discovery
costs for patent infringement lawsuits).
the patent troll cannot become a target company itself.45 A patent troll risks little financially when it litigates a patent suit. At worst, the patent troll will lose attorney fees and its patent right.46 At best, however, the patent troll may win substantial damages47 and a permanent injunction.48 The patent troll can further mitigate its financial risk by litigating only its strongest claims and by acquiring its patent rights inexpensively.49

By contrast, the target company has little bargaining power. Because the patent troll does not manufacture any products, the target cannot countersue, as often happens in patent infringement cases.50 Thus, the target company does not have bargaining leverage that it can use to reduce the value of the patent troll’s licensing demand.

Although the target company does not have bargaining leverage against the patent troll, the target company can use other resources in its power struggle against the patent troll. The alternative strategies available to the target company are discussed in detail in Part IV.

IV. TARGET COMPANIES HAVE THE POWER FEND OFF PATENT TROLLS

Understanding the modus operandi of patent trolls discussed in Part III, a target company can fight back against patent trolls without risking financial ruin by: 1) proactively policing patents related to its technology; 2) licensing rather than developing technologies; and 3) teaming with industry competitors.

A. Proactive patent policing

Patent trolls acquire patent rights from outside sources.51 At a theoretical extreme, a target company could be perfectly effective in policing patents, and thereby cut off the patent troll’s ability to make patent assertions entirely. In reality, a target company has limited ability to police its patents. Nevertheless, if done strategically, a target company can ensure that available patent rights in its industry – the rights that the patent troll can acquire – are the weakest patent claims.

45 See Kim & Stein, supra note 4 (“(T)he patent troll is . . . not likely to be interested in a cross-licensing deal in the future because it does not contemplate ever producing a product. Furthermore, the lack of products takes future business considerations out of the picture between the patent troll and the target company.”).
46 See e.g. Lemelson v. Topper Corp., 450 F.2d 845, 850 (2d Cir. 1971) (In a patent infringement suit brought by Lemelson, the court found Lemelson’s patent to be invalid).
47 See supra Part II.
48 See supra notes 34-38 and accompanying text.
49 See supra Part III.A.
51 See discussion supra Part III.A.
One way to police patents in an industry is through reexamination proceedings in the USPTO. The target company can use reexamination proceedings to deprive patent trolls of overly broad patents.52 First, the target company should file a prior art citation that contains relevant prior art that the examiner did not consider but could be used to minimize the scope of the patent claims.53 Next, the target company must request a reexamination proceeding during the period of enforcement of the patent.54 After an ex parte reexamination proceeding,55 the USPTO will decide whether to modify the patent claims.56 If the target company succeeds in its reexamination efforts, the USPTO will narrow the claims of the reexamined patent.

As an alternative to reexamination, a target company can police the patents in its industry by competing for patents at bankruptcy auctions and distress sales. If a target company can purchase an overly broad patent, a patent troll will not be able to assert that patent against the industry.57 At the very least, economic competition for patents will increase the patent troll’s operating costs.58

An active policing strategy will benefit the companies in the second and third target groups. These companies give in to the licensing demands of the patent troll because they cannot afford the discounted risk of money damages or a permanent injunction.59 However, active policing of patents will reduce the patent troll’s expected value of money damages or a permanent injunction resulting from litigation.60 If the target company successfully polices patents in its industry, it will broaden the class of cases not worth litigating for the
A target company can also minimize its exposure to patent trolls by licensing technology from a third party vendor. The target company should seek contract terms that allocate each party’s responsibility in the case of infringement. In the license, the vendor should warrant that the licensed product is not known to be infringing. The contract should further oblige the vendor to indemnify and make the target company whole in the case of an infringement suit. Finally, the contract should contain a survival clause that continues the vendor’s infringement liability after the contract ends.

Although licensing technology from a third-party has certain advantages, it also has limited usefulness as a defense against patent trolls. Most target companies cannot license every technology in a product. For example, a pharmaceutical company will develop a drug based on patent rights that it owns. It would rather use licensing to avoid patent infringement liability only for ancillary technologies, such as software that it uses to manufacture or test the drug.

C. Teaming With Other Target Companies to Battle Patent Trolls

Patent trolls typically demand licenses that are significantly less than the

---

61 The patent troll will not file cases that have a negative expected value (i.e., litigation costs will exceed the discounted trial award). See id.
62 See Steiner & Guth, supra note 40 (explaining that a license for a third party’s technology provides the target company with both statutory and common-law protection against a patent infringement claim from a patent asserter). See also JAY DRATLER, JR., LICENSING OF INTELLECTUAL PROPERTY § 10.02(1)(a) (2005) (“[T]he contractual provisions [of a patent license] may resemble an insurance policy under which the licensor is responsible not only for making the licensee whole in the event any damages are assessed, but also for defending the licensee from third parties’ claims of infringement and paying ongoing legal expenses as incurred.”).
63 Steiner & Guth, supra note 40.
64 Id.
65 Id.
66 Id.
expected cost that each target company will incur in litigation.69 Thus, many target companies opt for the economically efficient path and pay a license fee to the patent troll rather than incur litigation costs.70 This is particularly true of the first group of target companies.

By teaming with other members of its industry, a target company can alter the cost-benefit calculus associated with battling a patent troll in court.71 When targets share resources, the costs to each target company will decrease. If the target company is confident that it will win in court, it will choose to litigate once its expected litigation costs become equal to or less than the patent troll’s license demand.72

The successful efforts of several Minnesota companies in rebuffing the licensing demands of Solaia Technology best illustrate the effectiveness of this strategy.73 Solaia sent letters to several Minnesota companies demanding $600,000 licensing fees.74 Litigation to resolve Solaia’s patent infringement claim would have cost each company approximately $2 million if each had litigated individually.75 However, nine target companies teamed together to challenge Solaia in court.76 The joint effort reduced each company’s litigation costs below a licensing fee, and it forced Solaia to settle.77 In short, this group of target companies worked together to do what each was without the power to do individually – refuse the offer of a patent troll.

V. CONCLUSION

Patent trolls use the rights granted by the United States patent system to exact license payments from target manufacturing companies. However, target companies know the strategies that patent trolls use to pick targets and exert influence over those targets. With this knowledge, target companies can adopt

---

69 See DePass, supra note 39 (describing a patent troll’s request of a license fee of $600,000 when litigation would cost a target company $2 million).
70 See Bessen & Meurer, supra note 28 at 16 (“[E]ven a weak lawsuit may impose significant costs on the defendant, and the defendant might settle to avoid the nuisance of mounting a defense.”).
71 See DePass, supra note 39 (describing the approach of sharing litigation costs among several target companies to reduce each target’s cost of litigation to an amount less than the patent troll’s license demand).
72 See id. (describing the efforts to enlist several target companies to rebuff the licensing demands of a patent troll and proceed with litigation).
73 See generally id.
74 Id.
75 Id.
76 Id.
77 Id.
appropriate countermeasures that will make patent trolling less lucrative. In short, a target company can refuse the offer made by a patent troll if the target company proactively polices patents in its industry, licenses ancillary technologies, and teams with industry competitors to battle the patent troll.