

Patent Trolls Prey on SMEs

Rita S. Heimes¹

Introduction

Since the Federal Circuit confirmed the validity of patents on business methods in 1998², a new business model has evolved featuring the enforcement of broad software and e-commerce patents against online enterprises. In many cases, these patents are not owned or enforced by the original inventors. Instead, they form the basis for a unique business strategy built solely, by so-called “trolls,” around collecting license fees on a portfolio of patents covering ubiquitous uses of electronic communication and the Internet. Many small and medium enterprises (SMEs) have been forced to pay license fees from \$5,000 to \$30,000 simply to continue operating their online services. Some businesses have closed their doors rather than pay the fee or fight. At least one website developer was compelled to pay six figures to indemnify his clients from liability. In only a few cases have businesses banded together to contest the patents’ validity in court or in the USPTO.

Patent owners argue that they are heroes for agreeing to license their technologies rather than insisting on complete shut-down. They also argue there is no “problem” as patent ownership, enforcement, and licensing are perfectly legal. They are right about legality. But something seems unfair. Something about this practice feels extortionist, and the fact the US government tacitly sanctions such behavior through its patent and legal systems adds bitterness to the pill.

Software and “E-Commerce” Patents

According to David Martin of M-Cam, Inc., “If you’re selling online, at the most recent count there are 4,319 patents you could be violating... If you also planned to advertise, receive payments for or plan shipments of your goods, you would need to be concerned about approximately 11,000 [patents].”³

Although software initially was considered not patentable subject matter, court decisions in the early 80s and mid-90s opened the door for patents on computer-related technologies, including functionality driven by software. The number of patents granted in 2001 was nearly double the number granted 20 years earlier. And the relative share of software patents has climbed in that time from 2 percent of all patents to nearly 15 percent.⁴

¹ Director, Center for Law & Innovation, University of Maine School of Law.

² *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998).

³ David Streitfeld, *E-Commerce Battles ‘Me’- Commerce*, LA Times, Feb. 8, 2003, available at: <http://www.frommeyer.com/news-20.html> (quoting David E. Martin, CEO of risk-management firm specializing in patents). One website collected several examples: <http://webshop.ffii.org/>.

⁴ James Bessen and Robert Hunt, *The Software Patent Experiment* at 4-5, available at <http://www.researchoninnovation.org/softpat.pdf> (forthcoming in Conference Proceedings, “Patents, Innovation and Economic Performance,” OECD, April, 2003).

The dot-com boom of the mid- to late-90s also played a factor in the growth of patent applications on Internet-related functionalities. Even though many of the original owners of these patents are no longer in business, their patents may have been or may now be available for sale from the owner or its bankruptcy estate.

Challenging such patents for lack of novelty or obviousness has proved difficult. Software tools by design solve common problems. Many computer engineers simply wrote code to create the tools but had no reason to publish it. Consequently, prior art on software and e-commerce functionality patents is difficult to discover, even if the patent claims appear to disclose obvious or non-innovative outcomes.

Trolling

Shortly after the dot-com bust, businesses were formed to take advantage of the vast number and vast scope of patents issued on software and Internet-based functions. Massive patent portfolios were seen as revenue opportunities by the manufacturing firms that had acquired them, and start-ups with no manufacturing or sales capacity saw an opportunity. These new firms, created to exploit broad computer-related patents, have been dubbed “trolls.”⁵

Only a few examples of trolling have been widely publicized, yet they evoke wide outrage and concern. One California company, Pangea Intellectual Properties (“PanIP”), claims its patent is infringed by websites that process financial information that customers enter online. PanIP has sent letters to hundreds of small businesses seeking licensing fees of \$25,000 on average.⁶ Some letters reportedly demanded as much as \$30,000 but later requests were as low as \$10,000 and rumors are that the company accepted as little as \$5,000.⁷ Many companies who failed to pay the fees faced costly litigation. Most recent figures show that PanIP sued 40 small Web sites in 2002. Although a majority of the defendants settled, 16 banded together in a joint defense group and successfully convinced PanIP to drop the lawsuits.

A Chicago-based company called Divine, Inc. asserted that its patents have broad claims covering the process by which buyers purchase products online and the use of virtual online shopping cart systems.⁸ Divine reportedly sought approximately \$20,000

⁵ Bruce Perens calls them “patent parasites.” See Perens, *The Problem of Software Patents*, available at <http://perens.com/Articles/PatentFarming.html#1>. Note that the term has been applied to aggressive patent acquisition and enforcement individuals and firms in fields other than software and e-commerce as well such as Ronald Katz, holder of over 40 patents on computer telephony. See Eric W. Pfeiffer, *Setting Patent Traps*, *Forbes.com*, June 2002, available at <http://www.forbes.com/asap/2002/0624/065.html>.

⁶ See Brenda Sandburg, *Battling the Patent Trolls*, *The Recorder*, July 30, 2001, available at <http://www.law.com>. See also *Nightmare on E-Commerce Street*, Green Sheet, available at <http://www.greensheet.com/PriorIssues-/020602-/020602.html>.

⁷ Jon Van, *E-Commerce Patent Threat*, *Chicago Tribune*, January 13, 2003.

⁸ See *Getting Inside Online Shopping Carts*, available at: <http://www.thinkavenue.com/articles/sales/article06.htm>. Online shopping cart systems are a convenient means by which online shoppers can select products that they would like to purchase. *Id.* Just as customers hold items in traditional shopping carts while browsing in actual stores, online shopping carts allow visitors to add or remove items before making

for a lifetime license, and convinced at least 150 small businesses to buy one. At least 15 companies who balked faced lawsuits in Chicago. According to a *Los Angeles Times* report, a website developer settled with Divine for over six figures to protect his clients from Divine's lawsuits.⁹

Perhaps the most notorious troll is Acacia Media Technologies ("Acacia"), which insists that it holds patent rights to multiple e-commerce technologies, including the transmission of compressed video and music content over the internet.¹⁰ As a New York Times article noted:

Imagine being able to set up a tollbooth on the Internet. Now imagine collecting a small fee every time anyone in the United States clicked on the Web to watch a video of a car advertisement, to listen to an audio clip of a garage band or to review an updated credit card statement. Sound far-fetched? Acacia Research Corporation ... has a portfolio of patents that, it claims, allows it to do exactly that.¹¹

The same article reported that in 2004 alone Acacia Research, which formed in 1992 as a venture capital firm financing biotechnology and later acquired a substantial information technology patent portfolio, "is expected to receive \$2 million to \$3 million in royalties for the streaming media patents from 169 licensing agreements."¹² A September 2004 article reported that Acacia had, over the previous few weeks, sent another 100 letters to colleges asking them to pay a licensing fee approximating \$5000 per year for the right to continue distance education services.¹³

It is not clear how Acacia Research arrives at its royalty rate, nor is it possible to determine whether the company could earn a similar amount if it were making and selling streaming media products which, based on the patent claims, the letter recipients allegedly infringe. The bottom line is that Acacia doesn't make or sell such products; it simply owns the right to stop others from using the patented technology, a right granted by the U.S. government in the name of encouraging innovation.

a final purchase. *Id.* Online shopping carts are superior to traditional carts, however, in that they can tally up costs, calculate taxes and other costs and provide the shopper with a secure way to validate their credit card payments. *Id.* See also *E-Commerce Patents*, available at: <http://www.chillingeffects.org.ecom/> (setting forth specifics on e-commerce patents, including those owned by Divine, Inc.).

⁹ Streitfield, *supra*, n. 1.

¹⁰ See John Borland, *Streaming Patent Claims Go to Court*, available at: http://msnbc-cnet.com.com/2102-1023_3-984698.html?tag=st_util_print (discussing Acacia's claims to "virtually all on-demand transmissions of compressed audio and video). Acacia believes that the patents it owns are broad enough to affect any company that utilizes streaming audio or video online. *Id.* See also *Video Streaming*, available at: http://www.mediaeditpro.com/psjs_faqs/10219800.shtml#10210144. Streaming audio or video is sound or video that is transferred over the Internet by means of a modem or broadband connection. *Id.* Sound and picture data "stream" from a server computer to the recipient's computer and enable the receiver to hear or view the digital "bits" in real time, without having to download all of the content before playing it. *Id.*

¹¹ Teresa Riordan, *Patents, A patent owner claims to be owed royalties on much of the Internet's media content.*, New York Times, Monday, August 16, 2004 at C6.

¹² *Id.* See also Fight the Patent.com, <http://www.fightthepatent.com/v2/Acacia-FAQ.html>.

¹³ Andrea Foster, *Colleges Join Forces to Fight Company's Patent Claims to Certain Online Audio and Video Technology*, The Chronicle of Higher Education, September 3, 2004.

InternetAd Systems likewise makes no products and offers no services. Instead, its business model is patent enforcement. The recently-formed patent enforcement firm began systematically seeking licenses from websites posting advertisements, based on patents owned by its client, David Judson. Judson's patents allegedly broadly cover methods of interstitial Web advertising which include, according to InternetAd Systems, messages that appear before or behind Web sites such as, potentially, pop-up ads.¹⁴ After suing ESPN, The New York Times Co. and Travelocity.com for allegedly infringing its patents, InternetAd Systems began targeting other web site operators whose sites featured pop-up and pop-under ads seeking, according to one source, up to 5 percent of Internet ad sales as a royalty for using the patented technology. InternetAd Systems was formed by TechSearch specifically for the purpose of pursuing revenue from enforcing the online advertising patents. TechSearch's patent action against Intel inspired the first use of the term "patent troll," based on the firm's attempt to recover around \$500 million from Intel for allegedly infringing a patent TechSearch purchased from another company.¹⁵

From a business perspective, the theory is simple. Companies "harvest patents" and then send letters to internet businesses who use the patented technology by virtue of conducting business online.¹⁶ The online businesses are told that they can either shut down their websites and stop using the technology or pursue their online livelihoods and agree to pay the patent holder a licensing fee.¹⁷ Businesses that fail to heed the warning and continue to operate online without obtaining a license are apt to be sued for patent infringement, typically in a distant and inconvenient forum.¹⁸

Abusing the System

Patents purchased by "trolls" solely as a means to generate revenue through aggressive licensing are not being used in a manner consistent with their underlying purpose. The patent grant was intended, in part, to reward an inventor for the expense and creativity of ingenuity by providing him with an opportunity to recover his sunk research and development costs through holding a monopoly to produce and sell the invention for a limited time. Society benefits by gaining access to the innovation and also from its disclosure in the publication process.

¹⁴ Stephanie Olsen, Patent Owner Stakes Claim in Net Ad Suit (January 7, 2004, CNet News.com) available at http://news.com.com/2100-1024_3-5136909.html?tag=nefd_top

¹⁵ *Id.*

¹⁶ Davidson, *supra* note 5, at 1B (stating companies' conduct is akin to "harvest(ing)" of patents). *See also* Stephen Lesavich, *Patent Enforcement: Extortion, Shakedown, Blackmail or the American Way?*, 2003, at 5, available at: <http://www.hightech-iplaw/leswibar2003.pdf> (outlining strategies being used to enforce patents).

¹⁷ *See* Lesavich, *supra* note 13 at 5 (providing brief overview of how companies enforce their patent rights).

¹⁸ *Id.*

Patent trolls invent nothing and produce nothing. They do not contribute innovation to society. Rather, they exploit flaws in the patent system¹⁹ by purchasing excessively broad and questionable patents on ubiquitous software and e-commerce technologies, and demanding payment from many who use them. They give nothing to the economy or society; they only take for themselves.

Trolls tend to target e-retailers who are rarely competitors of the patent holders – indeed they are rarely competitors of each other. Instead, they tend to be companies engaged in a myriad of enterprises that do *not* involve the practice of creating or selling e-commerce functionality or software. They are end users of the patented technology. Ironically they have become vulnerable to such actions primarily because they do business online and are thereby more visible and easily located.

The business nature of the typical troll target has several significant consequences. For instance, one of the trends in software patents is the acquisition of large patent portfolios as a defensive measure. A firm threatened with patent infringement may have a patent of its own to show the aggressor, thereby reaching a cross-licensing settlement that costs little to either party. In the trolling environment, this defensive strategy is ineffective. Not only are the parties targeted by the trolls unlikely to have patents of their own, but as the trolls are not themselves producing anything they are not likely to infringe any patents.

In addition, because troll targets are unlikely to have experience owning software and business method patents, let alone other patents, a patent infringement claim is incredibly intimidating. A quick check with the company's local attorney will reveal that defending a patent infringement claim can cost a firm hundreds of thousands if not millions of dollars, more than the annual revenue of most of these small businesses. Indeed, the American Intellectual Property Law Association estimates that patent litigation costs each party approximately \$3 million dollars to prosecute or defend.²⁰ In most cases then, firms feel compelled to settle rather than fight. Perhaps the only affordable way to litigate the infringement claims is as a joint defense group.²¹ Because the trolls target entities in different fields of business, however, the targets often have a difficult time finding out about each other and banding together is rare.

In a few cases, small businesses have set up websites as a means to publicize the patent owners' actions and seek to form communities to defend against the infringement claims. The most successful of these ventures, to date, was the PanIP defendant group whose website, youmaybenext.com, served as a critical source for gathering and informing businesses facing PanIP's patent infringement threat. Universities and

¹⁹ The obviousness standard, for example, has been significantly eroded in recent times. See, e.g., Glenn S. Lunney, Jr., *E-Obviousness*, Michigan Telecommunications and Technology Law Rev. V. 7 (2001) at 363-421, available at http://www.researchoninnovation.org/tiip/archive/2002_2_a.htm .

²⁰ See Perens, *supra* n.4, quoting 2003 Economic Survey, American Intellectual Property Law Association.

²¹ According to John Hangartner, the lawyer for the PanIP joint defense group, the only defense is for small firms to get together to share litigation costs. "You need a leader who is willing to organize the group and keep it together. We need to convince people that there is an alternative to writing this check." Bob Sullivan, MSNBC.com, April 30, 2004 (quoting John Hangartner).

colleges threatened by Acacia Research with infringement claims targeting their distance learning activities have begun group discussions about joint defense methods.²² Divine's targets attempted a similar feat, establishing a website at divineintervention.com, although this effort appears not to have garnered much support.

Defendants in the same industry who face infringement suits from Acacia, such as the adult entertainment industry or universities, may have an easier time cooperating even though they typically compete because they are aware of each other and tend to be accustomed to gathering at the same conferences or otherwise communicating through similar channels. Those in unrelated fields, however, rarely have the opportunity or means by which to find each other.

To be sure, some trolls take on major corporations with the means to litigate. Intel, for example, first coined the "troll" term when it faced an action from a small company looking to capitalize on Intel's deep pockets. And Kodak may have become one of the first "Mega Trolls" through its litigation tactics against Sun Microsystems over the Java patents.²³ There's little comfort, however, in knowing that even large corporations must spend vast sums of money litigating over patents that under a more rational patent system would not have issued at all.

Solutions

The root problem lies in the issuance of these patents in the first place. Patent standards must be enhanced to prevent issuance of patents on business methods or software that describe ubiquitously used functions and are enforceable against myriad end users. Recent patent reform proposals do nothing to enhance pre-grant review, however.²⁴ So other solutions must be considered.

The American Bar Association and the American Intellectual Property Lawyers Association should take an official stance against their members taking trolls' cases and even – not unheard of – forming firms designed solely to profit from troll behavior.

Yet another approach is to make it harder for trolls to recover fees from their targets. It has been proposed that intellectual property insurance, and certainly general liability policies, expressly exclude coverage for the defense of troll-like litigation. How such events are defined and which insurers would favor such exclusions remains unknown. But the intent is to prevent trolls from pursuing deep insurance pockets and

²² See Andrea Foster, *Colleges Join Forces to Fight Company's Patent Claims to Certain Online Audio and Video Technology*, *The Chronicle of Higher Education*, September 3, 2004.

²³ See, e.g., Ben Rand, *Kodak Wins Java Suit*, *Democrat & Chronicle.com*, available at <http://www.democratandchronicle.com/apps/pbcs.dll/article?AID=/20041002/BUSINESS/410020333/1001>

²⁴ U.S. Congress has recently proposed a major overhaul of the patent system (H.R. 2795), the most dramatic reform of the U.S. patent system in decades. Some are concerned the revisions are too harsh and will impede innovation, as well as drive up the cost of access to the patent system. Others believe the revisions are a step in the right direction but do not go far enough. A good discussion can be found at http://patentlaw.typepad.com/patent/2005/06/patent_reform_p.html.

thereby deter the behavior. The short term effect, however, may be to leave certain insureds high and dry when faced with license fee requests on broad patents.

Some software vendors are building indemnification clauses into their standard end user licenses. Perhaps the most notable of these is Microsoft, which has acknowledged the prevalence of software patent litigation by including, for its major licensing clients, indemnification against software patent infringement claims.²⁵

Others are tackling the problem head-on by attacking the patents themselves through a process known as re-examination. Re-examination involves submitting a petition to the U.S. Patent Office that challenges a particular patent and lists a set of reasons why the patent is invalid, including examples of any prior art that the PTO might not have considered when it first granted the patent. One organization filing such requests is the Electronic Frontier Foundation, a non-profit public interest advocacy group employing attorneys, technologists and activists on civil rights and consumer issues in the digital age.²⁶ Another organization is the Public Patent Foundation, a nonprofit legal services organization working to protect the public from harms caused by wrongly-issued patents and unsound patent policy.²⁷

That trolls exist is not just a condemnation of the patent system, which takes a neutral stance on patent abuse even while passively allowing it. It is an unfortunate reflection on society and the willingness of some to profit without contributing positively to the economy or the common good, and indeed while preventing others from doing so.

²⁵ For a description of Microsoft's policy, see <http://www.microsoft.com/mscorp/execmail/>.

²⁶ See www.eff.org

²⁷ See www.pubbat.org.