Reforming Patents¹ Colleen Chien² 8/1 DRAFT IN PROGRESS – PLEASE DO NOT CITE [IMPROVED DRAFT WILL BE POSTED TO SSRN BY 8/3]

The patent system is in crisis. Though supposed to "promote the progress of [] the useful arts,"³ claims that the patent system is doing the opposite are mounting. The increasingly widespread,⁴ legal practice of buying or developing patents and using them for assertion and licensing, rather than for making products (patent "trolling") is typically blamed.

The growth of this business model has led mainstream press and lawmakers to compare patent enforcement to "shakedown" efforts by organized criminals.⁵ Patent trolling is now being seen as a business model to be outlawed, or at least regulated.⁶ Proposals to abolish trivial software patents have become mainstream,⁷ and patent holders have been excoriated in the halls of Congress for suing technology users like the Red Cross for soliciting charitable contributions on the Internet⁸ and going after companies like Costco, and McDonald's.⁹ Patent wars between competitors have raised a host of other issues. In 2012, Google spent \$12.5B to buy Motorola Mobility and its patents,¹⁰ and \$5.2B in 2011 on R&D.¹¹ In 2011, Apple spent \$2.4B on R&D¹²

² Assistant Professor, Santa Clara University School of Law.

¹ © 2012 Colleen V. Chien, colleenchien@gmail.com. Thanks to David Olson, Eric Goldman, Michael Risch, Mark Lemley, and David Schwartz, and participants at the 2012 Santa Fe IP Law Institute for their comments, Lex Machina, RPX, and Gazelle Technologies for sharing data, and to Gerald Wong, Lee-Ann Smith Freeman, Nicole Shanahan, and Kevin Isaacson for their excellent research assistance.

³ US Constitution, Section 8, Clause 8

⁴ Colleen Chien, NPEs and the ND California, Address at the Northern District of California Judicial Conference 9 (April 26, 2012), (reporting data provided by RPX Corp. that indicates that 55% of new suits from January 1, 2012 to April 8, 2012 have been brought by NPEs)

⁵ See, e.g. http://www.law360.com/ip/articles/360428?nl pk=bbc3d26f-4bfd-4165-97b0-

²²⁶¹²⁵cbf024&utm_source=newsletter&utm_medium=email&utm_campaign=ip (quoting Rep. Zoe Lofgren as referring to patent enforcement as a "shakedown situation."), remarks of Chris Sacca in *This American Life*, Episode 441: When Patents Attack! transcript available at <u>http://www.thisamericanlife.org/radio-archives/episode/441/transcript</u>

⁶ Introductory remarks of Representative Goodlatte, Hearing on the ITC and Patent Disputes before the House of Representatives Judiciary Committee Intellectual Property, Competition, and the Internet Subcommittee. July 18, 2012 <add link to transcript when available> <add parenthetical re: same>

⁷ See, e.g. Oversight of the United States Patent and Trademark Office: Implementation of the Leahy-Smith America Invents Act and International Harmonization Efforts, Comments of Sen. Dianne Feinstein, June 20, 2012 <add link, parenthetical to same> ⁸ 157 CONC DEC 114400 (10) to a single Constant of Sen. Constant of Sen. Dianne Feinstein, June 20, 2012 <add link, parenthetical to same>

⁸ 157 CONG. REC. H4480, H4496 (Statement of Rep. Crowley) (legislative history in the House of the America Invents Act), *available at* http://www.uspto.gov/aia_implementation/20110623-debate_hr_1249_h4480-h4505.pdf. (hereinafter referred to "House AIA History.") Ziarno v. Am. Red Cross, No. 99 C 3430 (N.D. Ill. June 28, 2001). ⁹ House AIA History, supra note _____ at H4496 (statement of Rep. Grimm). *See, e.g.*, Kelora Systems, LLC v. Target Corporation et al., No. 4:2011cv01548 (Costco); GeoTag Inc v. Starbucks Corp et al., No. 2:2010cv00572 (McDonald's).

¹⁰ Google Official Blog, We've acquired Motorola Mobility, http://googleblog.blogspot.com/2012/05/weveacquired-motorola-mobility.html (last visited May 24, 2012); Jenna Wortham, Google Closes \$12.5 Billion Deal to Buy Motorola Mobility, http://bits.blogs.nytimes.com/2012/05/22/google-closes-12-5-billion-deal-to-buy-motorolamobility/ (last visited May 24, 2012). Google has since said that of the \$12.5B, \$5.5were for patents, which is still a staggering sum. http://www.fiercewireless.com/story/google-motorolas-patents-worth-55b/2012-07-25

but contributed more, approximately \$2.6B, to a single transaction to buy patents from Nortel.¹³

The patent system, it seems, has hit a historic low, at least in the public eye.

Yet discontent with patents is nothing new. In 2006, Justices of the Supreme Court criticized the use of patents "to charge exorbitant fees" of productive companies.¹⁴ In 1994, at hearings held by the Patent and Trademark Office, software patents were described by a startup executive as "defensive and an infuriating waste of our technical talent and financial resources."¹⁵ Most programmers that testified about software patents testified against them.¹⁶ In 1967, a Presidential Commission opposed granting software patents because of the PTO's inability to vet them.¹⁷

Fears that patents are hurting, rather than helping, innovation go back further. In 1883, the Supreme Court railed against "speculative schemers who make it their business to watch the advancing wave of improvement and [] lay a heavy tax."¹⁸ Five years before that, Senator Christiancy complained to Congress about "patent-sharks [who][] procure an assignment of [a][] useless patent, and at once proceed to levy black-mail [] upon any man who has ever manufactured or sold, or even used, the later and valuable invention; and hundred[s], at least, among the innocent users, choose to compromise rather than run the risk of ruin from lawsuits; [] millions are thus filched and extorted from the people every year."¹⁹ In 1836, the Ruggles Report

http://www.sec.gov/Archives/edgar/data/320193/000119312511282113/d220209d10k.htm (reporting an R&D expenditure of \$2.4B in fiscal year 2011 (ending September 30, 2011)).

http://www.sec.gov/Archives/edgar/data/320193/000119312511192493/d10q.htm ("On June 27, 2011, the Company, as part of a consortium, participated in the acquisition of Nortel's patent portfolio for an overall purchase price of \$4.5 billion, of which the Company's contribution will be approximately \$2.6 billion.").

 ¹⁵ UNITED STATES PATENT AND TRADEMARK OFFICE, PUBLIC HEARING ON USE OF THE PATENT SYSTEM TO PROTECT SOFTWARE-RELATED INVENTIONS AT SAN JOSE, CALIFORNIA -- JANUARY 26-27, 1994, 48 (1994), available at: http://www.uspto.gov/web/offices/com/hearings/software/sanjose/sjhrng.pdf [hereinafter SAN JOSE HEARING].
 ¹⁶ UNITED STATES PATENT AND TRADEMARK OFFICE, PUBLIC HEARING ON USE OF THE PATENT SYSTEM TO PROTECT SOFTWARE-RELATED INVENTIONS AT ARLINGTON, VIRGINIA -- FEBRUARY 10-11, 1994 (1994), available at: http://www.uspto.gov/web/offices/com/hearings/software/arlington/vahrng.pdf [hereinafter VIRGINIA HEARING] [the SAN JOSE HEARING and the VIRGINIA HEARING will be referred to collectively as SOFTWARE PATENT HEARINGS], at 90-91. (Commissioner Bruce Lehmann: "There is no question about it that the lawyers seem to very much in favor of patent protection. Companies tend to be somewhat split, and programmers who've testified, though not all, a majority of them have testified against it." Accord independent analysis "SW Patent Hearings Sorted.xls" (finding that only 2 out 7 engineers and none of the programming based non-profit testified in favor of software protection)

¹¹ Google, Inc., Annual Report (Form 10-K), (Jan 26, 2012), available at

http://www.sec.gov/Archives/edgar/data/1288776/000119312512025336/d260164d10k.htm (reporting an R&D expenditure of \$5.2B in 2011). [update with 2012 data if available pre-publication]

¹² Apple, Inc., Annual Report (Form 10-K), (Oct. 26, 2011), available at

¹³ Apple, Inc., Quarterly Report (Form 10-Q), (July 20, 2011), available at

¹⁴ eBay Inc. v. MercExchange, L.L.C. 547 U.S. 388, 396, 126 S.Ct. 1837, 1842 (2006) (Kennedy concurrence (joined by Justices Stevens, Souter, and Breyer)).

protection) ¹⁷ THE PRESIDENT'S COMMISSION ON THE PATENT SYSTEM, "TO PROMOTE THE PROGRESS OF ... USEFUL ARTS, at 21 (1966) ("The Patent Office now cannot examine applications for programs because of the lack of a classification technique and the requisite search files. Even if these were available, reliable searches would not be feasible or economic because of the tremendous amount of prior art being generated. Without this search, the patenting of programs would be tantamount to mere registration.")

¹⁸ Atlantic Works v. Brady, 107 U.S. 192, 200, 2 S.Ct. 225, 231 (1883).

¹⁹ 8 CONG. REC. 307-308 (1878)(Statement of Sen. Christancy).

documented how lax patent standards, "encourag[ed] fraudulent speculators in patent rights, deluging the entire country with worthless monopolies, and laying the foundation for endless litigation."²⁰ American patent nuisance lawsuits date back to the early 1790s.²¹ In 1601, excessive complaints were made about the "royal monopolies" of patents in the British House of Commons.²²

In both modern and historical times, large numbers of colorably infringed patents, oftentimes held by patent outsiders that do not make products, have made users and makers of technology vulnerable to patent demands. Some of the demands have been brought by trolls seeking settlements driven by the avoidance of legal remedies and fees rather than the economic value of the patent. All of them have vexed their targets.

Thus, many of the problems, real or perceived, that currently confront the patent system are familiar and well-known. Less well-known, however, is that many of the very reforms which are now being proposed have been called for and in many cases tried before, in response to both similar and different conditions.

For example, those dissatisfied with the current patent system demand creation of an independent inventor defense,²³ shifting costs to losing plaintiffs,²⁴ and the end of software patents.²⁵ Not for the first time. Beginning in the 1880s, farmer groups lobbied for the creation of an innocent user defense, fee-shifting provisions that would deter frivolous claims, and eliminating certain patents, all in response to demands made by patent-holders of agrarian patents.²⁶

Patent reformers now press for, among other things, reducing damages²⁷ and increasing the fees patent owners must pay to keep their patents active.²⁸ Likewise, railroad companies who were sued en masse by patent purchasers around the turn of the century pushed to change how damages were calculated and impose renewal fees on granted patents.²¹

Recent history is also instructive. In the past decade, Congress and the PTO have engaged

²⁰ Senate Report Accompanying Senate Bill No. 239, 24th Cong., 1st Sess. (April 28, 1836)

²¹ According to Robert Merges, nuisance patent lawsuits in the U.S. date back to the late 1790s, when patents were in effect registered rather than examined. Robert P. Merges, The Trouble With Trolls: Innovation, Rent-Seeking, And Patent Law Reform, 24 BERKELEY TECH. L.J. 1583, 1592 (2009). Nuisance lawsuits in general date back to Justinian times according to Werner Pfennigstorf, The European Experience With Attorney Fee Shifting, 47 LAW & CONTEMP. PROBS. 37 (1984) (describing the origins of fee-shifting rules in Europe as frivolous litigation in the Justinian era, around 400 A.D.).

²² Thomas B. Nachbar, Monopoly, Mercantilism, and Intellectual Property 91 Va. L. Rev. 1313 (2005) at *20-21.

²³ Described infra, Section ____.

²⁴ Described infra, Section .

²⁵ Described infra, Section ____.

 ²⁶ Described infra, Section _____.
 ²⁷ See, e.g., FEDERAL TRADE COMMISSION, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION Chapter 4 (2011) (describing and advocating for the continued evolution of damages law in order for the judicial remedy "to replicate the market reward")

²⁸ See, e.g., proposals from Gerard Magliocca, Blackberries and Barnyards: Patent Trolls and the Perils of Innovation, 82 NOTRE DAME L. REV. 1809, 1813, 1836-37 (2007) (describing increased maintenance fees as a "dormancy tax") and others, infra at Section _____.

²⁹ Described infra, Section ___.

in extensive regulation of business method patents.³⁰The Courts and Congress have changed nearly every aspect of patent law – its remedies, procedure, and substance.³¹

Some of these efforts have worked, others have failed. But virtually every idea currently proposed has been tried before, in some version. Collectively, these efforts, and how they have fared, including why and how they have succeeded and failed, represent a rich data source of experiments to fix the patent system. Studying them provides a context for understanding the current situation, why certain proposals have failed, and which ones are likely to succeed. Upon reflection, they reveal the different roles institutions have played, in both initiating and implementing reform.

During this historic moment, what can be learned about the nature of the current technology patent crisis and how to resolve it? Based on the research described below regarding what has been tried, what has worked, and what hasn't, I believe, quite a lot. Pausing to reflect can help policymakers avoid the mistakes the past, illuminate the paths they should be exploring, and be mindful of current progress. The benefit of hindsight is substantial where, as here, there are strong parallels between the past and present.

The Federal Circuit's *State Street* decision confirmed the patentability of business method patents and was decided in 1998. The recent round of efforts to reform patents began in Congress around 2005 and culminated in the 2012 America Invents Act (AIA);³² court-led change has taken place in the meanwhile.³³ Reform efforts in both venues continues.³⁴

According to a recent account, the agrarian patent crisis started when functional design patents were created by the PTO and Congress around 1869.³⁵ It took about 30 years for this patent crisis to develop and resolve, through a combination of PTO and legislative acts.³⁶ There was a significant push for railroad patent reform around the same time. About twelve years passed between two seminal patent cases³⁷ that set and changed the balance of power involving disputes between railroads and the patent holders that demanded royalties from them.

To be sure, much has changed. In the late 1800s, the Patent Office played a substantive policy-making role,³⁸ the International Trade Commission (ITC) was not a major patent venue,³⁹

³³ Described infra, Section ___.

Brady, 107 U.S. 192 (1883), 199–200 (in dicta, condemning "speculative schemers" who used "patented monopolies[] to lay a heavy tax upon the industry of the country without contributing anything to the real advancement of the art.")

³⁸ Described, e.g. in Edward C. Walterscheid, To Promote the Progress of Useful Arts: American Patent Law and Administration, 1798-1836, at (1998)

³⁰ Described infra, Section ___.

³¹ Described infra at Section _____.

³² Matal (Part I), at 438.

³⁴ Described infra at Section _____.

³⁵ Described in Magliocca , Barnyards, supra note _____, and infra, Section____.

³⁶ Id.

³⁷ Sayles v. Chicago and NW Ry Co., 21 F. Cas. 600 (1871), aff'd by Railway Company v. Sayles, 99 U.S. 554, 556– 57 (1878) (affirming a pro-patentee doctrine for deciding damages, the doctrine of savings), and Atlantic Works v.

³⁹ Not until the ITC was modernized under the 1974 Trade Act did it assume this role. Described in Chien, *Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 WM. & Mary L. Rev. 63 (2008)

and competitors tended not to engage in sustained patent wars. There was no Federal Circuit.⁴⁰

But the similarities are striking. Each patent crisis evolved in part in response to the surge in patenting that accompanied an expanding part of the economy.⁴¹ Each generated many thoughtful, substantive proposals to change substantive law that were never enacted. They all generated great anxiety for a specific sector of the economy; the agrarian and railroad crises were resolved through changes to the patent system that largely left other sectors of the economy intact. Much progress was achieved outside the halls of Congress, and in the courts, the PTO, and through self-help. Applying a lens that is informed by these historical lessons provides a different and constructive view of modern-day reforms. It casts skepticism on broad-based reforms that are popular but hard to tailor narrowly. It highlights both the need for judicial and legislative reform and the importance of self-help, including coordination to capture economies of scale, lobbying, and taking advantage of the laws, to advance the interests of consumers and companies.

Section I describes three features commonly associated with the current and past patent crises: (1) too many trivial patents, held by (2) specialized patent plaintiffs that bring (3) cases for their nuisance value. Section II summarizes the development and resolution of the agrarian and railroad patent crises. Section III discusses several groups of current proposals, including: (1) reducing the number of software patents including by abolishing them, (2) reducing the stakes including through an independent invention defense, and (3) changing the economics of patent litigation, including through fee-shifting, as well as (4) self-help attempts; their historical counterparts, and what past experiences can teach.

Section I: What's the Problem?

The use of patents to extract settlements or exclude competitors is perfectly legal and nothing new. So is the opportunistic use of patents to accomplish the same aims. Indeed, Robert Merges cites as historical examples of patent rent-seeking: nuisance suits based on patents after the 1793 patent act, agricultural patents in the 1860s and 1870s,⁴² railroad patents of around the same time, and automobile patents in the early 1900s.⁴³ The rent-seeking comes in the pattern of assertion – often through the use of older patents,⁴⁴ in cases in which copying is not alleged, and based on a technology in which the defendant has already invested considerable resources thereby maximizing holdup. Today's smartphone patent "wars" have been predated by patent "wars" over airplanes,⁴⁵ diapers,⁴⁶ and sewing machines.⁴⁷ Others have compared the current

http://www.centennialofflight.gov/essay/Wright Bros/Patent Battles/WR12.htm

⁴⁰ The Federal Circuit was created under the Federal Courts Improvement Act of 1982, which merged the United States Court of Customs and Patent Appeals and the appellate division of the United States Court of Claims. ⁴¹ Described infra, at note _____. [reference the patent numbers and description re: name] ⁴² Gerard Magliocca's paper, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE

DAME L. REV. 1809 (2007) provides an excellent recent description, drawing upon historical and primary accounts. ⁴³ Merges, supra note____, at 1592-1596.

⁴⁴ Cf Hayter, supra note _____, at 62-63 (describing the practice of agrarian patent rings of buying up "old claims, or 'bottom' patent," getting them reissued or continued, and asserting them en masse), Congressional Testimony infra (describing same in the railroad context), and Brian Love, supra note (same). note ⁴⁵ Of the early 1900s, described, e.g. in

⁴⁶ Of the 1980s, described, e.g. in Fred Warshofsky, THE PATENT WARS (Wiley & Sons 1994), pp. 18-28 (also discussing the microprocessor patent wars of

disputes over technology patents to historical disputes over telegraph, aircraft, semiconductors, radio, and 3G cell phone patents.⁴⁸

Some of these comparisons are inapposite. Smartphone technology, for example is covered by an estimated 250,000 patents⁴⁹ and the subject of numerous court battles between a diverse set of practicing companies, non-practicing entities, competitors, and others around the world, with diverse stakes and business models.⁵⁰ The sewing machine patent wars, in contrast, resolved with a patent pool involving just nine patents and four members.⁵¹ The historical airplane and automobile patent incidents involved single patent "extorters," namely the Wright Brothers and George Selden, and their tactics to have their patents extended and applied broadly.⁵²

Yet two historical precedents have much to offer. In the late 1800's, according to Congressional record and historical accounts, the patenting of agricultural tools produced a "flood" of patents until "practically every device or tool that the farmer had" was covered by a patent. ⁵³ Patents covered "the most insignificant things" and there were "so many patents to different people on the same article" that "farmers had neither the time, money, nor skill 'to wade through the vast labyrinth" of patent rights.⁵⁴ Patentees sold their patents to patent

more than 250,000 active patents relevant to today's smartphones"). ⁵⁰ See, e.g., Layne-Farrar, Anne, *The Brothers Grimm Book of Business Models: A Survey of Literature and Developments in Patent Acquisition and Litigation* (March 21, 2012), *available at* SSRN:

⁵⁴ *Id.*, at 63.

⁴⁷ Petra Moser and Ryan Lampe, *Do patent pools encourage innovation? Evidence from the 19th-century sewing machine industry* (NBER 2009), (describing the Sewing Machine "Wars" of 1846-1856), at p.7 available at http://www.nber.org/papers/w15061

⁴⁸ See presentation of David Kappos, at Princeton Conference, Patent Success or Failure

https://citp.princeton.edu/event/patent-success-or-failure/ <the presos aren't posted yet> - Still not avail as of 5/27/2012

⁴⁹ RPX Corp., Registration Statement (Form S-1), at 59 (Sept. 2, 2011), *available at* http://www.sec.gov/Archives/ edgar/data/1509432/000119312511240287/ds1.htm ("Based on our research, we believe there are more than 250 000 active patents relevant to today's smartphones ")

http://ssrn.com/abstract=2030323 or http://dx.doi.org/10.2139/ssrn.2030323 (listing a variety of business models and 24 disputes brought in 4Q2011-1Q2012 in a variety of venues); Florian Mueller, List of 50+ Apple-Samsung lawsuits in 10 countries, FOSS PATENTS, Apr. 28, 2012, http://www.fosspatents.com/2012/04/list-of-50-apple-samsung-lawsuits-in-10.html (listing 50+ suits between Samsung and Apple alone, in multiple venues) (last visited May, 27, 2012). Martin Kenney & Bryan Pon, *Structuring the Smarphone Industry: Is the Mobile Internet OS Platform Key*?, 11 J. Ind. Compet. & Trade 239 (2011) (describing the number of players in the smartphone industry and the diversity of their stakes).

⁵¹Ryan Lampe & Petra Moser, *Do Patent Pools Encourage Innovation? Evidence from the 19th-Century Sewing Machine Industry* 7, Appendix A (June 8, 2010), *available at* SSRN: http://ssrn.com/abstract=1308997 or http://dx.doi.org/10.2139/ssrn.1308997 (Singer, Wheeler & Wilson, Grover & Baker, and Elias Howe were its members).

⁵² See Robert P. Merges & Richard R. Nelson, On the Complex Economics of Patent Scope, 90 COLUM. L. REV. 839, 889–90 (1990). Similarly, the "Telephone patent war" that some have tried to compare to the current situation (Kenneth Lustig, *No, the Patent System is Not Broken*, FORBES LEADERSHIP FORUM, Feb. 9, 2012,

http://www.forbes.com/sites/forbesleadershipforum/2012/02/09/no-the-patent-system-is-not-broken/ (last visited May 30, 2012)) focused on two patents held by inventor Alexander Graham Bell. *See* Overland Telephone Company v. American Bell Telephone Company, 126 U.S. 1 (1888). In contrast to reforming the patent system generally, patent "reform" efforts were focused on addressing problematic patents specifically, for example by opposing extensions to their terms.

⁵³ Earl W. Hayter, *The Patent System and Agrarian Discontent, 1875-1888,* 34 MISS. VALLEY HIST'L. REV. 1 (1947) 59, 61.

"royalty agents" that would demand fees from farmers,⁵⁵ who, due to their lack of experience with patent law, financing, and access to skillful representation⁵⁶ were easier to collect from than manufacturers and more willing to pay royalty fees to escape costly litigation.⁵⁷ Patents were also used anticompetitively by patent "rings," groups of manufacturers that controlled various essential articles and used various tactics to get their patents reissued with broadened scope.⁵⁸ They used their patents to "drive out competitors by compelling them either to sell or assign their patents or pay a royalty fee for every article manufactured."59

During the same era, according to the chief historian of this period in patent history Steve Usselman, the railroad industry was "besieged" by lawsuits brought by "avaricious patent agents"⁶⁰ who bought up patents.⁶¹ Railroad managers themselves initially sought few patents, not because they did not innovate but because the industry was "so dynamic that railroad managers assumed they would profit more from the open exchange of technical information than they would by securing exclusive rights to specific inventions."⁶² This led to extensive infringement, sometimes willful.⁶³ Companies were taken by surprise as the increasing complexity of railroad technology exposed them to lawsuits over their use of technology "that they had assumed either had become generic or were covered by patents for which they had paid a nominal fee."64

The suits also had similar motivations. Modern patent assertion entities serve a market need by overcoming the obstacles to patent monetization and providing a "path to liquidity" for invention assets.⁶⁵ Likewise, the growth in railroad litigation was created in part by the challenges faced by independent inventors in getting support for their inventions, due to the sophistication and built-in advantages of the railroads. For example, "[i]f railroad managers

⁶⁰ Steven W. Usselman and Richard R. John, Patent Politics: Intellectual Property, the Railroad Industry, and

⁵⁵ *Id.*, at 61.

⁵⁶ *Id.*, at 64.

⁵⁷ *Id.*, at 61.

⁵⁸ Id. at 62 (citing Arguments before the Committee on Patents, Senate Miscellaneous Documents, No. 50, 45 Cong., 2 Sess., 362-63; Prairie Farmer, XLIV (1873), 297; Buck, Granger Movement, 118-19). ⁵⁹ *Id.*, at 63. Some farmers were subjected to multiple royalty demands on the same tool. *Id.*, at 65.

J. Policy Hist. 96, 99 (2006); STEVEN W. USSELMAN, REGULATING RAILROAD INNOVATION: the Problem of Monopoly, 18 BUSINESS, TECHNOLOGY, AND POLITICS IN AMERICA, 1840-1920, at 116 (2002) [hereinafter REGULATING RAILROAD] (describing the activities of patent dealers Chittenden and Sayles who bought up patents and sued a whole industry based on them in particular).

⁶¹ "There is now growing up a class of men in the country who, when they find an invention in successful use, go to the Patent Office and rake over all the patent files to see if they can find an old patent which will supersede the later successful on, and then buy it up for a mere nominal sum. After obtaining a reissue, if needed, they commence an onslaught on legitimate business." U.S. Senate, Arguments before the Committees on Patents of the Senate and the House of Representatives in Support of and Suggesting Amendments to Bills (S. 300 and H.R. 1612) to Amend the Statutes in Relation to Patents, and for Other Purposes, 45th Cong., 2d sess., miscellaneous document no. 50, 304 [hereinafter Arguments before the Committees] (statement of Mr. Hyde). But see Id. <what is this referring to? I assumed it is not the arguments, but Usselman's Regulating Railroad>, supra note , at 104-105 (describing patenting and assertion by independent inventors and outsiders as well).

 $^{^{62}}$ Id., at 104. While railroads did not compete on patents, they did compete on other aspects of their operations, including government-granted privileges such as particular rights of way.

⁶³ Id., at 106-107. ("[i]f a patentee asked for an unreasonable price or there was a dispute over priority between multiple patentees, the railroads were more than willing to refuse any fee and simply infringe the patent.") ⁶⁴ *Id.*, at 105.

⁶⁵ Described, e.g. in Chien, *Of Trolls*, supra note , at 108.

detected a conflict between two patented inventions, they might refuse to purchase either one, confident they could fend off an infringement suit by contending that the ownership of the product or process in question remained in dispute."⁶⁶

While distinct, the patent disputes over agrarian, railroad, and modern technology patents present a common story, that a practice and an industry has formed to exploit three basic facts:

1. Pervasive infringement of a large number of trivial patents

The patenting of incremental inventions, historically and recently, has led to inadvertent infringement across industries that make and use technology. There are now a growing number of software and computer patents.⁶⁷ Many cover small improvements to the basic building blocks of commerce. Individuals and companies have recently been sued over their use of social media,⁶⁸ internet solicitations,⁶⁹ and pop-up advertising.⁷⁰ A century ago, railroads were sued over paints, lubricants, office machinery, and electrical equipment.⁷¹ Basic farm tools were covered by numerous patents; according to a historical account, "there were as many as 20 patents on an ordinary coal stove, 647 on a corn planter, 378 on a corn sheller, and 6,211 on the different parts of a plow."⁷² The result in each case: pervasive and inadvertent infringement across businesses that make and use technology. The sheer number of patents has made certain market-based solutions, such as patent clearance⁷³ economically unfeasible.

Figure 1: 2001-2011 US Patent Software Applications (Keywords: "Computer" and "Software" in the Spec)

⁶⁶ Steven W. Usselman and Richard R. John, Patent Politics: Intellectual Property, the Railroad Industry, and

the Problem of Monopoly, 18 J. Policy Hist. 96, 105 (2006).

⁶⁷ For modern patent proliferation, see Figure 1 <under revision>. Historically: "By the end of the Civil War, the number of railroad-specific patents had increased from fifty per year to more than five hundred." Usselman and John, supra note ___, at 104. Hayter, supra note ___, at 61 (documenting the increase in agricultural patents from 400 in 1863 to 1800 in 1866).

⁶⁸ EveryMD v. Rick Santorum, Mitt Romney, Newt Gingrich, et al., No. CV12-01623 (C.D. Cal. filed Feb. 27,

^{2012),} available at http://www.patentlyo.com/files/everymdcomplaintasfiled022712-1.pdf.

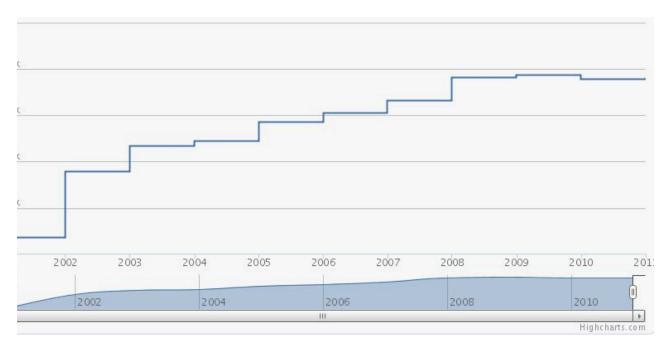
⁶⁹ Ziarno v. Am. Red Cross, No. 99 C 3430 (N.D. Ill. June 28, 2001).

⁷⁰ Stephanie Olsen, *Patent owner stakes claim in Net ad suit*, CNET NEWS, Jan. 7, 2004, http://news.cnet.com/2100-1024_3-5136909.html (last visited May 28, 2012).

⁷¹ Usselman and John, supra note ____, at 104.

⁷²See Hayter, supra note, _____, at 63, FN 13 ("It was claimed there were as many as 20 patents on an ordinary coal stove, 647 on a corn planter, 378 on a corn sheller, and 6,211 on the different parts of a plow.") (citing 8 CONG. REC. at 269, 307, 1372.)

⁷³ Described, e.g., in Chien, *Predicting Patent Litigation*, 90 Tex. L.Rev. 283 (2011). *See also* James Bessen & Michael J. Meurer, *Lessons for Patent Policy from Empirical Research on Patent Litigation*, 9 LEWIS & CLARK L. REV. 1 (2005).





2. Specialized Patent Plaintiffs

In both historical and contemporary times, patent plaintiffs have enjoyed the benefits of specialization. For example, patents have been transferred to outside entities that do not practice their patents and can't be countersued. Because suing on their own patents was expensive, agricultural inventors transferred them to "royalty agents," who split the proceeds from assertion with them.⁷⁴ This revenue-sharing model has been used by modern PAEs such as Acacia (ACTG)⁷⁵ that focus wholly on the monetization of patents rather than the commercialization of technology. Railroad suits were brought by inventors as well as "patent speculators."⁷⁶ In an incident eerily reminiscent of the public statement of embarrassment by a Yahoo! engineer that his former employer was suing Facebook in 2012,⁷⁷ a railroad company issued a "contrite" apology that its patent had fallen into the hands of a patent dealer, to those threatened with

⁷⁴ Hayter, supra note ____, at 61 ("They could either collect damages from producers for infringing their patents, which they seldom chose to do, for litigation with corporations was expensive, or they could take the other alternative and collect royalty fees from purchasers. Since these articles were purchased by farmers who were much easier to collect from than manufacturers, the royalty agents began to visit the rural areas during the period under discussion.").

⁷⁵ Acacia Research Group LLC, 2012 Presentation,

http://acaciatechnologies.com/ACTGPresentation1stQtr2012.pdf, p.5 (last visited May 28,2012) ("Acacia partners with patent owners (50/50)").

⁷⁶ U.S. Senate, "Arguments before the Committees on Patents of the Senate and the House of Representatives in Support of and Suggesting Amendments to Bills (S. 300 and H.R. 16I2) to Amend the Statutes in Relation to Patents, and for Other Purposes," 45th Cong., 2d sess., miscellaneous document no. 50, 79 (Mr. Hyde).

⁷⁷ Andy Baio, *A Patent Lie: How Yahoo Weaponized My Work*, WIRED EPICENTER, Mar. 13, 2012, http://www.wired.com/epicenter/2012/03/opinion-baio-yahoo-patent-lie/ (last visited May 28, 2012).

litigation over it, in 1869.78

Patent speculators have turned being out of the market into an advantage.⁷⁹ Unlike companies who sell products, these specialized plaintiffs are largely invulnerable to the counter accusations of infringement, distractions from the core business, and traditional reputational and brand damage. PAEs and patent speculators don't have to abide by industry norms which have traditionally favored patent stalemate rather than war.⁸⁰ Traditional obstacles to patent litigation – cost, fear of countersuit, disruption, and reputational harm – can be avoided by a 3rd party that is focused solely on patent assertion that can enjoy economies of scale⁸¹ and financing mechanisms⁸² built, for example, around contingency fee lawyers.⁸³ While practicing companies typically want freedom to operate, patent assertion entities enjoy freedom to litigate, and therefore gain leverage by pursuing high-stakes injunctions and damages.

When practicing companies sue competitors opportunistically, they also often have special advantages, for example "ultra powerful" standards essential patents. In the late 1800s, suits by George Westinghouse based on patents over his air-brakes, which quickly became an industry standard, "deeply troubled" policymakers.⁸⁴ The infringement may be unavoidable: recently, both houses of Congress held hearings addressing the potentially unfair use of patents essential to complying with a standard.⁸⁵

3. Settlements driven not by the economic value of the patent, but the cost of avoiding legal costs and remedies ("patent nuisance fee economics")

Historical and modern patentees have also relied on "patent nuisance fee economics," a term I use to describe the incentive that exists to assert patents not because they are economically

⁷⁸ REGULATING RAILROAD, supra note ___, at 116, FN 61 (had this transfer been avoided "he certainly would have granted permission to use the device without charge throughout the system").

⁷⁹ In other words, the business model of "Being Infringed" see Markus G. Reitzig, Joachim Henkel, and Christopher Heath, *On Sharks, Trolls, and Other Patent Animals - 'Being Infringed' as a Normatively Induced Innovation Exploitation* Strategy. Available at SSRN: http://ssrn.com/abstract=885914

⁸⁰ See Chien, *Arms Race*. (describing the historic patent peace that has prevented companies from driving each other out of business with patents, even though they probably could)

⁸¹ From Chien. Forbes (2011): ("They sue multiple defendants at the same time. They use the same patents over and over again. They show up in the same courtrooms, using the same set of counsel. Trolls capture economies of scale in litigation, and lower their committed capital by using contingent fee lawyers. Though trolls don't make anything, this may be their real "product:" a safer, cheaper way to monetize patents.")

⁸² *Id.* Chien. Forbes (2011) See also Tom Ewing. *Introducing the patent privateers*, IAM Magazine Jan/Feb 2011, at 31.

⁸³For a description of this phenomenon, see <u>http://dx.doi.org/10.2139/ssrn.1990588</u>, Schwartz, David L., The Rise of Contingent Fee Representation in Patent Litigation (March 23, 2012). Alabama Law Review, Forthcoming. Available at SSRN: http://ssrn.com/abstract=1990651

⁸⁴ Steven W. Usselman and Richard R. John, *Patent Politics: Intellectual Property, the Railroad Industry, and the Problem of Monopoly*, 18 J. Policy Hist. 96, 108 (2006). ("The public clamor for air brakes became intense, and legislation mandating their installation was seriously debated not only in several states but also in Congress. Seizing the moment, Westinghouse negotiated lucrative air-brake contracts with several large railroads, and sued others for patent infringement. Westinghouse's conduct deeply troubled [the Railroad Commissioner]."
⁸⁵ <u>http://www.leahy.senate.gov/press/leahy-chairs-senate-judiciary-committee-hearing-on-standard-essential-patents</u>,

⁸⁵ <u>http://www.leahy.senate.gov/press/leahy-chairs-senate-judiciary-committee-hearing-on-standard-essential-patents,</u> <u>http://judiciary.house.gov/hearings/Hearings%202012/hear_07182012.html</u>

valuable but because patent assertion inflicts a lot of costs, and therefore induces settlement.⁸⁶ According to such a model, money is paid to the patentee not in order to compensate for the patent's contribution but in order to avoid legal fees or the possibility of an injunction. If a lawsuit is threatened or filed, it's often cheaper to settle than pay litigation expenses, even if the case appears to be weak.⁸⁷ If the asserter has a large patent portfolio, the cost of evaluating it, even for the owner, has been described as a "a mind-boggling, budget-busting exercise to try to figure [] out with any degree of accuracy at all."88 By agreeing to settle, the painful exercise of determining on a patent-by-patent basis what products infringe what patent claims and their validity, as well as the appropriate royalty, as would a court would, can largely, though not completely, be avoided.

In the late 1800s, patent agents demanded payments from farmers for articles the farmers had purchased or made themselves.⁸⁹ Thousands of cases were filed on behalf of single patentees, in venues inconvenient for their targets. In one example, attorneys reportedly prepared for more than 4,000 cases in Iowa on behalf of a single patentee with the likely result that "unwary and unsuspecting farmers" would pay the nuisance fee rather than "be dragged one hundred fifty miles away from their homes, at great inconvenience and expense."90 Most farmers were too poor to mount any investigation or defense against the alleged patent rights,⁹¹ and usually settled.⁹²

"Cost of defense" tactics have been utilized recently as well. In Eon-Net LP v. Flagstar Bancorp,⁹³ the Federal Circuit affirmed an award of attorney's fees in a case that displayed "indicia of extortion" where a non-practicing entity filed a large number of cases in order to "exploit[] the high cost to defend complex litigation to extract a nuisance value settlement." Each complaint was followed by a "demand for a quick settlement at a price far lower than the cost of litigation... based on the defendant's annual sales: \$25,000 for sales less than \$3,000,000; \$50,000 for sales between \$3,000,000 and \$20,000,000; and \$75,000 for sales between \$20,000,000 and \$100,000,000."94 Judge Davis of the Eastern District of Texas has singled out

⁸⁷ Two excellent papers that discuss why and how IP lawyers bring cases even when they are weak are: Gallagher. William T., Trademark and Copyright Enforcement in the Shadow of IP Law (September 2, 2011). Santa Clara Computer and High Technology Law Journal, Vol. 28, 2012. Available at SSRN: http://ssrn.com/abstract=1990588 or http://dx.doi.org/10.2139/ssrn.1990588, Schwartz, David L., The Rise of Contingent Fee Representation in Patent Litigation (March 23, 2012). Alabama Law Review, Forthcoming. Available at SSRN:

⁸⁶Inspired by David Rosenberg & Steven Shavell, A Model in Which Suits Are Brought for Their. Nuisance Value, 5 Int'l Rev. L. & Econ. 3 (1985).

http://ssrn.com/abstract=1990651

⁸⁸ Competition and Intellectual Property Law and Policy in the Knowledge-BasedEconomy: Hearing Before the Fed. Trade Comm'n, supra note Error! Bookmark not defined., at 743 (statement of Fred Telecky, General Patent Counsel for Texas Instruments).

⁸⁹Hayter, supra note , at 65-66.

⁹⁰ Id. at 68 (describing Arguments before the Committee on Patents, Senate Miscellaneous Documents, No. 50, 45 Cong., 2 Sess., 362-63; Prairie Farmer, XLIV (1873), 297; Buck, Granger Movement, 118-19). ⁹¹ Magliocca, *Blackberries*, supra note ____, at 1824.

⁹² Id. at 1823-24 (citing 11 CONG. REC. 1973 (1881) (statement of Sen. Voorhees) ("The manufacturing company will stand on its legal rights and go into litigation quite as cheerfully as the other side, while the plain people of the country shrink from law, and justly so, as they would from contagion, small-pox, or any other great calamity.")). 93 Eon-Net LP v. Flagstar Bancorp, 653 F. 3d 1314 (Fed. Cir. 2011), available at

http://www.cafc.uscourts.gov/images/stories/opinions-orders/09-1308.pdf.

⁹⁴ *Id.* at 1326-1327.

"plaintiffs who file cases with extremely weak infringement positions in order to settle for less than the cost of defense and have no intention of taking the case to trial. Such a practice is an abuse of the judicial system and threatens the integrity of and respect for the courts."95

Section II: How Did the Crises Arise and Resolve in the Past?

How the Crises Arose

How did the historical crises arise? In the case of agrarian patents, according to a recent account, in 1869, the start of the agrarian patent crisis was the Patent Office's creation of a new kind of design patent that enabled applicants to protect incremental functional designs and codified by Congress the next year.⁹⁶ Contemporary accounts blamed the patent office and its "laxity in administering the law" and practice of granting patents on "trifling modifications...not entitled to protection."⁹⁷ By 1874, groups sympathetic to farmer's causes, the most prominent of which was the National Grange, called on Congress to change the law⁹⁸ as well publicized information about suits and tactics, tried to minimize the damage caused by particular patents, and educated farmers who were generally knew little about patent law.

Patent demands became so pervasive that in farmers found that they could not escape the patent system: "it is in our boots, it is in our clothes, it is in the tools we work with, in the buggy we ride in, in the harness on the horse, in the whip we strike him with. It is to be found in our fences, our gates, in our pumps, in our kitchen, in our food, and finally in our coffin."99

In the case of railroads, the "new economic order" brought by industrial development put pressure on many governmental institutions, including the patent system. The expanding economy generated a surge of patent activity that the patent office had a hard time keeping with and "significantly increasing the success rate of would-be patent holders." ¹⁰⁰ Similar things could be said of the digital revolution. The growing backlog has recently driven calls for more PTO fees to be allocated to hiring examiners, rather than diverted to other activities. Just as the large number of patent applications did in the late 1800s.¹⁰¹ Patent demands brought by practicing companies and patent outsiders alike and high-profile suits involving double-acting and air brakes, sleeper cars, and a variety of railroad safety equipment caused the railroads great anxiety and drove them to get organized.

⁹⁵ Raylon LLC v. Complus Data Innovations, et al., 6:09cv355, 356, 357 (E.D. Tex. Mar. 9, 2011). On the filing of weak cases in IP cases, see Gallagher, supra note ____, at ____. But see Schwartz, *Contingent Litigation* supra note _____, noting that the strength or weakness of a case is in the eye of the beholders, with plaintiffs and defendants

holding widely divergent views).

⁹⁶ Magliocca, Barnyards, supra note ____ at 1820. *See Ex parte* Crane, C.D. 7 (1869), *reprinted in* HECTOR T. FENTON, THE LAW OF PATENTS FOR DESIGNS 225 (Philadelphia, Campbell ed. 1889). At the time, the Patent Office played an expanded role in the patent system. (cite/paraphrase)

⁹⁷ Hayter, supra note at 65-66.

⁹⁸ Hayter, supra note at 77 (describing the National Grange convention) and 78 (discussing other farmer interest groups)

Hayter, supra note at 64 (citing an 1879 farmer statement.)

¹⁰⁰ Steven W. Usselman and Richard R. John, Patent Politics: Intellectual Property, the Railroad Industry, and the Problem of Monopoly, 18 J. Policy Hist. 96, 99 (2006).

¹⁰¹ Steven W. Usselman and Richard R. John, Patent Politics: Intellectual Property, the Railroad Industry, and

the Problem of Monopoly, 18 J. Policy Hist. 96, 102 (2006). ("Patent commissioners grumbled about the financial drain [other priorities] posed: they would have preferred to use funds to hire more patent examiners.")

Through their specialized industry groups such as the Eastern and Western Railroad Associations, the railroads hired patent attorneys and coordinated defense efforts for the entire industry. These efforts included lobbying Congress and the courts, settling cases, and other forms of self-help.¹⁰²

How the Crises Resolved

In the name of agrarian patent reform, an innocent user defense was introduced in several forms¹⁰³ to curb the "[harassment of][] people with vexatious suits about that of which they never could by any possibility have had knowledge."¹⁰⁴ Another amendment would shift fees to plaintiffs if the economic value of their suit was low or they lost, in order to discourage frivolous suits and end, "wholesale raiding upon innocent people."¹⁰⁵ Schemes to eliminate injunctive relief for certain patents and set the licensing rate ex ante, by statute¹⁰⁶ or in connection with the issuance or payment of renewal of patents were also proposed.¹⁰⁷ Railroads pressed for a statute of limitations on claims of infringement.¹⁰⁸ There was a proposal to adopt European style renewal fees on granted patents.¹⁰⁹ A new way of calculating damages – by using an established license fee or profits from sales and doing away with a legal principle called the doctrine of savings – was suggested.¹¹⁰

¹⁰⁴ "Now, the object of this amendment is to prevent the oppression and the great injustice that is being perpetrated upon hundreds of thousands of innocent people by means of the patent law... I want to free [the user][]from such harassing and vexatious suits. Give the patentee his full redress against the vender, against the manufacturer, or against the man who has knowledge of the patent, but do not send him into every farm-house and cottage in this country to harass the people with vexatious suits about that of which they never could by any possibility have had knowledge. That is the object of this amendment." 8 Cong. Rec 269 (1879).

¹⁰⁵ The proposal: "[i]f the plaintiff shall not recover the sum of \$20 or over, the court shall adjudge him to pay his own costs, unless it shall also appear that the defendant at the time of such purchase, manufacture, or practical application, had knowledge or actual notice of the existence of such patent." 8 Cong. Rec. 652, 660 (1879). Senator Windom explained that the purpose of the change would be to "[c]ompel these men to give security for costs and then inform them that such suits must be conducted at their own expense, and we shall hear no more of wholesale raiding upon innocent people." 8 Cong Rec 303 (1879) (Sen. Windom).

¹⁰⁶ Senator Christiancy proposed "[t]here is still another class of cases in which, for patents hereafter to be issued, to prevent extortion, some rate of compensation should be fixed by the statute . . . when the infringement consists in using the thing patented."See 8 CONG. REC. 291, 308 (1878).

 ¹⁰² Described *supra*, Section _____.
 ¹⁰³ Sen. Windom's Proposal: "No recovery of damages or costs shall be had against the defendant in any suit brought for the alleged infringement of a patent by the use of any patented device, process, invention, or discovery, if It shall appear that the defendant purchased the same for his own private use from the manufacturer thereof or from a dealer engaged in the open sale of the same, unless it shall also appear that the defendant at the time of such purchase had knowledge or actual notice of the existence of such patent." 8 CG 269. An alternative version of this reform would have eliminated liability for innocent consumers of patented products. The National Grange petitioned Congress to "amend the patent laws of America as to make the manufacturer or vendor alone responsible for infringement in the sale of patented articles."10 Cong. Rec. 101, 102 (1880) (statement of Sen. Butler) (introducing the petition).

¹⁰⁷ "A number of state granges proposed that, when patents were issued or renewed, a definite royalty fee be set and paid to the patentee; in return for this payment could construct and sell such improved machines and thus bring them into immediate use." Hayter, supra note , at 77. (citing Iowa State Grange, Proceedings, IV (1873), 44-45; Michigan State Grange, Proceedings, II (1875), 42; Kansas State Grange, Proceedings (Topeka), VIaII (1880), 8).

¹⁰⁸ Regulating Railroad, supra note ____, at 145.
¹⁰⁹ Regulating Railroad, supra note 1, at 145.

¹¹⁰ *Id*.

The railroads and other supporters of patent reform expended significant money and time to convince Congress to change patent law.¹¹¹

What Didn't Work: Substantive Legislative Proposals Across the Patent System

Most of these legislative proposals failed. They failed because, in solving the problems of farmers and railroads, they would, it was perceived, create problems for other parts of the patent system. It appeared for example, and rightly so, that "patent reforms brought forth by the railroad were done for the railroads [sic] self-interest."¹¹² Likewise, the "hardship" experienced by farmers was seen "hardly a sufficient justification[] for abolishing that system of patents which has accomplished so much in this country."¹¹³ Fee-shifting proposals were rejected as unfairly punishing patentees with lawful claims, but low damages.¹¹⁴ Suggestions to reform damages were seen as self-serving because few others suffered from the doctrine of savings that the railroads complained about.¹¹⁵ In addition, they appeared to hinder judges and juries with their specificity.¹¹⁶

The changes were portrayed as helping large companies, at the expense of small inventors.¹¹⁷ Individual inventor Thomas Edison claimed that they would "strongly tend to discourage and prevent the perfection of useful inventions."¹¹⁸ Companies in other industries likewise opposed any changes. Their opposition was focused mainly on the isolated nature of patent shark attacks. Most industries and inventors had nothing to do with patent sharks. As such, they saw no need to limit their patent rights because of a problem that did not affect them.

What Did Work: Narrowly-Tailored, Specific Reform

Where these proposals failed, more tailored changes to the law, accomplished largely outside of the legislative process, succeeded. A period of confusion about what should be considered patentable under the design law followed the change that precipitated the agrarian patent crisis.¹¹⁹ According to legal historian Gerard Magliocca,"[a]fter a long internal debate...the Patent Office reversed field in the late 1880s and held that design patents should only be granted for significant ornamental improvements and ended protection for trivial

¹¹¹ Regulating Railroad, supra note 1, at 154-155.

¹¹² U.S. Senate, "Arguments before the Committees on Patents of the Senate and the House of Representatives in Support of and Suggesting Amendments to Bills (S. 300 and H.R. 1612) to Amend the Statutes in Relation to Patents, and for Other Purposes," 45th Cong., 2d sess., miscellaneous document no. 50, 304 [hereinafter Arguments before the Committees], at 69.

¹¹³ Id.

¹¹⁴ This amendment "would absolutely prevent, practically at least, the bringing of any suit simply to settle the question of the validity of a patent, or the infringement, where the damages were not considerable." 8 Cong. Rec. 570 (1879) (Sen. Wadleigh).

¹¹⁵ Usselman, *Regulating Railroads*, supra note __, at 159.

 $^{^{116}}$ Id.

¹¹⁷ *Id*.

¹¹⁸ See Hayter, 81 ("Thomas. A. Edison, in opposing the bill of 1879, stated in a letter to Butler: "I am sure that this provision will not only act oppressively upon many inventors, but will strongly tend to discourage and prevent the perfection of useful inventions by those most fitted for that purpose, and most likely to accomplish it.... It would be very burdensome to me.") Citing Thomas A. Edison to Butler, February 17, 1879, Butler Papers.

¹¹⁹ Gerard N. Magliocca, *Ornamental Design and Incremental Innovation*, 86 Marq. L. Rev. 845, 879 (2003) (Hereinafter "Ornamental Design").

changes."¹²⁰ Congress codified a stricter standard in 1902.¹²¹ The Patent Office applied this more stringent standard, making it harder to get patents on trivial advances.¹²² When these patents expired, "complaints about patent sharks disappeared and did not return."¹²³ Reform took time thirty years elapsed prior between the two Congressional amendments that bookended the period of patent "crisis."

Railroad patent reform was led by courts rather than Congress. Though many legislative fixes were proposed, "Congress could not accommodate the special concerns of railroads without sacrificing essential features of a patent system that still functioned quite capably in most segments of the economy."¹²⁴

How, eventually, did the crises abate? A combination of self-help and court leadership were critical. Supreme Court Justice Joseph P. Bradley, an ex-railroad man himself, through a series of decisions regulating the railroad industry, has been credited with meticulously and carefully helping. In Railway Company v. Sayles, he "avoided making any sweeping pronouncements [][about] the doctrine of savings... instead, honed in on the specific details of the patent claims []advanced,"¹²⁵ to invalidate the patents at stake. In other decisions, he ruled for the patentee, but based on specifics that "kept patent law relatively unencumbered by abstract principles."¹²⁶ However, his views on the patent system became clear in his 1883 Atlantic Works v. Brady decision, that:

"To grant a single party a monopoly of every slight advance made, except where the exercise of invention somewhat above ordinary mechanical or engineering skill is distinctly shown, is unjust in principle and injurious in its consequences . . .

It was never the object of [the patent] laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufacturers. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention.

It creates a class of speculative schemers, who make it their business to watch the advancing wave of improvement and gather its foam in the form of patented monopolies,

¹²⁰ Blackberries, updated version on ssrn.com at page 54. <Kevin; is this the Shulze Berger case? If so, please add parenthetical> Also, please cite the Notre dame Law Review version of this article, which is in the "References" of the dropbox. ¹²¹ Ornamental Design, supra note ___, at 879. *See* P.L. 57-109; 35 U.S.C. §73 (1902).

¹²² Ornamental Design, supra note ____, at 879.

¹²³ Blackberries, updated version on ssrn.com at page 55. ("One could plausibly contend that the cure was really the expiration of the low-quality patents taken out in the 1860s and 1870s, but without a change in the substantive test there is every reason to think that more nuisance patents would have been granted and enforced.")

¹²⁴ Naomi R. Lamoreaux, Daniel M. G. Raff and Peter Temin, editors, LEARNING BY DOING IN MARKETS, FIRMS, AND COUNTRIES, UNIVERSITY OF CHICAGO PRESS (1999), at 76-77. Steven Usselman, Patents, Engineering Professionals, and the Pipelines of Innovation: The Internalization of Technical Discovery by Nineteenth-Century American Railroads.

¹²⁵ Usselman, *Patent Politics*, supra note ____, at 116.

¹²⁶ Usselman, *Patent Politics*, supra note ____, at 118.

which enable them to lay a heavy tax upon the industry of the country without contributing anything to the real advancement of the art. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to law suits and vexatious accountings for profits made in good faith."¹²⁷

Buoyed by this decision, the railroad associations worked through trade groups to identify relevant prior art, discouraged patenting, and urged patents to be assigned to their corporate owners so that they wouldn't fall into the hands of speculators.¹²⁸

In particular, railroads banded together and formed associations (the Western and Eastern Railroad Associations) that facilitated collaboration on patent defense, monitored developments, . The railroad paid fees, assessed in proportion to earnings, shared information, and agreed to settle collectively rather than individually or lose their rights to the association's defenses. In return they received legal services and the settlement of claims against them. The associations were so effective they were accused of violating antirust laws and being illegal, to no avail. Described, e.g., in Usselman, *Patents Purloined*, supra note ____, at 1065-1074.

Section III: Implications for Current Proposals

Although much has been accomplished with respect to patent reform, great dissatisfaction remains. As firms watch others make money¹²⁹ and build firm reinvigoration strategies off of patents,¹³⁰ the practice of patent assertion is expected intensify, rather than abate, in the short-term.¹³¹ As quickly as patent institutions have moved to reform the patent system, the market has arguably moved even faster, introducing new sources of capital, business models, and tactics¹³² to the business of patent assertion. For these reasons, efforts to reform patents continue, with several proposals receiving attention.

Addressing the three problems of too many patents, invulnerable patent defendants, and patent nuisance fee economics, these proposals include: to abolish software patents, increase patent fees or fix the patent office, in order to reduce the number of trivial patents; to introduce an independent invention defense, in order to reduce the stakes; and to introduce fee-shifting provisions, and reduce the costs of patent defense, in order to shift the balance of patent nuisance economics. The following paragraphs discuss these proposals, and the implications of related experiences for them.

¹³⁰ For an example of two recent attempts to do so, see <u>http://www.sfgate.com/cgi-bin/article.cgi?f=/g/a/2012/05/29/bloomberg_articlesM4F00Y0D9L3901-M4SMI.DTL</u>, <u>http://www.techdirt.com/blog/wireless/articles/20120418/03490318538/early-mobile-internet-company-that-failed-to-adapt-becomes-patent-troll.shtml [add parentheticals]</u>

¹²⁷ Atlantic Works v. Brady, 107 U.S. 192 (1883), 199–200.

¹²⁸ Usselman, *Regulating Railroads*, supra note ____, at ___.

¹²⁹ For example, through the successful stock prices of well-managed company Acacia, whose approximate value has increased 1000%, from a low of \$2.50 in 2008 to a low of \$28.76 in 2012 thus far. http://finance.yahoo.com/q?s=ACTG

¹³¹ In accordance with customary demonstration effects in the patent world, described e.g. in Chien, *Arms Race*, supra note ____.

¹³² See, e.g. Colleen Chien, *The Economics of Patent Assertion* (paper in progress). [add link when posted], Patent Law Institute 2012 Program *IP Monetization 2012: Maximize the Value of Your IP Assets*, chair Jose Estevers (describing various financing and legal vehicles for patent monetization.)

A. Proposals to Reduce the Number of Patents

1. "Abolish software patents"

If the problem is too many patents, why not eliminate a large class of them, namely software patents? Software patents have been singled out for elimination due to their perceived vagueness, low-quality,¹³³ and non-essential relationship to innovation. As a solution called for by those within the industry,¹³⁴ to apply specifically to problematic patents rather than to the patent system generally,¹³⁵ the idea of abolishing software patents has enormous popular appeal. It also has historical and recent precedent. According to Gerard Magliocca, "abolishment" of agricultural design patents is what ultimately resolved the agrarian patent crisis.¹³⁶ The regulation of business method patents, through the SPER program, the application of the prior user rights defense only to business method patents prior to the America Invents Act,¹³⁷ and the Act's business method specific provisions,¹³⁸ represents a recent attempt to minimize the perceived harms associated with a certain type of patent.

Each of these experiences contains lessons for how, assuming it the goal, software patents might be abolished. Though, it should be noted, the courts seem to be well on their way to abolishing certain types of software patents already. In Bilski, the Supreme Court rejected the low bar of having a "useful, concrete, and tangible" result that had been used to police patentability for over a decade. Applying it, the Federal Circuit has found unpatentable a software product for detecting internet-based credit card fraud,¹³⁹ a computer-implemented method for processing car loan applications,¹⁴⁰ and a tax-avoiding real estate investment tool reciting computer-aided steps.¹⁴¹ In *Prometheus*,¹⁴² a case about medical diagnostic methods, the Supreme Court cited precedents about software patents, made comments about abstract ideas, and, based on the case, sent back to the Federal Circuit for review a patent over watching an advertisement in order to access copyrighted content over the internet the appellate court had found valid.143

The Definitional Issue

One of the biggest challenges to "abolishing software patents" is the question of what

¹³³ Described, e.g. in JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK, (Princeton University Press 2008). ¹³⁴See, e.g. http://www.feld.com/wp/archives/tag/abolish-software-patents

¹³⁵ As conceived, at least. However, the redefinition of patentable subject matter it has prompted is arguably having implications for other sorts of patents as well.

¹³⁶ Magliocca, *Barnyards supra* note ____, at ___. ¹³⁷ 35 U.S.C. § 273 (2000) ("It shall be a defense to an action for infringement [] with respect to a [business method patent] [that] [] if such person had, [] actually reduced the subject matter to practice at least 1 year before the effective filing date of such patent, and commercially used the subject matter before the effective filing date[].").

¹³⁸ Including the outlawing of tax method patents and Section 18, both described supra, at section _____. These portions of the AIA have been called "a rifleshot earmark []for a special industry," meaning banks. 157 CONG. REC. at S5408.

¹³⁹ CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1367 (Fed. Cir. Aug. 16, 2011).

¹⁴⁰ Dealertrack, Inc. v. Huber, 2012 WL 164439, at *1 (Fed. Cir. Jan. 20, 2012).

¹⁴¹ Fort Properties, Inc. v. Am. Master Lease LLC, No. 2009-1242, slip op. at 2, 12 (Fed. Cir. Feb. 27, 2012).

¹⁴² Mayo Collaborative Services v.Prometheus Laboratories, Inc., 566 U.S. (2012)

¹⁴³ Cite GVR for Ultramercial when available.

exactly is a "software patent"?¹⁴⁴ However, it's arguably as hard to define a "business method" patent as it is to define a "software" patent. That hasn't stopped Congress from regulating "method[s] of doing or conducting business," through the prior user rights defense it passed in 1999,¹⁴⁵ subdefining business methods through its invalidation of future tax strategy patents,¹⁴⁶ and redefining them as part of the covered business method transitional program¹⁴⁷ of the 2012 America Invents Act.

Thus, the definitional issue may be a bit of a red herring– a working definition, rather than a perfect definition, may be all that is needed to discourage nuisance suits. Congress has already drawn the business method line several times. The PTO will need to implement the definition of a "covered business method patent" as part of the AIA's Section 18 transitional business method patent program.¹⁴⁸ Knowing this, they provided input into the definition during the legislative backdrop to enactment of Section 18,¹⁴⁹ and debates about what should and shouldn't be included continue.¹⁵⁰ Their experience doing so will be important to observe and

¹⁴⁷ Section 18(d) of the America Invents Act: "For purposes of this section, the term 'covered business method patent' means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions." See also Matal, *supra* note _____, at *113 et seq. recounting the fascinating, convoluted, and contentious history of section 18, in which "Iblusiness-method trolls fought a scorched-earth, office-by-office lobbying war with banks and retailers," and covered business method patents is guite clearly defined, at least by certain Senators as not only including non-technical "business methods" pertatining to the financial services industry but software implemented inventions that cover "not only financial products and services, but also the "practice, administration and management" of a financial product or service. This language is intended to make clear that the scope of patents eligible for review under this program is not limited to patents covering a specific financial product or service. In addition to patents covering a financial product or service, the 'practice, administration and management' language is intended to cover any ancillary activities related to a financial product or service, including ... marketing, customer interfaces, Web site management and functionality, transmission or management of data, servicing, underwriting, customer communications, and back office operations-e.g., payment processing, stock clearing." See 157 CONG. REC. S1364-65 (daily ed. Mar. 8, 2011) (statement of Sen. Schumer). One thing that aids in the identification of business method patents is that they are concentrated around a single class, Class 705. See Matal, supra note , at 116. (describing efforts to limit the definition of "covered business-method patent" to language that tracks the USPTO's patent class 705). Software patents, in contrast, are harder to pin down. See John Allison (describing dissatisfaction with the PTO's classes and identifying software patents by reading each patent and classifying it based on its description and claims). For an interesting history of class 705, beginning with its creation in 1997 from the business and cost/price sections of computer classes 395 and 364, see Gene Quinn, Business Methods by the Numbers: A Look Inside the PTO Class 705, January 12, 2012 http://www.ipwatchdog.com/2012/01/22/business-methods-by-the-numbers-a-look-inside-pto-class-705/id=21892/ ¹⁴⁸ Id., legislative history.

¹⁴⁹ Id., Matal, supra note ___, at ___.
¹⁵⁰ Cite to Section 18 public comments.

¹⁴⁴ See, e.g. Michael Risch, *Everything is Patentable*, cite to Allison. But see Chien and Allison, *Defining a* Software Patent, working project

¹⁴⁵ Described *supra*, section _____. ¹⁴⁶ Section 14 of the America Invents Act: "'any strategy for reducing, avoiding, or deferring tax liability, whether known or unknown at the time of the invention or application for patent, shall be deemed insufficient to differentiate a claimed invention from the prior art.[] (c) EXCLUSIONS.—This section does not apply to that part of an invention that (1) is a method, apparatus, technology, computer program product, or system, that is used solely for preparing a tax or information return or other tax filing, including one that records, transmits, transfers, or organizes data related to such filing; or (2) is a method, apparatus, technology, computer program product, or system used solely for financial management, to the extent that it is severable from any tax strategy or does not limit the use of any tax strategy by any taxpayer or tax advisor."

learn from.

The historical experience also lends insight into what it means to "abolish" a certain type of patent or patent lawsuit. In the case of agricultural design patents, their "abolishment" was not achieved through any changes to section 101. Rather, changes to design "nonobviousness" law effectively eliminated trivial patents in this area.¹⁵¹ In the case of railroad patents, Justice Bradley's ruling on a set of particular patents, covering double-acting brakes, and subsequent jurisprudence, including dicta,¹⁵² led to a "surgical intervention"¹⁵³ in the field that produced industry-specific change.

A Bright Line?

Currently, the difficulties of defining a bright line between patentable and unpatentable subject matter have stymied significant development. In my opinion, a successful rule would be one that would enable parties to a licensing discussion to look quickly at a patent's claims and, based on them, agree upon which ones are invalid under the new standard. That question will depend on how consistent the courts are in their determinations and the extent to which patentees try to assert patents, by themselves or en masse, that, though issued under a different standard, are likely now invalid. It's easy to argue about one particular patent, but if a whole portfolio is asserted against an entity, the costs of arguing about each one keep the cost of defense, and therefore the economic opportunity, high.

Circumvention

In addition, nuisance suits are not only based on software patents. In my analysis of troll suits from 2000-2008, I found that a significant number of patent suits involving hardware.¹⁵⁴ Recently, Project Paperless LLC has recently approached small companies for licenses based on their use of PDF machines in alleged violation of a patent whose claim 1 recites "a computer data management system" with "at least one memory," "at least one processor ..." and also mentions a "scanner," "digital copier", and "digital imaging devices."¹⁵⁵ One can imagine trolls suing based on patents that are less abstract and more likely to be found patentable. There may be less to argue about with respect to these patents, because you can more easily tell what they cover and there may be fewer of them. However, where there is a colorable claim based on subject matter that clears subject matter eligibility standards, the business opportunity will remain.

2. Increasing Maintenance Fees

Several have suggested reducing patent numbers by increasing what it costs to keep them

¹⁵¹ Magliocca, supra note _____, at ____. ¹⁵² In the *Atlantic Works v. Brady* case, described supra at note _____. See also Usselman, *Patent Politics*, at 119-121 (describing the railroad industry's reaction to this case and the efforts to find prior art, patent their own inventions, and engage in self-help, rather than just lobbying for legal help to solve the problem that it encouraged.) ¹⁵³ Merges, *Trouble with Trolls*, supra note _____, at 1578.

¹⁵⁴ Chien, *Of Trolls*, supra note ____, (add parenthetical, numbers)

¹⁵⁵ Patent 6,771,381. The suits are described at the website http://stop-project-paperless.com/.

in force.¹⁵⁶ Increasing maintenance fees was also proposed in the late 19th century, for largely the same reasons:¹⁵⁷ it was argued that the grant of a patent "is a tax upon, or a deprivation to the public, and should not be perpetuated unless it is worth a good price." ¹⁵⁸ Then, as now, patent speculators tended to amass "old patents" to assert them.¹⁵⁹ By hiking fees, the thinking goes, fewer patents will survive long enough to end up with trolls.¹⁶⁰ Gerard Magliocca has suggested a "dormancy tax" that would assessed at a higher rate and more frequently than current maintenance fees.¹⁶¹

There does seem to be some room to increase fees. Controlling for wealth, US patent fees are at an all-time low, "suggesting that the U.S. patent system has never been so affordable. Current fees would need to increase approximately tenfold to match their 1800 level."¹⁶² Globally, pre- and post-grant fees per capita in the US are in the lowest 1/3 tier.¹⁶³

Broad-Sweeping Reform

However, changing maintenance fees represents broad-sweeping, rather than tailored reform. For example, consider a modest change to the existing system which requires payments to be made at 3.5, 7.5, and 11.5¹⁶⁴ years that would make fees due every year and double them. This could severely impact small entities and entrepreneurs who are cash-strapped. Indeed, critics of the unsuccessful late 19th century fee reform proposals thought they were ten-fold too

¹⁵⁶ See, e.g. Gerard Magliocca, *Barnyards and Blackberries* at 1813 and 1836-1837 (describing increased maintenance fees as a "dormancy tax"), Brian Love, *Troll Timing*, at ____. *See also*, Ted Sichelman, *Commercializing Patents* at 411 (proposing that the PTO could charge an order of magnitude greater than it currently does for a "commercialization patent.")

¹⁵⁷ U.S. Senate, "Arguments before the Committees on Patents of the Senate and the House of Representatives in Support of and Suggesting Amendments to Bills (S. 300 and H.R. 16I2) to Amend the Statutes in Relation to Patents, and for Other Purposes," 45th Cong., 2d sess., miscellaneous document no. 50, 304 [hereinafter Arguments before the Committees] (Mr. Hyde), at 253 (G. H. Christy, of Pittsburgh, for car-brake manufacturers) ("the result [of the renewal fees] will be undoubtedly to remedy a large portion of the evils which [J. H. Raymond] has set forth, such as speculations in patents, etc."); *Id.* at 304 (Henry D. Hyde, of Boston, for the Shoe and Leather Association of Boston) ("We believe that is is a wise provision, for there are a great many patents which are taken out, and which lie dormant and are not put into active use.").

¹⁵⁸ *Id.*, at 233 (J. H. Raymond).

¹⁵⁹ Cf. "I believe I should not be overstating the case if I were to say that I could go into the Patent Office and find old patents to-day which, may be bought for a song, that would enable me to bring at least a dozen well-founded suits against the Senator from Massachusetts himself. I suspect I could, and for a sixpence buy up some old patent that under his proposition would compel him either to pay me a royalty or to strip his boots off on Pennsylvania avenue. And I suspect that if I were to examine his suspenders I could find they infringe a half dozen patents, and that under his amendment he must take them off and run the risk of walking down the street without them, or else pay several royalties. I think I could obtain enough old patents to disrobe the Senator from Massachusetts entirely, or else compel him to pay a royalty for something that is actually worthless." 270-271 Windom and Brian Love, *Troll Timing* supra note ____, at __.

¹⁶⁰ It was argued in Congress in that the grant of a patent "is a tax upon, or a deprivation to the public, and should not be perpetuated unless it is worth a good price."¹⁶⁰

¹⁶¹ Magliocca, *Barnyards*, *supra* note ____, at 1836-1837. Others have suggested increasing the fee to obtain rather than maintain, a patent to, say, \$50,000 per patent <insert >. <Add proposals by B&M, Love>

¹⁶²Gaetan de Rassenfosse and Bruno van Pottelsberghe de la Potterie, "*The role of fees in patent systems: Theory and Evidence*" Intellectual Property Research Institute of Australia Working Paper No. 7/10 ISSN 1447-2317 (November 2010), 6

¹⁶³ Rassenfosse and van Pottelsberghe, Table 1

¹⁶⁴ 37 C.F.R. § 1.20(e)–(g) (2011). (update with 2012 numbers once PPAC is finished with their process)

large and did not take into account the realities of inventors, who needed time to test their inventions before paying fees on them.¹⁶⁵

However, carving them out from any change in maintenance fees is likely to also avoid the desired policy result, as it is individuals and small companies that provide the bulk of patents to PAEs.¹⁶⁶ According to data provided by RPX, which buys patents in the marketplace, over three-quarters of PAE/NPE patents come from small inventors and individuals.¹⁶⁷ In addition, while a modest change is likely to hurt small entities the most, it is unlikely to make a difference to companies who may pay in the thousands or even millions for a patent, expecting much greater returns.¹⁶⁸ Even if fewer patents end up available for sale, few trolls rely on having huge portfolios of patents;¹⁶⁹ the limiting factor for most trolls is not usually the number of patents, but the resources to assert them.

These realities have likely made the proposed PTO fee increases more measured than they might otherwise be. Section 10 of the America Invents Act gives the PTO the authority to set fees, in order "to recover the aggregate estimated costs to the Office for processing, activities, services, and materials relating to patents." Although it does not cost the PTO anything to maintain a patent, the PTO is "not required to align individual fees and activity costs on a fee-byfee basis."¹⁷⁰ In its 2012 proposal to reset fees, the PTO boosted large entity maintenance fees (first to third stages) by 42% (from \$1,130 to \$1,600), 26% (from \$2,850 to \$3,600) and 61% (from \$4,730 to \$7,600), respectively.¹⁷¹ The rationale for doing so was to rebalance front-end and backend fees with policy objectives: "early stage fees are lower in recognition of the uncertainty of patent value; as time goes on, an inventor can better measure the value of an invention and determine whether maintenance is truly worthwhile."¹⁷² In its presentation to the PTO's advisory board, the Office explained that the suggested fee increase, among other things, was meant to nudge "the marginal patent into the public domain more quickly." ¹⁷³ These are welcome policy changes that, if enacted, should reduce, though not eliminate the lifetime and risk presented by marginal patents.

3. Better Patent Examination

¹⁶⁸ Accord, Mark Lemley, *Fixing the Patent Office*, available at

¹⁶⁵ See, e.g. comments of W.C. Dodge, representative of the Patent Office Bar Association, Arguments before the Committees, supra note , 69-80.

¹⁶⁶ Individual inventors and PAEs with few employees may also gualify for micro-entity status, entitling them to a 75% discount off of large-entity fees. America Invents Act, Section 10(b).

¹⁶⁷ Colleen Chien, Race to the Bottom Intellectual Asset Management Magazine (January/February 2012), Figure

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2023958. ("A maintenance fee of \$40,000-\$50,000-ten times the current fee-may weed out more patents that aren't being used, but it is unlikely to deter someone considering spending perhaps 100 times that much to litigate a patent.") ¹⁶⁹ Chien, *Arms Race, supra* note _____. (citing studies by Risch and Henkel & Fischer that find troll patents to be

higher quality and examples of trolls that have small, but high-quality portfolios and are more numerous than patent aggregator-asserters like Intellectual Ventures).

¹⁷⁰ <u>http://www.gao.gov/assets/600/590382.pdf</u>, p.2

¹⁷¹ http://www.uspto.gov/aia implementation/fee_setting - ppac_hearing_executive_summary_7feb12.pdf, p. 11

http://www.uspto.gov/aia_implementation/fee_setting - ppac_hearing_executive_summary_7feb12.pdf, p. 11
 http://www.uspto.gov/aia_implementation/fee_setting - ppac_hearing_executive_summary_7feb12.pdf, p. 18

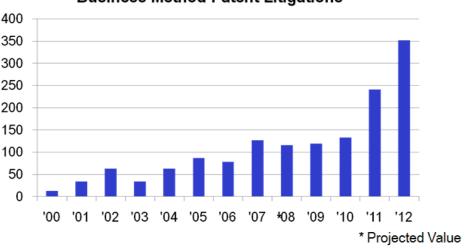
If the problem is that there are a lot of low-quality patents, one solution, oft-heard, would be to give the PTO the resources it needs to increase quality. They could do so by more stringently policing the disclosure requirements of 35 USC 112, using better prior art, and getting full access to the fees that they generate, for example. Here, the PTO's experience with business methods recounted before instructive. In that case, the PTO increased the resources dedicated to examination of business methods. The allowance rate of business method applications dropped dramatically, to around 10%.¹⁷⁴ However, due to the time delay, twelve years later, business method litigations have not subsided. Rather they have grown.¹⁷⁵ (Figure 3) However laudable, whatever the PTO does today will not impact the generation of "legacy patents," examined under varying conditions and likely of different quality.¹⁷⁶

¹⁷⁴ Described supra note ____.

¹⁷⁵ The source of this data was Lex Machina, which uses [describe methodology?]. These results were then verified using PTO data. Class 705 was created in 1997 from the business and cost/price sections of computer classes 395 and 364, see Gene Quinn, Business Methods by the Numbers: A Look Inside the PTO Class 705, January 12, 2012 http://www.ipwatchdog.com/2012/01/22/business-methods-by-the-numbers-a-look-inside-pto-class-705/id=21892/. It is perceived to tracks business method patents so closely that Congress attempted to define "covered business-method patent" by using language that tracks the definition of the PTO class. *see* Matal, supra note _____, at 116. ¹⁷⁶ Christina Mulligan and Tim Berners Lee make a similar point in their paper, *Scaling the Patent System*, which

argues that efforts to reform patent quality, alone, won't help.





Business Method Patent Litigations

Data Source: Lex Machina 2012 (based on litigation of "705" patents)

B. Proposals to Bolster Defenses and Decrease Remedies

Several proposals have been developed that address the problem of specialized plaintiffs that are invulnerable to countersuit and seek high-stakes injunctions.

1. An Independent Invention Defense

A popular suggestion has been to create an independent invention defense.¹⁷⁷ Right now, a company that has no knowledge of a patent, and did not learn of the invention from the patentee can still be sued for patent infringement and asked to stop.¹⁷⁸ Introducing an independent invention defense would change this, shielding so-called "innocent" infringement from liability. Because copying is rarely asserted in patent infringement,¹⁷⁹ it is believed that an independent defense would solve the problem of both holdup and trolls.¹⁸⁰ It would also greatly diminish patent quality problems by preventing obvious inventions from becoming the patentee's exclusive domain since others are likely to come up with it on their own.¹⁸¹

Though it has not been the subject of a serious recent legislative proposal, an innocent user defense was proposed in the 1880s. The proposal was notably narrower than the defense of

¹⁸¹ Id. Shapiro at 131.

¹⁷⁷ See, e.g. FTC Evolving Marketplace, supra note ____, at ____

¹⁷⁸ See, <u>http://www.btlj.org/data/articles/17_02_05.pdf</u> (exploring the "strict liability" nature of patent infringement) ¹⁷⁹ Christopher A. Cotropia & Mark A. Lemley, Copying in Patent Law, 87 N.C. L. REV. 1421, 1425. (2009)

¹⁸⁰ See, e.g. Carl Shapiro, *Aligning Reward and Contribution*. NBER Working Paper No. 13141. May 2007, 131 (claiming it would "in one fell swoop, do away with many of the problems with a patent holdup"), Mark A. Lemley, *Should Patent Infringement Require Proof of Copying*?, 105 Mich. L. Rev. 1525, 1525. (2007) (the defense "would eliminate the troll problem")

innocent infringement many are now calling for. It would shield innocent buyers of technology from claims of patent infringement; the patentee could still pursue the manufacturer.¹⁸²

Broad-Sweeping Change

Still, the defense was viewed as undermining the entire patent system and the incentive to innovate, for the sake of a few.¹⁸³ It would diminish US competitiveness,¹⁸⁴ it was claimed, and might also disproportionately benefit large corporations,¹⁸⁵ who by the virtue of their sales, arguably had the most to gain from the defense.

Modern commentators have echoed these reservations. The most important inventions could be delayed or not disclosed, they worry.¹⁸⁶ Commercialization incentives may also be dampened, as patentholders would be unable to depend on any assurance of exclusivity.¹⁸⁷ Many of the details have not been thought through – where the burden would lie, what kind of proof would be required, the transferability of the defense, whether or not the defense would and the differential impact on industries and particular types of patentholders and defendants.¹⁸⁸ The impact of the cure could potentially be much worse than the disease.¹⁸⁹

An independent invention may not even be available all or perhaps most of the time – although copying is not often alleged in the courtroom, companies copy each other all the time.¹⁹⁰ Said one boss allegedly, at a social gaming company "I don't fucking want innovation.

¹⁸² "As I understand the amendment now under consideration, it proposes to leave to the inventor all his remedies against the man who manufactures without his consent a patented, article, [] but it seeks to protect only those who, without knowing of the existence of his patent or that the article manufactured or sold trenches upon his patented rights in good faith buy an article from the manufacturer or seller for their own use. It protects such purchasers against a suit for damages." 270. ¹⁸³ ""[T]he amendment proposed by my friend, the Senator from Minnesota (Sen. Windom), would completely

¹⁸³ ""[T]he amendment proposed by my friend, the Senator from Minnesota (Sen. Windom), would completely abolish the patent laws. []" "Now, the Senator from Minnesota proposes an amendment which strikes down the patent law of this country substantially. There is nothing of it worth having left when the amendment of the Senator from Minnesota shall be adopted, if it shall be." 269; "There are hard cases, there are cases of extreme hardship, I am fully aware, under the administration of the existing law; the Senator from Minnesota has alluded to some of them; but that hardship is hardly a sufficient justification, in my judgment, for abolishing that system of patents which has accomplished so much in this country." 272 (Hamlin).

¹⁸⁴ "It is, in the nature of things, impossible; and this is simply, in my judgment, an amendment which would entirely prostrate the patent system to which the country owes so much, and through which this country is enabled to contest with foreign countries in the markets of the world." 8 Cong. Rec 269 (1879).

¹⁸⁵ Sen Hoar's Proposal to amend Sen. Windom's Proposal, Supra, note _____. "Without [amending the proposal] any railroad corporation or wealthy manufacturer, having got possession of the invention without notice of the Patent, may continue to use it in spite of the most plain and emphatic notice." 8 CG 269

¹⁸⁶ See, e.g. Samson Vermont, *The Angel Is in the Big Picture: A Response to Lemley*, 105 MICH. L. REV. 1537, (2007)(summarizing and agreeing with the reservation of Mark Lemley to an independent invention defense that it could slow down important innovations). See also, Carl Shapiro, supra note _____, at 130-1 (acknowledging that such a defense could drive some inventors to trade secrets rather than patents, and create uncertainty for patentees) ¹⁸⁷ Lemley, supra note _____ *Proof of Copying*, at ___ (describing this potential impact of the defense on the drug industry)

¹⁸⁸ Described, e.g. in Shapiro, supra note (133-135)

¹⁸⁹ See, e.g. Vermont, supra note _____, *Angel* at 1538 (characterizing the unknown impact of a reinvention defense as akin to "playing with fire.")

¹⁹⁰ Described, e.g. <u>http://www.economist.com/node/21554500</u> (extolling the virtues and prevalence of copying) the allegation that copying is widespread is not necessarily inconsistent with the findings of Christopher Cotropia &

Just copy what they do and do it until you get their numbers."¹⁹¹ These levels of uncertainty have likely prevented any serious proposals to create an independent invention defense to date.¹⁹²

Towards An Innocent User Defense to Software Patent Infringement?¹⁹³

A more narrow change that could accomplish some of the aims of an independent invention defense is an innocent user defense for software patents, a modified version of what was suggested in the late 1800's. This could be accomplished in effect in a number of ways, including through the legislative enactment of such a defense, judicial receptivity to staying cases brought against individual users if a case with the manufacturer is pending or filed, akin to the Section 18 of the AIA, judicial receptivity to impleading manufacturers as necessary parties to such actions and dismissing users from suits in the meanwhile. Several countries, including the Germany, France, the UK, Japan, and Canada feature a non-commercial user defense.¹⁹⁴ Patentholders don't usually sue consumers – it risks alienating potential customers and it expensive to go after them one by one. But PAEs have mechanisms to overcome these problems. When liability for users has been an issue in the US before, in the case of medical doctors using surgical methods, the patent law has been changed to immunize them. (35 USC Section 287(c)).

2. Injunctions Reform at the ITC

eBay made it harder for NPEs to get injunctions, reducing much of the leverage district court patentees used to wield by virtue of the possibility of shutting down the defendant's product. But this result can be circumvented in some cases by filing qualifying patent cases at the ITC, where injunctions remain readily available. One suggestion has been to close this "loophole" by making the injunction standard consistent across the ITC and district courts. There are a variety of ways that this could be accomplished. Congress could simply require the ITC to follow *eBay*, rather than its current standard. Or the ITC could implement the existing public interest analysis it is required to carry out to reach results that are similar to the district court applying *eBay*. It could make greater use of the flexibility it has to award exclusion orders, but in a more flexible way.¹⁹⁵ The ITC domestic industry requirement could be interpreted to exclude

Mark Lemley, in *Copying in Patent Law*, 87 N.C. L. REV. 1421 (2009) that willfulness is alleged in few patent litigations. For example, one company may copy another's feature without any awareness of the specific patents that cover the feature, or the feature may not be patented. The copying may go undetected, especially if it's a method invention. [Need to bolster citations with book references]

¹⁹¹ Id. the Economist, citing Oded Shenkar, Copycats: How Smart Companies Use Imitation to Gain a Strategic Edge., at page ____

¹⁹² FTC Evolving Marketplace 2011, supra note ____, at 17 ("a substantial change along these lines could result in a dramatically different patent system, and knowledge in this area is limited.")

¹⁹³ See, e.g. Colleen Chien, working project of the same title, in preparation for November 16, 2012 Conference: Solutions to the Software Patent Problem

¹⁹⁴ Like the defenses available under Chinese patent law, as described, e.g. in Betty Sun,

International Harmonization: A Focus on China, the United States, and the Patent Law (May 2012) (unpublished paper on file with the author) (describing the innocent user defense and non-commercial user exemption from infringement).

¹⁹⁵ These ideas are described in Chien and Lemley, supra note ____, at ____.

from the ITC altogether the cases that are the least likely to deserve them under eBay.¹⁹⁶ A variety of ITC reform efforts are being considered that implement these strategies.¹⁹⁷

C. Proposals to Reduce the Incentive to Bring Nuisance Suits

1. Increased use of Fee-Shifting/Sanctions in Patent Cases

Fee-shifting has been proposed as one way to deter patent suits that are brought for their nuisance value.¹⁹⁸ "Nuisance suits" have a low expected recovery value - because the patent is weak or its economic value is low.¹⁹⁹ While the low value of the suit would normally deter it - it doesn't make sense to pay \$10 to recover \$5 - nuisance suit economics dictate otherwise, because the high cost of defense increases the likelihood of a favorable settlement.²⁰⁰ (Figure 2) Feeshifting changes the economics by requiring an unsuccessful plaintiff to foot the defendant's legal fees, punishing and deterring low-probability claims.



Figure 2: Patent Nuisance Fee Economics²⁰¹

Assertion Makes Sense Because the Cost To Defend or Negotiate, and therefore the Likely Settlement Fees, Exceed the Cost To Assert

 ¹⁹⁶ See, e.g. Chien, *Patently Protectionist*, supra note ____, at ____. Colleen Chien, *Protecting Domestic Industries at the ITC* (May 24, 2011). Santa Clara Computer and High Technology Law Journal, Vol. 28, No. 169, 2011, ___.
 ¹⁹⁷ Described, e.g. in Chien and Lemley, supra note _____, at _____.

¹⁹⁷ Described, e.g. in Chien and Lemley, supra note ____, at ____. ¹⁹⁸ <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=980346</u>, See also HR ____ Reps. DeFazio and Chaffetz bill 112th Congress (2012), described infra at note ____ (proposing one-way fee shifting to losing patentees in software patent cases where the "patentee did not have a reasonable likelihood of succeeding.") Remarks of Rep. Mel Watt and Others, July 18, 2012 Subcommittee Hearing on the International Trade Commission and Patent Remedies (discussing the viability of a related judicial tool – sanctions –at the ITC to deter litigation abuses), Patent Reform Act of 2006, S. 3818, 109thCong. (2006), at section 5 (proposing mandatory fee shifting in patent cases), described infra at note _____ Available at <u>http://thomas.loc.gov/cgi-bin/query/D?c112:1:./temp/~c112V9v3Sw::</u>

¹⁹⁹ For example, because it covers a component that can be easily substituted.

²⁰⁰ See, e.g. David Rosenberg & Steven Shavell, *A Model in Which Suits Are Brought for Their Nuisance Value*, 5 Int'l Rev. L. & Econ. 3 (1985).

²⁰¹ Adopted from David Rosenberg & Steven Shavell, *A Model in Which Suits Are Brought for Their Nuisance Value*, 5 Int'l Rev. L. & Econ. 3 (1985).

Nearly as long as there have been nuisance lawsuits, there have been efforts to deter them.²⁰² Fee-shifting statutes can be mandatory or discretionary, one-way or two-way.²⁰³ In Europe, the losing party pays the winning parties' expenses and fees under the so-called "English Rule,²⁰⁴ a two-way mandatory shift. In order to increase access to justice,²⁰⁵ the US has enacted fee-shifting rules that favor plaintiffs in public interest and civil rights contexts.²⁰⁶ Alaska has adopted the English rule generally,²⁰⁷ and a handful of other states have some version of mandatory fee-shifting in narrow contexts.²⁰⁸ But they are the exception rather than the rule. In the US, courts generally must determine independently of the merits of the overall case whether one party has behaved badly enough to be punished.²⁰⁹ Since 1937, for example, Rule 11 has authorized federal judges to sanction attorneys if they fail to vet a pleading before filing it.²¹⁰

Does Fee-Shifting Deter Frivolous Litigation? Theory And Evidence

Fee-shifting rules have long been in place, but have they worked to deter frivolous litigation?²¹¹ The theoretical and empirical literature on fee-shifting has been described as "vast"²¹² and "immense,"²¹³ the latter encompassing simulations, surveys, and theoretical

Anderson, One-Way Fee Shifting Statutes and Offer of Judgment Rules: An Experiment, 36 Jurimetrics *Journal* (1996). ²⁰⁷ See Alaska R. Civ. P. 82

²⁰² Pfenningstorf, supra note at p. 41-42. (describing how, by the time of Justinian, "a practice developed to require the losing party to reimburse the winner for his costs in cases of frivolous litigation and in cases of bad faith denial. Fee-shifting to the losing party in all cases, not just those involving bad-faith, was adopted by the Code of Justinian, "the ecclesiastical courts of the Roman Catholic Church eventually by the courts of the emerging European nations.")

²⁰³ See, e.g. Thomas Rowe. Predicting the Effects of Attorney Fee Shifting, LAW & CONTEMP, PROBS., Winter 1984, 140-1(describing these and other variables among fee-shifting rules including exceptions to the rule and the method of calculation for fees to be shifted)

²⁰⁴ This term is a misnomer as fee-shifting is the rule in most Western jurisdictions, not just England. Pfenningstorf, supra note at p.41-2 and 44 et seq (describing the "European rule" which, in among many instantiations, uniformly imposing costs on the losing party (two-way shifting), without requiring any evidence of fault or bad faith, and including court fees, related costs, attorney fees and other expenses incurred by the winner.)

²⁰⁵ The literature and policy debate about fee-shifting has generally focused on this and the nuisance fee deterrent value of fee-shifting statutes however other rationales include fairness and making those wronged whole. See Rowe, The Legal Theory of Attorney Fee Shifting: A Critical Overview, 1982 DUKE L.J. 651, 653 and Pfenningstorf, supra note at 66-68. ²⁰⁶ e.g. The Civil Rights Attorneys' Fees Awards Act Section 1988, described in Thomas D. Rowe Jr. and David A.

²⁰⁸ See Thomas Rowe, Predicting the Effects of Attorney Fee Shifting, LAW & CONTEMP. PROBS., Winter 1984, fn. 8 (describing rules in Arizona, California, Florida and Illinois). ²⁰⁹ See, e.g. Thomas Rowe, *Predicting the Effects of Attorney Fee Shifting*, LAW & CONTEMP. PROBS., Winter

^{1984, 141 (}commenting that in general, two-way fee shifting is unlikely to ever be adopted widely in the US.)

²¹⁰ FRCP Rule 11 (1992). See also Gerald F. Hess, Rule 11 Practice in Federal and State Court: An Empirical, Comparative Study, 75 Marquette Law Review 313, (1992). Following regional circuit precedent, the Federal Circuit has held that "before a district court awards Rule 11 sanctions under Ninth Circuit law, the district court must determine that the complaint is "legally or factually 'baseless' from an objective perspective" and that the attorney failed to conduct a "reasonable and competent inquiry" before filing the complaint." Eon-Net, [fill in cite] Citing Christian v. Mattel, Inc., 286 F.3d 1118, 1127 (9th Cir. 2002)

²¹¹ Excluding one-way plaintiff favorable statutes, and those passed for other reasons, including those described supra at note

²¹² Theodore Eisenberg and Geoffrey Miller's terrific paper, *The English vs. The American Rule on Attorneys Fees:* An Empirical Study of Attorney Fee Clauses in Publicly-Held Companies' Contracts (November 9, 2010).

models.²¹⁴ However, only a select few of them focus on the specific question of whether feeshifting statutes that intend to deter frivolous litigation (rather than to make it cheaper to bring meritorious suits, for example). Below I summarize the relevant theory and evidence. Though my summary, like the literature, tends to focus on mandatory fee-shifting, much of the reasoning extends to discretionary regimes as well, albeit with less force.

Weak cases are cases that are likely to lose at trial. A mandatory fee-shifting regime punishes plaintiffs who bring such cases when they do in fact lose. According to theory, the regime makes defendants more willing to fight than fold, because the fees they incur will be repaid. Plaintiffs will also be discouraged from bringing weak cases due to the penalty they will have to pay when they lose.

Yet theorists have pointed out various limitations of the rule. The dynamics describe work best when the penalties cannot be avoided, by the plaintiff going bankrupt for example, and when weak cases can be identified ahead of time.²¹⁵ Theoretical work by Polinsky and Rubinfield concluded that the English Rule, while it may deter many claims, encourages weaker claims that are brought to go to trial because the risks associated with an erroneous outcome will increase the penalty to the defendant.²¹⁶ Even if fee-shifting rules deter frivolous claims, they will also deter meritorious claims.²¹⁷ According to critics, the "real losers" are those with credible, but uncertain cases who cannot bear the risk of paying the opposing party's costs if, despite the strength of the case, they nonetheless lose in court.²¹⁸

Theory and common sense also imply that mandatory fee-shifting has differential impacts upon different types of plaintiffs and cases. Two-way fee-shifting discourages pessimistic plaintiffs, who are afraid of having to pay their opponents' fees but encourages optimistic plaintiffs, who think they will win, "all expenses paid,"²¹⁹ so to speak. The decision-making of "one-shotters," rather than repeat plaintiffs, and in low-value, as opposed to high value cases, is more likely to be influenced by the specter of fee-shifting.²²⁰ More plainly: the possibility of having to pay over \$1M in attorney's fees is more likely to influence a single inventor's decision to assert her patent against a defendant hoping for a \$100,000 judgment than a serial patent

²¹³ John J. Donohue, Opting for the British Rule; or, If Posner and Shavell Can't Remember the Coase Theorem, Who Will?, 104 Harv. L. Rev. 1093 (1991)

²¹⁴ Described,e.g. in Theodore Eisenberg and Geoffrey Miller's terrific paper, *The English vs. The American Rule on* Attorneys Fees: An Empirical Study of Attorney Fee Clauses in Publicly-Held Companies' Contracts (November 9,

^{2010), 14-16.} ²¹⁵ Theodore Eisenberg and Geoffrey Miller's terrific paper, *The English vs. The American Rule on Attorneys Fees:*

An Empirical Study of Attorney Fee Clauses in Publicly-Held Companies' Contracts (November 9, 2010), at 9. ²¹⁶ There is some empirical support for this theoretical finding. According to Rhode, a fee-shifting rule for medical malpractice cases in Florida may have decreased the number of cases which were filed, but the number going to trial actually increased. Plaintiffs fought harder in litigation because the stakes were higher. Deborah L. Rhode, Frivolous Litigation and Civil Justice Reform: Miscasting the Problem, Recasting the solution, 54 Duke Law Journal 447, 474-475 (2004).

²¹⁷ Id. ²¹⁸ Id.

²¹⁹ Theodore Eisenberg and Geoffrey Miller's terrific paper, *The English vs. The American Rule on Attorneys Fees:* An Empirical Study of Attorney Fee Clauses in Publicly-Held Companies' Contracts (November 9, 2010), at 12. ²²⁰ Thomas Rowe, Predicting the Effects of Attorney Fee Shifting, LAW & CONTEMP. PROBS., Winter 1984, 143.

assertion entity like NTP that has recouped over \$612M in a single case.²²¹

Turning to the empirical evidence, studies of mandatory two-way fee shifting cannot be characterized as encouraging. While proponents of the 'English Rule' credit it with the perceived relatively lower levels of litigation in Europe as compared to the US,²²² several things undercut a direct inference. A comprehensive study of European fee-shifting statutes basically concluded that the task of assessment was impossible.²²³ It's difficult to identify frivolous suits and to control and isolate the impact of the rule as opposed to other differences, for example.²²⁴ European laws don't necessarily have the deterrent goal in mind.²²⁵

In the United States, Alaska is the only state that has a more or less mandatory version of fee-shifting. Alaska Rule of Civil Procedure 82 states: "Except as otherwise provided by law or agreed to by the parties, the prevailing party in a civil case *shall* be awarded attorney's fees calculated under this rule,"²²⁶ (emphasis added) and specifies a schedule for the recovery of fees.²²⁷ Two independent studies, one by by Douglas Rennie of 1997-2010 case filings in Alaska and comparable jurisdictions,²²⁸ and the other commissioned by Alaska's Judicial Council²²⁹ failed to find that the fee-shifting policy in Alaska has played a significant role in decreasing filings.²³⁰

Gerald Hess, surveying judges and attorneys in Washington, found that most believed that FRCP Rule 11 caused attorneys to increase their pre-filing inquiries,²³¹ however when asked about the Rule's impact on filings, 50% of federal judges and 62% of federal attorneys believed that the Rule had none.²³²

Section 505 shifts fees in copyright cases, stating that the "court in its discretion may allow the recovery of full costs by or against any party other than the United States or an officer thereof. [][T]he court may also award a reasonable attorney's fee to the prevailing party as part of the costs."²³³ This standard is more permissive than Rule 11's "legally or factually baseless" standard.²³⁴

²³² Id, at 328-329.

²²¹ Add cite.

 ²²² Pfenningstorf, supra note _____ at 76.
 ²²³ Pfenningstorf, supra note _____ at 76. (describing the task as being of "gigantic dimensions and mind-boggling difficulty")

²²⁴ Id. at 75-76.

²²⁵ Id. at 75-76.

²²⁶ Alaska Rule of Civil Procedure 82(a).

²²⁷ Id.

²²⁸ See generally Douglas C. Rennie, Rule 82 & Tort Reform: An Empirical Study of the Impact of Alaska's English Rule on Federal Civil Case Filings, 29 Alaska Law Review 1 (2012).

²²⁹ Susanne Di Pietro, et al., Alaska's English Rule: Attorney's Fee Shifting in Civil Cases (1995), available at http://www.ajc.state.ak.us/reports/atyfeeexec.pdf

²³⁰. Rennie at 43., Pietro at ES-11

²³¹ Hess, supra note at 327-328 (71% of federal court attorneys believed that Rule 11 caused their pre-filing fact inquires to increase, $\overline{63\%}$ believed that the rule caused their pre-filing legal inquiries to increase)

²³³ 17 U.S.C. § 505.

²³⁴ Eon-Net, Eon-Net LP v. Flagstar Bancorp, * (No. 09-1308) (November 2011)Citing Christian v. Mattel, Inc., 286 F.3d 1118, 1127 (9th Cir. 2002)

Implementing Section 505,²³⁵ prevailing plaintiffs have gotten 89 percent of their fee award requests reimbursed,²³⁶ and prevailing defendants 61 percent,²³⁷ generally based on the "objective unreasonableness" of the claim.²³⁸ This suggests that Section 505 has succeeded in its aim of punishing baseless litigation. Indeed, attorney fee judgments have been credited with contributing to the demise of copyright troll Righthaven.²³⁹However, section 505 did not deter prevent Righthaven from bringing its cases in the first place,²⁴⁰ and because of the particular facts of the case,²⁴¹ the deterrent effect of this case is hard to know. Others believe Section 505 to be limited in its impact due to the divergence in how courts have interpreted it.²⁴² Prevailing plaintiffs still seem to be favored.²⁴³

Thus, fee-shifting statutes seem to make a difference, but the particulars vary, and even with respect to specific statutes, the impact is hard to measure with any sort of precision.

Shifting Fees in Patent Cases

In patent cases, judges may already award attorney's fees in patent cases when the circumstances are "exceptional" (35 USC 285),²⁴⁴ and in other situations.²⁴⁵ Attorneys fees are

²³⁷ *Id.* at 1390-1391.

²³⁵ Though courts have historically favored prevailing plaintiffs, the Supreme Court held in *Fogarty v. Fantasy, Inc.* 510 U.S. 517, 534-535 (1994) that \$505 must be implemented in a manner which is party-neutral and "faithful to the purposes of the Copyright Act." This ruling increased awards to prevailing defendants. Jeffrey Edward Barnes, Comment, Attorney's Fee Awards in Federal Copyright Litigation After Fogerty v. Fantasy: Defendants are Winning Fees More Often, but the New Standard Still Favors Prevailing Plaintiffs, 47 UCLA L. Rev. 1381, 1390. ²³⁶ Jeffrey Edward Barnes, Comment, Attorney's Fee Awards in Federal Copyright Litigation After Fogerty v.

Fantasy: Defendants are Winning Fees More Often, but the New Standard Still Favors Prevailing Plaintiffs, 47 UCLA L. Rev. 1381, 1390.

²³⁸ *Id.* at 1397.

²³⁹ http://www.pbs.org/mediashift/2011/12/copyright-infringement-defendants-turn-the-table-on-righthaven335.html (describing Righthaven as "besieged by attorney fee judgments.")²⁴⁰ I am thankful to Eric Goldman for pointing this out to me.

²⁴¹ http://www.vegasinc.com/news/2011/jul/25/copyright-conundrum/ (describing Righthaven's tactics of failing to get complete control of the copyrights, disclose its continuing interest in the outcome of its suits, leading to accusations of barratry and champerty), which presumably could be avoided by subsequent plaintiffs.) 242 Id. at 472-473.

²⁴³ Barnes, supra note , at 1404 (describing how plaintiffs are likely to get their fees as a matter of course, but defendants are only likely to get their fees when the plaintiff brings the case in bad faith or are the claims are otherwise objectively unreasonable) Accord, Hyde & Sharrock, supra note ____, at 474-475. See also, e.g., Playboy Enters, v. San Filippo, 46 U.S.P.O.2d 1350, 1356 (S.D. Cal. 1998) ("Generally, the plaintiff in a copyright action is awarded fees by virtue of prevailing in the action."); Fantasy, Inc. v. La Face Records, No. C96-4384 SC ENE, 1997 U.S. Dist. LEXIS 16359, at *2 (N.D. Cal. Sept. 26, 1997) ("[C]ourts should bear in mind that awards of attorney's fees to prevailing defendants should be granted more sparingly than those awarded to prevailing plaintiffs, so that plaintiffs are not chilled in exercising their rights under the Copyright Act."); Walden Music, Inc. v. C.H.W., Inc., No. 95-4023-SAC, 1996 U.S. Dist. LEXIS 6622, at **18-19 (D. Kan. Apr. 19, 1996) ("The primary purpose of an attorney's fees award [under § 505] is 'to serve as an economic incentive for a copyright holder to use the courts in challenging an infringement.""); Belmore v. City Pages, Inc., 880 F. Supp. 673, 680-81 (D. Minn. 1996) (declining to award attorney's fees to the prevailing defendant because the defendant did not prove that the action was "frivolous or was commenced in bad faith").

²⁴⁴ 35 USC 285: "The court in exceptional cases may award reasonable attorney fees to the prevailing party." ²⁴⁵ See, e.g.

http://www.velaw.com/uploadedFiles/VEsite/Resources/AjeetPaiAttorneysFeeAwardsPatentLitigationCLE_Aug201 0.pdf (listing as additional bases for recovering attorney fees, F.R.C.P. Rule 37, 28 U.S.C. § 1927, F.R.A.P. 38,

awarded infrequently: from 2005-2011, there were on average 50 awards per year²⁴⁶; in comparison to around 3,000 patent case filings on average per year.²⁴⁷The majority of the attorney fee awards are made in cases that go to trial.²⁴⁸ The rule doesn't favor either side, and slightly less than half of the awards are to prevailing defendants.²⁴⁹

Thus, the increased use of fee-shifting in patent cases has been proposed²⁵⁰ as a way to counter nuisance patent suits generally and more specifically, the dramatic increase in NPEdriven litigation.²⁵¹ In the historical era, an agrarian patent reform proposal would have shifted fees in favor of the defendant in low-value suits, even where the plaintiff prevailed: "[i]f the plaintiff shall not recover the sum of \$20 or over, the court shall adjudge him to pay his own costs, unless [infringement was knowing]."²⁵² Similarly, a recent proposal would shift fees when the cost of the offense is greater than provable damages, to encourage settlement and discourage nuisance litigation.²⁵³ These types of proposal are analogous to "offer of judgment" rules such as Rule 68^{254} that penalize plaintiffs who reject settlement offers greater than the value of the court-determined judgment.²⁵⁵

Other reform proposals have aligned the reward of fees more closely with actual defeat in the courtroom. In 2006, a precursor bill to the America Invents Act would have placed a heavy

From March 2002-March 2011, 20,138 "patent" cases (which could include false marking, malpractice, inventor dispute, and other cases) were filed (data aggregated from reports available at

http://www.uscourts.gov/statistics/FederalJudicialCaseloadStatistics/FederalJudicialCaseloadStatistics Archive.aspx

). From 2005-2011, according to data from patstats.org, 2,598 patent infringement cases were decided (patent infringement cases, including ITC filings. Patstats.org contents described at

http://www.patstats.org/Patstats3.html). ²⁴⁸ Id. 258 attorneys fees were granted or confirmed in trial-based judgments, 133 to plaintiff patentee and 125 to defendant infringer. (Patentee awards: 133 = 89 (2005-09) + 23 (2010) + 21 (2011); Infringer awards: 125 = 83 (2005-09) + 27 (2010) + 15 (2011)). ²⁴⁹ Id.

²⁵⁰ For example, by Scott Kieff, THE CASE FOR PREFERRING PATENT-VALIDITY LITIGATION OVER SECOND-WINDOW REVIEW AND GOLD-PLATED PATENTS: WHEN ONE SIZE DOESN'T FIT ALL, HOW COULD

TWO DO THE TRICK? 157 UPenn Law Rev. 1937 (2009), at 1951 (proposing that prevailing defendants would get fees if the patentee had been warned about the particular prior art that ultimately invalidates the patent in court.) ²⁵¹ Colleen Chien, NPEs and the ND California, Address at the Northern District of California Judicial Conference 9

(April 26, 2012), (reporting data provided by RPX Corp. that indicates that 55% of new suits from January 1, 2012 to April 8, 2012 have been brought by NPEs) (copy on file with the author) ("NPE" suits exclude university and individual inventor suits).

²⁵² 8 Cong. Rec. 652, 660 (1879). Described e.g. in Thomas D. Rowe Jr. and David A. Anderson, One-Way Fee Shifting Statutes and Offer of Judgment Rules: An Experiment, 36 Jurimetrics *Journal* (1996).²⁵³ Cite to FCAC proposal when released.

²⁵⁴Described e.g. in Thomas D. Rowe Jr. and David A. Anderson, One-Way Fee Shifting Statutes and Offer of Judgment Rules: An Experiment, 36 Jurimetrics Journal (1996).

²⁵⁵ For a description of the empirical data on offer of judgment rules, see Theodore Eisenberg and Geoffrey Miller's terrific paper, The English vs. The American Rule on Attorneys Fees: An Empirical Study of Attorney Fee Clauses in Publicly-Held Companies' Contracts (November 9, 2010) at 15-16. NYU Law and Economics Research Paper No. 10-52. Available at SSRN: http://ssrn.com/abstract=1706054

Inherent Power of the Court)

²⁴⁶ Author analysis based on statistics reported at patstats.org. Taking into account reversals, attorney's fees were finally granted in 312 cases from 2005 through 2011, 165 to plaintiff patentee, and 147 to defendant infringer. (Patentee awards: 165 = 100 (2005-09) + 45 (2010) + 20 (2011); Infringer awards: 147 = 104 (2005-09) + 30 (2010) + 13 (2011)).

thumb on the scale in favor of awarding attorney's fees to prevailing parties, "unless the court finds that the position of the nonprevailing party or parties was substantially justified or that special circumstances make an award unjust."²⁵⁶ In 2011, Judge Rader appeared to urge use of fee-shifting authority in nuisance fee cases, "when the case is over and the court can identify a troll or a grasshopper, I strongly advocate full-scale reversal of attornev fees and costs!"²⁵⁷ In 2012 Representatives Peter DeFazio and Jason Chaffetz introduced a fee-shifting bill that would favor defendants in "software"²⁵⁸ patent cases:

"in an action disputing the validity or alleging the infringement of a computer hardware or software patent, upon making a determination that the party alleging the infringement of the patent did not have a reasonable likelihood of succeeding, the court may award the recovery of full costs to the prevailing party, including reasonable attorney's fees, other than the United States."

Though this particular bill does not change the discretionary nature of Section 285, it does change the standard for awards and limits this change to software patent cases where plaintiffs lose.

The Definitional Challenge- Identifying Patent Nuisance Suits

For a fee-shifting rule to deter frivolous litigation requires there to be a consistent understanding of when litigation is frivolous. In the Eon-Net case, the Federal Circuit cited a variety of tactics to support its confirmation that the plaintiff's case was objectively baseless.²⁵⁹ Judge Davis has also warned that suits where the theory of recovery is based on the "cost of defense" deserve to be sanctioned. 260

However, it's often hard to determine when fee-shifting warranted under a discretionary standard. In his study of fee-shifting statutes throughout European, Werner Pfenningstorf observed that when costs are imposed only in the case of bad faith, rather than automatically, courts are reluctant to find make the requisite finding and rarely order the payment of fees.²⁶¹ This finding that is consistent with the infrequent use of the exceptional cases rule of 35 USC

²⁵⁶ Patent Reform Act of 2006, S. 3818, 109thCong. (2006), at section 5: "(b) Attorney's Fees- Section 285 is amended to read: `(a) The court shall award, to a prevailing party, fees and other expenses incurred by that party in connection with that proceeding, unless the court finds that the position of the nonprevailing party or parties was substantially justified or that special circumstances make an award unjust." ²⁵⁷ <u>http://www.patentlyo.com/files/raderstateofpatentlit.pdf</u>. But also stating that, "this improvement suggestion is

not really discarding the American rule that each party pays its own attorney. Instead this fee reversal recommendation is a tool to discourage cases that are brought only to obtain revenue from litigation avoidance instincts."

²⁵⁸ Defined as: "a patent that covers--(A) any process that could be implemented in a computer regardless of whether a computer is specifically mentioned in the patent; or (B) any computer system that is programmed to perform a process described in subparagraph (A)." ²⁵⁹ Eon-Net LP v. Flagstar Bancorp, (No. 09-1308) (November 2011)

http://www.cafc.uscourts.gov/images/stories/opinions-orders/09-1308.pdf

²⁶⁰ Raylon LLC v. Complus Data Innovations, et al., 6:09cv355, 356, 357 (March 9, 2011)

²⁶¹ Pfenningstorf, supra note at 69.

Section 285.262

Dividing cases into ones that "did not have a reasonable likelihood of succeeding" and those that did will likely also prove difficult. Although trolls overwhelmingly lose at trial,²⁶³ the indeterminacy of patent law²⁶⁴

Scope

The misjoinder rules also don't limit the number of potential defendants that can be subject to licensing requests using the same demand letter. The ratio between demands and lawsuits can be large. According to one account, troll E-Data sued 43 companies but offered licenses to at least 25,000 others.²⁶⁵ "Cease and desist letters, phone calls, and negotiations with alleged infringers constitute the bulk of IP enforcement,"²⁶⁶ yet these are not impacted judicial reforms such as the misjoinder rules.

In addition, fee-shifting does not punish tactics and abuses outside of the courtroom – where the majority of assertions take place. Based on talking to lawyers who assert other forms of IP, Bill Gallagher has concluded that "legal sanctions aimed at deterring over-reaching IP enforcement are unlikely to be effective because most such over-reaching occurs in informal disputing processes outside of the legal system."²⁶⁷

Circumvention and Avoidance

Perhaps the most damning critique of loser pays rules is that they potentially can be circumvented. Many troll suits are brought using shell companies created for the specific

²⁶² Based on a search in Westlaw, in 2011, approximately 20 awards were made, and in 2002, 10 awards were made. They were sought in 86 and 50 cases. Over comparable 1-year periods 2,892 (March 2010-March 2011) and 2,573 (March 2001-March 2002), patent cases were filed. (data available at

http://www.uscourts.gov/Viewer.aspx?doc=/uscourts/Statistics/FederalJudicialCaseloadStatistics/2011/tables/C02M ar11.pdf and

http://www.uscourts.gov/uscourts/Statistics/FederalJudicialCaseloadStatistics/2002/tables/c02mar02.pdf, respectively).

²⁶³ John R. Allison et al., Patent Quality and Settlement Among Repeat Patent Litigants, 99 Geo. L.J. 677 (2011). ²⁶⁴ For example, as exemplified by the indeterminacy of the meaning of patent claim terms that contribute to reversal

rates of 25-50%.

Kimberly A. Moore, Markman Eight Years Later: Is Claim Construction More Predictable?, 9 Lewis & Clark L. Rev. 231, 232-34 (2005); David L. Schwartz, Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases, 107 Mich. L. Rev. 223 (2008). Cf. David L.

Schwartz, Pre-Markman Reversal Rates, 43 Loy. L.A. L. Rev. 1073 (2010) (studying reversal rates before district judges began expressly construing patent claims). Jonas Anderson and Peter Menell have found in a more recent study that the claim construction reversal rate is declining, but it is still over 25%. J. Jonas Anderson & Peter S. Menell, The Emergence of Informal Deference: An Empirical Examination of the Federal Circuit's Patent Claim Construction Jurisprudence (draft 2012). ²⁶⁵ http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=c032e6c4-e575-40cf-99b4-72e7753c1359

²⁶⁶ Gallagher, supra note ___, at Abstract.

²⁶⁷ Gallagher, supra note ____, at Abstract.

purpose of shielding their investors from liability and scrutiny.²⁶⁸ Structured correctly, the entity need not be connected to the corporation's sponsors or its assets. Faced with a sanction or attorney's fee award against it, the LLC could go bankrupt rather than paying the penalty. In Europe, for example, German patent troll IP Com is structured as a special purpose entity (SPE) designed to be "judgment proof" from fee awards against it.²⁶⁹ If trolls can shield themselves from fee-shifting awards and sanctions in this way, they will. Indeed, such concerns apparently have already provided an incentive for them to be set up in this way.²⁷⁰

Circumvention in cost-reduction regulation has been attempted in the application of the new misjoinder rules. Trolls like to sue multiple defendants at once, both because it is cheaper to sue once rather than file separate actions and also because it gives defendants less time to present their cases, especially in districts that do not increase the amount of time available by the number of defendants.²⁷¹ The new "misjoinder rules" who can be sued in a single patent infringement action, to parties who are engaged in the "same accused product or process."²⁷²

When it became clear that the AIA and the misjoinder provisions would be going into effect, non-practicing entities (NPEs) rushed to the courthouse, filing an all-time high number of cases against a record number of defendants.²⁷³ This seemed to provide an early positive indication that the new rule would matter, by making it harder for patentees to capture the economies of scale associated with suing a large of number of defendants at the same time.

The early results are mixed, but encouraging. While NPE case filing are up,²⁷⁴ the number of average defendants per NPE suit is down, from five to two.²⁷⁵ Taking both of these trends into account by counting total NPE defendants indicates a downward trend thus far. (Figure 4) According to data collected by RPX, the average number of NPE defendants per week in high technology sectors prior to passage of the AIA was 67,²⁷⁶ and since then through the end of January 2012, was down to 37.²⁷⁷ There are early indications that trolls are concentrating their

²⁶⁸ See e.g., Thomas Ewing, *Enter the Privateers*, 45 Intellectual Asset Management Magazine 32 (Jan/Feb 2011) (describing this practice in the context of corporate sponsorship of suits, or privateering, and commenting that, "the LLC is a nearly perfect corporate form for privateering, as many jurisdictions offer maximum privacy for businesses having this form.")

²⁶⁹ Stefania Fusco, supra note ____, at ___. ²⁷⁰ *Id.* at ____, citing interview with Intellectual Ventures. In general, there is no guarantee that a defendant will be able to recover their fees. In the case of Florida's medical malpractice rule, for example, Rhode finds, because many plaintiffs lacked funds to pay their opponents' costs, defendants' costs were higher as well. Rhode, *supra* note

at _____. ²⁷¹ Watal, *Part II*, supra note _____ at *67 ²⁷² America Invents Act, sec. 19(d), 125 Stat. at 332–33 (New section 299) ²⁷³ Rush to Judgment: New Dis-Joinder Rules and Non-Practicing Entities, PATENTLYO (Sept. 20, 2011, 3:10 PM EDT), http://www.patentlyo.com/patent/2011/09/rush-to-judgment-new-dis-joinder-rules-and-non-practicingentities.html, accord Figure 4 (graphically depicting this spike) ²⁷⁴ See Chien, *N.D. Cal Presentation*, supra note _____(on file with author) ²⁷⁵ http://www.rpxcorp.com/index.cfm?pageid=14&itemid=17

²⁷⁶ 2011 data, not including the two weeks prior to passage of the law, due to the anomalous rush to the courthouse described earlier.

²⁷⁷ Figure 3A, but see http://www.rpxcorp.com/index.cfm?pageid=14&itemid=17 at slide 25, showing that when the weeks right before the AIA are taken into account, the smoothed trend is increasing, rather than decreasing.

efforts on bigger fry.²⁷⁸

However, the misjoinder provisions do not extend to the International Trade Commission, where patentees can also bring infringement actions. As would be expected, there is no indication thus far that the same decline in number of defendants per suit experienced in the district court will be experienced there.²⁷⁹

The misjoinder rules require codefendants to be engaged in the "same accused product or process."²⁸⁰ This makes it harder to bring cases against disparate clients that are developing or using different products. However, it does not preclude suits brought against a group of defendants all using the same product. For example, Innovatio, LLC has sued hotels and coffee shops for their use of wireless technology.²⁸¹

Thus, even if the number of suits or defendants goes down, there is no guarantee of a corresponding decrease in demands on companies.

2. Decreasing the Costs of Litigation

The problem may in fact not be the idea that patentees should be compensated, but how such compensation is accomplished. It is estimated that only a small fraction of the loss associated with NPEs is returned to innovators and their shareholders.²⁸² As has written about tort law, where nuisance suits have also been perceived as a problem, perhaps the problem is not excessive litigation but, the systematic "undercompensation of victims and overcompensation of lawyers."

Judicial Innovation

A host of proposals fall under the category of streamlining and reducing the high costs of patent litigation. Much of this is within the power of the judiciary, to, for example, order early mediation/alternative dispute resolution procedures, limit the number of claims and issues in a case,²⁸³ and request early disclosure of the value of the case.²⁸⁴ Perhaps the best developed

²⁷⁸ http://www.rpxcorp.com/index.cfm?pageid=14&itemid=17 at slide 26 (reporting data to support the headline "NPEs Focusing Efforts on Larger Companies").

²⁷⁹See, e.g. Colleen Chien and Mark Lemley, *Public Interest, Patents, and the ITC* Cornell Law Rev., Figure 1 (forthcoming 2012) (showing that the number of defendants per suit has decreased dramatically in the district court post-AIA, without any corresponding decrease in the ITC). 280 A moving L

⁸⁰ America Invents Act, sec. 19(d), 125 Stat. at 332–33 (New section 299)

^{281 &}lt;u>http://patentexaminer.org/2011/09/innovatios-infringement-suit-rampage-expands-to-corporate-hotels/</u>

Bessen, James E., Ford, Jennifer Laurissa and Meurer, Michael J., The Private and Social Costs of Patent Trolls (January 9, 2012). Regulation, Vol. 34, No. 4, p. 26, Winter 2011-2012. ²⁸³ See comments of Judge Lucy Koh, that to subject a jury to decide the infringement 16 patents, six trademarks,

five "trade dress" claims, and an antitrust case, with 37 products accused of violations would amount to "cruel and unusual punishment" that patent juries are subject to.

http://www.computerworld.com/s/article/9226803/Judge again orders Apple Samsung to streamline claims in i Pad patent case. See also Federal Judicial Council model instructions for streamlining patent cases (forthcoming 2012), http://news.cnet.com/8301-13579 3-57449607-37/even-judges-are-fed-up-with-patent-lawsuits/ (describing court-ordered case winnowing by Judges Posner and Koh, and)

²⁸⁴ Chief Judge Randall Rader, speech at Santa Clara University Law School 2011,

proposal is the model e-Discovery order promulgated by the Federal Bar Association's Advisory Council and adopted by several districts in various forms.²⁸⁵

Although these proposals have the potential to sweep across cases, judges have the discretion to implement them as they see fit. Importantly, they are well-aligned with judicial incentives to enhance the efficient resolution of cases. As forum-shopping has been tightened up, they have the potential to reduce the cost of defense, and therefore the economic opportunity offered by nuisance litigation. (Figure 2)

Market-Based Innovation

RPX, Rational Patent Exchange, aims to introduce efficiency to patent assertion by "providing a rational alternative to traditional litigation strategy for our clients, offering defensive buying, acquisition syndication, patent intelligence, and advisory services.²⁸⁶This value proposition has proven compelling to its 100+ members, who pay a subscription fee every year to access the market intelligence and services of the firm. IPXI launched in 2012 and also has the objective of reducing legal intermediaries by offering companies the ability to buy patent rights on an exchange. By selling Unit Licensing Rights (ULR) contracts, the firm hopes to connect buyers and sellers of technology rights, avoiding the need for costly enforcement campaigns.²⁸⁷Though it is still early, in May 2012 the exchange had 27 "offering" members.²⁸⁸

D. Self-Help

to be written

CONCLUSION – to be written

²⁸⁵ Since the initial disclosure there have been four cases of note: three in E.D.TX. and one in <u>N.D.CA</u>. A summary of those cases and discovery holdings can be found here: http://discoverready.com/blog/model-order-generatesbuzz-in-district-courts/ In December 2011, Delaware updated its default standards in eDiscovery. Recognizing the merits of the Federal Model Order, Delaware has chosen to emphasize cooperation between parties in its standards. The default standard will only apply when parties fail in their efforts to find consensus. A summary can be found at: http://discoverready.com/blog/delaware-provides-default-e-discovery-limits/. In Spring 2012, the E.D. TX has issued its own Model Order, implemented as an appendix to its own local rules, allowing greater flexibility. See <u>http://discoverready.com/blog/texas-court-builds-on-judge-raders-model-order/</u>. ²⁸⁶ <u>http://www.rpxcorp.com/</u>

²⁸⁷ http://www.ipxi.com/products/ulr

²⁸⁸ http://www.ipxi.com/media/newsreleases/IPXI-Attracts-Leading-Global-Corporation-Universities-National-Lab