


September 2009

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Recommended Citation

Mark Chandler, *The Patent System's Relationship to Digital Entrepreneurship*, 112 W. Va. L. Rev. (2009).

Available at: <https://researchrepository.wvu.edu/wvlr/vol112/iss1/10>

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THE PATENT SYSTEM'S RELATIONSHIP TO DIGITAL ENTREPRENEURSHIP

*Mark Chandler**

Editor's Note: The following is a transcript adaptation of Mr. Mark Chandler's remarks on Friday, March 27, 2009 at the West Virginia University College of Law's Law Review Symposium: *Digital Entrepreneurship: The Incentives and Legal Risks*.

I hope I can offer some useful thoughts on our patent system and its relationship to digital entrepreneurship.

To organize our discussion, I would like to ask three questions, and offer my own proposed answers to those questions. The three questions are:

- First, why do we have a patent system, and what is it supposed to accomplish?
- Second, are those purposes being accomplished by the patent system we have today, as it relates to the world of digital systems and new media?
- And third, what should we change to improve our patent system's effectiveness in the digital world?

I have strong views, and you may agree, or disagree, with my analysis and conclusions. I hope the discussion I offer at least helps you form your own opinions.

To the first question, why do we have a patent system, and what is it supposed to accomplish? You might question my credentials to speak. After all, I am not a patent lawyer, or even an intellectual property lawyer. I once joked to a law professor that intellectual property law is too important to be left to intellectual property lawyers. She promptly printed that statement on posters promoting a speech I was to give. I was mortified to see the posters, first because it seemed kind of arrogant and more importantly because the audience included several members of the Federal Circuit, before whom we have cases. I

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explained to the judges that my joking remark had simply been meant to show the lengths some people will go to speak on topics they know nothing about.

But at a larger level, a generalist might have something to offer, because the goals of our patent system must be distinguished from the intellectual property rights regime that has developed around it. By that, I mean the following: at its root, our patent system is a form of industrial policy. The Founders viewed the patent system as driven by a specific goal. In our Constitution, they gave Congress the power, and I quote, “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”¹ Our Founders did not view patent rights as natural law rights, in the Lockean sense. They are not inalienable, in the same manner as are life, liberty, the pursuit of happiness,² or, as Locke had it, life, liberty and property.³ The Founders could have said their goal was to “protect in perpetuity property rights that are the inalienable expression of one’s creativity.” But the Founders did not do that.

They created a patent system because they had a policy goal — to promote the progress of science and the useful arts. They wanted to spur economic development in the nation they were creating, whose greatness they imagined — but they demanded there be a time limit on the advantages they were bestowing. The implication is clear — the promotion of progress in science and useful arts is the goal, not the protection of some abstract or basic rights.

And that leads to my second question: Are those purposes being met by the patent system we have today, as it relates to the world of digital systems and new media?

I believe our system of intellectual property rights is failing as it relates to digital products. It is failing because in building legal rules around the patent system, the intellectual property rights regime that supports the patent system, we have lost sight of the original goal of the Founders.

We all know the importance to economic development of a well-functioning, consistent, predictable contract law system. When we work with other nations about the legal changes necessary for economic development, we often point to the need for parties to know where they stand going into a deal, the importance of the enforceability of contracts. Our commercial law system is held up for admiration around the world.

On the other hand, we do not often hear people say, “To promote economic development, you need to have a tort system just like we do in the United States.” The tort system is designed to redress wrongs and to do that in a highly individualized way, not to promote economic development. And yet the enforcement mechanisms in our patent system have come to more and more re-

¹ U.S. CONST. art. I, § 8, cl. 8.

² THE DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776).

³ JOHN LOCKE, SECOND TREATISE OF GOVERNMENT (Oskar Piest & Thomas P. Peardon eds., The Liberal Arts Press 1952) (1690).

semble our tort system, and principles developed for real property are used as well. Instead of a patent jurisprudence that is uniquely designed to address the “promotion of progress in science and the useful arts,”⁴ we have a system of rules built by analogy to common law property and tort principles. These analogies utterly fail to support the digital entrepreneur who is seeking to innovate. And I would like to describe three areas where the failure is most pronounced.

First, there are unnecessary restrictions which preclude a robust review of whether patents have been properly granted in the first place. Interest groups representing some patentholders argue they should be entitled to “quiet title” in their property rights, using the analogy of real property. I also once heard a patentholder argue that a patent is like a government bond: that once the bond has been bought, the promise of repayment should be absolute. Well, I say, if it turns out that the bond was paid for with counterfeit bills, knowingly or unknowingly, the government should not have to redeem the bond. And if it turns out that the patent should not have been granted, then the patentholder should not have the ability to enforce it.

Real property can be measured by metes and bounds, and title registries provide certainty as to real property ownership. A wire transfer to buy a government bond provides assurance of actual payment.

But patents are based on necessarily imperfect disclosure by inventors and their lawyers, review by an understaffed, underpaid and overworked patent office, dealing with matters of extraordinary complexity, and with strict time limitations. For instance, in a typical electronics application, a patent examiner is on average allotted about twenty hours, from the time she opens the file to the time years later when the patent is issued, to review the file, understand the invention, research and understand all the prior art, go back and forth with the inventor multiple times, and determine what claims should be rejected or amended.⁵

Patentholders have worked hard to build walls that make it difficult for bona fide validity challenges to proceed. Courts offer a presumption of validity for patents being litigated — probably not a bad idea given the expertise we expect the Patent Office to have.⁶ But the law also ties the Patent Office’s hands to extremely narrow grounds for reexamination. As an example, the law prohibits review of whether another product using the supposed invention was al-

⁴ U.S. CONST. art. I, § 8, cl. 8.

⁵ Nicholas Varchaver, *Patent Review Goes Wiki*, FORTUNE, Aug. 16, 2006, http://money.cnn.com/magazines/fortune/fortune_archive/2006/08/21/8383639/ (“The issue is that patent applications have tripled in the past two decades, leaving examiners only 20 hours on average to comb through a complex application, research past inventions, and decide whether a patent should be granted.”).

⁶ See 35 U.S.C. § 282 (2002) (“A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.”).

ready on the market before the patentholder allegedly came up with the invention. Those who want a chance to present evidence in a Patent Office reexamination are blocked not just from raising in court those matters they raise in the reexamination, but are barred from raising in court any items they could have raised to the Patent Office, whatever that means. And courts generally do not stay patent litigation while Patent Office reexaminations occur. That is why we see miscarriages of justice like Research in Motion's (RIM) payment of \$612.5 million to settle the Blackberry litigation, even though the patent office had started the process of invalidating the patent.⁷

Now, beyond that fact that bad patents are hard to invalidate, the patent holding companies which have sprung up, which are basically litigation syndicates, have tried to cast infringement as a moral offense. But remember: no intent is required to infringe a patent.⁸ Not even negligence is required. An entrepreneur can innocently bring a new product to market, and only later does a patent issue to someone else, who claims to have invented first. There is no protection in that innocence. The word infringement, however, perhaps because it is also used in copyright, where literal copying is required, has been cast with an element of moral opprobrium. The patent litigation syndicates, and some big companies, equate infringement with stealing, ignoring that we have special penalties for willfulness and the typical case involves no willfulness.⁹ In virtually all of our cases at Cisco, the plaintiff seeks to leverage settlement by claiming triple damages for willful infringement, even though in nearly every instance the first time we have seen or heard of the patents is after our products have been developed and in the marketplace for years, and no reasonable search would have flagged the patent as even applicable to our products. And this tort-like concept of "fault," for what is — absent willfulness — a strict liability, permeates the public debate, distracting from the goal of economic development which undergirds our patent system. There is an irony here, when we hear "infringement" used as an epithet, that should not be lost: perfectly innocent inventors and entrepreneurs, who can show they had no knowledge of another's work or had been working on an idea before someone else's patent application was ever published, can be blocked by the government from bringing their ideas and

⁷ See Arik Hesseldahl & Heather Green, *Blackberry Won't Get Squashed*, BUS. WK., Mar. 3, 2006, http://www.businessweek.com/technology/content/mar2006/tc20060303_098230.htm?campaign_id=tbw.

⁸ See 35 U.S.C. § 271(a) (2003) (No intent element appears in the statute. Instead, patent infringement occurs when an entity "without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent . . .").

⁹ See, e.g., *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1221 (Fed. Cir. 1995) ("Willfulness of infringement is a question of fact, for it includes elements of intent, reasonableness, and belief. The boundary between unintentional and culpable acts is not always bright, for the facts often include subjective as well as objective elements. Thus willful infringement must be established by clear and convincing evidence, for it is a punitive finding, and can have the consequence of multiplication of damages.") (citations omitted).

inventions to market and realizing their dreams. And there is certainly an “infringement” of that innocent prior user’s right to “pursue happiness,” though one that we justify on the basis of the constitutional goal of progress. And yet, tort-like “fault” concepts prevail, even in ordinary, non-willful patent cases.

And finally, like the tort system, our zeal to award damages creates uncertainty as to outcomes. The fifteen-factor *Georgia Pacific* test is a nightmare for litigants who want to predict the outcome of a case.¹⁰ In the absence of certainty, litigation gamesmanship and leverage become the dominant modes of interaction. If we had a vague, fifteen-factor jury-decided test for breach of contract cases, our commercial system would grind to a halt. The absence of a clear rule as to when damages should be based on the entire market value of a product that simply includes a feature that may infringe a patent, as opposed to the economic value added by the feature itself, is a disaster for those in the digital world, who build complex products.

That is why we have seen patent litigation rise from about 900 cases in 1990 with 1500 defendants, to almost 3000 cases and more than 9000 defendants in 2007.¹¹ And that is why, similar to the tort system, we see allegations of forum shopping in the debate over patents. The rise of the patent holding companies, who build no products themselves, acting as litigation syndicates, reflects the ability under the current rules to leverage uncertainty, and reflects the move away from the goal of “promotion of progress in science and the useful arts.” In Cisco’s case, we have gone from three cases a decade ago, all involving competitors, to over thirty today, with almost all the cases brought by litigation syndicates which have no interest whatsoever in bringing products to market. As Justice Kennedy wrote about the rise of the patent litigation syndicates in the *Ebay* case, “An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees.”¹²

Carl Shapiro at Berkeley, the newly appointed Chief Economist of the Antitrust Division in the Justice Department, in his path-breaking writing about patent thickets, said it best in describing the effect all of this has on the digital

¹⁰ See *Georgia Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970).

¹¹ Marie-Anne Hogarth, *Proposed U.S. Senate Bill Would Limit Patent Lawsuit Damages*, E. BAY BUS. TIMES, Feb. 29, 2008, <http://sanfrancisco.bizjournals.com/eastbay/stories/2008/03/03/focus1.html> (“There were 900 patent suits involving 1,500 defendants nationally in 1990”); Stanford University IP Litigation Clearinghouse, *Patent Infringement Filings and Number of Patent Infringement Defendants 2006–2009* (2009), <http://www.law.stanford.edu/program/centers/iplc/> (subscription required) (There were 2840 patent infringement filings in 2007 with 9077 defendants.); see also Mark Chandler, Senior Vice President and General Counsel, Cisco Systems, Address at the Sen. Comm. on the Judiciary, 109th Cong.: Perspectives on Patents: Post-Grant Review Procedures and Other Litigation Reforms (2006).

¹² *Ebay Inc. v. Mercexchange, LLC*, 547 U.S. 388, 396 (2006) (Kennedy, J., concurring).

entrepreneur. I will quote from him, since my attempt to paraphrase cannot do justice to his eloquence. He wrote:

Our current patent system is causing a potentially dangerous situation in several fields, including biotechnology, semiconductors, computer software, and e-commerce, in which a would-be entrepreneur or innovator may face a barrage of infringement actions that it must overcome to bring its product or service to market. In other words, we are in danger of creating significant transaction costs for those seeking to commercialize new technology based on multiple patents, overlapping rights, and holdup problems. Under these circumstances, it is fair to ask whether the pendulum has swung too far in the direction of strong patent rights, ranging from the standards used at the Patent and Trademark Office for approving patent applications, to the secrecy of such applications, to the presumption afforded by the courts to patent validity, to the right of patent holders to seek injunctive relief by insisting that infringing firms cease production of the offending products.¹³

Professor Shapiro's grim description now leads directly to the third of my three questions: what should we change to improve our patent system's effectiveness in the digital world?

I will start with some bad news. Change is hard. It is hard because those who benefit from an existing system, no matter how imbalanced or counterproductive, will fight aggressively to protect their benefits. Right now the system works well for those who have products covered by a single or small number of patents, such as pharmaceutical and chemical companies. And it works well for those with weak patents, or for the litigation syndicates whose business model is based on extracting maximum dollars through threats and leverage.

The good news is that the courts, when presented with the right cases, have begun to recognize how dysfunctional our patent system is. The Supreme Court's unanimous decision in *Ebay* brought some common sense to use of injunctions in patent cases. In *KSR International v. Telefax Inc.*,¹⁴ again by a unanimous vote, the Supreme Court made common sense improvements to the

¹³ See Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting* 28, Competition Policy Center, University of California, Berkeley (May 2000), <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1015&context=iber/cpc>.

¹⁴ 550 U.S. 398 (2007). The Court held that "[i]n determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103. One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims." *Id.* at 419–20.

definition of what is obvious, cutting off patentability in some cases where there is no promotion of progress in science and the useful arts. The 7–1 decision in *Microsoft Corp. v. AT&T Corp.*,¹⁵ limited a bizarre extraterritorial application of U.S. patents that had been used by plaintiffs to ratchet up the damage claims and thereby extract settlements. And the unanimous Supreme Court decision in *Quanta Computer, Inc. v. LG Electronics, Inc.*¹⁶ limited the scope of follow-on suits when a patent is already licensed, avoiding double dipping by patentholders. When Justices across the spectrum agree on four cases, you can bet the law was way out of whack. By the same token, the Federal Circuit's decisions regarding willfulness in *In re Seagate Technology*,¹⁷ and regarding abstract patents in *In re Bilski*,¹⁸ also helped to take unnecessary leverage out of the patent system and eliminate a class of patents that represented no real inventive activity.

I will sketch out three areas where more change is urgently needed to ensure we have a patent system that protects true ingenuity.

First, damages rules must be clarified so that entrepreneurs do not have to worry about the risk of absurd jury verdicts based on the entire market value of a complex product. I do not blame jurors for being confused when told to take into account the fifteen *Georgia Pacific* factors. It only takes a few bad cases to make dozens of patent holding companies think it is worth their while to sue an entire industry. Dozens of different U.S. patent holders claim that the WiFi 802.11 standard cannot be practiced without infringing their patents. A number have brought suit, all, of course, seeking a royalty based on the entire market value of the WiFi device. These high damage claim cases, based on uncertainty regarding the entire market value rule, are a key source of unmerited leverage for plaintiffs.

Second, a fair system needs to be put in place so that those who have been sued, who have bona fide evidence of invalidity, can go back to the Patent Office with that evidence. It is essential that errors by the Patent Office in the initial review process not be rewarded with patents that are nearly invulnerable to attack. The review process must of course be speedy so that patentholders do not get bogged down with repetitive challenges and denied their day in court. But the system should also encourage patentholders to assert their claims early, rather than waiting for an entire industry to develop before suing. By the way, it is this business strategy of waiting until an industry has developed that caused Peter Detkin, then of Intel and now Intellectual Ventures, to refer to the patent litigation syndicates as “trolls.”¹⁹

¹⁵ 550 U.S. 437 (2007).

¹⁶ 128 S. Ct. 2109 (2008).

¹⁷ 497 F.3d 1360 (Fed. Cir. 2007) (holding that willful patent infringement requires some proof of recklessness).

¹⁸ 545 F.3d 943 (Fed. Cir. 2008).

¹⁹ See Peter N. Detkin, *Leveling the Patent Playing Field*, 6 J. MARSHALL REV. INTELL. PROP. L. 636, 636 (2007).

Third, and finally, the standards-setting process should be looked at anew. Standards bodies are simply too vulnerable to being misused by those who would enshrine their private intellectual property advantage in what becomes a mandatory industry standard. The sanctions for violating the commitment to reasonable and non-discriminatory terms are neither strict enough nor uniformly enough applied to make a real difference.

With these steps, we can rebuild a patent system that focuses on innovation, not litigation, and fulfills the constitutional mandate to promote progress.

Let us go back to our questions and review the answers I have offered:

– First, why do we have a patent system, and what is it supposed to accomplish? I say the purpose is to drive innovation and promote economic growth, not to reward gamesmanship and litigation skill.

– Second, are those purposes being accomplished by the patent system we have today, as it relates to the world of digital systems and new media? My answer is no — that we need a patent jurisprudence focused on the goals of promoting progress in science and useful arts, in driving economic growth and innovation, rather than one built on analogies to torts and real estate.

– And third, what should we change to improve our patent system's effectiveness in the digital world? Well, I have spelled out what I think needs to be done. A bipartisan group of Senators and Congressmen have introduced patent reform legislation to eliminate these abuses and strengthen our patent system. This year, with your help, we can get the job done. I urge you to join with me in writing to your Senators, asking them to support Senator Leahy and Senator Hatch's patent reform legislation, and restore the greatness of our patent system.

Thank you again for the chance to join the Symposium, and for your attention today.