VIRGINIA LAW REVIEW ONLINE

Volume 1	101
----------	-----

JANUARY 2015

1-13

ESSAY

BAD ACTORS AND THE EVOLUTION OF PATENT LAW

Brian J. Love*

IN patent law, bad actors are the topic du jour. Nuisance value patent lawsuits, mass-mailed demand letters, and other practices of dubious social value dominate patent policy discussions.¹ So much so, in fact, that only four years after overhauling the patent system in 2011² Congress is again considering a package of patent reforms to target these activities and more.³

^{*} Assistant Professor and Co-Director of the High Tech Law Institute, Santa Clara University School of Law. Thanks to Bernard Chao, Eric Goldman, and Kyle Graham for comments on previous drafts of this Essay.

¹ See, e.g., Joe Mullin, Lawmakers Blast Patent Trolls, but Split on Parts of a Key Bill, Ars Technica (Oct. 30, 2013, 9:00 PM), http://arstechnica.com/tech-policy/2013/10/ lawmakers-blast-patent-trolls-but-split-on-parts-of-a-key-bill/ (quoting members of the U.S. House of Representatives Judiciary Committee).

² President Obama signed the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284 (2011), the largest package of patent reform legislation passed since 1952, on September 16, 2011. Because most controversial aspects of the bill were removed before its passage, the AIA was largely greeted with ambivalence by the patent community. See, e.g., Gary R. Maze & K. Kalan, The America Invents Act: Much Ado About Very Little, Berenbaum Weinshienk PC (Oct. 3, 2011), http://www.bw-legal.com/news/nbin/20111006_whitepaper.pdf. In recent months, however, new procedures created by the AIA for administratively challenging issued patents have exploded in popularity and promise to have a significant impact on patent litigation strategy moving forward. See Brian J. Love & Shawn Ambwani, *Inter Partes* Review: An Early Look at the Numbers, 81 U. Chi. L. Rev. Dialogue 93, 93–95 (2014).

³ In December 2013, the U.S. House of Representatives passed the Innovation Act, H.R. 3309, 113th Cong. (2013), but the bill later died in the Senate in May 2014. See Kate Tummarello, Patent Reform Bill Dealt Fatal Blow in Senate, The Hill (May 21, 2014, 5:16 PM), http://thehill.com/policy/technology/206793-leahy-takes-patentreform-off-committee-agenda. The Innovation Act was largely designed with nuisance value patent litigation in mind and, if passed, would have, inter alia, raised pleading requirements for patent infringement claims, established a presumption that attorneys'

2

Virginia Law Review Online

[Vol. 101:1

Though recent criticism of the patent system is wide-ranging, many view courts' historical reluctance to award attorney's fees and otherwise exercise their equitable powers to counteract sharp behavior as central factors behind the present abundance of sociallyquestionable patent enforcement.⁴ As a result, there is general agreement that patentees regularly sit on their rights while others unwittingly invest to their detriment,⁵ take advantage of continua-

⁵ See Ronald J. Mann, Do Patents Facilitate Financing in the Software Industry?, 83 Tex. L. Rev. 961, 1027 (2005) (noting the "especially damaging" patent monetization strategy of "waiting after a patent has been issued while an industry advances using the covered technology and then suing widely for infringement only after the industry has become locked into the technology through independent innovation and development"); Robert P. Merges, The Trouble with Trolls: Innovation, Rent-Seeking, and Patent Law Reform, 24 Berkeley Tech. L.J. 1583, 1590–91 (2009) ("The patent troll strategy is to take advantage of 'lock-in' that occurs as a result of [sunk cost] investments.

fees be awarded in patent suits, and limited discovery in patent suits prior to claim construction. See Dennis Crouch, New Patent Legislation: Innovation Act of 2013, Pa-24, 2013), http://patentlyo.com/patent/2013/10/new-patenttently-0 (Oct. legislation-innovation-act-of-2013.html. Many other bills, including bills designed to target misleading patent demand letters, were introduced both at the federal and state levels. See Patent Progress's Guide to Federal Patent Reform Legislation, Patent Prohttp://www.patentprogress.org/patent-progress-legislation-guides/patentgress. progresss-guide-patent-reform-legislation/ (lasted visited Dec. 17, 2014) (collecting citations to federal patent reform bills); Joe Mullin, Ten States Pass Anti-Patent-Troll Laws, with More to Come, Ars Technica (May 15, 2014, 4:47 PM), http://arstechnica. com/tech-policy/2014/05/fight-against-patent-trolls-flags-in-the-senate-but-statespush-ahead/ (collecting citations to state-level legislative action). After a period of inaction caused by the 2014 mid-term elections, patent reform efforts are widely expected to begin again in earnest in early 2015. See, e.g., Erica Teichert, Congress to Push Patent Troll Bill in 2015, Goodlatte Says, Law360 (Nov. 18, 2014, 3:52 PM), http://www.law360.com/articles/597447/congress-to-push-patent-troll-bill-in-2015goodlatte-savs.

⁴ Though the Patent Act permits courts to award attorney's fees in "exceptional" cases, 35 U.S.C. § 285 (2012), courts have historically been reluctant to do so. See Randall R. Rader et al., Make Patent Trolls Pay in Court, N.Y. Times, June 5, 2013, at A25 ("Lost in the debate [about abusive patent litigation] is that judges already have the authority to curtail these practices.... But remarkably, judges don't do so very often: by our count, fees were shifted under Section 285 in only 20 out of nearly 3,000 patent cases filed in 2011."); Colleen V. Chien, Reforming Software Patents, 50 Hous. L. Rev. 325, 377 (2012) (reporting that between 2005 and 2011, judges awarded fees in patent cases an average of just fifty-six times per year); Saurabh Vishnubhakat, What Patent Attorney Fee Awards Really Look Like, 63 Duke L.J. Online 15, 15 (2014) (collecting data on more than 200 attorneys' fee award orders issued in patent cases between 2003 and 2013). In *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1755–56 (2014), the Supreme Court relaxed the standard for awarding fees under § 285, a development that promises to increase the number of awards in the future, though it is still too early to say by how much.

tion applications to acquire rights to after-arising technology they never invented,⁶ file low-value suits worth less than the cost of defendants' discovery bills,⁷ and engage in other equally questionable activities—all seemingly without much risk of consequence.

Widespread use of tactics like these has fueled a long running debate on the prudence of various legislative and judicial reforms—a debate that, to date, has focused on estimating the *direct* monetary costs and benefits of taking action. On one side of the divide, numerous commentators have written in favor of strengthening patent law's existing deterrents and impediments to bad behavior,⁸ as well as introducing entirely new roadblocks to such conduct.⁹ Almost in-

⁹ Examples include, inter alia, instituting a new patent maintenance fee regime, James Bessen & Brian J. Love, Make the Patent "Polluters" Pay: Using Pigovian Fees to Curb Patent Abuse, 4 Calif. L. Rev. Circuit 84, 86 (2013), shortening the patent term, Brian J. Love, An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?, 161 U. Pa. L. Rev. 1309, 1350–53

Typically, the troll waits until a technology is fully entrenched before scouting around for patents to acquire or asserting patents it holds." (footnote omitted)).

⁶ See Mark A. Lemley & Kimberly A. Moore, Ending Abuse of Patent Continuations, 84 B.U. L. Rev. 63, 65 (2004) ("[C]ontinuation practice can be—and has been—used strategically to gain advantages over competitors by waiting to see what product the competitor will make, and then drafting patent claims specifically designed to cover that product.").

⁷ See Informational Hearing on Patent Assertion Entities Before the Cal. Assemb. Select Comm. on High Tech., 2013–14 Sess. 2 (Cal. 2013) (statement of Brian J. Love), available at http://papers.srn.com/sol3/papers.cfm?abstract_id=2347138 ("[Patent Assertion Entities] are problematic because they drastically change the economics of patent litigation in ways that allow them to extract from product-producing companies settlement payments that primarily reflect litigation costs, not the value of the patented technology.").

⁸ Examples include, inter alia, increasing the frequency of attorneys' fees awards, see Christian Helmers et al., Is There a Patent Troll Problem in the U.K.?, 24 Fordham Intell. Prop. Media & Ent. L.J. 509, 539, 545 (2014) (concluding that fee shifting is a key reason for the relative lack of patent assertion by non-practicing entities in the U.K.); raising pleading requirements in patent cases, Jonathan L. Moore, Particularizing Patent Pleading: Pleading Patent Infringement in a Post-Twombly World, 18 Tex. Intell. Prop. L.J. 451 (2010); liberalizing rules for staying patent suits, Brian J. Love & James C. Yoon, Expanding Patent Law's Customer Suit Exception, 93 B.U. L. Rev. 1605, 1626 (2013); restricting and delaying discovery in patent suits, Ranganath Sudarshan, Nuisance-Value Patent Suits: An Economic Model and Proposal, 25 Santa Clara Computer & High Tech. L.J. 159, 184-88 (2008); limiting patent applicants' use of functional claiming, Mark A. Lemley, Software Patents and the Return of Functional Claiming, 2013 Wis. L. Rev. 905, 962–63; and reining in remedies for patent infringement see, e.g., Colleen V. Chien & Mark A. Lemley, Patent Holdup, the ITC, and the Public Interest, 98 Cornell L. Rev. 1, 39–43 (2012), Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 Tex. L. Rev. 1991, 2043 (2007).

Virginia Law Review Online [Vol. 101:1

variably, these scholars base their calls for reform on an accounting of the direct costs—particularly legal fees—borne by accused infringers forced to litigate patent suits that appear to have little social benefit.¹⁰ On the other side of the debate are commentators who argue that deterrents like those included in current reform bills cast too wide of a net and threaten to unduly restrain the power of all patent rights, rather than merely weed out ne'er-do-wells with laserlike focus.¹¹ These arguments, like those made by reform proponents, also generally rest on a tally of direct losses—in this case, predictions of deflated patent valuations and reduced licensing revenue that all patent owners (good as well as bad) will face due to inevitable imperfections in any mechanism for targeting bad actors.¹²

page/619657/doc/slspublic/hacking_the_patent_system_final_cc.pdf.

¹¹ See, e.g., Louis Carbonneau, Toxic Asset: The Gradual Demise of the American Patent, IPWatchdog (Dec. 10, 2014), http://www.ipwatchdog.com/2014/12/10/toxic-asset-the-gradual-demise-of-the-american-patent/id=52571/ ("[T]here has been a multi-faceted attack on patent holders, primarily as a result of some real and perceived abuses of the system Unfortunately, shooting the messenger instead on focusing on the reprehensible behavior of a few has had unintended consequences that we now have to account for."); Joff Wild, Obama Declares War on Trolls, but All Patent Owners Will Be Affected, IAM Blog (June 4, 2013), http://www.iam-magazine.com/Blog/Detail.aspx?g=18b987fa-1722-4613-9952-bb204b2041d1 ("[Y]ou are going to find a large number of entities targeted, many of which will not be the kinds of bottom-feeding outfits that use the threat of litigation as a means of extracting relatively low sums from their targets that the President may wish to discourage.").

¹² See, e.g., Bruce Berman, Nine Companies in IP CloseUp 30 Index Fall Below \$1/Share, IP CloseUp Blog (Dec. 17, 2014), http://ipcloseup.wordpress.com/2014/12/ 17/nine-companies-in-ip-closeup-30-index-fall-below-1share/ (explaining that these valuations reflect that patent holding entities have been "beaten down by new patent laws"); Joff Wild, Big US Tech Companies Face Major Patent Losses in the Post-Alice

^{(2013),} establishing an independent invention defense, Samson Vermont, Independent Invention as a Defense to Patent Infringement, 105 Mich. L. Rev. 475 (2006), making it more difficult for patent owners to hide their identities, Robin Feldman, Transparency, Va. J.L. & Tech. (forthcoming), available at http://ssrn.com/abstract=2402389, and facilitating inter-industry defensive coordination, Marta Belcher & John Casey, Hacking the Patent System: A Guide to Alternative Patent Licensing for Innovators (2014), https://www.law.stanford.edu/sites/default/files/child-

¹⁰ See, e.g., James Bessen & Michael J. Meurer, The Direct Costs from NPE Disputes, 99 Cornell L. Rev. 387, 387 (2014) ("Using a survey of defendants and a database of litigation, this paper estimates the direct costs to defendants arising from NPE patent assertions. We estimate that firms accrued \$29 billion of direct costs in 2011."); James Bessen et al., The Private and Social Costs of Patent Trolls, Reg., Winter 2011–12, at 26, 26 ("We find that NPE lawsuits are associated with half a trillion dollars of lost wealth to defendants from 1990 through 2010. During the last four years, the lost wealth has averaged over \$80 billion per year.").

Though scholars' focus on the first-order effects of potential reforms is quite understandable, this emphasis has left largely unexplored the possibility that less direct, though still sizeable, costs and benefits exist as well. This Essay begins the process of filling this gap in the literature by highlighting one heretofore underappreciated indirect benefit of implementing reforms that strengthen courts' ability to punish and prevent inequitable behavior: namely, that doing so will tend to make patent law more coherent and predictable in the long run, to the benefit of all patentees and perhaps especially those industry groups most opposed to reform.

As I explain below, there is good reason to believe that patent law's historical paucity of tools for deterring socially-questionable behavior played a large, though unstated, role in the creation of some of the most perennially confounding aspects of patent law. In the words of a familiar adage, patent jurisprudence has seen its fair share of "bad facts mak[ing] bad law"—that is, opinions that hastily apply ill-suited, generally-applicable legal rules to quietly rebuke a bad actor who otherwise would go unpunished. Consequently, there is also good reason to believe that one benefit of raising the bar for patent law's bad actors is that patent law will thereafter develop more logically because, simply put, when bad actors sue less often, courts grapple with "bad facts" less often, and thus have fewer opportunities to generate "bad law."

A REALIST VIEW OF PATENT LAW

It is no secret that judges' feelings about litigants and legal issues influence court rulings,¹³ and judges hearing patent cases are no exception.¹⁴ Commentators have long recognized that jurists can be swayed by the importance of the technology at issue in the patent

World, IAM Research Reveals, IAM Blog (Sept. 27, 2014), http://www.iam-magazine.com/Blog/Detail.aspx?g=2028b324-2d4a-4523-9f0d-f0773b8b3fa1.

¹³ Indeed, there is a long-running literature on this topic. See, e.g., Karl N. Llewellyn, Some Realism About Realism—Responding to Dean Pound, 44 Harv. L. Rev. 1222, 1239–42 (1931); Thomas J. Miles & Cass R. Sunstein, The New Legal Realism, 75 U. Chi. L. Rev. 831, 834 (2008) ("[M]uch of the emerging empirical work on judicial behavior is best understood as a new generation of legal realism.").

¹⁴ See Brian J. Love, The Misuse of Reasonable Royalty Damages As a Patent Infringement Deterrent, 74 Mo. L. Rev. 909, 910–11 (2009) (making this observation in light of reasonable royalty awards that appear to be punitive in nature).

Virginia Law Review Online [Vol. 101:1

cases they oversee.¹⁵ Indeed, this practice was at one time formally enshrined in a doctrine designed to bend the rules of claim construction in favor of protecting "pioneer inventions."¹⁶

Less common—at least among patent commentators—is the observation that courts also may look with suspicion at patentees who appear to be bad actors and, as with "pioneers," feel less restrained by precedent as a result. Though Oliver Wendell Holmes, Jr. observed that "hard cases make bad law" more than a century ago,¹⁷ patent scholars have paid this idea little heed to date. If anything, recent commentary has stressed to the contrary that courts and juries are virtually blind to several forms of iffy behavior on the part of patent plaintiffs, like establishing superficial ties to favorable localities,¹⁸ obfuscating ownership of asserted patents,¹⁹ and feigning commercialization efforts.²⁰

¹⁷ This adage is usually attributed to Justice Oliver Wendell Holmes, Jr., who wrote in a 1904 dissent that "hard cases make bad law," N. Sec. Co. v. United States, 193 U.S. 197, 400 (1904) (Holmes, J., dissenting), but the phrase dates back much further. Winterbottom v. Wright, (1842) 152 Eng. Rep. 402 (Exch.) 402; 10 M&W 109, 116 ("Hard cases, it has frequently been observed, are apt to introduce bad law.").

¹⁸ See Chester S. Chuang, Offensive Venue: The Curious Use of Declaratory Judgment to Forum Shop in Patent Litigation, 80 Geo. Wash. L. Rev. 1065, 1072–77 (2012) (documenting accused infringers' inability to combat forum shopping with declaratory judgment actions); Jeanne C. Fromer, Patentography, 85 N.Y.U. L. Rev. 1444, 1462–63 (2010) (discussing "[w]idespread [f]orum [s]hopping in the [d]istrict [c]ourts"); see also Network Prot. Scis, LLC v. Fortinet, Inc., No. C 12-01106 WHA, 2013 WL 4479336, at *7 (N.D. Cal. Aug. 20, 2013) (declining to sanction patentee despite evidence that it "manufactured venue in Texas via a sham [The sham included] rent[ing] a windowless file-cabinet room with no employees in Texas and [holding] it out as an ongoing business concern").

¹⁹ See Feldman, supra note 9.

²⁰ See Joe Mullin, How Newegg Crushed the "Shopping Cart" Patent and Saved Online Retail, Ars Technica (Jan. 27, 2013), http://arstechnica.com/tech-policy/2013/ 01/how-newegg-crushed-the-shopping-cart-patent-and-saved-online-retail/ (noting

¹⁵ Perhaps the most well-known example is *Parke-Davis & Co. v. H. K. Mulford Co.*, 189 F. 95, 103 (S.D.N.Y. 1911), aff'd in part, rev'd in part sub nom. *Parke-Davis & Co. v. H. K. Mulford & Co.* 196 F. 496, 497 (2d Cir. 1912), a case that has been described by many as holding that purified natural substances can be patented simply because the much-impressed, and highly-influential, Learned Hand "said so." See Jon M. Harkness, Myriad Misunderstandings of Parke-Davis v. Mulford, Patently-O (May 23, 2012), http://patentlyo.com/patent/2012/05/myriad-parke-davis.html.

¹⁶ See Brian J. Love, Interring the Pioneer Invention Doctrine, 90 N.C. L. Rev. 379, 389–404 (2012) (summarizing the history of the pioneer invention doctrine). A doctrine with similar effect, but which bends the rules in favor of impressive technology *accused of infringement*, is the "reverse doctrine of equivalents." See Westinghouse v. Boyden Power Brake Co., 170 U.S. 537, 568–69 (1898).

While these observations do have merit, they nonetheless offer an incomplete picture of the role that questionable conduct has played in patent jurisprudence. As the paragraphs below demonstrate, a broader inspection reveals many layers in the sedimentary crust of U.S. patent law bear the telltale signs of bad facts ushering the creation of bad law. In fact, one need look no further than a selection of "textbook" patent cases already familiar to generations of patent lawyers.

"SUBMARINE" INVENTORS SHAPED NOVELTY AND UTILITY

Probably no patent-related court opinion exemplifies this phenomenon better than *Egbert v. Lippman*,²¹ which reaches the surprising conclusion that an invention can be "publicly used" even when worn exclusively inside a person's undergarments. The technology at issue in the case—a new corset spring design—was "publicly used" according to the Court because the inventor's significant other (subsequently his wife) wore an embodiment sewn into her corset for several years before her tinkerer-turned-inventor husband filed a patent application on the design.²²

For a legal system that, in other contexts, ensures the secrecy of marital conversations,²³ it is hard to imagine a decision that deems "public" the interior of a romantic partner's underwear.²⁴ The case

that Soverain Software's webpage, which has "separate pages for 'products,' 'services,' and 'solutions'" as well as "phone numbers and e-mail addresses for sales and tech support," is "all a sham" because "[c]ourt records show Soverain hasn't made a sale—*ever*").

²¹ 104 U.S. 333 (1881).

 $^{^{22}}$ Id. at 335 (explaining that the inventor's "intimate friend...wore [the corset] steels [that he constructed for her] a long time...[and] [w]hen the corsets in which these steels were used wore out, the witness ripped them open and took out the steels and put them in new corsets").

²³ See Milton C. Regan, Jr., Spousal Privilege and the Meanings of Marriage, 81 Va. L. Rev. 2045, 2055 (1995) ("The privilege for confidential marital communications may be invoked in federal court and in all state courts. In federal court and in many state courts, the privilege is available in both civil and criminal proceedings." (footnotes omitted)).

²⁴ To be fair, the Court stressed that the inventor not only gave the corset spring to his significant other, but also did so "without limitation or restriction, or injunction of secrecy." *Egbert*, 104 U.S. at 336. Then again, as the dissent points out, it seems likely that telling one's romantic partner not to share the contents of his or her undergarments with the public "would have been supposed to be a piece of irony." Id. at 339 (Miller, J., dissenting).

Virginia Law Review Online [Vol. 101:1

makes a great deal more sense, however, when viewed in the context of two additional facts: first, that the inventor waited eleven years before filing a patent application; and second, that the corset spring industry independently and innocently adopted the same design in the meantime.²⁵ In other words, the patentee appears to have intentionally "slept on his rights" until many years later when the unwitting efforts and finances of others proved them to have great value.²⁶

Rather than enunciating an equitable rule to protect settled expectations, and conversely to punish those who sit on their rights only to spring forth later and disrupt those expectations, the Court chose instead to stretch the meaning of "publicly used" to an arguably tortured and, at the very least, quite counter-intuitive extent. Members of the Court, it seems quite possible, spotted a bad actor and made a deliberate decision not to reward his sharp behavior. But, rather than doing so forthrightly and in a manner directed solely at the inventor involved in *this* case, the Court did so *sub silencio* and in a manner that created a perennial trap for unsophisticated inventors that continues to destroy the nascent patent rights of small inventors to this day, more than a century later.²⁷

²⁵ Id. at 337 (majority opinion) ("The inventor slept on his rights for eleven years.... In the mean time, the invention had found its way into general, and almost universal, use. A great part of the record is taken up with the testimony of the manufacturers and venders of corset-steels, showing that before he applied for letters the principle of his device was almost universally used in the manufacture of corset-steels."). The industry's use of the invention-at-issue over the course of several years did not bar the inventor's patent rights in this case because, at the time this case was decided, it was generally understood that a "public use" could bar patent rights only if that use took place with the inventor's consent. Robert Patrick Merges & John Fitzgerald Duffy, Patent Law & Policy: Cases and Materials 512–13 (6th ed. 2013). Today *any* public use can constitute a statutory bar. Id.

²⁶ Egbert, 104 U.S. at 337.

²⁷ See William C. Rooklidge & Russell B. Hill, The Law of Unintended Consequences: The On Sale Bar After *Pfaff v. Wells Electronics*, 82 J. Pat. & Trademark Off. Soc'y 163, 176 (2000) ("The 'reduced to practice,' 'substantially complete' and 'experimental stage' tests resulted from an urge to soften the harsh effects of application of the on sale and public use bars. More often applied to legally-unsophisticated or uncounseled inventors, and having a disproportionate effect on individual inventors, the bars have been reviled as a 'trap for the unwary'...."); Jay David Schainholz, Note, The Validity of Patents after Market Testing: A New and Improved Experimental Use Doctrine?, 85 Colum. L. Rev. 371, 394 n.113 (1985) ("Generally, a patent legal department is in constant contact with the research and development and marketing departments to avoid costly but inadvertent mistakes that could lead to patent invalidation.... [But] [t]o the

Facts underlying another seminal patent case, *Brenner v. Manson*, give rise to similar inferences.²⁸ In this case, the Court denied patent rights to a putative inventor who—a careful reading of the opinion reveals—filed a patent application on a new process for making a particular steroid four years after another team of researchers filed an application covering the same process and, perhaps not coincidentally, just three months after that application was first revealed to the public as a published patent.²⁹

But again, rather than focusing on the suspicious timing of the Johnny-come-lately inventor's alleged conception and application dates, the Court seized instead on the fact that the latecomer could not demonstrate he was aware of a use for the steroid that his process created—even though he clearly *could* show that many researchers believed the steroid would prove useful and, thus, intended to produce it for research purposes. As a result, the Court deemed not "useful" within the meaning of the Patent Act a process that, oddly enough, the record clearly demonstrated was useful to researchers in the field.³⁰ As in *Egbert*, the counter-intuitive nature of this holding combined with the suspicious nature of the facts-athand plausibly suggests that members of the Court identified a potential bad actor and, with that unspoken conclusion in mind, were inclined to adopt a narrow definition of "useful" that would deny him patent rights—a ruling that, despite decades of persistent criticism from commentators and the biopharmaceutical industry, remains good law today.³¹

30 Id. at 532-36.

entrepreneur or less sophisticated small businessperson, a restrictively applied experimental use doctrine serves as a trap for the unwary.").

^{28 383} U.S. 519 (1966).

²⁹ Id. at 520–21 ("In December 1957, Howard Ringold and George Rosenkranz applied for a patent on an allegedly novel process for making certain known steroids. They claimed priority as of December 17, 1956, ... [and received] United States Patent No. 2,908,693... late in 1959. In January 1960, respondent Manson ... filed an application to patent precisely the same process described by Ringold and Rosenkranz. He asserted that it was he who had discovered the process, and that he had done so before December 17, 1956." (footnote omitted)).

³¹ See, e.g., Salim A. Hasan, A Call for Reconsideration of the Strict Utility Standard in Chemical Patent Practice, 9 High Tech. L.J. 245, 246 (1994) ("The strict utility requirement in chemical and biotechnology patent cases has been the subject of considerable criticism and controversy." (footnotes omitted)).

Virginia Law Review Online

[Vol. 101:1

CONTINUATION ABUSE REANIMATED THE WRITTEN DESCRIPTION REQUIREMENT

A similar motivation may well have also been at work in *Gentry Gallery, Inc. v. Berkline Corp.*³² As recounted in this opinion, the inventor of the patent-in-suit—which, as originally filed, was directed to a reclining sofa with *console-mounted* controls—admitted at trial that he intentionally broadened his claims during prosecution to cover competitors' later-conceived designs with recliner controls located elsewhere on the sofa.³³

Yet again, rather than directly address the inventor's apparent bad faith addition of "new matter" to his patent application³⁴—a practice that is generally regarded as widespread and virtually never punished³⁵—the court instead focused on the mismatch between the patent-in-suit's specification and claims that resulted from these shenanigans.³⁶ In doing so, the court revived the (until then) largelydormant "written description requirement," a doctrine that went on to develop into what commentators have called "an unmitigated disaster"³⁷ and "an essentially standardless disclosure doctrine that can be deployed arbitrarily."³⁸

³⁵ See Lemley & Moore, supra note 6, at 65; Merges & Duffy, supra note 25, at 291 ("When the language in the patent application allows, the applicant's lawyer may add a claim to the application embracing the variant sold by the competitor.... This type of practice is a standard type of gamesmanship that lawyers have long tried.").

^{32 134} F.3d 1473 (Fed. Cir. 1998).

³³ Id. at 1479 ("Sproule admitted at trial that he did not consider placing the controls outside the console until he became aware that some of Gentry's competitors were so locating the recliner controls.").

 $^{^{34}}$ 35 U.S.C. § 132 (2012) ("No amendment shall introduce new matter into the disclosure of the invention.").

³⁶ Gentry Gallery, 134 F.3d at 1479-80.

³⁷ Harris A. Pitlick, The Mutation on the Description Requirement Gene, 80 J. Pat. & Trademark Off. Soc'y 209, 222 (1998).

³⁸ Mark D. Janis, On Courts Herding Cats: Contending with the "Written Description" Requirement (and Other Unruly Patent Disclosure Doctrines), 2 Wash. U. J.L. & Pol'y 55, 61 (2000). See also Ariad Pharm. v. Eli Lilly & Co., 598 F.3d 1336, 1361–62 (Fed. Cir. 2010) (en banc) (Rader, J., dissenting-in-part) ("The frailties of this court's 'written description' doctrine have been exhaustively documented ... [including] the embarrassingly thin (perhaps even mistaken) justifications for the minting of this new description doctrine ... and the extensive academic criticism of this product of judicial imagination."); id. at 1360–61 (Gajarsa, J., concurring) ("I disagree ... with those who view an independent written description requirement as a necessity of patent law.... [It] serves little practical purpose as an independent invalidity device"); Laurence H.

"PATENT TROLLS" AWOKE PATENTABLE SUBJECT MATTER

A final example—and perhaps the most salient one today—is the resurgence of patentable subject matter jurisprudence over the course of the last several years. The notion that Section 101 should serve as a serious check on software patentability awoke from a decades-long slumber in tandem with the rise of the "patent troll" business model in the mid-2000s.³⁹ Arguably, it was because accused infringers and judges lacked the firepower necessary to shoot down cases brought by bad actors with bad patents, that courts slowly began to embrace patentable subject matter as a means to toss suits brought at least in part for nuisance-value before litigation costs could reach six figures.⁴⁰

Perhaps due to the ad hoc and case-specific nature in which it was revived, courts have to date failed to apply Section 101 to software in a principled manner. As Judge Plager bluntly put it in a recent opinion, patentable subject matter jurisprudence has become a "murky morass" that few in the patent bar purport to understand fully.⁴¹ Nonetheless, its emergence has cast a dark shadow on the validity of virtually all pure software patents⁴² and, much to the bio-

⁴¹ MySpace, Inc. v. GraphOn Corp., 672 F.3d 1250, 1260 (Fed. Cir. 2012) (referring to patentable subject matter jurisprudence as a "swamp of verbiage" and a "murky morass"). See also Peter S. Menell, Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: *Bilski*'s Superficial Textualism and the Missed Opportunity to Return Patent Law to Its Technological Mooring, 63 Stan. L. Rev. 1289, 1291 (2011) (describing patentable subject matter precedent as "[leaving] the patent community in the wilderness").

⁴² The Supreme Court's latest word on this issue, *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), has spurred lower courts to strike down software patents with unusual vigor in recent months, to the dismay of royalty-dependent players in that industry. See, e.g., Brian McCall, Lessons from 4 Months of Post-Alice Decisions, Law360 (Oct. 31, 2014, 10:18 AM), http://www.law360.com/articles/590465/lessons-from-4months-of-post-alice-decisions ("As of Oct. 20, 2014, 18 courts have directly relied up-

Pretty, The Recline and Fall of Mechanical Genus Claim Scope Under "Written Description" in the Sofa Case, 80 J. Pat. & Trademark Off. Soc'y 469 (1998).

³⁹ See Love, supra note 16, at 399 n.83 ("Parties (or amici) in just twelve appeals raised 35 U.S.C. § 101 as a defense between 2001 and the time *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), reached the Federal Circuit in early 2007.").

⁴⁰ See Brian J. Love, Why Patentable Subject Matter Matters for Software, 81 Geo. Wash. L. Rev. Arguendo 1, 10–11 (2012) ("It was only after finding themselves with nowhere else to turn that accused infringers gradually began to resort to section 101 for protection. Though software first clearly became patentable in 1998, challenges on the basis of patentable subject matter were largely unheard of prior to 2007, when *Bilski* first landed at the Federal Circuit." (footnote omitted)).

12

Virginia Law Review Online [Vol. 101:1

tech industry's chagrin, may well have inspired courts and litigants to reach for the doctrine more often in cases involving genes and diagnostics.⁴³

While astute readers can no doubt think of additional cases that belong on this list, an exhaustive accounting is not necessary to make what at core is a very simple point. Bad facts often make bad law—but only when cases with bad facts reach a ruling on the merits. And, because patent law traditionally has not done a good job of weeding out cases brought by bad actors, the patenting community—especially the parts thereof most opposed to patent reform: small inventors, biopharma companies, and patent-reliant software makers—have suffered the effects of controversial doctrinal shifts that, had more effective deterrents existed, might never have come into existence.

In short, while establishing new deterrents to bad faith actions may well impose direct costs on good actors (along with the bad), it likely will also bring indirect benefits to that same community in the form of increased doctrinal clarity that, though hard to quantify, may nonetheless be quite substantial in size. Sectors of the tech world that presently oppose reforms aimed at bad faith conduct may want to ask: Might it be worth it to lose a few more dollars per patent transaction to avoid yet another doctrinal debacle?

on Alice in deciding whether claims were invalid under § 101.... Of those, 14 decisions invalidated claims by applying Alice."); Wild, supra note 1212 ("[T]ens of thousands of assets owned by the likes of IBM, Microsoft, Apple, Oracle, Google and Cisco could be threatened by the judgment, which was handed down in June and has since led to a series of software patent rights being overturned by lower courts.").

⁴³ See Ass'n for Molecular Pathology v. Myriad Genetics, 133 S. Ct. 2107, 2111 (2013) (holding that claims covering isolated DNA segments are unpatentable because "a naturally occurring DNA segment is a product of nature"); Christopher M. Holman, In *Myriad* the Supreme Court Has, Once Again, Increased the Uncertainty of U.S. Patent Law, 32 Biotech. L. Rep. 289, 289 (2013) (criticizing *Myriad*); see also Mayo Collaborative Servs. v. Prometheus Labs., 132 S. Ct. 1289, 1294 (2012) (holding that claims covering diagnostic tests are unpatentable if they are so broad that they cover, "apart from the natural laws themselves," no more than "well-understood, routine, conventional activity previously engaged in by researchers in the field"); Bernard Chao, Moderating *Mayo*, 107 Nw. U. L. Rev. Colloquy 82, 82 nn.2–3 (2012) (collecting citations critical of *Mayo*).