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IP Theory

Volume 6 | Issue 1

Article 1

2016

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Jason Rantanen University of Iowa College of Law, jason-rantanen@uiowa.edu

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Recommended Citation

Rantanen, Jason (2016) "How Malleability Matters," *IP Theory*: Vol. 6: Iss. 1, Article 1. Available at: http://www.repository.law.indiana.edu/ipt/vol6/iss1/1

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Essay: How Malleability Matters

Jason Rantanen¹

In *The Malleability of Patent Rights*, I developed the concept that patent rights are malleable rather than static and fixed, distinguishing malleability from the idea that patent rights are merely uncertain. Malleability refers to the idea that the strength and scope of patent rights can be altered by the actors who interact with a patent well after it has issued. Patent law is full of mechanisms that allow for these postissuance changes, yet there seems to be no good theoretical argument that supports malleability. At best, I concluded, the costs of malleability must be weighed against the doctrinal cures, and perhaps those cures themselves would come with greater costs of their own. This Essay builds upon The Malleability of Patent Rights to explain how viewing patent rights as malleable can dramatically alter conventional narratives of the patent system-both narratives told by supporters of strong patent rights and narratives told by those who argue that the patent system must be changed to favor competitors. In doing so, this Essay provides examples of how the malleable nature of patent rights can present real problems for the patent system.

¹ Professor of Law, University of Iowa College of Law. I thank Christina Bohannan, Steve Burton, Tun-Jen Chiang, Tom Cotter, John Duffy, Richard Epstein, Paul Gowder, Herbert Hovenkamp, Mark Lemley, Peter Menell, Lisa Larrimore Ouellette, Oskar Liivak, Robert Miller, Todd Pettys, Michael Risch, Dave Schwartz, Jacob Sherkow, Greg Vetter, and the audience members and participants at the Drake Intellectual Property Roundtable, the Patent Conference 4, and the Iowa Legal Studies Workshop for very helpful discussions about the project and comments on an earlier draft. I also thank my research assistants Alex Lodge, Rajul Patel and Andrew Stanley for help in preparing this Article.

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Introduction

In The Malleability of Patent Rights, I developed the concept of malleability: that the strength and scope of patent rights can be altered by the actors who interact with a patent well after it has issued.² The rights granted by a particular patent are not fixed in the sense that they are immutable and unalterable. Rather, they can be pushed and pulled. Their very existence and shape can be changed through an array of legal mechanisms.

I contrasted this view of patent rights with the predominant view, which conceives of patent rights as fundamentally static and unchanging, frozen forever at the moment the patent issues. Even when scholars, lawyers, judges, and policy makers recognize that there are uncertainties inherent in patent rights, they tend to view those uncertainties as just a puzzle to solve with, ultimately, a "right" answer, or as a hopelessly indeterminate problem whose resolution is essentially a roll of the dice. Malleability embodies a different characteristic: that regardless of whether one views patent rights as certain or probabilistic, the scope of the patent right or the likelihood of a particular roll can be deliberately changed during a patent's term.³

In this Essay, I explore the consequences of viewing patent rights as malleable. I offer two scenarios in which recognizing the malleability of patent rights can alter conventional narratives told about those rights. In the first, I apply the concept of malleability to the primary narrative articulated by supporters of emerging patent monetization strategies, a narrative that draws upon two arguments: that such strategies are economically efficient because (1) they ensure that inventors receive their just rewards for the teachings of the patent, and (2) they reduce the costs of transacting over patent rights. Because patent rights are malleable, however, patent owners can actively expand the scope and strength of those rights independent of a patent's technological teachings. In

² Jason Rantanen, *The Malleability of Patent Rights* 2015 MICH. ST. L. REV. 895 (2015).

³ For a much more extensive description of the concept of malleability, including how it operates and possible theoretical justifications, see *id*.

other words, patent owners can extract revenue not only by reducing transaction costs, adding to the value of the underlying technology, or (in the conventional challenge to the narrative) reaping nuisance costs,⁴ but also by expanding the patent right itself after it has issued. This insight leads to an alternative narrative, one that neither revolves around efficiency gains nor invokes the critique of nuisance costs.

But malleability can work the other way, too: it can be used to push back against the scope and strength of a patent, even if the teachings of the patent reflect an important advancement in the art. Beyond the presence of at least two parties in every patent lawsuit, including an accused infringer who can shove back on patent scope and strength, is the existence of mechanisms that expressly allow patent challengers to push on claim scope or to even terminate the patent right after it has issued. In particular, the recently-implemented mechanisms of inter partes review and covered business method review affect the malleability of the patent right in a remarkably one-sided way. Furthermore, the consequences of these new mechanisms are not limited to just so-called "low-quality" patents but can affect a much broader range of patents.

I. The Malleability of Patent Rights and the Efficient-Invention Narrative

One of the most (if not *the* most) complex, prominent, and divisive issues in patent law today is whether emerging patent

⁴ See, e.g., Colleen V. Chien, *Reforming Software Patents*, 50 Hous. L. REV. 325, 342 (2012) (discussing "the incentive that exists to assert patents because defending against patent demands is expensive, and, therefore, induces settlement"); Jonathan S. Masur, *Costly Screens and Patent Examination*, 2 J. LEG. ANALYSIS 687, 707–11 (2010) (discussing the problems of nuisance patents); Ted Sichelman, *Commercializing Patents*, 62 STAN. L. REV. 341, 368 (2010) (stating that nonpracticing entities "are often termed 'patent trolls,' because they tend to exploit litigation and licensing market defects to extract unwarranted rents from commercializers, usually on patents that the commercializer was completely unaware of before the NPE's demand for payment"); Ranganath Sudarshan, *Nuisance-Value Patent Suits: An Economic Model and Proposal*, 25 SANTA CLARA COMPUTER & HIGH TECH. L. J. 159, 160–62 (2008).

monetization strategies—a collective term that encompasses actors such as non-practicing entities, patent-assertion entities, and similar business models—are beneficial or harmful as a matter of public policy.⁵ The primary policy argument in favor of these strategies rests on a relatively simple narrative that I refer to as the "efficient-invention narrative." In this section, I examine this narrative and explain its normative pull—a pull that rests largely on the view that patent rights are fixed.

A. The Efficient-Invention Narrative

The "efficient-invention narrative" refers to the idea that patentassertion entities and other entities who acquire patents in order to monetize them are fundamentally beneficial from an economic perspective because they make the patent system operate more smoothly and effectively.

The narrative is woven through most aspects of the public persona of every entity engaged in emerging patent monetization strategies — that is, profit-generating commercial strategies based on the buying, licensing, and enforcing of patented technologies without any meaningful attempt to practice the technology of the patent.⁶ Labels for such entities

⁵ See, e.g., Dennis Crouch, Professor-to-Professor: You Are Wrong about Patent Reform, PATENTLY-O (Mar. 10, 2015), http://patentlyo.com/patent/2015/03/professor-patent-reform.html.

⁶ For examples of such strategies, see Peter Detkin, Leveling the Patent Playing Field, 6 J. MARSHALL REV. INTELL. PROP. L. 636, 637-40 (2007); Raymond P. Niro, Who is Really Undermining the Patent System-"Patent Trolls" or Congress?, 6 J. MARSHALL REV. INTELL. PROP. L. 185, 190–97 (2007); Patrick Ennis, Patents Are Recipes, Not Monopolies, on Invention, INTELL. VENTURES (Nov. 18. 2013), http://www.intellectualventures.com/insights/archives/patentsrecipes-not-monopolies-on-invention; Paul Schneck, Not So Scary, After All: In Defense of Patent Trolls, FORBES (Feb. 1, 2013, 8:19 PM), http://www.forbes.com/sites/ciocentral/2013/02/01/not-soscary-after-all-in-defense-of-patent-trolls; Adam Mossoff & Nathan Myhrvold, The Future of Invention—What's at Risk (Sept. 12, 2013) available (transcript at http://www.intellectualventures.com/assets_docs/Future_of_Invent ion_Whats_at_Risk_Transcript_2013_Speech.pdf).

are numerous, from "patent-assertion entity"⁷ (PAE) to "patent dealer,"⁸ "patent intermediary"⁹ to "patent troll."¹⁰ These labels are almost useless as meaningful categories, however, since entities engaged in emerging patent monetization strategies are even more diverse than the strategies themselves,¹¹ leading to a morass of categorization attempts that are doomed to failure. On this, both sides of the debate over such entities agree.¹²

For this reason, although I refer to the concept of PAEs below, I do so only as a touchstone: a basic point around which to orient rather than a precisely defined category. Rather, the better way to think of these entities is as a collection of their attributes and behaviors. For now, however, it suffices to reference PAEs in order to sketch out the dimensions of the efficient-invention narrative upon which most—if not all—emerging patent monetization strategies draw to support the idea that they are economically beneficial.¹³

⁷ Colleen V. Chien, From Arms Race to Marketplace: The New Complex Patent Ecosystem and Its Implications for the Patent System, 62 HASTINGS L.J. 297, 300 (2010) (coining the term "patent-assertion entity").

⁸ James McDonough III, Comment, The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy, 56 EMORY L.J. 189, 212 (2006).

⁹ Allen W. Wang, *Rise of the Patent Intermediaries*, 25 BERKELEY TECH. L.J. 159, 160 (2010).

¹⁰ See, e.g., Robert P. Merges, The Trouble with Trolls: Innovation, Rent-Seeking, and Patent Law Reform, 24 BERKELEY TECH. L.J. 1583, 1583 (2009).

¹¹ See Chien, supra note 7, at 320 (describing a "complex patent ecosystem").

¹² See, e.g., Mark A. Lemley & A. Douglas Melamed, *Missing the Forest* for the Trolls, 113 COLUM. L. REV. 2117, 2121–29 (2013); Michael Risch, *Patent Portfolios as Securities*, 63 DUKE L.J. 89, 127–28 (2013); David L. Schwartz & Jay P. Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. 425, 428–33 (2014).

¹³ While this narrative may be a powerful one, it is important to keep in mind its limitations. There is evidence that suggests that patent assertions involving actual copying of technology may be rare. *See, e.g.*, Christopher A. Cotropia & Mark A. Lemley, *Copying in Patent Law*, 87 N.C. L. REV. 1421, 1423–24 (2009) (finding that outside of pharmaceutical cases, virtually no patent lawsuits involve a defendant who obtained the technology from the plaintiff).

A hypothetical¹⁴ illustrates the basic premise of the narrative:

After decades of experience working in the chemical and semiconductor industries, Dr. C decides to devote himself full-time to inventing and experimenting in his own laboratory. After several years, Dr. C develops two technologies for enhancing computer microprocessors: one that can be used in nearly all microprocessors to boost their speed and one that will make a specific type of microprocessor much more efficient. He obtains multiple patents on his technologies and shows these patents to several microchip companies. Despite telling him that they are not interested, all of the companies incorporate Dr. C's first technology into their own products. Worse, Dr. C is unable to find any companies that could make use of his second microprocessor advance.

Disheartened and lacking the resources to mount an effective lawsuit against the infringers (who have deep pockets of their own), Dr. C gives up inventing and spends his life golfing.

This hypothetical illuminates two fundamental failures. First, it illustrates the breakdown of the fundamental mechanism by which patent law operates to promote technological progress (i.e., the market reward for inventing).¹⁵

The basic mechanism by which patent law encourages invention is to give the inventor exclusive rights over the new technology that enable that inventor to charge supracompetitive prices in the marketplace.¹⁶ Inventors are

¹⁶ See, e.g., Jason Rantanen, *Peripheral Disclosure*, 74 U. PITT. L. REV. 1, 10 (2012) ("The patent system encourages investment in technological development by giving the investor who first

¹⁴ This hypothetical is based on the story of Dr. James Cunningham, as told by Detkin, *supra* note 6, at 639.

¹⁵ See, e.g., CRAIG ALLEN NARD, THE LAW OF PATENTS 33 (3d ed. 2014) ("The historically predominant theory [of patent law] is the *incentive to invent*...."); WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 294 (2004) ("The standard rationale of patent law is that it is an efficient method of enabling the benefits of research and development to be internalized, thus promoting innovation and technological progress.").

then able to monetize their invention either by practicing the invention themselves and charging a supracompetitive price or by licensing the right to use the technology to others.¹⁷

In the above hypothetical, however, Dr. C was unable to monetize his invention using either approach. He was not able to practice the invention himself in any commercially meaningful way because, as an independent inventor, he lacked the necessary resources. Nor was he able to license the technology to those who could practice it on a commercial scale; the semiconductor companies stole it outright. Note that Dr. C's ownership of a patent did not change the outcome. Because he lacked the ability to present a meaningful threat of enforcement, the companies simply trod on his rights.¹⁸

When inventors are unable to capture the value of their inventions, they have fewer resources to invest in creating future inventions. Even worse, an inventor may simply conclude, as Dr. C did, that she is better off not inventing; with a smaller expectation of monetary reward ex ante, inventors have less incentive to begin inventing in the first place.¹⁹ Potential investors, too, will be less willing to devote resources to research and development for similar reasons: they will be unable to share in any of the value of the invention.²⁰

The above hypothetical also illustrates a second failure, one due to transaction costs. Recall that Dr. C developed a second technology that was fairly specific but was unable to find a company that used the specific semiconductor design required

successfully develops a new product or method the possibility of obtaining exclusive rights over that invention, allowing the inventor to charge a supra-competitive price during the patent's life.").

¹⁷ *Id.* at 16 n.63.

¹⁸ As framed, this story draws upon the idea of patents as a solution to Arrow's Paradox. One alternate criticism of the narrative, then, is that as Michael Burstein points out, the multi-faceted nature of information may mean that there is an array of solutions to Arrow's Paradox that do not require intellectual property protections. *See* Michael J. Burstein, *Exchanging Information Without Intellectual Property*, 91 TEX. L. REV. 227, 258–70 (2012), In other words, Dr. C could have monetized his invention through alternate mechanisms, and the dichotomy of patent-or-nothing is false.

¹⁹ LANDES & POSNER, *supra* note 15, at 13.

²⁰ LANDES & POSNER, *supra* note 15, at 13; Risch, *supra* note 12, at 128.

to take advantage of it. This is an example of a transaction failure due to transaction costs that are simply too high.²¹ Inventors need to find potential users of their technologies; potential users need to find inventors.²² This can be quite difficult and costly.

Furthermore, even if a transaction does occur, it will likely involve substantial costs. For example, the parties will need to deal with Arrow's Information Paradox (the problem that inventors must disclose information about the invention in order to attract investors, which in turn destroys the secrecy of the information, and hence its value).²³ Although that problem may be addressed through mechanisms other than patents²⁴ it will nonetheless impose at least some costs on information exchange.²⁵

But what happens when a third party gets involved on Dr. C's behalf? What if, rather than holding on to his patents, Dr. C sold them to a company that was in the business of buying and enforcing patents?²⁶ Consider the following modification of the hypothetical:

²⁴ Mark A. Lemley, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311, 336–37 (2008) (arguing that trade secret law partially solves Arrow's Paradox); Burstein, *supra* note 18, at 262–70 (describing non-intellectual property mechanisms for addressing the information exchange paradox).

²¹ LANDES & POSNER, *supra* note 15, at 16–17; *see also* Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 348–49 (1967) (discussing transaction costs in general).

²² McDonough, *supra* note 8, at 213–14.

²³ See Kenneth J. Arrow, Economic Welfare and the Allocation of Resources for Invention, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY, 609 (Nat'l Bureau of Econ. Research ed. 1962).

²⁵ Such costs include paying attorneys to draft confidentiality agreements. Michael Burstein provides an extensive analysis of various ways in which Arrow's Paradox can be overcome and discusses their limitations and costs. *See* Burstein, *supra* note 18, at 227. Burstein suggests, however, that information is far more complex than conventionally assumptions allow for and the degree to which it is appropriable in the context of an information exchange. For purposes of this Article, however, the important point remains: exchanging information is costly—perhaps more so than the existing literature has recognized.

²⁶ That is what happened in the real story. Detkin, *supra* note 6, at 644 ("Dr. Cunningham, for example, sold his suite of semiconductor

While golfing one day, Dr. C meets the CEO of an entity called Innovation Unpacked Corp. ("IUC"). IUC is a company that acts as "the bridge between invention and application"²⁷ to generate "a strong return on investment," purchasing "inventions from individual inventors and companies of all sizes" and licensing "them to the world's most innovative companies."²⁸ Dr. C agrees to assign his patents to IUC for a substantial sum plus a small share of any licensing revenue that IUC obtains from the patents.

Following this initial transaction, IUC contacts the semiconductor companies that Dr. C had initially approached. Recognizing IUC's substantial experience in the patent assertion-field, most of the semiconductor entities quickly agree to a nonexclusive license to the patents. IUC then proceeds to bring an infringement action against the holdout, in which it prevails, in part due to its substantial expertise in patent infringement lawsuits and highly skilled attorneys. IUC is also able to use its knowledge of the industry to identify a company that could make use of Dr. C's second, more specific technological advance and licenses that patent as well.

In this scenario, IUC fulfills two positive economic functions.²⁹ First, it forces transactions to occur that would

²⁷ ACACIA RESEARCH CORP., http://acaciaresearch.com/

²⁸ Sell Your Patents, INTELLECTUAL VENTURES, http://www.intellectualventures.com/services-solutions/sell

²⁹ Fiona Scott Morton and Carl Shapiro offer another articulation of this narrative:

patents to Intellectual Ventures in exchange for a lump sum payment in a transaction that took far less time than a typical licensing negotiation.").

An inventor has discovered and patented valuable technology, but she lacks the assets to exploit it herself and is having difficulty finding downstream firms that can do so. She also is having difficulty locating downstream firms that have copied her technology and are not paying royalties. She sells her patent to a PAE that is skilled at finding downstream firms to which the technology can be transferred. The PAE also is good at locating unscrupulous firms that have copied the patented technology and are using it without paying, by hiding and by

otherwise constitute theft of the patented technology: a onesided exchange under which the inventor receives nothing and the user of the technology gets all.³⁰ In other words, PAEs solve the free-riding problem by making sure that there is a credible enforcement threat.³¹ They can centralize the gathering of information and closely monitor users.³² PAEs may also have particular expertise in patent enforcement,³³ allowing them to send out more letters and, perhaps, litigate more efficiently.³⁴ PAEs may also have more resources to bring a credible threat of litigation and extract a fair license than an individual inventor.³⁵

³¹ See generally McDonough, *supra* note 8, at 206–12 (explaining "[a]t a minimum, there must be a credible threat of litigation to incentivize potential infringers to license the patent").

³² See PRESIDENT'S COUNCIL, supra note 30, at 3; McDonough, supra note 8, at 212.

³³ See http://www.cnet.com/news/inside-intellectual-ventures-themost-hated-company-in-tech/

³⁴ See President's Council, *supra* note 30, at 3; U.S. Gov't Accountability Office, GAO-13-465, Intellectual Property: Assessing Factors That Affect Patent Infringement Litigation Could Help Improve Patent Quality 3 n.8 (2013) (noting that because PAEs do not make products, they have lower discovery costs, which can cost several million dollars in complex litigation); Lemley & Melamed, *supra* note 12, at 2147–52, 2162.

³⁵ See PRESIDENT'S COUNCIL, supra note 30, at 3 ("[P]otential inventors may not have the resources to protect their patents from infringement; their incentives to invent may be increased if they can sell their patents to firms that specialize in litigation and other means to collect license fees from those who are using the patented technology."); Brief for United Inventors Assoc. & Tech. Licensing Corp. as Amici Curiae Supporting Respondents at 5, eBay v.

ignoring demand letters. The PAE also is skillful at negotiating reasonable royalties, in part due to its litigation capabilities. In this narrative, the PAE improves the functioning of the market for ideas, enhances returns to inventors, and promotes innovation.

Fiona M. Scott Morton & Carl Shapiro, *Strategic Patent Acquisitions*, 79 ANTITRUST L.J. 463, 479 (2014)

³⁰ See PRESIDENT'S COUNCIL OF ECON. ADVISERS, PATENT ASSERTION AND U.S. INNOVATION 3 (2013) ("[P]otential inventors may not have the resources to protect their patents from infringement; their incentives to invent may be increased if they can sell their patents to firms that specialize in litigation and other means to collect license fees from those who are using the patented technology.") [hereinafter PRESIDENT'S COUNCIL].

Additionally, PAEs consolidate all of these resources into a single unit that, according to their marketing message, can secure more value than many other types of patent holders.³⁶

Second, PAEs may know exactly whom to contact and negotiate with because of their concentration of knowledge and expertise.³⁷ For many of the same reasons discussed above, PAEs can reduce the costs of patent rights transactions: they can act as centralized clearinghouses for rights, where both production entities and inventors can go to transact, thus greatly reducing the information cost of transacting.³⁸

Thus, under this efficient-invention narrative, PAEs should be at least tolerated—and certainly not punished—because they reduce transaction costs and ensure that inventors receive

MercExchange, L.L.C., 547 U.S. 388 (2006) (No. 05-130) ("Often times...inventors are forced to litigate against would-be licensees, who have the economic clout and resources to drain inventors and tie them up in costly litigation."); McDonough, *supra* note 8, at 209; Sannu K. Shrestha, Note, *Trolls or Market-Makers?An Empirical Analysis of Nonpracticing Entities*, 110 COLUM. L. REV. 114, 126–27 (2010).

³⁶ See PRESIDENT'S COUNCIL, supra note 30, at 3 ("[I]t can be costly for technology users to find all potentially-relevant patents. Effective brokering of patents by intermediaries can therefore increase the value of patents, fostering greater incentives to innovate."); McDonough, supra 8, at 212; see also Brett M. Frischmann & Mark A. Lemley, Spillovers, 107 COLUM. L. REV. 257, 267 (2007) (noting that under a Coasean perspective, "[p]roperty rights can be a useful institution for reducing transaction costs where such rights delegate decisionmaking authority to the entity with the closest connection to and best information regarding the resource").

³⁷ See PRESIDENT'S COUNCIL. *supra* note 30, at 3 ("Patent intermediaries can play a useful social role. Inventors and buyers of patents (such as a manufacturer who can commercialize patented inventions) may have a difficult time finding each other because the potential usefulness of a patented technology is often not obvious, and often depends on the complementarity between the protected technology and the buyer's own portfolio of technology.").

³⁸ PRESIDENT'S COUNCIL, *supra* note 30, at 3 ("[PAEs] bring value to society by more efficiently matching patent holders to patent buyers, thereby fostering transfer of technology from inventors to those who can use the technology to make products that are valuable to consumers."); Lemley & Melamed, *supra* note 12, at 2155–62.

the rewards for invention to which they are entitled by virtue of the patent grant.³⁹

B. The Narrative Inverted

How does the reconceptualization of patent rights as malleable interact with the efficient-invention narrative? As laid out in the previous section, the efficient-invention narrative is based on the dual arguments that (1) PAEs ensure that inventors receive their due rewards and (2) PAEs enhance the efficiency of the patent transaction by reducing transaction costs.

Yet, the narrative begins to break down when the malleable nature of patent rights is considered. Both the scope and strength of patent rights can be altered after issuance, independent of the underlying technological disclosure.⁴⁰ In other words, because patent law doctrine operates only as an elastic leash over the scope of the patent rights relative to the underlying technology disclosed in the patent,⁴¹ it is possible to expand the scope of the patent rights without doing anything with the technological teachings of the patent. Viewed in this light, patents are less embodiments of technology and more like rights alone. The consequence is that only a portion of the enforced scope of patent rights may reflect the inventor's actual contribution. Instead, some of the value that a patent middleman extracts can be due to its own expansion of the

³⁹ Some commentators also offer a third benefit: clearing the market and improving patent liquidity. *See, e.g.,* McDonough, *supra* note 8, at 214–16; Yuichi Watanabe, Comment, *Patent Licensing and the Emergence of a New Patent Market*, 9 HOUS. BUS. & TAX. L.J. 445, 460– 62 (2009). This is essentially a combination of reducing transaction costs and ensuring that inventors receive their due rewards, rather than a true separate benefit. In other words, patents are perceived as more liquid precisely because the costs for transacting around them are reduced and patents actually have value in the hands of inventors, rather than being merely worthless pieces of paper.

⁴⁰ As I discuss in *The Malleablity of Patent Rights*, this independence is not perfect; rather patent law doctrine does impose some constraints on the degree to which patent scope can depart from the technological disclosure of the document. *See* Rantanen, *supra* note 1. Thus, patent law doctrine operates more like an elastic leash than a rigid chain on patent scope.

⁴¹ For a discussion of how patent law doctrine operates in this way, *see* Rantanen, *supra* note 1.

rights and not due to the value of the teachings of the patent. Due to the malleable nature of patent rights, a patent claim in the right hands can have greater scope than a patent claim in someone else's hands.

When patent rights are viewed as malleable, the tale takes an unexpected twist: the efficient use of patent rights (the hallmark of a good PAE) may, instead, be simply the expansion of rights ex post. This expansion is very different than additional social gains in the form of more efficient transactions or in merely making others aware of the value of the new technology. Instead, what is occurring may be an expansion of the rights alone, capturing more and more territory with the same patent. Moreover, this expansion can occur without any increase in the value of the teachings of the patent.⁴² To use a property analogy, it is as if A purchased a plot of land with area X and was able to increase its area to X+Y simply because it chose to do so; no increase in the value of the property is necessary for the expansion to occur.

In other words, the better a PAE is at enforcing a patent, the more likely the PAE is capturing value from sources other than the inventor's actual technological contribution because it is its skill at enforcement that a PAE uses to broaden the effective scope of patent rights. Also, more transactions are not simply a benign result of greater efficiency and reduced transaction costs. Rather, the alternative is that increases in the number of

⁴² There may be other changes to the strength of patent rights that flow from changes in ownership. Consider, for example, what would happen if Dr. C brought an infringement suit against an infringing semiconductor company. That company would likely seek discovery of Dr. C. It might be particularly interested in evidence of prior sales or potential material for an inequitable conduct claim. It might request the inventor's own prosecution files. Responding to this discovery will be costly for Dr. C; worse, it could turn up information that would be useful in invalidity or unenforceability arguments. If, however, Dr. C sells the patent to IUC, and IUC is the entity that files the infringement complaint, the discovery burdens on the patent holder will be less. IUC will presumably not have the same volume of records that Dr. C has; indeed, it may have relatively little discoverable material. It will also probably not have any evidence of prior sales or potential material for an inequitable conduct claim. The result is that IUC's patent rights will effectively be greater because it will not have the same baggage that Dr. C had.

transactions may be due to an expanded patent scope capturing more firms and people within its net.

This critique thus differs in two important ways from the conventional challenge to the efficient-invention narrative, which rests on the idea that PAEs are using patents to extract nuisance costs (i.e., some settlement that is less than the cost of a litigating a patent suit).⁴³ First, this critique does not assume that the patents being asserted are necessarily weak ones: the focus is on making the patent right greater rather than on attempting to capitalize on the accused infringer's defense costs. Second, malleability involves an actual change of the legal right itself; a pushing on the boundary of that scope.

But wait; surely the accused infringers could do the exact same thing but in reverse: shrink the effective scope of the patent through effective argument and clever strategy? Absolutely—skilled patent challengers may push back against the scope and strength of patent rights. Patent infringement suits do not involve unidirectional malleability, but instead can be viewed as a battle between two sides, with each pushing and pulling on the aspects of the patent that offer the greatest potential for victory.

My point here, however, is simply the idea that entities who specialize in patent transactions are inherently economically efficient rests on an assumption that patent rights are fixed. If, instead, patent rights are malleable, that assumption no longer holds.⁴⁴ Instead, it is the skill of the litigator, rather than the contents of the patent right, that matter. Furthermore, if there are systematic advantages possessed by some entities—such as PAEs—due to the very nature of those entities, those advantages can manifest as stronger, greater patent rights. These types of unidirectional abilities that take advantage of the

⁴³ See, e.g., Chien, supra note 4, at 342 (discussing "the incentive that exists to assert patents because defending against patent demands is expensive, and, therefore, induces settlement").

⁴⁴ Note that there may still be efficiencies gained from patent transactions; particularly in terms of the consolidation of rights relating to a particular technology. *See* Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2005–08 (2007). I do not address that perspective here.

malleability of patent rights are areas that merit especially close scrutiny.

II. Malleability and Patent Reforms

Setting aside concerns about systematic imbalances between litigants, patent infringement litigation typically offers both parties the opportunity to take advantage of the malleability of patent rights to more or less the same degree. This bidirectional malleability can be contrasted with situations where the malleability is much more unidirectional—in other words, situations where one party is able to take much greater advantage of the malleability of patent rights than the other.

A powerful example of unidirectional malleability can be found in recently implemented mechanisms for "patent reform" (i.e., attempts to improve the functioning of the patent system through legislative changes). A central element of these reform efforts has been the development of new processes to weed out low-quality patents—patents that should not have been granted but nonetheless were.⁴⁵ These mechanisms consist of several new and revised procedural routes for challenging issued patents.⁴⁶ Members of Congress intended these mechanisms to allow interested parties to challenge patents that fail to meet the requirements of patentability or that claim too broadly,⁴⁷ and

⁴⁶ See DONALD S. CHISUM, CHISUM ON PATENTS § 11.07 (2014) (discussing post-issuance review mechanisms).

⁴⁵ See, e.g., Gerard N. Magliocca, Blackberries and Barnyards: Patent Trolls and the Perils of Innovation, 82 NOTRE DAME L. REV. 1809, 1827 (2007) (indicating that "low quality patents" are those that are erroneously granted and of questionable validity); R. Polk Wagner, Understanding Patent-Quality Mechanisms, 157 U. PA. L. REV. 2135, 2138 (2009) (defining a low quality patent). The very concept of low quality patents draws on the idea that patent rights are fixed, not malleable: a patent is low quality because it never should have issued but for a mistake made by someone. To be clear, I am not contending here that there is no such thing a low quality patent; malleability does not mean that a stone statue of a horse can be changed into a bronze statue of a cat. I am simply pointing out that the language of discussions about low quality patents inevitably draws upon the idea of fixed rights.

⁴⁷ 157 CONG. REC. E1184 (daily ed. June 23, 2011) (statement of Rep. Lamar Smith) ("This bill will provide the patent office with a fast,

commentators hailed their creation.⁴⁸ The rising popularity of these tools speaks volumes about their perceived potency in altering the patent right.

A. Inter Partes Review and Covered Business Method Review

A core component of the America Invents Act was the creation of the inter partes review mechanism. This proceeding replaced inter partes reexamination, a procedural mechanism implemented by the American Inventors Protection Act of 1999⁴⁹ that allowed for an adversarial-style challenge to issued patents at the United States Patent and Trademark Office (PTO).⁵⁰ Inter partes reexamination was, from the perspective of some, an unsuccessful experiment.⁵¹ While the outcomes of inter partes reexamination proceedings favored petitioners as

precise vehicle to review low quality business method patents, which the Supreme Court has acknowledged are often abstract and overly broad."). *See generally* Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part II of II*, 21 FED. CIR. B.J. 539, 598–612 (2012) (describing the legislative history of the America Invents Act's revisions to *inter partes* review and post-grant review).

⁴⁸ See, e.g., Jay Kesan, America Invents, More or Less?, 160 U. PA. L. REV. PENNUMBRA 229, 234–35, 249 (2012) ("There are good reasons to conclude that post-grant review and *inter partes* review will improve patent quality."); Brian J. Love & Shawn Ambwani, *Inter Partes Review: An Early Look at the Numbers*, 81 U. CHI. L. REV. DIALOGUE 93, 105 (2014) (evaluating *inter partes* review outcomes and concluding "Congress appears to have hit the mark—but only time will tell for sure").

⁴⁹ See American Inventor's Protection Act of 1999, Pub. L. No. 106-113, § 4602–07, 113 Stat. 1501A-567–71 (1999).

⁵⁰ For a critique of *inter partes* reexamination at the time of its initial implementation, see Mark. D. Janis, *Inter Partes Patent Reexamination*, 10 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 481 (1999).

⁵¹ See Love & Ambwani, supra note 48, at 95 ("Though originally developed to serve as a cost-effective alternative to full-blown litigation, reexaminations rarely realized that goal."). But see Tun-Jen Chiang, The Advantages of Inter Partes Reexamination, 90 J. PAT. & TRADEMARK OFF. Soc'Y 579, 585 (2008) (arguing that "Contrary to the conventional wisdom, inter partes reexamination has important and often overlooked advantages compared to the other avenues of contesting validity.").

often as not,⁵² a consensus had emerged at the time Congress voted for the America Invents Act that inter partes reexamination was largely ineffective in achieving its purpose: to provide a low-cost mechanism for challenging invalid patents.⁵³ In large part, this was because the process was slow⁵⁴ and allowed patent holders to easily amend their claims and thus strengthen their patents.⁵⁵ These attributes compounded into a severe image problem for inter partes reexamination. In short, a makeover was in order.

The new inter partes review moves further away from the traditional examination model, where the focus is on a dialogue between the applicant and the examiner, and toward a mini-trial

⁵⁴ The process typically took about three years. *See INTER PARTE* REEXAMINATION FILING DATA, *supra* note 52 (reporting an average pendency of 36.2 months and a median of 32.9 months).

⁵² U.S. PAT. & TRADEMARK OFFICE, *INTER PARTE* REEXAMINATION FILING DATA, SEPTEMBER 30, 2013, http://www.uspto.gov/patents/stats/inter_parte_historical_stats_ro ll_up_EOY2013.pdf (reporting that out of the 305 *inter partes* reexamination certificates issued between 1999 and September 2011, 44% had resulted in all claims being cancelled) [hereinafter *INTER PARTE* REEXAMINATION FILING DATA].

⁵³ Love & Ambwani, *supra* note 48, at 95. That said, it should be noted that towards the end of the period, *inter partes* reexamination was seeing greater and greater use. *See INTER PARTE* REEXAMINATION FILING DATA, *supra* note 52 (reporting an increase from 1 filing in 2001 to 374 filings in 2011). It should also be kept in mind that the effective date provision of the statute implementing *inter partes reexamination* limited its use to applications that were filed on or after November 29, 1999. *See* American Inventor's Protection Act of 1999, Pub. L. 106-113, §4608, 113 Stat. 1501A-572 (1999). Because there were relatively few patents meeting this requirement during the early years of IPR, it should not be surprising that there few *inter partes* reexaminations during that period either.

⁵⁵ Love & Ambwani, *supra* note 48, at 95 ("[R]eexamination developed a well-deserved reputation for lengthy delays, a lack of decisive results, and a permissiveness for claim amendments that led some in the patent bar to view reexamination more as a vehicle for patentees to strengthen their patent rights post hoc than as a tool for possible infringers to quickly and cheaply eliminate invalid claims without resorting to litigation.").

before a panel of patent office judges.⁵⁶ This mini-trial is streamlined to be completed within a year from the time review is instituted.⁵⁷ Negative incentives encourage parties who have been sued for patent infringement in district court to file for review quickly.⁵⁸ Procedural mechanisms require the petitioner to submit proposed claim constructions, which may necessitate a responsive claim construction by the patent owner. ⁵⁹ The ability of the patent holder to offer iterative amendments has also been sharply limited.⁶⁰

The result of the new inter partes review mechanism has been an explosion of filings.⁶¹ Some of this may be a "relaunch"

⁵⁸ See 35 U.S.C. § 315(b).

⁵⁹ Iancu, Haber & Iglesias, *supra* note 56, at 580 (concluding that being required to provide an express claim construction disadvantages the petitioner more than the patent owner).

⁶¹ See Love & Ambwani, *supra* note 48, at 96–97 (reporting that between September 16, 2012 and March 31, 2014, challengers filed a total of 979 petitions, "roughly half the total number of requests for

⁵⁶ See Andrei Iancu Ben Haber & Elizabeth Iglesias, Inter Partes Review is the New Normal: What Has Been Lost? What Has Been Gained?, 40 AIPLA Q.J. 539, 541–42 (2012).

⁵⁷ See 35 U.S.C. § 316(a)(11) (2012) (requiring the Director to prescribe specific regulations for the conduct of *inter partes* review, including "that the final determination in an *inter partes* review be issued not later than 1 year after the date on which the Director notices the institution of a review under this chapter"). In practice, this has turned out to be about 15 months, due to an automatic sixmonth stay at the discretion of the patent office. Love & Ambwani, *supra* note 48, at 99.

⁶⁰ Section 316 states that the Director of the Patent Office shall prescribe regulations, *inter alia*, "setting forth standards and procedures for allowing the patent owner to move to amend the patent under subsection (d) to cancel a challenged claim or propose a reasonable number of substitute claims" 35 U.S.C. § 316(a)(9). The final rule issued by the Director limits patent owners to one motion to amend as of right and one additional motion to amend with a showing of good cause. *See* 37 C.F.R. § 42.221; Iancu, Haber & Iglesias, *supra* note 56, at 568–70 (discussing the change from the amendment-andresponse format to one that leads quickly to a final disposition). As of spring 2016, however, this practice may be changing. *See* Director's Forum: A Blog from USPTO's Leadership, *PTAB Issues Final Rules for Improved Proceedings*, USPTO.Gov, (Mar. 31, 2016, 2:36 PM), http://www.uspto.gov/blog.

effect: the mere perception that inter partes review is a useful tool for patent challengers, along with both the flurry of publicity accompanying the signing of the America Invents Act and commentary on all its changes, might be driving some of these filings. However, there is also a sense that these changes are real and meaningful and that inter partes review is a much more effective procedural mechanism for patent challengers than inter partes reexamination ever could have been.⁶²

A logical reading of this result is that it is a positive. After all, a driving motivation for implementing inter partes review was to establish a viable proceeding at the PTO to hear challenges involving "questionable" or "low-quality" patents.⁶³ Inter partes

inter partes reexamination filed over the course of the thirteen years prior").

⁶² See, e.g., Steven J. Baughman, Special Report: Advantages of the Defensive Use of US Patent Reexaminations for Companies Based Abroad, BUREAU NA'L AFF. 32, 33–36 (2011) (outlining the "significant potential benefits" using inter partes reexamination); Douglas Duff, The Reexamination Power of Patent Infringers and the Forgotten Inventor, 41 CAP. U. L. REV. 693, 698–705 (2013) (discussing the popularity of inter partes review and providing reasons for its popularity); Love & Ambwani, supra note 48, at 99 (commenting that inter partes review "is considerably more powerful than inter partes reexamination").

⁶³ See FEDERAL TRADE COMMISSION, A Report by the Federal Trade Commission October 2003, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY at 8 (2003), ("Because www.ftc.gov/os/2003/10/innovationrpt.pdf. http:// existing means for challenging questionable patents are inadequate, we recommend an administrative procedure for post-grant review and opposition that allows for meaningful challenges to patent validity short of federal court litigation.") (emphasis added); Comm. on Intellectual Prop. Rights in the Knowledge-Based Econ., Bd. On Sci., Tech., and Econ. Policy, Nat'l Research Council of the Nat'l Acads., A Patent System for the 21st Century, at 95 (Stephen A. Merrill, Richard C. Levin & Mark B. Myers eds., 2004) (recommending adoption of an "Open Review" system to address low-quality patents); see also Kesan, supra note 48, at 248-51 (arguing that inter partes review will improve overall patent quality) (emphasis added). This goal of only allowing inter partes review for questionable patents can also be seen in the threshold requirement for initiation of an IPR: that there is a "reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314. In practice, however, *inter partes* review is routinely initiated. See Love & Ambwani, *supra* note 48, at 101 (reporting that out of the 823)

review furthers this purpose: it weeds out the "low-quality patents" via administrative challenges rather than costly infringement proceedings.

A second post-issuance mechanism introduced by the America Invents Act, the covered business method (CBM) review,⁶⁴ represents an even more deliberate attempt to allow patent challengers to eliminate and weaken certain types of patents after they are issued.

The history of business method patents is well documented,⁶⁵ and there is no need to repeat it in depth here. It is enough to simply recognize that some innovation takes the form of computer-implemented financial tasks and other business methods. Consider, for example, Amazon's infamous 1-click patent.⁶⁶ A fundamental issue underlying this type of patent is whether it claims ideas that are too abstract to be patentable.

For a while, the answer was generally no; business methods could be patented. In the Federal Circuit's 1998 decision in State Street Bank,⁶⁷ the court held that business methods could be patentable, as long as they produce a "useful, concrete and

petition with an institution decision, 84% had at least 1 claim instituted and 74% had *all* challenged claims instituted).

⁶⁴ Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18, 125 Stat. 284, 329–31 (2011). In addition to *inter partes* review and CBM Review, the AIA also introduced a post-grant review mechanism that is available for nine months after a patent issues. *See* §§ 321–29, 125 Stat. at 306–13. Generally speaking, the same points discussed in this Part could apply to post-grant review. That said, since post-grant review is limited to only a short window after a patent issues, it could thus be viewed more as part of the process of ensuring that a valid right is issued in the first place (similar to trademark registration's opposition period) than invoking malleability.

⁶⁵ See, e.g., Megan M. La Belle & Heidi Mandanis Schooner, *Big Banks and Business Method Patents*, 16 U. PA. J. BUS. L. 431 (2014); Mark A. Lemley, Michael Risch, Ted Sichelman, & R. Polk Wagner, *Life After Bilski*, 63 STAN. L. REV. 1315 (2011); Joshua D. Sarnoff, *Patent-Eligible Inventions After Bilski: History and Theory*, 63 HASTINGS L.J. 53 (2011).

⁶⁶ U.S. Patent No. 5,960,411 (filed Sept. 28, 1999).

⁶⁷ State St. Bank & Trust Co. v. Signature Fin. Grp., 149 F.3d 1368 (Fed. Cir. 1998).

tangible result," in this case, "share prices."⁶⁸ The result was that business methods were, generally, patentable subject matter.

However, in 2010, the Supreme Court issued its decision in Bilski v. Kappos which offers patent challengers a new tool for contesting business method patents: the requirement of patentable subject matter.⁶⁹ The Supreme Court's Bilski decision did not simply breathe new life into the relatively dormant doctrine;⁷⁰ it was a Frankensteinian surge.⁷¹ The reaction to Bilski was both swift and great: Section 101 rose from the ashes to become a significant (perhaps the most significant, in the case of software-based patents), limitation on patents, one that has spawned more recent Supreme Court decisions—all enhancing the scrutiny patents face under this requirement—than any other issue in patent law.⁷²

Corresponding with the rise of Section 101 as a meaningful limitation on patents, Congress, as part of the America Invents Act, implemented a special procedural mechanism to allow parties to challenge business method patents at the PTO after

⁷¹ And indeed, Frankenstein is a perfect metaphor for post-*Bilski* Section 101 jurisprudence.

⁶⁸ *Id.* at 1373 (quoting *In re* Alappat, 33 F.3d 1526, 1543 (Fed. Cir. 1994), *abrogated by In re* Bilski, 545 F.3d 943 (Fed. Cir. 2008)); *see also* La Belle & Schooner, *supra* note 65, at 445; Lemley, Risch, Schelman & Wagner, *supra* note 65, at 1318.

⁶⁹ 35 U.S.C. § 101. The outcome of *Bilski* was not a complete surprise; the Federal Circuit's 2008 decision had, after all, affirmed the patent office's rejection of Bilski's claims, *Bilski*, 545 F.3d at 949.

⁷⁰ See CRAIG ALLEN NARD & R. POLK WAGNER, PATENT LAW 122–23 (1st ed. 2008) ("The tale of the modern application of § 101 is one of uncertainty, debate, and (especially) gradually receding importance."); Lemley, Risch, Schelman & Wagner, *supra* note 65, at 1318 ("For a decade after 1998, patentable subject matter was effectively a dead letter.").

⁷² Alice Corp. Pty. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014) (holding method for mitigating settlement risk as not patent eligible under § 101); Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (holding isolated DNA is not patent eligible under § 101); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012) (holding a method for administering drug, measuring metabolite levels, and issuing warnings is not patent eligible under § 101).

issuance. From at least one Senator's perspective, the purpose of this procedure was clear:

Recent court decisions . . . have sharply pulled back on the patenting of business methods, emphasizing that these "inventions" are too abstract to be patentable. In the intervening years, however, PTO was forced to issue a large number of business-method patents, many or possibly all of which are no longer valid. The Schumer proceeding offers a relatively cheap alternative to civil litigation for challenging these patents, and will reduce the burden on the courts of dealing with the backwash of invalid business method patents.⁷³

The CBM review mechanism allows parties to challenge the validity of business method patents that, under then-current law, were presumed valid when issued but, under the intervening court decisions, are no longer valid.

As with the inter partes review proceeding, the results of the CBM review can be seen as desirable. Patents that never should have issued are being weeded out, and no longer operate to grant their owners exclusive rights.

B. Unidirectional Malleability

Consider, however, how looking at patent rights as malleable impacts this view. If indeed the scope and strength of a patent depend substantially on the actions of those who interact with the patent after its issuance, perhaps more so than on the inherent characteristics of the patent itself, then inter partes review is not merely a tool to be brought to bear on "lowquality" patents. It is a tool that rational parties and skilled lawyers will bring to bear whenever threatened with a patent.⁷⁴ Unsurprisingly, the patents being challenged through inter partes review are also overwhelmingly involved in infringement

⁷³ 157 CONG. REC. S1367 (daily ed. Mar. 8, 2011) (statement of Sen. Jon Kyl).

⁷⁴ See Jacob Sherkow, Administrating Patent Litigation, 90 WASH. L. REV. 205, 260 (observing that "[t]hese loose restrictions on the availability of alternative for a to patent litigation make the procedures ripe for abuse").

suits.⁷⁵ And there are many inter partes reviews being instituted; the PTO reported 1,737 petitions filed in financial year 2015 resulting in 801 inter partes proceedings being instituted.⁷⁶ CBM review is less common, with only 149 petitions filed in financial year 2015, ⁷⁷but it is still seeing use.

Just as with infringement trials, malleability can manifest in these post-issuance proceedings at the PTO. As in infringement proceedings, malleability allows the challenger to push and pull on the scope and strength of the patent. The challenger can choose to initiate an inter partes review; the challenger selects the prior art to assert in the inter partes review; the challenger chooses which claims to target; the challenger offers the first claim construction.⁷⁸ To these are added all the standard forms in which malleability exists: the elastic nature of claim scope relative to what is disclosed, for example.⁷⁹ Since the patent rights are malleable, this allows the challenger to push them in the direction that favors the outcome desired by the patent challenger.

But unlike in infringement actions, that malleability is unidirectional in that it largely only operates to the detriment of the patent owner.⁸⁰ If the patent challenger wins, the claims are declared unpatentable and hence no longer an exclusionary

⁷⁷ Id.

⁷⁹ Rantanen, *supra* note 2, at 28–30.

⁷⁵ *See* Love & Ambwani, *supra* note 48, at 103 (reporting that "in 80 percent of IPRs, the challenged patent was also asserted in litigation between the petitioner and respondent.).

⁷⁶ Patent Trial and Appeal Board AIA Progress: Statistics (as of 2/29/2016), U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/sites/default/files/documents/2016-2-29%20PTAB.pdf. (last visited Apr. 2, 2016).

⁷⁸ Adding to this point, the patent challenger in *inter partes* review need not be a defendant in an infringement suit brought by the patent holder, or even a competitor. *Anyone* can initiate an *inter partes* review. *See* Sherkow, *supra* note 74, at 231 ("Any person "other than the patent owner" may bring petitions for *inter partes* and post-grant reviews.").

⁸⁰ *C.f.* Chiang, *supra* note 51, at 581 (explaining that *inter partes* reexamination offered advantages for the petitioner and relatively little downside).

right. On the other hand, if the patent owner wins, the result is essentially the status quo: it keeps the claims that it already had. In contrast, if the patent owner prevails in an infringement proceeding, it obtains a judgment of infringement, entitling it to remedies such as damages and an injunction.⁸¹ The result is that the challenger can push on the scope of the patent to maximize the likelihood of its invalidity while not bearing the countering risk of maximizing its chances of an infringement finding. In short, it turns Giles Rich's aphorism that "the stronger a patent the weaker it is and the weaker a patent the stronger it is" on its head.⁸²

To be fair, there are some benefits that accrue to the patent owner. The patent owner gains the benefit of estoppel against that particular challenger with respect to "any ground that the petitioner raised or reasonably could have raised during that inter partes review."⁸³ Although the exact scope of the "reasonably could have raised" language remains unsettled, it unquestionably excludes invalidity arguments such as indefiniteness, lack of patentable subject matter, or failure to comply with the disclosure requirements of § 112(a), as these arguments cannot be raised in an inter partes review petition.⁸⁴ Thus, if the patent challenger loses on the inter partes review, it can still defend itself on infringement and other invalidity grounds at the district court.

In addition, the patent challenger will not be bound by the claim construction it proffered during inter partes review when it comes time to argue noninfringement at the district court.⁸⁵ The PTO analyzes the validity of claims under a "broadest

⁸¹ See 35 U.S.C. § 283, 284.

⁸² Giles S. Rich, *The Proposed Patent Legislation: Some Comments*, 35 GEO WASH. L. REV. 641, 644 (1967).

⁸³ 35 U.S.C. § 315(e)(2).

⁸⁴ See 35 U.S.C. § 311(b) ("A petitioner in an *inter partes* review may request to cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.").

⁸⁵ *See* Director's Forum: A Blog from USPTO's Leadership, *supra* note 60.

reasonable interpretation" standard of claim construction.⁸⁶ The purpose of this standard is to ensure that all possible invalidity arguments are considered at the PTO.⁸⁷ Proceedings at the district court, however, simply construe the claim term, which results in a potentially narrower claim scope.⁸⁸ This combination allows the patent challenger to argue invalidity during inter partes review using the broader claim scope (thus increasing the likelihood of invalidity) and noninfringement at the district court proceeding using the narrower claim scope (thus increasing the likelihood of no infringement).⁸⁹

CBM review represents an even stronger case of a procedural mechanism that allows malleability to operate in a way that is only to the disadvantage of patent owners. As with inter partes review, CBM review is largely one-sided in its effect. A successful petitioner in CBM review can eliminate or

⁸⁷ See Bey & Cotropia, supra note 86, at 291 ("The standard allegedly helps the USPTO avoid erroneously blessing a claim as patentable when a district court may construe the same claim more broadly than the USPTO had considered, with the resulting increase in scope capturing prior art or an obvious variation of the prior art.").

⁸⁸ See id. at 287–88 (describing the district court approach to claim construction).

⁸⁶ See Dawn-Marie Bey & Christopher A. Cotropia, *The Unreasonableness of the Patent Office's "Broadest Reasonable Interpretation" Standard* 37 AM. INTELL. PROP. L. ASS'N Q. J. 285 (2009) (describing the broadest reasonable interpretation standard). This standard applies to *inter partes* review. *See* 37 C.F.R. § 42.3001(b) ("A claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears."); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012) ("The Office has for decades employed the broadest reasonable interpretation standard to construe claims before the Office, and it will continue to do so in IPR, PGR, and CBM proceedings for construing challenged claims as well as any amended or new claims."); Gregory Dolin & Irina D. Manta, *Taking Patents*, WASH. & LEE L. REV. (forthcoming 2016).

⁸⁹ *C.f. id.* at 303–06 (pointing out the potential difference between claim scope under USPTO methodology and claim scope under district court methodology.); Mike's Train House, Inc. v. Broadway Ltd. Imports, LLC, No. 1:09–CV–02657–JKB, 2012 WL 664498, at *22 (D. Md. Feb. 27, 2012), *aff'd*, 500 F. App'x 958 (Fed. Cir. 2013) (rejecting patent holder's argument that estoppel applied based on accused infringer's allegedly different claim constructions in ex parte reexamination and infringement proceeding).

substantially reduce the scope of an issued patent.⁹⁰ A successful patent holder, on the other hand, merely maintains the status quo: it keeps the same rights that it previously held. While, as with inter partes review, there are some potential benefits that a patent owner can reap—estoppel as to that particular patent challenger, a non-binding but potentially persuasive decision by the PTO that the patent is valid as against the particular legal challenge, and an opportunity to strengthen the claims through amendment⁹¹—but they are more like door prizes that reduce the downside of CBM review and offer little upside.

Still, the patent holder does have some choices to make and some ability to use the malleability of patent rights in its favor. As discussed above, patent holders can (theoretically, at least) amend their claims during inter partes review and potentially emerge with claims that are stronger from a validity standpoint but that still encompass the challenger's products or methods.⁹² Patent holders can also argue issues of claim construction and respond to invalidity arguments, thus pushing to expand the scope and strength of the patent.⁹³ And if the patent owner succeeds, it may obtain at least a gloss of strength for the patent.

⁹⁰ See generally P. Andrew Riley, Jonathan R.K. Stroud & Jeffrey Totten The Surprising Breadth of Post-Grant Review for Covered-Business-Method Patents: A New Way to Challenge Patent Claims, 15 COLUM. SCI. & TECH. L. REV. 235 (2014) (describing the CBM review, its benefits, and legislative history).

⁹¹ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18, 125 Stat. 284, 329–31 (2011).

⁹² But see Love & Ambwani, supra note 48, at 101–02 (reporting that "[t]o date, the PTAB has granted just a single motion to amend—one that was both unopposed and filed by the United States itself"). Recently, the PTO amended its rules to allow longer motions to amend claims, see Rules for Practice for Trials Before the Patent Trial and Appeal Board, 80 Fed. Reg. 28561, 28565 (May 19, 2015) (to be codified at 37 C.F.R. pt. 42) (increasing page limit for motions to amend from 15 pages to 25 pages), and it is considering other changes to the claim amendment process. See Michelle K. Lee, PTAB'S Quick-Fixes for AIA Rules Are to Be Implemented Immediately, DIRECTOR'S FORUM: A BLOG FROM USPTO'S LEADERSHIP (Mar. 27, 2015, 10:18 AM) www.uspto.gov/blog/director/entry/ptab_s_quick_fixes_for.

⁹³ Note that simply because the PTO uses a "broadest reasonable construction" standard does not mean that the claim scope encompasses everything under the sun. Claim construction can still

So should we be troubled by the unidirectional manner in which malleability operates in inter partes and CBM review? I think so. Unlike in the infringement suit context, where both patent owners and accused infringers have at least the opportunity to benefit from malleability inherent in patent rights, these post-grant procedures put a thumb on the side of the patent challenger. This concern is exacerbated by the use of the broadest reasonable interpretation standard, which places a thumb on the side of the patent challenger. Indeed, although there are a variety of arguments as to why the broadest reasonable interpretation standard should not be applied in inter partes and CBM review,⁹⁴ it is the interaction between that standard and the malleability of patent rights that may be the strongest policy argument against its application.

Conclusion

The Malleability of Patent Rights introduced the idea that patent rights should not be viewed as static rights, fixed forever at a precise moment in time. Rather, it suggested that those rights should properly be viewed as malleable, that is, changeable (to at least some degree) even after issuance. And it argued that this change need not accompany an increase in the value of the underlying technology but rather could take the form of an expansion in scope of the rights themselves.

This view of patent rights, as malleable rights, is not merely a theoretical construct; it affects fundamental perceptions of how aspects of the patent system are valued. Because patent rights are malleable, the conventional efficient-inventor narrative isn't quite as convincing as it seems, even when taken at face value.

The malleable nature of patent rights also offers a different perspective on patent reform efforts. This perspective requires

be necessary to arrive at that reasonable scope, and it is not clear that there is a meaningful difference between the two standards in every instance.

⁹⁴ Such as Greg Dolin & Irina Manta's Fifth Amendment takings-clause argument, *see* Dolin, *supra* note 86; *but see* Camilla A. Hrdy & Ben Picozzi, *The AIA Is Not a Taking: A Response to Dolin & Manta*, 72 WASH. & LEE L. REV. ONLINE 472 (2016) (responding to Dolin & Manta).

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a greater appreciation of the impact inter partes review and covered business method review have: to allow patent challengers greater ability to shrink—if not eliminate—the scope of issued patent rights without allowing patent owners much of an opportunity to use malleability in their favor.