GREG REILLY*

INTRODUCTION		
CON	VTEXTUAL DIFFERENCES IN THE PATENT SYSTEM	. 557
A.	The Structure of the Patent System	. 557
В.	Differences Between Patent Acquisition and Patent	
	Enforcement	. 559
	1. Different Functions	. 559
	2. Different Structure and Procedures	. 563
	3. Temporal Differences	. 565
	4. Different Decision Makers	. 566
C.	The Hybrid Nature of Patent Office Postissuance and ITC	
	Proceedings	
Cot	JPLED PATENT LAW	. 569
A.	The Norm of Coupled Patent Law	. 569
В.	Departures from Coupled Patent Law	. 572
	1. Claim Construction	. 573
	2. Indefiniteness	
	3. Inequitable Conduct	. 575
	4. Best Mode	. 576
	5. Other Examples	. 576
C.	The Questionable Benefits of Coupled Patent Law	. 577
	1. Certainty and Predictability	. 577
	2. The Quality of Patent Law and Error Costs	. 580
	3. Decision Costs	. 581
D.	The Problems with Coupled Patent Law	. 584
	1. The Theoretical Problem with Coupled Patent Law	. 584
	2. Evidence of the Problems with Coupled Patent Law	. 586
	CON A. B. C. Cot A. B. C.	 CONTEXTUAL DIFFERENCES IN THE PATENT SYSTEM

^{*} Assistant Professor of Law, IIT Chicago-Kent College of Law. For helpful discussions and comments on this and earlier versions, thanks to Clark Asay, Stephanie Bair, Graeme Dinwoodie, Patrick Goold, Jay Kesan, Ken Klein, Ed Lee, Orly Lobel, Mark Rosen, Chris Schmidt, David Schwartz, Ted Sichelman, Mila Sohoni, Melissa Wasserman, and the participants at the 2016 Works-in-Progress IP Conference at the University of Washington; Texas A&M IP Scholars Roundtable; UNH IP Scholars Roundtable; University of Illinois IP Colloquium; BYU IP Colloquium; USD Corporate Innovation and Policy Seminar; and faculty workshops at the Chicago-Kent College of Law, the University of San Diego School of Law, and the California Western School of Law. In private practice, I was counsel to a party in *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc), discussed herein.

BOSTON UNIVERSITY LAW REVIEW

[Vol. 97:551

III.	THE	POSSIBILITY OF DECOUPLING PATENT LAW	. 587
	A.	Overview of Decoupled Patent Law	. 587
	B.	Principles for Decoupled Patent Law	. 589
		1. Legalistic vs. Technical Determinations	. 590
		2. Policy-Influenced Decisions	
		3. Determinations as of the Time of the Invention or	
		Filing 594	
		4. Simplicity vs. Nuance	. 594
		5. Rules vs. Standards?	. 595
	C.	More Stringent Standards in the Patent Office?	. 596
	D.	Potential Examples of Decoupled Patent Law	. 600
		1. Claim Construction	
		2. Obviousness	. 602
	E.	Decoupled Patent Law Outside of Acquisition and	
		Litigation	. 603
IV.	IMP	LEMENTING DECOUPLED PATENT LAW	. 604
	A.	Statutory Authority for Decoupled Patent Law	. 604
		1. The Patent Act	. 604
		2. The Federal Courts Improvement Act	. 606
	B.	Decoupled Patent Law and Administrative Law Principles	. 608
	C.	The Feasibility of Decoupled Patent Law	. 611
CONCLUSION			. 612

Patent law is applied in a variety of settings, including the Patent Office in determining an applicant's initial entitlement to a patent, the courts in enforcing patent rights, and the Patent Office in reconsidering previously issued patents. These settings differ significantly in their functions, timing, structure, procedures, and decision makers. Yet, identical patent law rules are generally applied in identical ways in each setting. This norm of coupled patent law is presumed, with little theoretical justification. Problems arising from the norm of coupled patent law may underlie current disagreement among Congress, the Supreme Court, the Federal Circuit, and commentators about the optimal design of patent law. Simply put, it may be impossible to develop a single, optimal set of rules to be applied uniformly in the very different settings of the patent system. Thus, for patent law to be optimal in practice, rather than just in theory, it may need to be tailored for the different contexts and decision makers of the patent system. Decoupling patent law to apply different rules, standards, tests, presumptions, etc. in the different settings of the patent system, like patent acquisition in the Patent Office and patent enforcement in the courts, may be warranted. This Article makes the normative case for decoupled patents as a tool of patent law design and provides an initial framework for implementing it, addressing statutory and practical concerns.

INTRODUCTION

Over the past decade, the United States Supreme Court and the U.S. Court of Appeals for the Federal Circuit have displayed starkly different visions of the proper design of patent law. The Federal Circuit, which has exclusive intermediate appellate jurisdiction in patent cases, "has tended to adopt somewhat formalistic, bright-line legal rules in various areas of patent doctrine."¹ These lead to legalistic doctrines that minimize the technical aspects of patent law and the patent document.² The Supreme Court has preferred more open-ended standards that place greater reliance on the technical context in which patent disputes arise.³

The Federal Circuit's rule-oriented approach has been called "misguided" and critics have "blame[d] [it] for problems with the [modern] patent system."⁴ It has been criticized for ignoring patent law's technical context⁵ and for "undermining innovation policy."⁶ Conversely, the Supreme Court has been criticized for "announc[ing] broad, policy-oriented standards without considering the difficulties of applying them" and imposing undue burdens by "compel[ling] difficult technological inquiries by lay adjudicators."⁷ Its approach has been said to give insufficient attention to the need for "certainty in patent law," to "invite subjective decision making," and to "fail to provide any real constraint on the discretion of" decision makers.⁸

The design of patent law sometimes seems like a hopeless endeavor, criticized as too constrained or too open-ended; too legalistic for the technical context of patents or too technical for generalist judges; too divorced from innovation policy or too policy-oriented. To some extent, these contradictory criticisms reflect differing views on the proper scope of patent protection, the desirability of rules versus standards, and the proper institution to design patent law.⁹

But these criticisms may not be contradictory after all. Patent law may be both too open-ended and too constrained, too legalistic and too technically intensive, too inconsiderate of innovation policy, and too policy-oriented. It all depends on context. The pervasive dissatisfaction with the design of patent law

⁵ Holbrook, *supra* note 1, at 808.

⁶ Peter Lee, *Patent Law and the Two Cultures*, 120 YALE L.J. 2, 27 (2010) (describing, but not endorsing, the Federal Circuit's development of a more formalistic patent doctrine).

⁷ *Id.* at 63.

⁸ Taylor, *supra* note 3, at 468, 488.

¹ Timothy R. Holbrook, *Patents, Presumptions, and Public Notice*, 86 IND. L.J. 779, 788 (2011).

² Id. at 782-83.

³ Id. at 783; David O. Taylor, Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards, 46 CONN. L. REV. 415, 441 (2013).

⁴ Taylor, *supra* note 3, at 419 (describing, but not endorsing, the criticism of the Federal Circuit's rule-oriented approach).

⁹ See Lee, supra note 6, at 44-47.

results, at least in part, from a fundamental problem. It is impossible to design a single set of optimal patent doctrines, rules, and tests for the starkly different settings in which patent law is applied, especially patent acquisition (or "prosecution") in the United States Patent and Trademark Office ("Patent Office") and patent enforcement litigation in the United States district courts.¹⁰

Like any area of law, the design of patent law must account for the ease and reliability of implementation of the resulting legal doctrines.¹¹ A legal rule can be theoretically perfect but practically flawed if it cannot be reliably implemented by the relevant decision maker in the relevant context.¹² In the context of patent law, it is a useful theoretical exercise to determine whether a particular doctrine, rule, or test would provide the exact right incentives to innovate (if such a thing were identifiable) in a vacuum, assuming perfect implementation. But what ultimately matters is whether a doctrine, rule, or test *as applied by the relevant decision makers in the relevant context* leads to optimal incentives to innovate. The law as applied, not the law in theory, determines parties' actual real world behavior.¹³

Shifting focus to the law as applied casts in doubt a fundamental assumption of the patent system: that the exact same doctrines, rules, standards, tests, presumptions, etc. should apply identically in Patent Office proceedings and in district court patent litigation.¹⁴ Although departures from this norm of coupled patent law exist, most notably the test for interpreting the claims at the end of the patent that define the patent's scope ("claim construction"), these exceptions prove the rule.¹⁵ Commentators have advocated recoupling patent law where departures have occurred exactly because of the assumption of unified rules for patent acquisition and enforcement.¹⁶

Yet, the settings in which patent law is applied differ significantly in their purpose, timing, procedures, and decision makers. Patent acquisition occurs close to the time of invention before any rights exist for the very purpose of determining whether the government should grant the patentee a property interest.¹⁷ It proceeds ex parte before specialist patent examiners who, although technically savvy, are legal neophytes and must make decisions on a paper

¹⁰ See infra Section II.D.

¹¹ ADRIAN VERMEULE, JUDGING UNDER UNCERTAINTY: AN INSTITUTIONAL THEORY OF LEGAL INTERPRETATION 36 (2006); Lee, *supra* note 6, at 6.

¹² See VERMEULE, supra note 11, at 80 (noting that legal principles "may be implemented by a range of institutional arrangements" and that "[s]ome of these arrangements may produce worse outcomes" than others).

¹³ See id. at 9 ("[O]n any first-best account, intermediate institutional premises will determine the operational conclusions.").

¹⁴ See infra Section II.A.

¹⁵ See infra Section II.B.

¹⁶ See infra Section II.B.

¹⁷ See infra Section I.B.3.

record with limited consideration.¹⁸ Patent enforcement occurs comparatively far from the time of invention after creation of a property interest for the purpose of resolving a private dispute between two parties.¹⁹ It is highly adversarial—perhaps too much so—and is resolved by generalist judges who are legally savvy but technical neophytes.²⁰ Enforcement involves a comparatively small number of patents, with decisions made over a matter of years on a diverse evidentiary record.²¹ Beyond these two most common settings, patent law is also applied in postissuance proceedings in the Patent Office to cancel issued patents and in the International Trade Commission ("ITC") to determine whether to bar imports of products that infringe U.S. patents.²² Patent Office postissuance proceedings and ITC proceedings have some of the characteristics of both patent acquisition and patent enforcement, as well as some of their own unique characteristics.²³ In sum, the different contexts and decision makers of the patent system suggest that the reliability of implementation of patent law rules will differ across settings.

If it is impossible to design a single set of rules and tests for reliable implementation in all of the different settings in which patent law is applied, one solution is to alter the institutional structure to make the context and decision makers more homogenous throughout the patent system. Commentators have long called for reforms to increase technical competence in patent litigation, which would reduce the differences in decision makers between patent acquisition and patent enforcement. Like similar proposals in other areas at the intersection of law and science, these proposals—whether for court-appointed experts, technical adjuncts, or specialized courts—have largely failed "due to a combination of historical, practical, cultural, and efficacy reasons."²⁴ Indeed, "unless we are prepared to make fundamental modifications to our adversarial system," lay decision makers are inevitable in patent litigation.²⁵

Taking the institutional structure of the patent system as a given in light of the failed efforts to change it, this Article identifies an alternative way to

²⁴ Greg Reilly, *Rethinking the PHOSITA in Patent Litigation*, 48 LOYOLA UNIV. CHI. L.J. (forthcoming 2017) (manuscript at 29).

²⁵ See Jennifer L. Mnookin, *Expert Evidence, Partisanship, and Epistemic Competence*, 73 BROOK. L. REV. 1009, 1033 (2008) (reaching a similar conclusion in context of science and litigation generally).

¹⁸ See infra Section I.B.2, I.B.4.

¹⁹ See infra Section I.B.3.

²⁰ See infra Sections I.B.2, I.B.4.

²¹ See infra Section I.B.

²² 19 U.S.C. §1337 (2012) (authorizing the ITC to determine whether imported products infringe U.S. patents); *Post Grant Review*, U.S. PAT. & TRADEMARK OFF., https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/post-grant-review [https://perma.cc/6T2W-LWLG] (last updated Aug. 15, 2014).

²³ See infra Section I.C.

address the problems created by the different contexts and decision makers of the patent system: altering substantive patent law by, for example, tailoring rules, tests, presumptions. to reflect the different contexts and decision makers of the patent system. To some extent, and for certain doctrines and issues. optimal implementation of patent law may require different sets of patent law rules that reflect the differences in contexts and decision makers in the patent system. For example, doctrines and rules that require detailed and nuanced understanding of the technical aspects of the invention and the patent document are reasonable for patent acquisition in the Patent Office but unreliable when applied by generalist judges in litigation. Conversely, doctrines and rules that require legalistic analysis or parsing of legal documents are perfectly suitable for patent enforcement but difficult for patent examiners with minimal legal training.²⁶ More controversially, the different contexts of patent acquisition and patent enforcement may warrant more stringent rules for determining patentability in the Patent Office than the courts because the Patent Office is likely biased in favor of granting patents.²⁷ To be clear, the reference to patent law "rules" throughout this Article is not intended to invoke the general debate over rules versus standards.²⁸ Decoupled patent law could take the form of different legal principles, rules, standards, tests, presumptions, or any other mechanism by which law is applied to the facts of a case.

Reasonable concerns might exist about decoupled patent law, though they are ultimately unconvincing. Decoupled patent law may somewhat increase the costs of propounding and administering patent law, but there is little reason to think these costs outweigh the benefits of more reliable implementation of patent law rules tailored for the different contexts and decision makers of the patent system.²⁹ It may also mean that the scope and strength of a patent will vary based on the different choices made for tailoring patent law in the different settings. But, even with coupled patent law, patent rights are unstable probabilistic rights of uncertain validity and scope that are malleable and subject to alteration by those who encounter them.³⁰ Tailoring patent law to reflect the different settings of the patent system makes implementation of patent law more reliable and, therefore, outcomes are easier to predict ex ante.³¹

Finally, some may be concerned about the statutory authority to apply different patent law rules in different settings, given that the Patent Act

²⁶ See infra Section III.B.

²⁷ See infra Section III.C.

²⁸ See generally Taylor, supra note 3.

²⁹ See infra Section II.C.3.

³⁰ See Mark A. Lemley and Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSP. 75, 85 (2005); Jason Rantanen, *The Malleability of Patent Rights*, 2015 MICH. ST. L. REV. 895, 898-99.

³¹ See infra Section II.C.1.

contains only a single set of provisions.³² This concern is secondary to the Article's primary focus on the normative case for decoupled patent law. It is possible that implementation of decoupled patent law requires statutory reform. More likely, decoupled patent law largely can be implemented within the current statutory framework, which defines patent law doctrines at a high level of generality and leaves the details to the common law process.³³

This Article proceeds in four parts. Part I highlights the very different contexts in which patent law is applied. Part II describes and critiques the norm of coupled patent law. Part III then sketches the general contours of decoupled patent law, including examples of what it could look like for the claim construction and obviousness doctrines. Part IV considers questions related to the statutory authority for, and feasibility of, decoupled patent law. A short conclusion follows.

I. CONTEXTUAL DIFFERENCES IN THE PATENT SYSTEM

Patent law must be applied in several distinct settings. The most common settings—patent examination in the Patent Office and patent litigation in the courts—differ significantly in their functions, structure, procedures, timing, and decision makers. In recent years, patent law is increasingly applied in a third context—postissuance proceedings in the Patent Office, which are a hybrid of patent examination and litigation. Likewise, patent law is also applied by a second administrative agency, the ITC, which bears similarities to both the Patent Office and courts.³⁴ This Part describes the contextual differences that exist between the different settings for decision-making in the patent system.

A. The Structure of the Patent System

Patent law has long been applied in two primary settings. First, patent law is applied by the Patent Office during patent acquisition (or "prosecution"), which are proceedings to determine whether the statutory requirements for a patent have been satisfied such that a patent should issue.³⁵ Second, patent law is applied in courts during infringement lawsuits to determine whether a defendant is violating the "exclusive rights granted by the patent."³⁶ Decisions in each context can be appealed to the Federal Circuit, which has nationwide jurisdiction over patent appeals, and then potentially to the Supreme Court.³⁷

³² See 35 U.S.C. §§ 1-376 (2012).

³³ See infra Section IV.A.

³⁴ 19 U.S.C. §1337 (2012).

³⁵ See 35 U.S.C. §§ 100-123; Lemley and Shapiro, *supra* note 30, at 77-79.

 $^{^{36}}$ Robert Patrick Merges & John Fitzgerald Duffy, Patent Law and Policy: Cases and Materials 51-55 (6th ed. 2013).

³⁷ During patent acquisition, only patent denials, not grants, can be appealed. Jonathan Masur, *Patent Inflation*, 121 YALE L.J. 470, 474 (2011).

[Vol. 97:551

The following figure, taken from Robert Merges's and John Duffy's leading patent law text, illustrates the traditional structure of the patent system.³⁸

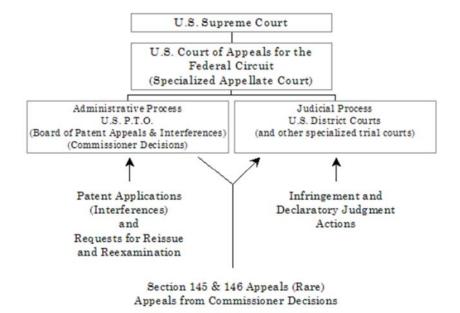


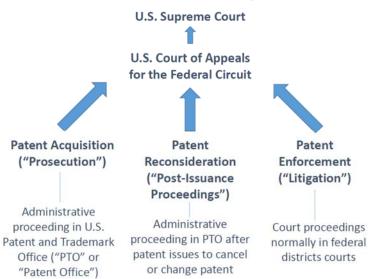
Figure 1-5 The Legal Process of the U.S. Patent System

In recent years, Congress has altered this basic structure by introducing several procedures by which patents can be challenged in the Patent Office as erroneously granted after issuance,³⁹ procedures that have proven very popular. These postissuance proceedings effectively create a third prong to the patent system distinct from both patent acquisition and patent enforcement: administrative challenges to issued patents. The current patent system is better depicted in the following chart.

³⁸ MERGES & DUFFY, *supra* note 36, at 51.

³⁹ *Id.* at 51-54.

Structure of Patent System



Even this depiction is incomplete for the many patent matters that cross the United States' borders. The ITC, an administrative agency with jurisdiction in international trade matters, has authority to adjudicate claims that imported goods infringe U.S. patents and exclude such products from the United States.⁴⁰ The ITC is an increasingly popular setting for patent disputes because of its speed of adjudication, the strong remedy provided by the ability to exclude infringing products at the border, and the help United States Customs and Border Protection provides in investigating and enforcing violations.⁴¹

B. Differences Between Patent Acquisition and Patent Enforcement

Focusing initially on the two primary settings in which patent law is applied, this Section details the significant differences that exist between patent acquisition and patent enforcement.

1. Different Functions

The Patent Office evaluates whether the statutory conditions have been satisfied to justify granting the government privilege that creates a property right, through a patent, in a private individual.⁴² Courts, by contrast, resolve a

⁴⁰ See Sarah R. Wasserman Rajec, *Patents Absent Adversaries*, 81 BROOK. L. REV. 1073, 1075-76 (2016).

⁴¹ *Id.* at 1095.

⁴² 35 U.S.C. § 261 (2012) ("[P]atents shall have the attributes of personal property."); *General Information Concerning Patents*, U.S. PAT. & TRADEMARK OFF. (Oct. 2015), http://www.uspto.gov/patents-getting-started/general-information-concerning-

specific dispute between private parties as to whether the patentee's claimed property right is valid *and* whether the accused infringer violated that right.⁴³ These different functions are significant in three ways.

First, the Patent Office primarily interacts with inventors, who seek patent rights in exchange for payment of fees to the Patent Office. "[A]ll that is being asked of the PTO is to grant patents," creating "constant one-way demands to issue patents."⁴⁴ The Patent Office's perspective is skewed because it is not exposed to the costs to competition when issued patents are "used as a business weapon" and "asserted against someone engaged in activity not contemplated by the inventors."⁴⁵ Unsurprisingly, given this dynamic, the Patent Office's website describes its function as "serv[ing] the interests of inventors and businesses with respect to their inventions and corporate products,"⁴⁶ and it even stated in the past that its goal was to "help[] customers get patents."⁴⁷

The new postissuance proceedings, which allow competitors to challenge issued patents, may give the Patent Office as a whole a fuller appreciation of the benefits and costs of the patent system.⁴⁸ However, these proceedings occur before Administrative Patent Judges ("APJs") of the Patent Trial and Appeal Board, not before the patent examiners who process initial applications.⁴⁹ Postissuance proceedings may broaden the perspective of high-ranking Patent Office officials who set overall policy, but the job of the thousands of patent examiners actually reviewing patent applications remains inherently one-sided.

By contrast, litigation necessarily involves both the patent holder and a party selling an allegedly infringing product, exposing courts to both the benefits of patents in spurring innovation and the costs of patents in hindering competition. In theory, courts should be less likely than the Patent Office to develop tunnel vision or bias in favor of either side. Although the Federal

patents#heading-1http://www.uspto.gov/patents-getting-started/general-information-

concerning-patents#heading-1 [https://perma.cc/GD2F-A9H3] ("[T]he USPTO examines applications and grants patents on inventions when applicants are entitled to them"). See generally Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 CORNELL L. REV. 953 (2007) (critiquing conventional wisdom that patents are government-granted privileges and not based on natural rights).

⁴³ See Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95 (2011).

⁴⁴ Melissa F. Wasserman, *The Changing Guard of Patent Law:* Chevron *Deference for the PTO*, 54 WM. & MARY L. REV. 1959, 2014 (2013).

⁴⁵ Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 632 F.3d 1246, 1257-58 (Fed. Cir. 2011) (Lourie, J., concurring in part and dissenting in part); *see also* Rochelle C. Dreyfuss, *Percolation, Uniformity, and Coherent Adjudication: The Federal Circuit Experience*, 66 SMU L. REV. 505, 532 (2013) ("[T]he PTO saw patents only at the application stage and had no way to observe their effects in product or research markets.").

⁴⁶ General Information Concerning Patents, supra note 42.

⁴⁷ Wasserman, *supra* note 44, at 2014.

⁴⁸ *Id.* at 2014-15.

⁴⁹ Sarah Tran, *Patent Powers*, 25 HARV. J.L. & TECH. 609, 631-39 (2012).

Circuit has been accused of tunnel vision and pro-patentee (or pro-patent) bias,⁵⁰ this does not affect the *relative* bias in patent acquisition and patent enforcement because the Federal Circuit supervises both. More relevant is the increasing concentration of patent litigation in a single district court, the U.S. District Court for the Eastern District of Texas, exactly because of its propatentee bias.⁵¹ Outside of the Eastern District of Texas, however, pro-patentee bias does not seem pervasive, currently or historically, in the district courts, and venue reforms may soon end the Eastern District of Texas's dominance in patent litigation.⁵²

Second, and relatedly, the Patent Office and courts each only see part of the patent system. The Patent Office only addresses issues of patentability and "has no jurisdiction over questions relating to infringement of patents," whereas courts address both whether the patent right should exist at all (i.e., validity) and whether the defendant's activity fits within the scope of the patent rights (i.e, infringement).⁵³ The patentability requirements are the only levers the Patent Office can use in evaluating patent applications.⁵⁴ If the applicant surpasses these hurdles, it prevails and obtains a patent, which occurs at least 55.8% of the time.⁵⁵ By contrast, courts addressing patent assertions in litigation have the levers of both invalidity doctrines and infringement doctrines. The patentee must win on both to prevail, while the accused infringer normally need only win on one.⁵⁶ As a result, patentees win only 26% of patent litigation cases that reach a definitive merits ruling.⁵⁷

⁵⁷ John R. Allison, Mark A. Lemley & David L. Schwartz, *Understanding the Realities of Modern Patent Litigation*, 92 TEX. L. REV. 1769, 1794 (2014). Plaintiffs generally win

⁵⁰ See Wasserman, supra note 44, at 2015-16.

⁵¹ Daniel Klerman & Greg Reilly, *Forum Selling*, 89 S. CAL. L. REV. 241, 243 (2016); *see also* J. Jonas Anderson, *Court Competition for Patent Cases*, 163 U. PA. L. REV. 631, 633 (2015) (referencing the Eastern District of Texas as a popular district for forum shopping).

⁵² Colleen V. Chien & Michael Risch, *Recalibrating Patent Venue* 3 (Santa Clara Univ. Sch. of Law Legal Studies Research Papers Series, Paper No. 10-16, Sept. 2016), http://ssrn.com/abstract=2834130 [https://perma.cc/7X5L-GPQZ].

⁵³ General Information Concerning Patents, supra note 42.

⁵⁴ See Dreyfuss, supra note 45, at 532.

⁵⁵ Michael Carley et al., *What Is the Probability of Receiving a US Patent?* 5 (U.S. Patent & Trademark Office, Economic Working Paper No. 2013-2, Jan. 2014), http://www.uspto.gov/ip/officechiefecon/OCE_WP_2013-2.pdf [https://perma.cc/HH6P-XJN4]. This success rate reflects applications that themselves generated an issued patent. Even applications that themselves fail may still generate an issued patent through what is called "continuation" procedures, and over 70% of applications led to an issued patent either themselves or through continuation applications. *Id.* at 6. On the other hand, most patent applicants obtain patents only after amending claims, receiving less patent scope than they originally sought. *Id.* at 3.

⁵⁶ See Mark A. Lemley, *The Fractioning of Patent Law*, *in* INTELLECTUAL PROPERTY AND THE COMMON LAW 504, 505 (Shyamkrishna Balganesh ed., 2013).

On the other hand, while every patent necessarily passes through the Patent Office, "[o]nly about 1.5% of all patents are ever litigated in court."⁵⁸ Courts have almost no opportunity to see patents used for nonlitigation purposes, such as in licensing and technology transfer, securing venture capital, or as assets in mergers and acquisitions. "[L]itigated patents are almost by definition extreme outliers"⁵⁹ These patents tend to be the most valuable (in terms of private value), valuable enough to justify the high costs of litigation.⁶⁰ Litigation may also be evidence of the weakness of a patent, as indisputable patents should be quietly licensed without the need for litigation.⁶¹

Third, courts "are institutionally disinclined to make express policy judgments."⁶² Judges tend to "rel[y] on arguments from statutory language, precedent, and logic"⁶³ and are limited by what issues the parties raise, how they frame them, and how skillfully they pursue them.⁶⁴ "[T]he goal of resolving a particular controversy may sometimes be in tension with the goal of broad-based policy formulation."⁶⁵ By contrast, administrative agencies like the Patent Office "are expressly charged with making policy and weighing the costs and benefits of competing outcomes."⁶⁶ Although the Patent Office has been notably less inclined towards policy-based decisions than other agencies, it is institutionally better suited to do so in comparison to courts, and has taken steps in this regard in recent years.⁶⁷ Patent Office officials have tools to make policy-based decisions that can be implemented without examiners having to resolve policy questions, such as by issuing guidance documents and instructions to examiners.⁶⁸

⁶⁴ See Arti K. Rai, Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development, 61 DUKE L.J. 1237, 1268 (2012).

fifty-eight percent of their cases in civil federal cases, suggesting patentees' low win rate is not just the result of selection effects. Lemley, *supra* note 56, at 505.

⁵⁸ John R. Allison et al., *Extreme Value or Trolls on Top? The Characteristics of the Most-Litigated Patents*, 158 U. PA. L. REV. 1, 4 (2009).

⁵⁹ Id.

⁶⁰ *Id.* at 29.

⁶¹ John R. Allison et al., Valuable Patents, 92 GEO. L.J. 435, 442 (2004).

⁶² Michael J. Burstein, *Rules for Patents*, 52 WM. & MARY L. REV. 1747, 1789 (2011).

⁶³ *Id.*; *see, e.g.*, Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 112-13 (2011) (refusing to consider policy issues related to presumption of validity and instead resolving claims based on long-standing precedent).

⁶⁵ Id.

⁶⁶ Wasserman, *supra* note 44, at 2011-12.

⁶⁷ *Id.* at 2012.

⁶⁸ See Burstein, *supra* note 62, at 1775 (describing Patent Office development of utility examination guidelines for a particular class of patents that could be applied by examiners on a case-by-case basis).

2. Different Structure and Procedures

The different functions of patent acquisition and enforcement result in important structural and procedural differences in the two contexts. Most notably, patents issued in litigation are presumed valid, and the challenger must prove invalidity by clear and convincing evidence.⁶⁹ There is a similar "presumption during prosecution that a patent is allowable,"⁷⁰ and "[t]he burden is on the Patent and Trademark Office to provide a reason *not* to issue a patent sought by an applicant."⁷¹ However, the patent examiner need only show unpatentability by a preponderance of the evidence.⁷²

Beyond the standard of proof, patent acquisition is done ex parte, with the applicant pursuing its self-interest in advocating issuance of the patent, checked only by a theoretically neutral patent examiner with limited motivation, time, and resources.⁷³ By contrast, patent enforcement is highly adversarial, with "an accused infringer who can shove back on patent scope and strength,"⁷⁴ and is strongly incentivized to identify, develop, and exploit any problem, ambiguity, or uncertainty in the patent.⁷⁵

Structural features bias the Patent Office generally, and individual examiners specifically, in favor of issuing patents, exacerbating the effects of ex parte patent acquisition.⁷⁶ No appeals or other challenges are allowed if a patent is issued, thereby terminating the examiner's work and inoculating the decision from reversal.⁷⁷ By contrast, an applicant can dispute a patent denial—leading to a back and forth between the applicant and examiner—and subsequently appeal within the Patent Office and ultimately to the Federal Circuit.⁷⁸ Beyond workload and likelihood of reversal, over fifty percent of the Patent Office's patent budget comes from issuance fees and maintenance fees, paid only for granted patents.⁷⁹ Empirical evidence "suggest[s] that the

⁷⁴ Jason Rantanen, *How Malleability Matters*, 6 IP THEORY 1, 3 (2016).

⁶⁹ See infra Section II.B.

⁷⁰ Michael Risch, *The Failure of Public Notice in Patent Prosecution*, 21 HARV. J.L. & TECH. 179, 196 (2007).

⁷¹ Lemley & Shapiro, *supra* note 30, at 78.

⁷² U.S. DEP'T OF COMMERCE, MANUAL OF PATENT EXAMINING PROCEDURES § 2103[VI] (9th ed. 2015) [hereinafter MPEP], https://www.uspto.gov/web/offices/pac/mpep/ [https://perma.cc/J8EJ-L89N].

⁷³ Wasserman, *supra* note 44, at 2014.

⁷⁵ See Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 U. PA. L. REV. 1743, 1752-54 (2009).

⁷⁶ Wasserman, *supra* note 44, at 2013-14.

⁷⁷ Masur, *supra* note 37, at 474.

⁷⁸ Roger Allan Ford, *Patent Invalidity Versus Noninfringement*, 99 CORNELL L. REV. 71, 88 (2013); Masur, *supra* note 37, at 474.

⁷⁹ Michael D. Frakes & Melissa F. Wasserman, *Does Agency Funding Affect Decisionmaking?: An Empirical Assessment of the PTO's Granting Patterns*, 66 VAND. L. REV. 65, 79 (2013).

Agency's fee schedule biases the PTO toward granting patents."⁸⁰ Likewise, the compensation and bonus system for individual examiners traditionally favored granting patents, though recent changes have reduced these pro-grant incentives.⁸¹

The day-to-day procedures also differ between patent acquisition and enforcement. The Patent Office must process a large number of patent applications quickly, whereas courts have a comparatively small number of cases to resolve and more time to do so.⁸²

[A] patent examiner spends only [eighteen] hours per application on average . . . reading the application, searching for and reading prior art, comparing the prior art to the application, writing one or more provisional rejections, reviewing responses and amendments, often conducting an interview with the applicant's attorney and writing a notice of allowance.⁸³

The Federal Judicial Center estimates that federal judges spend double that time, at least thirty-five hours per patent case.⁸⁴ Moreover, whereas patent examiners must do most of the work themselves, the parties in litigation spend thousands of hours identifying prior art, developing arguments, and presenting both to the court in an easily digestible and adoptable format.⁸⁵

In terms of evidence, patent acquisition is paper-centric, with examiners generally only searching for, and relying on, printed publications.⁸⁶ Examiners do not normally conduct any factual investigation (beyond searching for printed publications), hear live testimony, or call their own expert witnesses.⁸⁷ In litigation, each party conducts (and presents to the judge) its own factual investigation, and cases are resolved based on a wide range of evidence, including printed publications, testimony from fact witnesses, testimony from knowledgeable witnesses, and the opinions of competing expert witnesses.

⁸⁰ *Id.* at 70.

⁸¹ Masur, *supra* note 37, at 478; Wasserman, *supra* note 44, at 2014.

⁸² Burstein, *supra* note 62, at 1776-77.

⁸³ Lemley & Shapiro, *supra* note 30, at 79.

⁸⁴ PATRICIA LOMBARD & CAROL KRAFKA, FED. JUDICIAL CTR., 2003—2004 DISTRICT COURT CASE-WEIGHTING STUDY 57 (2005), http://www.fjc.gov/public/pdf.nsf/lookup /CaseWts0.pdf/\$file/CaseWts0.pdf [perma.cc/E9W2-BMPA] (showing total time per patent case as 2080 minutes). Because the study accounted for cases that settle early, judges spend significantly more than thirty-five hours on cases that reach the merits, which is a better comparison to patent examination. *See id.*

 $^{^{85}}$ Cf. Lemley & Shapiro, *supra* note 30, at 77-80 (describing the processes of patent prosecution and patent litigation).

⁸⁶ Risch, *supra* note 70, at 183.

⁸⁷ See id. at 196.

3. Temporal Differences

Important timing differences exist between patent acquisition and patent enforcement. Because the right to exclusive use of an invention only arises from the government's grant of a patent,⁸⁸ patent acquisition occurs before existence of the property right and patent enforcement after it. As a result, the claimed rights can be changed via claim amendment if those rights are found to be problematic in patent acquisition, creating three possible outcomes: (1) grant the rights originally sought, (2) grant narrower rights than originally sought, or (3) deny any patent rights. In comparison, patent claims cannot be amended during litigation, meaning the rights can only be either invalidated or upheld.

The termination of an existing property right during patent enforcement also raises greater concerns about reliance interests than the refusal to create a property right during patent acquisition.⁸⁹ "[I]nventors and entrepreneurs will make investment decisions in reliance upon those settled expectations" created by the patent grant, such as investing in commercialization efforts, committing to a certain course of conduct or product design, or obtaining third-party financing.⁹⁰ And competitors faced with an issued patent may purchase a license, undertake costly design-around efforts, or forego a certain course of conduct all together.⁹¹ An unpatentability decision during acquisition could undermine research and development investments, hampering incentives to innovate.⁹² An invalidity decision in litigation will often have the dual effect of hampering innovation incentives and disturbing expectations of patentees, third-party investors, and competitors that arise from the issuance of the patent rights.⁹³

Patent acquisition, by definition, also occurs closer to the time of the invention and filing of the patent application than does patent enforcement.

⁸⁸ See supra Section I.B.1.

⁸⁹ See Rai, supra note 64, at 1263-64 (noting that "judicial decisionmaking in the patent context will take place in the shadow of serious concerns about the negative effects of retroactivity" and "disturbing settled expectations").

⁹⁰ Burstein, *supra* note 62, at 1781. Reliance costs might arise from a pending patent application, though such costs are likely to be of lesser magnitude and reasonableness.

⁹¹ See Masur, supra note 37, at 479-80.

⁹² See Andres Sawicki, *Better Mistakes in Patent Law*, 39 FLA. ST. U. L. REV. 735, 767 (2012) (noting this effect will be muted by the difficulty of observing unpatentability decisions in acquisition).

⁹³ See David L. Schwartz, *Retroactivity at the Federal Circuit*, 89 IND. L.J. 1547, 1553-54 (2014) (noting that "[t]he retroactive effects on existing patents are more important in many respects than the effects on future patents" because of reliance interests). A litigation invalidity decision may not undermine innovation incentives if the period of exclusivity prior to invalidation is sufficient to recoup research and development investments. Sawicki, *supra* note 92, at 767.

Patent acquisition normally takes two to three years from filing to issuance.⁹⁴ "On average, it takes more than twelve years from the time a patent application is filed until final judgment on the merits [in litigation]; it takes even longer from the date of invention, of course."⁹⁵ Patent doctrines frequently require determinations as of the time of the invention or the filing of the patent application, such as whether the invention "would have been obvious to a person of ordinary skill at the time of the invention" or whether "the specification, at the time the application was filed, would . . . have taught one skilled in the art how to make and/or use the full scope of the claimed invention without undue experimentation."⁹⁶

Evidence necessary to these historical determinations, such as the memories of those in the technical field, is more likely to be available in patent acquisition closer to the relevant time than in patent enforcement.⁹⁷ By contrast, the possibility that decision makers will be subconsciously biased by hindsight is greater in patent enforcement because more time will have elapsed for subsequent developments in knowledge and ability in the field to infect the historical determination.⁹⁸

4. Different Decision Makers

suing guidance documents and instructions to examiners.₁ cquisition and patent enforcement is the decision maker. Patent acquisition decisions are made by patent examiners, "all of whom have been scientifically trained" and many of whom "hold advanced scientific degrees in the precise areas in which they work."⁹⁹ Examiners tend to "have technical knowledge of the subject matter covered by the patent."¹⁰⁰ They have "expertise in interpreting the

⁹⁴ MERGES & DUFFY, *supra* note 36, at 51.

⁹⁵ Dan L. Burk & Mark A. Lemley, *Is Patent Law Technology-Specific?*, 17 BERKELEY TECH. L.J. 1155, 1198 (2002).

⁹⁶ MPEP, *supra* note 72, §§ 2141(II), 2164.01(a); *see also, e.g.*, Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2128 (2014) (citing General Elec. Co. v. Wabash Appliance Corp., 304 U.S. 364, 371 (1938)) (describing definiteness requirement); Ariad Pharm., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citing Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1562-63 (Fed. Cir. 1991)) (describing written description requirement); Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (describing claim construction). Traditionally, the patent system awarded a patent to the first inventor, with some doctrines evaluated at the time of invention and others at the time of the filing of the patent application. *See* Burk & Lemley, *supra* note 95, at 1198. The Leahy-Smith America Invents Act of 2011 moved to a "first to file" system, making the time of filing the key date. Leahy-Smith America Invents Act, § 3, Pub. L. No. 112-29, 125 Stat. 284, 285-93 (2011) (codified at 35 U.S.C. §§ 102-103 (2012)); MERGES & DUFFY, *supra* note 36, at 341.

⁹⁷ Risch, *supra* note 70, at 214 (noting that "a court will face difficulties" from making the historical inquiry for claim construction "several years later").

⁹⁸ See Burk & Lemley, *supra* note 95, at 1198-99.

⁹⁹ Wasserman, *supra* note 44, at 2010.

¹⁰⁰ Risch, *supra* note 70, at 201.

[technical prior art] references," are "familiar from their work with the level of skill in the art," "speak the same language" as applicants, and "may share unspoken assumptions about the invention."¹⁰¹ For these reasons, patent examiners are presumed to be people of ordinary skill in the relevant technical field.¹⁰² In patent litigation, district court judges and jurors normally have no technical education or background.¹⁰³ These lay decision makers may struggle to understand the technical details of the patented invention¹⁰⁴ and certainly have less experience and comfort with the relevant technology than do patent examiners.¹⁰⁵

Relevant expertise is not a one-way street. Patent-related decisions are rarely purely technical; normally they are hybrid technical-legal issues.¹⁰⁶ All district court (and Federal Circuit) judges are legally trained, and many are among the most educated, experienced, and skilled lawyers in the country. On the other hand, despite being "quasi-judicial officials,"¹⁰⁷ "the vast majority of patent examiners are not lawyers and enter the examining corps with little or no legal training whatsoever."¹⁰⁸ Their only legal knowledge comes from "a two-week introductory course with intermittent continued training courses every few months for the first year or two of employment," as well as on-the-job experience.¹⁰⁹

¹⁰³ Lee, *supra* note 6, at 10-11, 16-17. Even the majority of Federal Circuit judges lack technical training. Wasserman, *supra* note 44, at 2010.

¹⁰⁴ See id. at 13-17 (noting that some district judges will be comfortable with complex technology); see also Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2120 (2013) (Scalia, J., concurring) ("[S]ome portions of the rest of the opinion go[] into fine details of molecular biology. I am unable to affirm those details on my own knowledge or even my own belief.").

¹⁰⁵ Burstein, *supra* note 62, at 1788.

¹⁰⁶ See Holbrook, supra note 1, at 780-81.

¹⁰⁷ Markman v. Westview Instruments, Inc., 52 F.3d 967, 986 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

¹⁰⁸ William S. Parks, *Patent Law Reform and the U.S. Patent and Trademark Office, in* UNDERSTANDING PATENT REFORM IMPLICATIONS: LEADING LAWYERS ON DEFINING KEY ISSUES, INTERPRETING CURRENT PROPOSED LEGISLATION, AND PROJECTING FUTURE DEVELOPMENTS (ASPATORE 2009), 2009 WL 535239, at *2.

¹⁰⁹ *Id.* The Federal Circuit's suggestion that patent examiners are "trained in the law" is clearly overstated. *Contra Markman*, 52 F.3d at 986 ("Patent applications, unlike contracts,

¹⁰¹ Am. Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1359 (Fed. Cir. 1984); Risch, *supra* note 70, at 201.

¹⁰² In re Sang-Su Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002), *aff*'d, 262 F. App'x 275 (Fed. Cir. 2008). This presumption also applies to other actors within the Patent Office, including the panel that hears appeals from examiners' decisions. *Id. But see* Gregory Mandel, *The Non-Obvious Problem: How the Indeterminate Nonobviousness Standard Produces Excessive Patent Grants*, 42 U.C. DAVIS L. REV. 57, 78 (2008) (questioning this presumption, but agreeing that examiners are better at technical decisions than are lay people).

C. The Hybrid Nature of Patent Office Postissuance and ITC Proceedings

The discussion thus far has focused on the most common parts of the patent system—initial prosecution in the Patent Office and litigation in the federal district courts. But there are two additional settings for application of patent law: postissuance proceedings in the Patent Office and ITC proceedings. Each of these settings shares some characteristics of both patent acquisition and patent enforcement.

Like patent acquisition, the purpose of postissuance proceedings is to determine whether the patentee is entitled to the sovereign privilege of a patent (i.e., whether the government should provide a property right to the inventor) not to resolve a private dispute as to whether a defendant violates the patent rights.¹¹⁰ On the other hand, postissuance proceedings necessarily occur after the patent is granted, which is further in time from the date of invention or filing than patent acquisition.¹¹¹ In fact, they often occur simultaneously with enforcement litigation,¹¹² though the exact timing differs between the different procedures themselves. Like patent enforcement, postissuance proceedings are adversarial, permitting participation by a challenger, and have a trial-like hearing, permitting consideration of a wider range of information and evidence.¹¹³ Finally, postissuance proceedings are distinct from both patent acquisition and patent enforcement with regards to the decision maker. Rather than the normal Patent Office examiners, postissuance proceedings occur before APJs of the Patent Trial and Appeal Board.¹¹⁴ APJs are generally patent lawyers with both technical backgrounds and law degrees.¹¹⁵

ITC proceedings are more akin to district court patent enforcement litigation, though not completely so.¹¹⁶ ITC proceedings resolve whether the products of one private party violate the existing patent rights of another private party and consider questions of both infringement and invalidity.¹¹⁷ On the other hand, a showing that the patent is infringed and not invalid is insufficient for the patentee to prevail because requirements specific to the trade laws, such as the presence of a domestic industry, must also be

are reviewed by patent examiners, quasi-judicial officials trained in the law").

¹¹⁰ Tran, *supra* note 49, at 631.

¹¹¹ One such procedure is post-grant review, which must be implemented within nine months of patent issuance. *Id.*

¹¹² Paul R. Gugliuzza, (In)valid Patents, 92 NOTRE DAME L. REV. 271, 273 (2017).

¹¹³ Tran, *supra* note 49, at 631-37.

¹¹⁴ Wasserman, *supra* note 44, at 1977.

¹¹⁵ Jennifer R. Bush, *Administrative Patent Judges: Not Your Typical Federal Judge*, FENWICK & WEST LLP (July 10, 2014), https://www.fenwick.com/ FenwickDocuments/Administrative_Patent_Judges.pdf [https://perma.cc/MSZ5-QP5A].

¹¹⁶ See Rajec, supra note 40, at 1089.

¹¹⁷ See Sapna Kumar, Expert Court, Expert Agency, 44 U.C. DAVIS L. REV. 1547, 1550-51, 1555 (2011).

established.¹¹⁸ Moreover, ITC proceedings do not just resolve a private dispute but also consider broader policy questions about the public interest. For example, an ITC investigative attorney serves as a third party in the proceedings to represent the public interest, and the President can set aside an ITC exclusion order on public policy grounds.¹¹⁹ Furthermore, ITC decisions and exclusion orders are in rem and can therefore bind entities importing the same or similar goods even if those entities were not related to the parties in the initial proceeding.¹²⁰

Like patent litigation in the district courts, ITC proceedings occur after the patent right is created and are remote in time from invention or filing of the patent application.¹²¹ They also generally are adversarial in nature¹²² and involve an evidentiary hearing where a wide range of evidence can be presented.¹²³ Like postissuance proceedings, ITC proceedings are unique in terms of the decision maker. They are resolved by Administrative Law Judges, who by definition are lawyers, but who come from a variety of backgrounds and therefore may not be technically trained.¹²⁴

II. COUPLED PATENT LAW

Despite the significant differences between the different decision-making settings of the patent system, the same substantive patent law rules generally apply in the same way in each setting.¹²⁵ This Part first describes this norm of coupled patent law, as well as its exceptions, before turning to an analysis of both the norm's potential benefits and the problems it introduces into the patent system.

A. The Norm of Coupled Patent Law

The norm of coupled patent law is a background principle of the patent system widely assumed but rarely acknowledged.¹²⁶ As Christopher Cotropia has explained, "the same rule of law applies to those individuals proceeding before the USPTO and those individuals in district court,"¹²⁷ resulting in

¹²³ See Kumar, supra note 117, at 1555-56.

¹²⁶ See, e.g., Burstein, supra note 62, at 1804 (assuming deference to Patent Office interpretations of patent law would apply in patent litigation); Lisa Larrimore Ouellette, *Patent Experimentalism*, 101 VA. L. REV. 65, 68 (2015) (arguing for greater variation in patent law "across heterogeneous jurisdictions," but not considering variation based on decision maker or context).

¹²⁷ Christopher A. Cotropia, "Arising Under" Jurisdiction and Uniformity in Patent

¹¹⁸ See Rajec, supra note 40, at 1094.

¹¹⁹ Kumar, *supra* note 117, at 1555-56.

¹²⁰ See Rajec, supra note 40, at 1086.

¹²¹ See Kumar, supra note 117, at 1555.

¹²² Rajec, *supra* note 40, at 1096.

¹²⁴ See id. at 1555.

¹²⁵ See infra Section II.A.

"uniformity in the substantive patent law applied in USPTO proceedings and district court patent litigation proceedings."¹²⁸ These uniform patent law rules apply equally in postissuance proceedings in the Patent Office.¹²⁹ Likewise, "the ITC applies the same substantive patent law as federal district courts" and, generally, the Patent Office.¹³⁰

As a result, the Patent Office is bound by the Federal Circuit's (or Supreme Court's) articulation of patent law rules even when made in the context of patent infringement litigation.¹³¹ For example, in discussing how to determine whether a patent application is unpatentable as "obvious" in light of existing knowledge in the field (or "prior art"), the Patent Office instructed its patent examiners that "[t]he Federal Circuit's directive in *Ball Aerosol* was addressed to a lower court, but it applies to Office personnel as well."¹³² The Patent Office also relies on district court enforcement decisions for guidance on patent law rules.¹³³

Conversely, the district courts are bound by the Federal Circuit's (or Supreme Court's) articulation of patent law rules even when made in the context of patent acquisition.¹³⁴ For example, the Supreme Court's first recent foray into what subject matter is eligible for a patent under 35 U.S.C. § 101 in *Bilski v. Kappos*¹³⁵ occurred in the context of patent acquisition.¹³⁶ But *Bilski* was applied equally in patent enforcement litigation.¹³⁷ Although courts do not formally defer to Patent Office interpretations of substantive patent law, they regularly rely on the Patent Office's internal guidance and patent examination instructions to define patent law rules for litigation.¹³⁸

¹³¹ See Burstein, supra note 62, at 1751 ("That task [of developing patent law] has been delegated largely to the courts.").

¹³³ See, e.g., *id.*, § 2128(II) (citing a Western District of Washington decision to explain what constitutes a printed publication for purposes of invalidating prior art).

Law, 9 MICH. TELECOMM. TECH. L. REV. 253, 305 (2003).

¹²⁸ Dawn-Marie Bey & Christopher A. Cotropia, *The Unreasonableness of the Patent Office's "Broadest Reasonable Interpretation" Standard*, 37 AIPLA Q.J. 285, 298 (2009).

¹²⁹ See Wasserman, *supra* note 44, at 2003-05 (explaining that "a uniform body of patentability standards" apply in postissuance proceedings and district court litigation, but arguing that the Patent Office, not courts, should be given the primary role in developing these standards).

¹³⁰ Rajec, *supra* note 40, at 1089; *see also supra* notes 127-28 and accompanying text.

¹³² MPEP, *supra* note 72, § 2143.

¹³⁴ See Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1298 (2012) (describing *Diamond v. Diehr*, 450 U.S. 175 (1981), and *Parker v. Flook*, 437 U.S. 584 (1978), which arose in that patent acquisition context as "controlling precedents" in cases arising from enforcement litigation).

¹³⁵ 561 U.S. 593 (2010).

¹³⁶ Id. at 597-98.

¹³⁷ See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2356 (2014).

¹³⁸ Lee Petherbridge, Patent Law Uniformity?, 22 HARV. J.L. & TECH. 421, 470 (2009).

Coupled patent law is most apparent for doctrines governing statutory entitlement to a patent—referred to as "patentability" requirements during patent acquisition and "invalidity" defenses in enforcement proceedings—because these issues most commonly arise in both contexts.¹³⁹ But coupled patent law extends beyond patentability or validity issues. For example, while there are important differences in the way the Patent Office and courts interpret patent scope,¹⁴⁰ the same "general claim interpretation principles . . . apply during both prosecution and enforcement proceedings."¹⁴¹ In determining whether a patent is unenforceable due to inequitable conduct in failing to disclose relevant information to the Patent Office, courts look to the standards for disclosure that the Patent Office used in patent acquisition.¹⁴² The Patent Office and district courts also use the same rules for a variety of other issues, including whether someone qualifies as an "inventor" of the claimed invention.¹⁴³

The norm of coupled patent law is often unthinkingly applied. For example, in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*,¹⁴⁴ the Supreme Court relied primarily on Federal Rule of Civil Procedure 52(a)(6) in holding that the Federal Circuit must defer to district court conclusions regarding the "evidentiary underpinnings" of claim construction.¹⁴⁵ The Federal Circuit subsequently applied *Teva*, without analysis or discussion, in an appeal from Patent Office post-issuance proceedings, even though the Federal Rules of Civil Procedure do not apply in the Patent Office.¹⁴⁶ Although deferential review could have been justified under analogous principles of administrative law,¹⁴⁷ the norm of coupled patent law substituted for the necessary reasoning by analogy.

¹³⁹ See 35 U.S.C. § 282(b) (2012) (providing that "condition[s] for patentability" also constitute invalidity defenses "in any [enforcement] action").

¹⁴⁰ See infra Section II.B.1.

¹⁴¹ Bey & Cotropia, *supra* note 128, at 309.

¹⁴² Revision of the Materiality to Patentability Standard for the Duty to Disclose Information in Patent Applications, 76 Fed. Reg. 43,631, 43,632 (proposed July 21, 2011) (to be codified at 37 C.F.R. pt. 1) ("Historically, the Federal Circuit connected the materiality standard for inequitable conduct with the PTO's materiality standard for the duty of disclosure.").

¹⁴³ MPEP, *supra* note 72, § 2137.01 (relying on cases from both acquisition and enforcement to define inventorship standards), *id.* § 2183 (using meaning of equivalence developed for doctrine of equivalents in patent enforcement to define equivalence for purposes of novelty in patent acquisition).

^{144 135} S. Ct. 831 (2015).

¹⁴⁵ *Id.* at 836-38, 841.

¹⁴⁶ In re Cuozzo Speed Techs., LLC, 793 F.3d 1268, 1279-80 (Fed. Cir. 2015), *aff'd sub* nom. Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131 (2016).

¹⁴⁷ See id. at 1280 (applying the "substantial evidence" standard for administrative review, not the "clearly erroneous" standard for district court review).

B. Departures from Coupled Patent Law

The norm of coupled patent law does not mean that patent law is always applied identically in patent acquisition and patent enforcement. For starters, the Patent Office only addresses entitlement to a patent (i.e., patentability), not whether a competitor has violated the patent (i.e., infringement), whereas courts in enforcement proceedings adjudicate both.¹⁴⁸ A host of issues related to infringement only arise in enforcement litigation,¹⁴⁹ while some issues related to the formality of patent applications only arise in patent acquisition.¹⁵⁰

The second notable difference is that a presumption of validity applies in enforcement litigation, rebuttable only by clear and convincing evidence of invalidity.¹⁵¹ By contrast, Patent Office examiners need only establish unpatentability by a preponderance of the evidence.¹⁵² This difference has been used to justify two exceptions to coupled patent law discussed below—claim definiteness and claim construction—on the theory that the presumption of validity justifies less stringent standards in courts than the Patent Office.¹⁵³ Contrary to the major thrust of this Article, this difference in standard of proof does *not* support decoupling substantive patent law rules.¹⁵⁴ The presumption of validity alters the level of certainty that the substantive rule is satisfied, and the higher level of certainty required under the "clear and convincing evidence" litigation standard already accounts for the reasons for the presumption—that a government agency is assumed to have properly done its job.¹⁵⁵ There is no need to also adjust the substantive rules solely because of the presumption of validity.

¹⁵⁴ Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2130-31 n.10 (2014) (concluding that the "presumption of validity does not alter the [definiteness standard]").

¹⁵⁵ See David L. Schwartz & Christopher B. Seaman, Standards of Proof in Civil Litigation: An Experiment from Patent Law, 26 HARV. J.L. & TECH. 429, 460 (2013) (detailing experimental results showing statistically insignificant differences between

¹⁴⁸ See supra notes 53-57 and accompanying text.

¹⁴⁹ See Wasserman, supra note 44, at 2003-04.

¹⁵⁰ These include the sufficiency of the patent drawings and whether to issue a "restriction" and force the applicant to file a "divisional" application because the application claims multiple inventions. 35 U.S.C. § 121 (2012); 4 DONALD S. CHISUM, CHISUM ON PATENTS § 11.02[1][b][i] (2014); 4A DONALD S. CHISUM, CHISUM ON PATENTS § 12.01, 12.06 (2016).

¹⁵¹ 35 U.S.C. § 282(a); Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95 (2011).

¹⁵² MPEP, *supra* note 72, § 2142.

¹⁵³ *Ex parte* Miyazaki, No. 2007-3300, 89 U.S.P.Q.2d (BNA) 1207, 1211 (B.P.A.I. Nov. 19, 2008) ("The Federal Circuit has noted that such a high standard of ambiguity for finding indefiniteness [in litigation] is due to the statutory presumption of patent validity."); Bey & Cotropia, *supra* note 128, at 293 (discussing how the Federal Circuit justifies the "broadest reasonable interpretation" standard for patent acquisition "by pointing to the fact that, during examination, patent applications do not enjoy the presumption of validity afforded to issued patents").

Most relevant for present purposes, the Patent Office and courts occasionally have applied different substantive rules, as described in the following Sections.

1. Claim Construction

According to conventional wisdom, there are "significant differences" in the standards for interpreting the patent claims that define the scope of the patent rights (i.e., claim construction) between patent acquisition and patent enforcement. "During patent examination, the pending claims must be 'given their broadest reasonable interpretation consistent with the specification."¹⁵⁶ By contrast, district courts "give claim terms what their 'ordinary and customary' meaning would be to a [skilled person] at the time of the application."¹⁵⁷ The Patent Office determines the *broadest* interpretation of the claim supported by the patent. This should "result[] in a more narrow construction [in litigation] than the interpretation under the [Patent Office's] broadest reasonable construction rule."¹⁵⁸

Commentators have criticized the Patent Office's broadest reasonable interpretation standard because it decouples claim construction rules for patent acquisition and patent enforcement.¹⁵⁹ In *Cuozzo Speed Technologies, LLC v. Lee*,¹⁶⁰ the Supreme Court considered, and rejected, exactly this argument in upholding the Patent Office's use of the broadest reasonable interpretation standard in postissuance proceedings.¹⁶¹

The formal differences may not be significant in practice. The Patent Office's guidance to its examiners "exemplifies general claim interpretation principles that apply during both prosecution and enforcement proceedings, but it does not elaborate on the specifics of the [broadest reasonable interpretation] standard unique to the [Patent Office]....[T]here is simply no articulation of how to accomplish this step other than that it should be consistent with the teachings in the specification."¹⁶² Courts sometimes even adopt a "best"

¹⁵⁸ Id.

¹⁶¹ *Id.* at 2145-46.

preponderance of evidence and clear and convincing evidence standards).

¹⁵⁶ MPEP, *supra* note 72, § 2111.

¹⁵⁷ Risch, *supra* note 70, at 185.

¹⁵⁹ Bey & Cotropia, *supra* note 128, at 298-300 (arguing that the broadest reasonable interpretation standard "violates the concept of horizontal equity" between the Patent Office and the district courts); Risch, *supra* note 70, at 204-05 (calling for abandonment of the broadest reasonable interpretation standard to improve clarity and "limit the costs caused by the use of different rules at different times"). Criticism is particularly strong in the context of Patent Office postissuance proceedings. *See In re* Cuozzo Speed Techs., LLC, 793 F.3d 1297 (Fed. Cir. 2015) (en banc) (Prost, J., dissenting); Gugliuzza, *supra* note 112, at 328-29.

¹⁶⁰ 136 S. Ct. 2131 (2016).

¹⁶² Bey & Cotropia, *supra* note 128, at 309-10.

interpretation broader than the Patent Office's "broadest reasonable" interpretation.¹⁶³

2. Indefiniteness

Under 35 U.S.C. § 112(b), claims must be definite, requiring that they "particularly point[] out and distinctly claim[] the subject matter which the inventor or a joint inventor regards as the invention."¹⁶⁴ In the early 2000s, the Federal Circuit held that granted claims asserted in enforcement proceedings were indefinite only if reasonable efforts at claim construction proved futile and the claim was insolubly ambiguous.¹⁶⁵ The Federal Circuit justified this low threshold based on the statutory presumption of validity applicable in patent litigation.¹⁶⁶ Probably because of the norm of coupled patent law, "this high barrier to invalidating a patent for indefiniteness was at times improperly imported into the examination context," where the presumption of validity does not apply.¹⁶⁷ In 2008, the Board of Patent Appeals and Interferences ("BPAI"), the reviewing panel within the Patent Office, recognized this error and adopted a more demanding definiteness standard for patent acquisition.¹⁶⁸

The decoupling of the indefiniteness doctrine lasted only five years. In *Nautilus, Inc. v. Biosig Instruments, Inc.*,¹⁶⁹ the Supreme Court rejected the Federal Circuit's lenient rule for claim definiteness, replacing it with the requirement that the claims "inform, with reasonable certainty, those skilled in the art about the scope of the invention" in light of the rest of the patent and its prosecution in the Patent Office.¹⁷⁰ Although *Nautilus* only addressed the rule in patent enforcement litigation, the Patent Office subsequently recoupled claim definiteness by applying *Nautilus* in patent acquisition.¹⁷¹

¹⁶³ See, e.g., SRAM Corp. v. AD-II Eng'g, Inc., 465 F.3d 1351, 1359 (Fed. Cir. 2006).

¹⁶⁴ 35 U.S.C. § 112(b) (2012).

¹⁶⁵ Jonathan S. Masur & Lisa Larrimore Ouellette, *Deference Mistakes*, 82 U. CHI. L. REV. 643, 692 (2015).

¹⁶⁶ *Id*.

¹⁶⁷ *Id.* at 693.

¹⁶⁸ *Ex parte* Miyazaki, No. 2007-3300, 89 U.S.P.Q.2d (BNA) 1207, 1211-12 (B.P.A.I. Nov. 19, 2008); *see also In re* Packard, 751 F.3d 1307, 1311 (Fed. Cir. 2014) (endorsing the Patent Office's standard that was less favorable to patentees than "insolubly ambiguous" standard).

¹⁶⁹ 134 S. Ct. 2120 (2014).

¹⁷⁰ *Id.* at 2124.

¹⁷¹ See, e.g., Ex parte Holbrook, No. 2013-009916, 2015 WL 8984727, at *5 (P.T.A.B. Nov. 30, 2015) (applying *Nautilus* standard on appeal from final patent rejection and noting that Patent Office "previously applied a standard consistent with that of *Nautilus* in the examination context").

2017]

3. Inequitable Conduct

The inequitable conduct defense in patent litigation renders a patent unenforceable based on the patentee's misconduct in the Patent Office, including the failure to disclose material information.¹⁷² The Patent Office defines its own rule for required disclosure in Patent Office Rule 56.¹⁷³ Consistent with the norm of coupled patent law, the Federal Circuit traditionally tied "the materiality standard for inequitable conduct to PTO rules."¹⁷⁴

In *Therasense, Inc. v. Becton, Dickinson & Co.*, the Federal Circuit decoupled the test for inequitable conduct from the standard for disclosure of Patent Office Rule 56.¹⁷⁵ The court adopted a higher standard for what constitutes improper disclosure for purposes of inequitable conduct out of concern that "the routine invocation of inequitable conduct in patent litigation has had adverse ramifications beyond its effect on the PTO."¹⁷⁶

These decoupled rules did not last long. After unsuccessfully urging the Federal Circuit in *Therasense* to keep inequitable conduct rules coupled to Patent Office Rule 56,¹⁷⁷ the Patent Office issued a Notice of Proposed Rulemaking only two months after *Therasense* "to adopt the standard for materiality required to establish inequitable conduct as defined in *Therasense* as the standard" for disclosure under Patent Office Rule 56.¹⁷⁸ The Patent Office recognized that *Therasense* "did not indicate that the Office must apply the standard for materiality required to establish inequitable conduct under *Therasense* as the standard for determining materiality" during patent acquisition.¹⁷⁹ Yet, reflecting the norm of coupled patent law, the Patent Office amended Rule 56 to insure that "the PTO's materiality standard for the duty of disclosure matches the materiality standard for inequitable conduct [in litigation]."¹⁸⁰

¹⁷² See Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1285-87 (Fed. Cir. 2011) (en banc).

¹⁷³ 37 C.F.R. § 1.56 (2016).

¹⁷⁴ Therasense, 649 F.3d at 1294.

¹⁷⁵ *Id.*

¹⁷⁶ Id.

¹⁷⁷ Brief for United States as Amicus Curiae on Rehearing in Support of Neither Party at 8-12, Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276 (Fed. Cir. 2011) (No. 04-CV-2123).

¹⁷⁸ Revision of the Materiality to Patentability Standard for the Duty to Disclose Information in Patent Applications, 76 Fed. Reg. 43,631, 43,632 (proposed July 21, 2011) (to be codified at 37 C.F.R. pt. 1).

¹⁷⁹ Id.

¹⁸⁰ Id.

4. Best Mode

Congress recently decoupled an entire patent law doctrine, not just a specific issue or test. Section 112(a) of the Patent Act requires a patentee to "set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention."¹⁸¹ This requirement prevents patentees from "keep[ing] secret details crucial to the practice of the most commercially valuable forms of the invention," which would undermine the value conferred to the public and hinder competition after patent expiration.¹⁸² Traditionally, best mode was a patentability requirement for acquisition *and* an invalidity defense in litigation.¹⁸³

The America Invents Act of 2011 decoupled the best mode doctrine, retaining it as a condition of patentability during patent acquisition but eliminating it as an invalidity defense during litigation based on a concern that it disadvantaged foreign inventors.¹⁸⁴ The limited commentary addressing the decoupling of the best mode doctrine criticized "the differential treatment of the best mode requirement" between patent acquisition and patent enforcement, calling it "the worst possible choice" because it could disadvantage American patentees.¹⁸⁵

5. Other Examples

Sometimes patent law rules that are formally coupled are informally decoupled when applied in practice. For example, under 35 U.S.C. § 102(a)(1), a patent can be invalid based on prior public uses or sales of the claimed invention, not just previous patents or printed publications (e.g., journal articles).¹⁸⁶ This nonprinted prior art should be equally applicable in patent acquisition and patent enforcement.¹⁸⁷ However, in practice, "patent examiners only conduct prior art searches for printed materials" and patent applicants "are only required to submit printed information."¹⁸⁸ By contrast, prior uses and sales of the claimed invention figure more prominently in enforcement litigation, where accused infringers and their lawyers have the resources, incentives, and tools of discovery to uncover this nonprinted prior art.¹⁸⁹

¹⁸¹ 35 U.S.C. § 112(a) (2012).

¹⁸² Lee Petherbridge & Jason Rantanen, *In Memoriam Best Mode*, 64 STAN. L. REV. ONLINE 125, 126 (2012).

¹⁸³ Id.

¹⁸⁴ 35 U.S.C. § 282(b)(3)(A); Lee Petherbridge & Jason Rantanen, *The Pseudo-Elimination of Best Mode: Worst Possible Choice?*, 59 UCLA L. REV. DISC. 170, 171-72 (2012).

¹⁸⁵ Petherbridge & Rantanen, *supra* note 184, at 174-77.

¹⁸⁶ 35 U.S.C. § 102(a)(1).

¹⁸⁷ See MPEP, supra note 72, § 2152.02(c)-(d).

¹⁸⁸ Risch, *supra* note 70, at 183.

¹⁸⁹ See Patrick J. Barrett, New Guidelines for Applying the On Sale Bar to Patentability, 24 STAN. L. REV. 730, 730 n.1 (1972) (noting that public use and the on-sale bar are "most

Similarly, an initial finding that the existing prior art renders a patent obvious—too trivial an advance to warrant a patent—can be rebutted by evidence of "secondary considerations" tending to show that the invention was significant, such as "commercial success, long-felt but unsolved needs, failure of others, and unexpected results."¹⁹⁰ Formally, secondary considerations are equally applicable in the courts and Patent Office. In practice, secondary considerations are rarely relied on during patent acquisition both because of the difficulty for examiners in identifying and developing evidence of real world activities (as opposed to printed materials) and because secondary considerations tend to be ex post factors that only arise after the patent is granted and the invention publicized and marketed.¹⁹¹ Conversely, in determining obviousness, the Patent Office has stated that "[o]ffice personnel may rely on their own technical expertise to describe the knowledge and skills of a person of ordinary skill in the art."192 Practically, this introduces differences from the obviousness standard in enforcement litigation, where lay judges and juries lack "their own technical expertise" upon which to rely.

C. The Questionable Benefits of Coupled Patent Law

Though the norm of coupled patent law is pervasive, little theoretical work explains or justifies it or the exceptions to it.¹⁹³ Like legal uniformity more generally, coupled patent law "has for so long simply been assumed to be a worthy goal that its supposed benefits have not been discussed in much detail or analyzed with any rigor."¹⁹⁴ This Section suggests—and rejects—three possible benefits of coupled patent law: (1) increasing certainty and predictability, (2) increasing quality and reducing error costs, and (3) reducing decision costs. It focuses largely on coupled rules for patent acquisition and enforcement, the two most common settings of the patent system, though the analysis is largely applicable to other settings.

1. Certainty and Predictability

The limited justifications for coupled patent law focus on preventing uncertainty and shifting patent rights. Uncertainty or unpredictability in the law deters socially desirable conduct and prevents efficient market transactions.¹⁹⁵ In particular, certainty and predictability of patent law is thought to be crucial

frequently raised as a defense to patent infringement suits," not during patent examination). ¹⁹⁰ MPEP, *supra* note 72, § 2141(II).

¹⁹¹ Daralyn J. Durie & Mark A. Lemley, A Realistic Approach to the Obviousness of Inventions, 50 WM. & MARY L. REV. 989, 1009-10 (2008).

¹⁹² MPEP, *supra* note 72, § 2141(II)(C).

¹⁹³ *Cf.* Bey & Cotropia, *supra* note 128, at 287 (stating that "[e]veryone seems to have accepted this dichotomy" of different claim construction standards).

¹⁹⁴ Amanda Frost, *Overvaluing Uniformity*, 94 VA. L. REV. 1567, 1579 (2008) (analyzing uniformity in federal law).

¹⁹⁵ Anthony D'Amato, Legal Uncertainty, 71 CALIF. L. REV. 1, 5-6 (1983).

to facilitating business planning and providing the security of investments in research and development necessary to "foster technological growth and industrial innovation."¹⁹⁶ Rochelle Cooper Dreyfuss has criticized the different legal standards that existed in the Patent Office and the courts prior to the Federal Circuit for creating uncertainty in the strength of patent rights, though her real concern is not different legal standards per se but instead that some courts have been excessively hostile to issued patents.¹⁹⁷ Dawn-Marie Bey and Christopher Cotropia have objected to the Patent Office's broadest reasonable interpretation standard because a "patentee's rights may vary" between acquisition and enforcement, creating "uncertainty" about patent scope and "validity and infringement."¹⁹⁸

Different legal rules for patent acquisition and patent enforcement certainly could lead to variation in patentability and other determinations between the Patent Office and courts. But justifying coupled patent law on this basis rests on the false "assumption that [patent] rights are fixed at the moment the patent issues."¹⁹⁹ To the contrary, "an inherent part of our patent system" is that patent rights are not "absolute" but rather "probabilistic" in that "[t]he actual scope of a patent right, and even whether the right will withstand litigation at all, are uncertain and contingent questions."²⁰⁰ Even under the current norm of coupled patent law, forty-three percent of patents whose validity is challenged to decision are invalidated.²⁰¹ Certainty of patent rights is a myth; uncertainty inherently results from permitting validity challenges in enforcement proceedings, rather than treating patent issuance as dispositive.²⁰²

Uncertain patent rights may still be predictable, that is, an observer applying the relevant legal standards would know there was a certain probability that the patent would be granted by the Patent Office and/or not invalidated in litigation and could plan accordingly.²⁰³ Absent coupled patent law, the odds of patentability/validity would vary from patent acquisition to patent enforcement. Coupling the standards for patent acquisition and patent

¹⁹⁶ Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 7 (1989).

¹⁹⁷ *Id.* at 6. Similarly, concerns about uncertainty in patent rights that motivated creation of the Federal Circuit were about disuniformity (and forum shopping) between different courts, not disuniformity between the Patent Office and courts. *See* Cotropia, *supra* note 127, at 259-60.

¹⁹⁸ Bey & Cotropia, *supra* note 128, at 299-300.

¹⁹⁹ Rantanen, *supra* note 30, at 900.

²⁰⁰ Lemley & Shapiro, *supra* note 30, at 95.

²⁰¹ Allison, Lemley & Schwartz, *supra* note 57, at 180. This number undoubtedly reflects selection effects.

 $^{^{202}}$ Cf. 15 U.S.C. §§ 1065, 1115 (2012) (providing that the validity of a registered trademark generally cannot be challenged after five years of registration).

²⁰³ See Rantanen, supra note 30, at 899.

enforcement arguably enhances predictability by allowing a single prediction under a single set of rules.

Yet, Jason Rantanen recently recognized pervasive patent "malleability": "[T]he very rights themselves can be altered by the actors who interact with the issued patent. In other words, the answers to questions about patent validity and scope can be changed by the actions of the patent's owners and potential infringers. Patent rights can be pushed and pulled."²⁰⁴ Put another way, the odds of patentability/validity are not static but vary based on the actors and actions involved.²⁰⁵

Even if the current norm of coupled patent law does not result in certainty or even significant predictability of patent rights, it might perform relatively better in this regard than using different legal rules for patent acquisition and patent enforcement. This relative question depends on the content of the different acquisition and enforcement rules. For example, if courts applied validity standards that were easier for the patentee to satisfy than the Patent Office's patentability standards, patent rights would become significantly more certain at the time of issuance.²⁰⁶ And if differences in legal rules for acquisition and enforcement "are of degree, not of kind," decoupled patent law might have little impact on predictability.²⁰⁷

Even if coupled patent law rules would be more predictable in theory, there is little reason to think that they are in practice.²⁰⁸ The existing malleability, or shifting probability, of patent rights identified by Rantanen results from the self-interested and ad hoc "actions and arguments of the parties after the patent issues," which are nearly impossible to predict ex ante.²⁰⁹ By contrast, the malleability of patent rights resulting from different legal rules for patent acquisition and patent enforcement would be a conscious design choice explicitly made and identified in the case law (or statute or Patent Office rules), and therefore comparatively predictable. Moreover, coupled patent law rules must be applied in very different contexts by very different decision makers. This likely generates errors that are almost impossible to predict ex ante.²¹⁰ Different rules better tailored for the different contexts and decision makers of the patent system are likely to be more reliably applied, reducing errors and increasing predictability.²¹¹

²⁰⁴ Id.

²⁰⁵ *Id.* at 919.

²⁰⁶ See Risch, *supra* note 70, at 191 (stating that "if ambiguous claims are truly given the broadest reasonable construction possible by the USPTO during prosecution, they could not ever be interpreted more broadly" and therefore are more predictable).

²⁰⁷ See Frost, supra note 194, at 1598 (addressing variations in federal law).

²⁰⁸ See id. at 1600.

²⁰⁹ Rantanen, *supra* note 30, at 951.

²¹⁰ See VERMEULE, supra note 11, at 36-37 (noting that errors resulting from doctrines poorly suited for decision makers undermine certainty and planning).

²¹¹ Cf. Frost, supra note 194, at 1600 ("If the law is nonuniform but perfectly stable and

2. The Quality of Patent Law and Error Costs

Coupled patent law might also be justified as promoting the development of patent law, so that patent law more effectively achieves its normative objectives, such as providing incentives for innovation.²¹² For example, different rules for patent acquisition and patent enforcement would reduce the opportunities to apply each set of patent law doctrines, leading to greater gaps and uncertainties in patent law.²¹³ Patent law might also be less well thought out because there would be less experience applying each set of doctrines.²¹⁴ Arguably, then, coupling patent law rules improves the ability of patent doctrines to promote underlying normative goals, whereas decoupling the rules introduces error costs by hindering the ability of patent doctrines to promote these goals.

The high volume of patent matters and the Federal Circuit's centralized appellate jurisdiction mitigate these concerns. During fiscal year 2014, the Federal Circuit received 567 appeals from district court patent litigation and 224 appeals from patent decisions of the Patent Office.²¹⁵ The Patent Office receives approximately 500,000 patent applications a year,²¹⁶ while more than 5000 patent cases per year are filed in federal district court.²¹⁷ Plenty of opportunities exist to develop high-quality law, even if done separately for

predictable, then multi-state actors can tailor their conduct").

²¹² See Eric Stein, Uniformity and Diversity in a Divided Power System: The United States' Experience, 61 WASH. L. REV. 1081, 1091 (1986) (describing "improved standards" as one of the "forces which pull towards legal uniformity").

²¹³ See Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1635 (2003) (noting a similar concern with industry-specific patent law).

²¹⁴ See Craig Allen Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 Nw. U. L. REV. 1619, 1634 (2007) (raising similar concerns that "[d]ecentralized appellate courts may lack the repeated experience with issues that confers expertise and concentrated knowledge").

²¹⁵ Appeals Filed, Terminated and Pending During the Twelve-Month Period Ended September 30, 2014, U.S. Ct. APPEALS FOR Fed. Cir. (2014),http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/appeals filed terminated _pending_2014.pdf [https://perma.cc/NQ4T-7D69]; Appeals Filed by Category FY 2014, U.S. CT. APPEALS FOR FED. CIR. (2014), http://www.cafc.uscourts.gov/sites/default/files/thecourt/statistics/caseload_by_category_appeals_filed_2014.pdf [https://perma.cc/K8PS-2ETK]. Of the Federal Circuit's 1492 appeals filed in fiscal year 2014, thirty-eight percent of its docket was district court patent cases and fifteen percent was Patent Office patent cases, which would be 567 and 224, respectively.

²¹⁶ General Information Concerning Patents: The United States Patent and Trademark Office, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/patents-getting-started/general-information-concerning-patents#heading-6 [https://perma.cc/GV8K-AS9X] (last updated Oct. 20, 2016).

²¹⁷ Brian Howard, *Patent Case Filings Up 32% in December but Down 18% for 2014*, LEX MACHINA (Jan. 12, 2015), https://lexmachina.com/patent-case-filings-28-december-20-2014/ [https://perma.cc/CA6K-DBES].

patent acquisition and patent enforcement. Moreover, different legal rules for acquisition and enforcement would not develop in isolation. Experience with acquisition rules could inform, or help fill gaps in, development of enforcement rules, and vice-versa.²¹⁸

Different legal rules for patent acquisition and patent enforcement actually could improve quality and reduce error costs. First, with coupled patent law rules, the Federal Circuit's adoption of a legal rule detrimental to innovation, competition, or some other normative baseline has pervasive consequences throughout the entire patent system.²¹⁹ Different legal rules for acquisition and enforcement would cabin the effects of any error to just part of the patent system.

Second, uniformity in patent law is increasingly blamed for ossification and insufficient experimentation with different legal rules.²²⁰ Decoupling patent law would facilitate experimentation by allowing a new legal rule to be tried first in one context. That rule might then be found equally suitable for the other contexts, or spur innovations in the other contexts that result in different rules.²²¹ This experimentation could be particularly useful because it would occur under the centralized review of the Federal Circuit, which could guide the "experiments," collect the resulting information, and adjust the rules appropriately.²²²

Third, the discussion so far has focused on the quality of the law on the books, with errors defined as departures from underlying normative objectives. But, even if the law on the books perfectly reflects normative goals, failures by decision makers to reliably implement formal doctrines introduce error costs that undermine substantive objectives.²²³ Different legal rules tailored to the different contexts and decision makers of patent acquisition and patent enforcement could lead to more accurate implementation in each context and reduce error costs.

3. Decision Costs

Coupled patent law arguably reduces the costs of law promulgation, application, and compliance. Congress, courts, and the Patent Office need only

²¹⁸ See infra Section IV.C.

²¹⁹ See Schwartz, supra note 93, at 1555 (describing "magnified effects" of Federal Circuit decisions because they bind "all of the district courts and the Patent Office, as well as the International Trade Commission and the United States Court of Federal Claims").

²²⁰ Nard & Duffy, *supra* note 214, at 1632; Ouellete, *supra* note 126, at 68-69, 84-87.

²²¹ *Cf.* Dreyfuss, *supra* note 45, at 533 (suggesting potential for percolation if the Federal Circuit "allow[ed] a PTO rule to stand for a period of time before it considers reversing").

²²² Ouellette, *supra* note 126, at 104-06 (describing benefits of experimentation under centralized control).

 ²²³ See Louis Kaplow, *The Value of Accuracy in Adjudication: An Economic Analysis*, 23
 J. LEGAL STUD. 307, 310 (1994) (concluding that inaccurate determinations of liability undermine law's deterrent effect).

incur, and can share, the costs of promulgating a single set of patent law rules.²²⁴ Inventors, technology companies, competitors, and the lawyers who advise all of them need only incur the costs of learning a single set of patent law rules, which will be applied in the same manner for all purposes in the patent system.²²⁵

Separating the rules for patent acquisition and patent enforcement would, in some ways, increase decision costs. Coupled patent law allows the Federal Circuit (or Supreme Court) to issue a single decision with a single rationale that will apply throughout the patent system. And the Patent Office and district courts can simply import each other's decisions and reasoning when no Federal Circuit (or Supreme Court) case is directly on point. If patent law were decoupled, the Federal Circuit (or Supreme Court) would have to resolve the same issue multiple times, for example, by either adopting different rules for patent acquisition and enforcement or explaining why the same rule is appropriate for each context. And, in the absence of Federal Circuit (or Supreme Court) authority, the Patent Office and district courts either would have to develop their own rule anew even though the issue was already resolved in another context, or explain why the same rule should be imported from another context despite the differences between, for example, acquisition and enforcement.

The magnitude of the increased decision costs is unclear. The Patent Office focuses just on patent acquisition and the district courts just on patent enforcement, so each would only have to develop, know, and apply a single set of rules.²²⁶ Because the Patent Office receives 500,000 patent applications per year and employs 8000 patent examiners, who lack legal training and turn over frequently,²²⁷ it already expends significant resources to publish and regularly update a multivolume Manual of Patent Examining Procedure that provides detailed summaries, analyses, and interpretations of the statutory requirements and legal rules for patentability.²²⁸ It expends additional resources on instructions, guidance, and notices for major issues or developments in the

²²⁴ See Nard & Duffy, supra note 214, at 1636 (noting that uniformity reduces "cost[s] in terms of formulating the rule").

²²⁵ See Stein, supra note 212, at 1091 (describing "increased efficiency, simplification and systematization" for private actors as one of the "forces which pull[s] towards legal uniformity").

²²⁶ Postissuance proceedings in the Patent Office complicate this somewhat. *See supra* Section I.B.1. Patent acquisition decisions are occasionally challenged in the U.S. District Court for the Eastern District of Virginia under 35 U.S.C. §§ 145 and 146. *See, e.g.*, BTG Int'l Ltd. v. Kappos, No. 1:12-cv-00682, 2012 WL 6082910, at *1 (E.D. Va. Dec. 6, 2012) (challenging a decision of the Board of Patent Appeals and Interferences).

²²⁷ See General Information Concerning Patents, supra note 216.

²²⁸ See Melissa F. Wasserman, *The PTO's Asymmetric Incentives: Pressure to Expand Substantive Patent* Law, 72 OHIO ST. L.J. 379, 394-98 (2011) (describing the Patent Office's efforts to develop substantive patent law). *See generally* MPEP, *supra* note 72 (describing the requirements of patentability).

law.²²⁹ None of this work receives deference from the district courts, which therefore must incur duplicative costs of interpreting and developing patent law rules or justifying reliance on Patent Office interpretations and instructions.²³⁰

The greatest impact would be on the Federal Circuit. Because it oversees both patent acquisition and patent enforcement, it would have to decide and explain why or why not various patent law issues should be decoupled, develop two lines of precedent for any decoupled issues, and learn and differentiate between two lines of precedent to resolve decoupled issues. However, the Federal Circuit is a specialized, expert appellate court that handles hundreds of patent appeals from each context each year, while having jurisdiction over only a narrow range of other subject matters.²³¹ Even assuming patent law is especially complex, the Federal Circuit's current costs from law promulgation and application are likely less than other circuits with broader jurisdiction. It thus has capacity to bear the increase in costs resulting from decoupled patent law. Nor are the opportunity costs of doing so likely to be significant because the Federal Circuit has so few nonpatent subjects that compete for its attention.

In terms of compliance costs, patent lawyers tend to be specialists that focus only on patent law.²³² The additional cost of mastering multiple sets of patent law rules are minimal compared to other lawyers working in a variety of fields. Because patent lawyers are increasingly specializing even within patent law, focusing, for example, just on acquisition or enforcement,²³³ they might only have to master one set of rules.

For those affected by the patent system, namely patent applicants and potential competitors, compliance costs may rise if different rules apply to

²³⁰ Wasserman, *supra* note 44, at 1971-77. Courts do not always fully justify their reliance on Patent Office materials.

²²⁹ See, e.g., 2014 Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74,618 (Dec. 16, 2014) (to be codified at 37 C.F.R. pt. 1) (providing detailed guidance on the same issue); July 2015 Update on Subject Matter Eligibility, 80 Fed. Reg. 45,429 (July 30, 2015) (to be codified at 37 C.F.R. pt. 1) (providing more detailed guidance on the same issue); Memorandum from Andrew H. Hirschfield, Deputy Comm'r for Patent Examination Policy, U.S. Patent & Trademark Office, to Patent Examining Corps, Preliminary Examination Instructions in View of the Supreme Court Decision in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.* (June 25, 2014), http://www.uspto.gov/sites/ default/files/patents/announce/alice_pec_25jun2014.pdf [https://perma.cc/GC5B-Y92D] (providing "Preliminary Examination Instructions" one week after a major Supreme Court decision, and also analyzing and explaining the decision).

²³¹ Court Jurisdiction, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/the-court/court-jurisdiction [https://perma.cc/AQE6-9K5L] (last visited Nov. 16, 2016).

²³² See David L. Schwartz, The Rise of Contingent Fee Representation in Patent Litigation, 64 ALA. L. REV. 335, 351-56 (2012).

²³³ See id.

acquisition and enforcement. To predict, and plan for, the outcomes of both, such actors would either have to master two sets of patent law rules themselves, hire a lawyer who has done so and would presumably charge a premium, or hire multiple lawyers specializing in acquisition and enforcement. On the other hand, if different rules were better tailored for the different contexts and decision makers of patent acquisition and patent enforcement, they would be more accurately applied. Outcomes would then be easier to predict and compliance costs would be lower.

Overall, different legal rules for patent acquisition and enforcement might increase decision costs, though the extent of the increase is unclear and depends, in part, on whether the differences are in degree or in kind.²³⁴ But higher decision costs must be weighed against the potential benefits of decoupled patent law, including lower error costs resulting from rules better tailored for each context and therefore more reliably applied.

D. The Problems with Coupled Patent Law

The significant differences in the different settings for decision-making in the patent system cast doubt on whether identical legal rules can be reliably applied in all contexts. Although conclusive empirical evidence is lacking, Section D.2 below offers some evidence that suggests that this theoretical concern has been borne out in practice. Again, the focus of this Section is primarily on patent acquisition and enforcement, though the analysis applies more broadly.

1. The Theoretical Problem with Coupled Patent Law

The functional justifications for coupled patent law are unpersuasive, in part, because they rest on an idealized assumption of perfect implementation: coupled patent law might increase predictability and reduce error and other costs if perfectly implemented in *both* patent acquisition and patent enforcement. This type of idealizing assumption is a useful tool for framing and exploring normative goals and solutions, such as patent law's goal of optimizing incentives to innovate.²³⁵ But such idealized, or first-best,²³⁶ theorizing provides limited insight into what legal principles should look like in practice.²³⁷

²³⁴ See Frost, supra note 194, at 1598 (discussing variations in state and federal law among regions).

²³⁵ *Cf.* Lawrence B. Solum, *Constitutional Possibilities*, 83 IND. L.J. 307, 310-11 (2008) (noting that "idealizing assumptions" allow commentators to "engage in normative investigation" while setting aside feasibility and "allow the normative issues to be framed clearly and simply").

²³⁶ These terms are used loosely and interchangeably, though "the two notions overlap but are not identical." *Id.* at 311 n.12.

²³⁷ See VERMEULE, supra note 11, at 16 ("[F]irst principles by themselves cannot yield conclusions about what real-world interpreters ought to do.").

People, including innovators, respond to the law as applied in practice, not to idealized conceptions of the law.²³⁸ Among other things, optimal legal principles in practice must be designed "in light of the capacities of the implementing institutions."²³⁹ For that reason, "no matter how elegantly policymakers craft patent law, if [the relevant decision makers] lack the capacity to administer it, the patent system cannot fulfill its objectives."²⁴⁰ Decision makers may fail to reliably implement first-best legal principles because they are cognitively limited, have imperfect information, or are unmotivated to avoid errors due to bias.²⁴¹ And if a decision maker lacks the capabilities, information, or motivation to reliably implement idealized or first-best legal principles, legal design should not necessarily "attempt to approximate or approach that standard as closely as possible."²⁴² Rather, legal principles better suited for the relevant decision maker may prove optimal in practice, even if second-best in theory.²⁴³

Patent law scholarship is admirably robust in addressing the capabilities of different institutions in the patent system, including district courts, the Federal Circuit, the Supreme Court, and the Patent Office.²⁴⁴ Missing, however, is comparative analysis of the institutional characteristics and capabilities of the district courts and the Patent Office and, most importantly, what this analysis means for the design of patent law. In particular, since the structure, incentives, information, and decision makers differ significantly between patent acquisition and patent enforcement, the reliability of application of legal rules is likely to differ between the different settings. It is, therefore, questionable whether a unified body of patent law principles can be reliably applied in both settings.²⁴⁵ Even assuming coupling patent law is a first-best solution, decoupled legal principles better tailored to the different contexts of patent acquisition and patent enforcement may be a second-best solution that is optimal in practice.

²³⁸ See id. at 9 ("[O]n any first-best account, intermediate institutional premises will determine the operational conclusions."); Kaplow, *supra* note 223, at 310 (detailing how errors in application of legal standards will affect a party's primary behavior via deterrence and incentives).

²³⁹ VERMEULE, *supra* note 11, at 36.

²⁴⁰ Lee, *supra* note 6, at 6 (focusing on generalist judges).

²⁴¹ VERMEULE, *supra* note 11, at 77-78; Sawicki, *supra* note 92, at 745.

²⁴² Cass R. Sunstein & Adrian Vermeule, *Interpretation and Institutions*, 101 MICH. L. REV. 885, 914 (2003).

²⁴³ *Id.* at 915.

²⁴⁴ See Lee, *supra* note 6, at 6 n.15.

²⁴⁵ *Cf.* VERMEULE, *supra* note 12, at 80 (noting that legal standards "may be implemented by a range of institutional arrangements" and "[s]ome of these arrangements may produce worse outcomes").

2. Evidence of the Problems with Coupled Patent Law

Though hardly dispositive, evidence does suggest that coupled patent law undermines the patent system's ability to fulfill its function. "There is widespread agreement that the patent system in the United States is broken,"²⁴⁶ with the Patent Office and Federal Circuit subject to "trenchant criticism for their handling (and mishandling) of patent applications and patent cases."²⁴⁷ Coupled patent law contributes to at least some of these problems. For example, the Federal Circuit's penchant for formalistic legal rules has been defended as "reduc[ing] information costs" by "decreasing the extent to which lay judges must engage technologically challenging subject matter."²⁴⁸ But this formalism is also described as ignoring industrial and technological needs,²⁴⁹ a problem created, in part, by the fact that these formalistic rules also apply in patent acquisition, despite the presence of technically savvy examiners.

Similarly, commentators criticize the Federal Circuit for unduly treating factual issues as questions of law, thereby refusing to give deference to lower tribunals.²⁵⁰ While perhaps justifiable for the review of district court judges who lack patent experience or expertise, it "impacts review of both agency and trial court decisions," even though the Patent Office is an expert administrative agency.²⁵¹ Finally, legally adept judges are better suited than legally inept patent examiners to navigate the "doctrinal fractures and fault lines that are at the heart of contemporary patent law disputes."²⁵² Unsurprisingly, the Patent Office's guide for patent examiners does "a terrific job with legal issues on which there is clear precedent" but "elides over" or "does not acknowledge" complexities, "mask[ing] the existence of sharp tensions and breakpoints in patent law."²⁵³

Further evidence of problems created by coupled patent law comes from what Jonathan Masur and Lisa Larrimore Ouellette call "deference mistake[s]."²⁵⁴ Masur and Ouellette explain that "[i]t is often a mistake for the PTO to rely on precedent from infringement cases when deciding to grant patents; ... [j]ust because there is not clear and convincing evidence that a patent is invalid [as required in patent enforcement] does not mean that it should not be held invalid under a lower standard [applied in patent

²⁵³ Id.

²⁴⁶ Burstein, *supra* note 62, at 1750.

²⁴⁷ Masur, *supra* note 37, at 472-73.

²⁴⁸ Lee, *supra* note 6, at 29.

²⁴⁹ Nard & Duffy, *supra* note 214, at 1644.

²⁵⁰ Sapna Kumar, The Accidental Agency?, 65 FLA. L. REV. 229, 266 (2013).

²⁵¹ Id.

 ²⁵² Jason Rantanen, *Fractures, Fault Lines, and the MPEP*, PATENTLYO (Sept. 28, 2015),
 http://patentlyo.com/patent/2015/09/fractures-fault-lines.html [https://perma.cc/695R-HWQ4].

²⁵⁴ Masur & Ouellette, *supra* note 165, at 645.

2017]

acquisition]."255 Masur and Ouellette speculate that deference mistakes result from some combination of error and strategic reasons,²⁵⁶ but coupled patent law is at least partly to blame. Whether inadvertently, strategically, or for lack of better alternatives, decision makers can easily ignore or gloss over the differing standards of proof in patent acquisition and patent enforcement when addressing the exact same substantive questions. If substantive standards were decoupled, mistaken decision makers would be far less likely, and strategic decision makers far less able, to rely on precedent from the opposite context addressing different substantive questions.

III. THE POSSIBILITY OF DECOUPLING PATENT LAW

If the different institutional settings of the patent system make coupled patent law problematic, two alternatives exist: either (1) alter the institutional structure or (2) relax the norm of coupled patent law. There have been persistent calls to alter the institutional structure, particularly to make litigation decision makers more technically savvy. These have their own shortcomings and have made little headway.²⁵⁷ Taking the current institutional structure as given, this Part explores the alternative of relaxing the norm of coupled patent law. It does so first in the context of patent acquisition and patent enforcement before taking up the question of postissuance and ITC proceedings in the last Section.

A. Overview of Decoupled Patent Law

Although commentators do not ignore institutional considerations in addressing the proper design of patent law, they often focus on the consequences for patent law design of the capacities of either (but not both) generalist district judges or specialized patent examiners.²⁵⁸ Patent law rules designed to reflect the context of only patent acquisition or only patent enforcement are likely to perform poorly in the other, very different, context. At the very least, the different contexts and decision makers of both patent acquisition and patent enforcement must be accounted for in designing patent law rules.

More ambitiously, decoupling patent law to sometimes apply different rules for the different settings of the patent system should be an available tool in designing patent law. On first glance, applying different rules in patent acquisition and patent enforcement seems inconsistent with the basic structure of the patent system, at least for issues of invalidity and patentability.

²⁵⁵ Id. at 647-48.

²⁵⁶ *Id.* at 664-67.

²⁵⁷ Lee, *supra* note 6, at 17-20.

²⁵⁸ Compare id. at 62-63 (focusing on the needs of generalist judges without considering those of patent examiners), with Arti K. Rai, Allocating Power over Fact-Finding in the Patent System, 19 BERKELEY TECH. L.J. 907, 913 (2004) (focusing on the abilities of patent examiners without accounting for the lack of similar abilities of generalist judges).

Invalidity challenges in litigation are often described as a review of administrative action to determine whether the Patent Office made a mistake in issuing a patent.²⁵⁹ How can courts in patent litigation review the Patent Office's decision or determine whether it made a mistake if they are using different rules than the Patent Office?

It is imprecise to say that courts in enforcement litigation are reviewing the administrative decision of the Patent Office. Courts are not limited to the record in the Patent Office when determining invalidity in enforcement litigation; rather, they consider new evidence, new arguments, and new grounds for invalidity not addressed by the Patent Office.²⁶⁰ Courts in enforcement litigation thus make an independent determination of whether the patent meets the statutory criteria, rather than just reviewing the Patent Office's determination,²⁶¹ though they require clear and convincing evidence because of a presumption that the expert Patent Office correctly applied the statutory criteria.²⁶² The insight of this Article is that requiring the same rules, tests, and presumptions to make these determinations is likely to lead to errors because of the significant differences in the two settings. Instead, crafting rules tailored to each setting, even if different, is likely to result in both the Patent Office and courts making more accurate determinations of whether the statutory criteria for a patent have been satisfied.

Decoupling patent law to apply different rules in different settings would be a significant change to the patent system, though not unprecedented as demonstrated by the examples of decoupled rules in Section II.B. Significant changes to the patent system could have substantial economic effects, including on incentives to innovate and on consumer prices. Some may worry that the evidence of problems caused by the norm of coupled patent law is not strong enough to warrant significant changes that result in significant economic consequences. However, the rules for patent acquisition and patent enforcement need not be different in kind; rather, they might just be different in degree or different in emphasis in a way that reflects the different contexts and decision makers of the patent system.²⁶³ In this way, decoupled patent law might only affect the patent system at the margins.

²⁶² *Microsoft Corp.*, 564 U.S. at 95.

²⁶³ See infra Section IV.C.

²⁵⁹ See, e.g., Mark A. Lemley, Why Do Juries Decide If Patents Are Valid?, 99 VA. L. REV. 1673, 1674 (2013).

²⁶⁰ See Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 108-12 (2011) (recognizing that invalidity challenges in litigation can involve new evidence and arguments not presented to the Patent Office).

²⁶¹ See 35 U.S.C. § 282 (2012) (providing that grounds of patentability "shall be defenses" in infringement actions); Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1563-64 (Fed. Cir. 1988) (noting that the statute permits "the federal courts to adjudicate the validity of patents," not just review the Patent Office's decision, to insure they "fully meet the statutory standards").

Moreover, the claim here is not that patent law in its entirety, or even most patent issues, should be decoupled. In some or even many circumstances, the same legal rules will be equally well suited for application in both patent acquisition and patent enforcement—or, there will not be an alternative better suited to one or the other. For example, under current standards, a patent is "useful" under 35 U.S.C. § 101 if it functions as it says it does and has at least a minimal practical application.²⁶⁴ This low threshold for utility is not particularly difficult to apply in either patent acquisition or patent enforcement.

Rather, the claim is more modest. Coupled patent law should not be an assumed limit on patent law design and doctrines, and rules should not be unthinkingly applied equally to all settings of the patent system. Instead, decoupling patent law and applying different rules for patent acquisition and patent enforcement should be a potential tool in the arsenal of patent law designers, whether Congress, the Federal Circuit, the Patent Office, or scholars.

This tool should be deployed when appropriate: when the benefits of using the same legal rules in the distinct contexts of patent acquisition and patent enforcement are outweighed by the costs. Specifically, patent rules should be decoupled when the significant differences between patent acquisition and patent enforcement suggest that the same legal rules cannot be reliably applied in both settings and, therefore, uniformity will create significant error costs in one or both settings.²⁶⁵ In such circumstances, tailoring different legal rules for the different contexts and decision makers of patent acquisition and patent enforcement maximizes the reliability of implementing the doctrines in both settings and minimizes error costs. Therefore, it makes outcomes more predictable, reducing decision costs and promoting efficient investment in technological innovation. The following Section provides guideposts for when and how patent law should be decoupled.

B. Principles for Decoupled Patent Law

Drawing on the contextual differences between patent acquisition and patent enforcement, this Section identifies several guideposts for the use of the tool of decoupled patent law. While these principles may apply differently for different doctrines,²⁶⁶ they provide a basic framework for deciding both whether to decouple a particular patent law doctrine and what the decoupled rules should look like. These principles seek to reduce inadvertent errors resulting from the different capabilities and contextual limitations in patent

²⁶⁴ See MERGES & DUFFY, supra note 36, at 209-30.

 $^{^{265}}$ Cf. Taylor, *supra* note 3, at 443 (suggesting formalistic rules are more appropriate for nonspecialized judges in the district courts than for specialized patent examiners in the Patent Office).

²⁶⁶ Sawicki, *supra* note 92, at 737 (suggesting that false positives on different doctrines during patent acquisition and patent enforcement will have different effects).

acquisition and patent enforcement. Section III.C, meanwhile, addresses errors resulting from biased decision makers.

1. Legalistic vs. Technical Determinations

Because patent examiners are generally technically skilled and generalist judges are technical neophytes, technically intensive inquiries are better suited for patent acquisition than patent enforcement. Conversely, because generalist judges are generally legally skilled and patent examiners are legal neophytes, legalistic inquiries are better suited for patent enforcement than patent acquisition.

Specifically, patent examiners are more capable of implementing inquiries into the background, knowledge, or abilities of the technical field because they either already know this information from their own technical training or, at least, will be able to draw on their technical background to make more informed judgments in evaluating the information before them.²⁶⁷ In patent enforcement litigation, technical "[e]xpertise is always external" to the actual decision maker,²⁶⁸ normally presented through expert witnesses selected, retained, and paid for by the parties.²⁶⁹ Heavy reliance on expert evidence raises litigation costs. It also introduces error costs due to the conscious and subconscious bias inherent in party-selected and paid experts.²⁷⁰ And it creates a paradox: "[I]f the [decision maker] lacks the knowledge that the expert provides, how, then, can it rationally evaluate the expertise on offer?"²⁷¹ Nonexpert decision makers tend to evaluate expert witnesses on the quality of their performance, not the quality of their expertise, and they fail to be "accurate evaluator[s] of partisan bias."²⁷²

Yet, numerous patent doctrines are evaluated based on the knowledge, abilities, or perspective of a "person having ordinary skill in the art" (a "PHOSITA"). This evaluation includes what the language of the patent claims means (i.e., claim construction), whether the invention sufficiently advances over existing knowledge (i.e., obviousness), and whether the patent adequately

²⁶⁷ *Cf. In re* Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002) (rejecting the Patent Office's reliance on examiner expertise and knowledge in determining obviousness); R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY AND THE COMMON LAW, *supra* note 56, at 123, 144-45 (endorsing an approach to claim construction bettersuited for patent acquisition that would emphasize the "ordinary" meaning of words to skilled people in the field with limited reliance on the patent itself).

²⁶⁸ Burstein, *supra* note 62, at 1788.

²⁶⁹ See J. Jonas Anderson & Peter S. Menell, *Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction*, 108 Nw. U. L. REV. 1, 68, 75 (2014) (acknowledging that greater reliance on technical context in litigation results in greater reliance on expert evidence).

²⁷⁰ Mnookin, *supra* note 25, at 1009-15.

²⁷¹ *Id.* at 1012.

²⁷² *Id.* at 1013-14.

teaches how to make and use the invention (i.e., enablement).²⁷³ Like tort law's "reasonable person," the PHOSITA is a legal construct and does not reflect "the actual capability of any individual or group of individuals."²⁷⁴ But a patent examiner is undoubtedly closer to the PHOSITA than a federal district judge or juror, and the examiner's knowledge is sometimes equated with or taken as probative evidence of the knowledge of the PHOSITA.²⁷⁵ By contrast, decision makers in patent litigation must rely on external evidence, particularly expert testimony, for information about the PHOSITA's knowledge or abilities.²⁷⁶ Thus, use of the PHOSITA's perspective in patent acquisition will tend to be fairly reliable, but its use in patent enforcement will be much more problematic.²⁷⁷

Decoupled patent law standards could retain reliance on the PHOSITA in patent acquisition but abandon it in patent enforcement whenever possible.²⁷⁸ For example, prior to *Nautilus*, the Federal Circuit's test for claim definiteness asked whether the claim was "insolubly ambiguous" and not amenable to construction, without directly invoking the PHOSITA.²⁷⁹ The Supreme Court replaced this with a requirement that a claim "inform, with reasonable certainty, *those skilled in the art* about the scope of the invention."²⁸⁰ Without suggesting that the Federal Circuit's pre-*Nautilus* standard was optimal, the Supreme Court's new PHOSITA-focused standard is ill suited for the context of patent litigation.

Even if an awkward fit for patent litigation, the PHOSITA perspective may be necessary to reflect the technical nature and audience of patents.²⁸¹ Rather than eliminate the PHOSITA perspective in patent litigation, it can be implemented in ways that minimize problems for lay decision makers. For example, in interpreting patent claims, one could ask (1) how a PHOSITA would normally understand a term used in a claim, or (2) how a PHOSITA reading the patent would understand the patent to be using the claim term.²⁸²

²⁷³ Burk & Lemley, *supra* note 95, at 1185-87.

²⁷⁴ *Id.* at 1187.

²⁷⁵ In re Lee, 277 F.3d 1338, 1345 (Fed. Cir. 2002); Burk & Lemley, supra note 95, at 1187-88.

²⁷⁶ J. Jonas Anderson & Peter S. Menell, *Restoring the Fact/Law Distinction in Patent Claim Construction*, 109 Nw. U. L. REV. ONLINE 187, 187-88 (2015); *see also* Burk & Lemley, *supra* note 95, at 1196 ("[J]udges are at a rather serious disadvantage in trying to put themselves in the shoes of an ordinarily skilled scientist.").

²⁷⁷ Reilly, *supra* note 24, at 108.

²⁷⁸ *Cf.* Greg Reilly, *Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard*, 20 MICH. TELECOMM. & TECH. L. REV. 243, 285 (2014) (proposing an "ordinary reader" standard for claim construction rather than the PHOSITA perspective).

²⁷⁹ Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2124 (2014).

²⁸⁰ Id. (emphasis added).

²⁸¹ See Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

²⁸² Id.

The first option is open-ended and puts significant emphasis on the background knowledge and understanding of the PHOSITA, which may be fine for patent acquisition but leaves generalist judges fully dependent on the external expertise of biased expert witnesses. The second option is more constrained and uses the patent document itself to guide and discipline the PHOSITA inquiry, allowing generalist judges to obtain their own independent understanding of the term by which they can check and evaluate expert testimony. It is therefore a better way of implementing the PHOSITA inquiry in patent enforcement.

For similar reasons that technically intensive inquiries are problematic in patent enforcement, legally intensive inquiries are problematic in patent acquisition. Inherently legal tasks—like parsing the wording of documents, analogizing and distinguishing precedent, and applying canons of document interpretation—are better suited for legally trained judges than legally limited patent examiners.²⁸³ For example, patent-eligible subject matter under 35 U.S.C. § 101 is subject to judicially created exceptions for "[1]aws of nature, natural phenomena, and abstract ideas."²⁸⁴ Rather than "delimit the precise contours of the 'abstract ideas' category," the Supreme Court identifies an "abstract idea" largely by analogizing (and distinguishing) prior precedent.²⁸⁵ This is feasible for judges, who are trained and experienced at common law reasoning, but the required careful reading, analogizing, and distinguishing of precedent is both foreign to, and difficult for, nonlawyer patent examiners.²⁸⁶

2. Policy-Influenced Decisions

Commentators increasingly contend that patent law doctrines should more directly address policy considerations, such as the effects on incentives for innovation.²⁸⁷ Relatedly, Dan Burk and Mark Lemley (and many other commentators) argue that because "innovation differs from industry to industry, and the patent system affects different industries in different ways,"²⁸⁸ there is a need to "apply the general rules of patent law with

²⁸³ *Cf.* Holbrook, *supra* note 1, at 782-83 (criticizing the Federal Circuit for treating patents as legal rather than technical documents).

²⁸⁴ Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013) (quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293 (2012)).

²⁸⁵ Alice Corp. Pty Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2356-57 (2014).

²⁸⁶ See Arti K. Rai, Improving (Software) Patent Quality Through the Administrative Process, 51 Hous. L. REV. 503, 515-16 (2013) (concluding that § 101 analysis is more difficult for examiners than judges).

²⁸⁷ See, e.g., Peter Lee, Substantive Claim Construction as a Patent Scope Lever, 1 IP THEORY 100, 105 (2010) ("[P]olicy considerations aimed at promoting technological progress should inform claim construction.").

²⁸⁸ Burk & Lemley, *supra* note 213, at 1674.

sensitivity to the characteristics of particular industries."²⁸⁹ Burk and Lemley suggest that, as compared to Congress, courts are better suited to conduct industry-specific tailoring.²⁹⁰

Yet, the analysis in Part I suggests that, as compared to courts, the Patent Office is better suited for "a policy-making role of making discretionary judgments based on a range of competing options."²⁹¹ Although individual patent examiners are unlikely to have the time or skills to make policy-sensitive decisions on an application-by-application basis, Patent Office officials have tools to "gather[] information necessary to make informed patent policy decisions" by "conduct[ing] hearings, partak[ing] in research studies, and work[ing] closely with other expert federal agencies."²⁹² The Patent Office can use these tools to make or change policy-sensitive judgments at a wholesale level. It then can use its manuals, guidances, and instructions to direct examiners in implementing these policy-based judgments at the retail application level.²⁹³ In this way, the Patent Office can adjust patent acquisition standards fairly quickly and comprehensively to reflect changing needs of innovation or differences in industries.

Explicit policy making, on the other hand, is contrary to traditional judicial norms.²⁹⁴ Courts are constrained by the evidence presented and arguments raised by the parties, and those parties have little incentive to raise issues of overall social welfare or develop and provide the data necessary to make informed policy judgments.²⁹⁵ Courts necessarily move slowly, both because of the limited frequency with which issues are presented and because of inherent features of the common-law process.²⁹⁶ Thus, they are unlikely to be responsive to changing needs of innovation or industries.²⁹⁷ While policy-intensive decision-making may be appropriate for patent acquisition, more legalistic doctrines that indirectly seek to implement policy choices are better for patent enforcement.

²⁸⁹ *Id.* at 1641.

²⁹⁰ *Id.* at 1638.

²⁹¹ Wasserman, *supra* note 44, at 2012.

²⁹² Id. at 2009 (footnotes omitted).

²⁹³ See, e.g., Examination Guidance and Training Materials: Examining Claims for Compliance with 35 USC 112(a): Overview and Part I—Written Description, U.S. PAT. & TRADEMARK OFF. (Aug. 17, 2015), http://www.uspto.gov/patent/laws-andregulations/examination-policy/examination-guidance-and-training-materials

[[]https://perma.cc/AB33-HL8L] (providing technology-specific instructions for implementing the written description requirement).

²⁹⁴ See supra notes 62-65 and accompanying text.

²⁹⁵ Wasserman, *supra* note 44, at 2009-10.

²⁹⁶ See Burstein, supra note 62, at 1789; Rai, supra note 64, at 1268.

²⁹⁷ See Rai, supra note 64, at 1268.

3. Determinations as of the Time of the Invention or Filing

Although historical tests that judge patent law issues as of the time of the invention or patent filing result in evidentiary difficulties and hindsight bias in patent enforcement,²⁹⁸ they are also inevitable. The alternative is unduly benefitting or penalizing patentees based on what subsequently occurred in the field, rather than based on their own contributions. Instead of eliminating historical tests from patent enforcement, decoupled patent law standards should be designed to maximize the reliability of historical tests in patent enforcement.

Consider again the example of claim construction. An approach that asks how the PHOSITA herself would generally understand the term at the time the patent was filed gives significant weight to the historical inquiry, exacerbating problems of accessibility to evidence and hindsight bias when applied years later in patent enforcement.²⁹⁹ An approach that asks how the PHOSITA reading the patent at the time of filing would think the patent was using the claim term also has a historical component.³⁰⁰ But the problems it creates in patent enforcement are mitigated because the historical PHOSITA would base her understanding on the same static patent document before the judge in litigation, making historical evidence of secondary importance and providing an objective check on hindsight bias. The latter approach is better suited for patent enforcement.³⁰¹

4. Simplicity vs. Nuance

Because of the high volume and short time allotments in patent acquisition, the Patent Office benefits from doctrines and rules that permit "relatively quick legal judgments."³⁰² Lacking the tools to conduct a factual investigation or hear live testimony,³⁰³ patent examiners also need doctrines that can be reliably resolved on a paper record. Simplified inquiries that require limited evidence are most appropriate for patent acquisition.

By contrast, in enforcement litigation, the parties have the time and ability to develop a comprehensive factual record and argue over complex legal tests.³⁰⁴ Decision makers have comparatively more time than patent examiners to hear and process this information, and can receive a wide range of evidence,

²⁹⁸ See Burk & Lemley, *supra* note 95, at 1198-99 ("Courts and expert witnesses must shut out of their minds intervening developments in the field. This is notoriously hard to do."); Risch, *supra* note 70, at 214 (noting that "a court will face difficulties" from making the historical inquiry for claim construction "several years later").

²⁹⁹ See Reilly, supra note 278, at 273; infra Section III.D.1.

³⁰⁰ See infra Section III.D.1.

³⁰¹ See infra Section III.D.1.

³⁰² Burstein, *supra* note 62, at 1776.

³⁰³ See Michael Risch, *The Failure of Public Notice*, 21 HARV. J.L. & TECH. 179, 183, 196 (2007).

³⁰⁴ See supra Section I.B.2.

including live testimony.³⁰⁵ Thus, compared to patent acquisition, patent enforcement is better suited for "quite detailed and nuanced applications of law to the particular factual circumstances of the patent and the dispute" and "detailed fact-finding about the circumstances surrounding the invention, the characteristics of the invention itself, and the place of the invention."³⁰⁶

For example, reliance on secondary considerations of nonobviousness is more appropriate in patent enforcement than in patent acquisition. Factors like "commercial success," "skepticism," "praise," and "long felt but unsolved needs" require detailed fact finding not neatly limited to paper documents, as well as nuanced evaluation of market conditions, the state of the art, and reception of the invention.³⁰⁷ Unsurprisingly, despite being a part of the formal (and coupled) test for obviousness, secondary considerations play little practical role in patent acquisition.³⁰⁸

5. Rules vs. Standards?

No discussion of legal design would be complete without a discussion of rules and standards. The recent conflict between the Supreme Court and the Federal Circuit has been explained based on different preferences for rules (the Federal Circuit) and standards (the Supreme Court).³⁰⁹ And some commentators contend that formalistic rules are necessary for lay judges (though not patent examiners) to reduce both decision costs that would result from lay judges needing to understand technical intricacies and the error costs that would result from lay judges applying standards that require nuanced or deep understanding of the technical detail.³¹⁰

The choice between rules and standards does not map neatly onto the different contexts of patent enforcement and patent acquisition. Rules do seem beneficial in patent enforcement to minimize costs and potential errors when compared to standards requiring technically intensive inquiries, such as an open-ended inquiry into whether a skilled person's background knowledge, experience, and abilities would make it obvious to create a given invention.³¹¹ But open-ended standards do not have to be technically intensive and might instead be legally intensive, such as a "holistic" inquiry into whether the patent claims, specification, and prosecution history collectively provide an implicit definition of a claim term.³¹² Such a legally intensive standard would be better suited for patent enforcement than patent acquisition.

³⁰⁵ Burstein, *supra* note 62, at 1786.

³⁰⁶ Id. at 1777 (footnote omitted).

³⁰⁷ See Durie & Lemley, *supra* note 191, at 995-96.

³⁰⁸ See supra note 191 and accompanying text.

³⁰⁹ See Taylor, supra note 3, at 430-65.

³¹⁰ See Dreyfuss, supra note 45, at 512; Lee, supra note 6, at 7, 25-29; Taylor, supra note 3, at 427.

³¹¹ See infra Section III.D.2.

³¹² See R. Polk Wagner & Lee Petherbridge, Is the Federal Circuit Succeeding? An

Moreover, rules tend to promote "clarity" and predictability, whereas standards tend to promote "flexibility" and tailoring to the needs of specific cases.³¹³ Because of the greater reliance interests in patent enforcement, the clarity and predictability that comes with rules might be more important, whereas the greater flexibility of standards might be useful in patent acquisition to permit policy-based decision-making. On the other hand, "[s]tandards increase the amount of time it takes to dispose of disputes" and generally require consideration of a wider range of information,³¹⁴ whereas rules tend to embody simplified heuristics.³¹⁵ These considerations suggest that standards may be more viable in patent enforcement litigation, and that rules may be better for the quick and limited review necessary in patent acquisition.

Ultimately, decoupled patent law is unlikely to result in a neat split between formalist rules for patent enforcement and open-ended standards for patent acquisition (or vice-versa). Rather, patent acquisition and patent enforcement doctrines will be a mix of both rules and standards, as appropriate given the nature of the issue.

C. More Stringent Standards in the Patent Office?

The principles for decoupled patent law identified in Section III.B aim to minimize inadvertent errors arising from the very different contexts of patent acquisition and patent enforcement. "Even cognitively perfect [decision makers], however, might make mistakes because they are not trying to avoid them."³¹⁶ Part I identified several reasons to think that the Patent Office is biased in favor of patentees and/or granting patents.³¹⁷ The Patent Office therefore is more likely to incorrectly issue a patent (Type I or "false positive" error) than to incorrectly deny a patent (Type II or "false negative" error). There is comparatively little reason to think that district court errors will skew towards false positives or false negatives.³¹⁸

The false positives that occur during patent acquisition can induce patentees, investors, and competitors to incur costs in reliance on the patent.³¹⁹ On the other hand, incorrectly issued patents may be costless if they fall into the vast

³¹⁴ Taylor, *supra* note 3, at 429.

- ³¹⁷ See supra notes 44-47 and accompanying text.
- ³¹⁸ See supra note 52 and accompanying text.

³¹⁹ See Sawicki, *supra* note 92, at 756 (noting costs arising from "[e]arly false positives"). Andres Sawicki provides a more comprehensive and nuanced account of errors within the patent system, considering error type (false positive or false negative), timing (during acquisition or enforcement), and doctrinal basis. *Id.* at 739.

Empirical Assessment of Judicial Performance, 152 U. PA. L. REV. 1105, 1133-34 (2004) (contrasting such a "free-form approach" with an alternative "fairly formal process").

³¹³ Burstein, *supra* note 62, at 1781.

³¹⁵ *See id.* at 427-28.

³¹⁶ VERMEULE, *supra* note 11, at 77-78.

majority of patents that are never litigated, licensed, or otherwise used.³²⁰ Overall, the weight of current opinion in the patent community supports the conclusion that the Patent Office's skew towards false positives imposes significant costs.³²¹ False positives in litigation sometimes will impose additional costs beyond those arising from the necessarily preceding false positive in patent acquisition, especially when they allow the patentee to extract monopoly profits for something different than the patentee's own contribution.³²²

Meanwhile, enforcement false negatives terminate the patent rights, whereas acquisition false negatives often still result in patent protection, albeit with amended claims of narrower scope.³²³ Additionally, greater reliance costs are likely to have been incurred by the time of patent enforcement than at the time of patent acquisition, increasing the relative costs of enforcement false negatives.³²⁴ And, if a patent applicant receives a false negative in patent acquisition, the patent applicant may still be able to protect its invention through trade secrecy, trademark, or contract.³²⁵ Because each of these is more effective if implemented earlier, they offer comparatively less help to an inventor who receives a false negative in patent enforcement.³²⁶

Ultimately, the relative likelihood and costs of different types of errors in patent acquisition and patent enforcement are complex questions, the definite resolution of which is beyond the scope of this Article. For present purposes, the point is that the Patent Office's biases make false positives more likely in the Patent Office than false negatives, and these false positives are likely to have significant costs, perhaps more so than false negatives during patent acquisition. On the other hand, district courts are less likely to skew towards either false positives or false negatives, though either type of error is likely to be costly in patent enforcement.

To counteract the Patent Office's pro-patent bias, more stringent patentability standards could be used for patent acquisition than invalidity standards for patent enforcement.³²⁷ That is, the patentee would have to pass a

³²⁰ See Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. Rev. 1495, 1501-08 (2001).

³²¹ See Masur, supra note 37, at 479-80 & nn.34-41.

³²² Sawicki, *supra* note 92, at 753, 756, 758 (arguing that false positives in litigation "impose significant additional costs" only if related to doctrines of patent scope or novelty and nonobviousness).

³²³ See Risch, supra note 70, at 214-15 (suggesting that it is more "acceptable to 'overreject' patent applications during prosecution, where amendments can be made," than during litigation).

³²⁴ But cf. Sawicki, supra note 92, at 776 (questioning "[t]he ordinary intuition" that litigation false negatives are less problematic "because . . . the inventor will have . . . some period of exclusivity").

³²⁵ Id.

³²⁶ Id.

³²⁷ Higher substantive standards in the Patent Office than in courts may warrant

higher substantive threshold to obtain a patent than it would to retain its patent in litigation.³²⁸ To be clear, the argument here is relative, not absolute: substantive standards should be *higher* in the Patent Office than in the courts. Whether to achieve this relative state by increasing current patentability rules for patent acquisition or decreasing current invalidity rules for patent enforcement depends on normative views about the relationship between current rules and the proper scope of patent protection.

Regardless, if doctrines simply reflected the optimal level of patent protection (whatever it is and assuming it is identifiable), the result would be an excessive issuance of patents due to the Patent Office's pro-patent bias.³²⁹ And, if coupled patent law rules were made more stringent to counteract the Patent Office's pro-patent bias, these more stringent rules could lead to a suboptimal invalidation of patents in litigation, where courts lack the propatent bias of the Patent Office.³³⁰ By decoupling patent law, the Patent Office can be required to apply more stringent rules to counteract its pro-patent bias, thereby achieving a level of patent issuance that better approaches the optimal level. Courts can then apply less stringent rules than the Patent Office to reflect their general lack of pro-patent bias and therefore also promote the optimal level of patent protection.

The assumption here is that offsetting the Patent Office's pro-patent bias and aiming for an error rate of zero in patent acquisition (and patent enforcement) is desirable. Lemley influentially has argued that tolerating errors in the Patent Office is "rationally ignorant" because the costs of more accurate review of patent applications outweigh the benefits, given how few patents are ever litigated or licensed.³³¹ Lemley's analysis is limited to whether the Patent Office should "chang[e] its level of effort" by increasing time for examination and prior art searching and explicitly did not address the possibility of "changing the legal standard [the Patent Office] is bound to apply."³³² In other work, Lemley has acknowledged the desirability of "improv[ing] the accuracy of PTO decisions in both directions if it could be done without substantial additional expense."³³³ More stringent substantive rules in the Patent Office are not necessarily inconsistent with rational ignorance, as they may be quicker and easier for patent examiners to apply.³³⁴ For example, an obviousness rule

- ³³¹ Lemley, *supra* note 320, at 1497.
- ³³² Id. at 1508, 1524.
- ³³³ Allison, Lemley & Walker, *supra* note 58, at 30.
- ³³⁴ Because it is "virtually impossible for an examiner to reject a patent application for

eliminating the higher standard of proof that accompanies the presumption of validity in litigation. Otherwise, the combined effect of less stringent validity standards and a clear and convincing evidence standard may skew litigation errors against patent challengers.

 $^{^{328}}$ Cf. Masur, supra note 37, at 484-85, 508 (describing the ability to alter the "cutpoints" for patentability/invalidity decisions).

³²⁹ See supra notes 44-47 and accompanying text.

³³⁰ See supra note 52 and accompanying text.

that permits patent examiners to use their background knowledge and common sense is both more stringent *and* easier for patent examiners than an obviousness rule limited to the explicit disclosures of the prior art.

One may reasonably worry that the Patent Office will fail to faithfully apply more stringent rules, given its biases and the lack of appellate review of grant decisions.³³⁵ This concern supports using rule-like approaches to implement more stringent patent law for patent acquisition, which would limit discretion and restrict the ability of the Patent Office to reach biased decisions without losing institutional legitimacy.³³⁶ New postissuance procedures that allow competitors and other interested parties to challenge issued patents may also mitigate the danger of the Patent Office ignoring more stringent substantive patent law.³³⁷ These procedures force the Patent Office to internalize the costs of granting unwarranted patents and create the possibility of appellate review if the Patent Office confirms its original decision.³³⁸

Arguably, decoupled substantive patent rules are not necessary because the differing standards of proof between patent acquisition (i.e., preponderance of the evidence) and patent enforcement (i.e., clear and convincing evidence) effectively impose a higher threshold to obtain a patent in patent acquisition than to retain the patent in patent enforcement.³³⁹ Nevertheless, the pervasive concerns about the Patent Office issuing "bad" patents indicate that the optimal level of patent protection is not being achieved³⁴⁰ and that the higher litigation standard of proof is simply inoculating the Patent Office's false positives from challenge. The higher litigation standard of proof could be abandoned, so as to weed out the "bad" patents created by the Patent Office's pro-patent biases.³⁴¹ But this would not directly address the costs imposed by the Patent Office's initial false positives. Alternatively, coupled patent law rules could be made more stringent to counteract the Patent Office's pro-patent bias, while the higher litigation standard of proof could be retained to mitigate the risk of overinvalidation in the more neutral district courts.

good," "a more stringent examination standard will simply result in a more protracted prosecution process," increasing costs. Lemley, *supra* note 320, at 1508, 1524. Adoption of more stringent rules for patent acquisition may also require procedural reforms to prevent applicants from prolonging prosecution, increasing costs, and wearing down the examiner. *See id.*

³³⁵ See Masur, supra note 37, at 474.

³³⁶ See Taylor, supra note 3, at 427.

³³⁷ See Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in 28 U.S.C. § 1454 (2012) and scattered sections of 35 U.S.C.).

³³⁸ See Tran, *supra* note 49, at 631-38, 650 (summarizing procedures and discussing scope of judicial review of Patent Office decisions).

³³⁹ See supra notes 72, 153 and accompanying text.

³⁴⁰ Masur, *supra* note 37, at 475, 477-78.

³⁴¹ Microsoft Corp v. i4i Ltd. P'ship, 564 U.S. 91, 112-13 (2011) (declining to evaluate this policy argument).

Ultimately, it is unclear whether the better path to counteracting the Patent Office's pro-patent bias is to decouple substantive rules and apply more stringent rules in the Patent Office than in the courts or to make coupled rules more stringent while retaining the higher standard of proof in litigation. Evidence shows that standards of proof generally make a difference.³⁴² The purpose here is simply to show that decoupled substantive rules are a possible way of addressing the Patent Office's pro-patent bias without causing suboptimal overinvalidation of patent rights in the courts.

D. Potential Examples of Decoupled Patent Law

To confirm the feasibility of decoupled patent law, this Section offers two examples of how decoupled patent law could be applied in practice, focusing on two of the most important patent law issues: claim construction and obviousness. The purpose is to demonstrate that decoupled patent law could be practically implemented and to show the ways in which patent law rules could be tailored to reflect the different contexts and decision makers of patent acquisition and patent enforcement. This Section relies solely on substantive legal rules for claim construction and obviousness that exist, or have existed, in case law, without taking a position on their normative desirability. The optimal legal rules for any particular issue in patent acquisition or patent enforcement may look nothing like existing case law and are beyond the scope of this Article.

1. Claim Construction

A split exists in the precedent as to the proper approach to claim construction. The first approach, "which I call the 'general meaning' approach, . . . begins with a 'heavy presumption' in favor of the 'general,' 'plain,' and/or 'ordinary' meaning of the claim term to a skilled person in the field" and only looks to the patent specification for the "quite narrow" purpose of determining whether it "clearly set[s] forth' an express definition different from the general meaning or use[s] 'expressions of manifest exclusion or restriction' that clearly and unmistakably disclaim[] claim scope."³⁴³ "The second approach to claim construction, which I call the 'patent-focused approach," determines claim meaning primarily from "contextual clues provided in the specification, which can define a claim term explicitly or implicitly. Extrinsic evidence can provide useful background information to understand the specification but cannot support a claim interpretation broader than that suggested by the specification."³⁴⁴

³⁴² Schwartz & Seaman, *supra* note 155, at 473.

³⁴³ Greg Reilly, *Patent "Trolls" and Claim Construction*, 91 Notre DAME L. Rev. 1045, 1053 (2016).

³⁴⁴ *Id.*; see also Reilly, supra note 278, at 298.

Currently, both approaches are variably used during both patent acquisition³⁴⁵ and patent enforcement,³⁴⁶ creating unpredictability and outcomes that vary with the preferred approach of the decision maker.³⁴⁷ However, the principles of decoupled patent law suggest that the general meaning approach is better for patent acquisition and the patent-focused approach is better for patent enforcement.

The patent-focused approach requires the legalistic "parsing" of the patent document to draw "inferences" as to the meaning of "complex language," whereas the general meaning approach focuses on the more technical question of how skilled people would normally understand the term.³⁴⁸ Although both approaches use the perspective of a skilled person at the time of the invention, they do so in different ways. The general meaning approach first asks how a skilled person at the time of the invention would normally understand the claim term, before consulting the patent document itself.³⁴⁹ This approach puts significant weight on both the PHOSITA and the historical inquiry into the state of the technology at the time of the invention. By contrast, the patentfocused approach asks how a skilled person at the time of the invention would understand the patent document to be using the claim term.³⁵⁰ The reliance on the PHOSITA and historical inquiry is much less than under the general meaning approach. The primary focus is on the static patent document itself, minimizing the need for a historical inquiry and permitting the judge to engage in the "uniquely lawyerly" task of "parsing the often complex language of a patent specification."351

On the other hand, the general meaning approach is arguably simpler for patent examiners than the patent-focused approach. Under the patent-focused approach, examiners have to carefully read through the specification to determine whether it implicitly defines a term. By contrast, under the general meaning approach, patent examiners, as people with some expertise in the field, can start with their own background understanding of the term and only check the specification for a clear and unmistakable express definition or disclaimer of claim scope.

³⁴⁵ Compare MPEP, supra note 72, § 2111.01(I) ("[W]ords of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification."), with id. § 2111.01(IV)(A) ("[T]he meaning of a particular claim term may be defined by implication ... according to the usage of the term in the context in the specification.").

³⁴⁶ Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1373 (Fed. Cir. 2011) (en banc) (Moore, J., dissenting).

³⁴⁷ Greg Reilly, *Completing the Picture of Uncertain Patent Scope*, 91 WASH. U. L. REV. 1353, 1358-59 (2014).

³⁴⁸ See Wagner & Petherbridge, supra note 267, at 144-45.

³⁴⁹ *Id.* at 144.

³⁵⁰ *Id.* at 145.

³⁵¹ Id.

BOSTON UNIVERSITY LAW REVIEW [Vol. 97:551

Commentators generally agree that the general meaning approach to claim construction results in "broader claim scope than the patent-focused approach."³⁵² Using the general meaning approach for patent acquisition and the patent-focused approach for patent enforcement would therefore impose more stringent standards on acquisition than on enforcement, because a broader construction implicates more prior art and increases the chances of an unpatentability rejection.³⁵³ Decoupling claim construction rules in this way would give actual effect to the broadest reasonable interpretation standard for patent acquisition, which is lacking in current case law.³⁵⁴

2. Obviousness

The obviousness doctrine has been a significant source of tension between the Supreme Court and the Federal Circuit. The Federal Circuit's previous rule required that an explicit "teaching, suggestion, or motivation" to combine prior art references be identified in the prior art.³⁵⁵ In *KSR International Co. v. Teleflex Inc.*,³⁵⁶ the Supreme Court rejected this rule, adopting a more flexible approach that looked for any reason to combine prior art references to make the invention, whether explicit in the prior art or arising from the PHOSITA's background knowledge, common sense, market demands, recent technological developments, or the fact that something was obvious to try.³⁵⁷ *KSR* applies to both patent acquisition and patent enforcement,³⁵⁸ but principles of decoupled patent law suggest it is more reliable for patent acquisition whereas the Federal Circuit's explicit teaching, suggestion, or motivation to combine test ("TSM Test") is more reliable for patent enforcement.

The Federal Circuit's TSM Test, like the patent-focused approach to claim construction, requires the legalistic parsing of documents—prior patents and publications—to identify an explicit statement that would cause a skilled person to combine prior art references. Although it asks whether a skilled person at the time of the invention would find such a statement, it deemphasizes both the PHOSITA and the historical inquiry by requiring identification of an explicit statement in static printed materials.³⁵⁹ By contrast, the *KSR* standard is more open ended, emphasizing technically intensive and historically focused questions about the background knowledge, experience,

³⁵² Reilly, *supra* note 344, at 1061 & nn.102-07.

³⁵³ See Bey & Cotropia, *supra* note 128, at 303-04.

³⁵⁴ See supra Section II.B.1.

³⁵⁵ Gregory N. Mandel, Another Missed Opportunity: The Supreme Court's Failure to Define Nonobviousness or Combat Hindsight Bias in KSR v. Teleflex, 12 LEWIS & CLARK L. REV. 323, 333 (2008).

³⁵⁶ 550 U.S. 398 (2007).

³⁵⁷ *Id.* at 415, 418-21, 424.

³⁵⁸ *Id.* at 407.

³⁵⁹ See Emer Simic, The TSM Test Is Dead! Long Live the TSM Test! The Aftermath of KSR, What Was All the Fuss About?, 37 AIPLA Q.J. 227, 232 (2009).

abilities, and common sense of a skilled person.³⁶⁰ And, like the general meaning approach, the *KSR* standard is simpler for patent examiners to apply. Rather than searching through prior art to identify an explicit statement that gives a reason to combine prior art references, patent examiners, as skilled people, can rely on their own knowledge, abilities, and common sense.³⁶¹

Use of the *KSR* standard in patent acquisition and the TSM Test in patent enforcement also would result in more stringent standards during acquisition than during enforcement. By permitting more flexibility and a greater range of evidence, the *KSR* standard makes a finding of obviousness more likely than does the TSM Test.³⁶²

E. Decoupled Patent Law Outside of Acquisition and Litigation

Because they share features of both patent acquisition and patent enforcement, postissuance proceedings in the Patent Office and ITC proceedings raise additional questions about the possibility of decoupling patent law.³⁶³ Taken to its logical end, the principle that optimal legal design must reflect the context and decision makers of implementation would suggest that unique patent law rules—distinct from those of patent acquisition and patent enforcement—should be designed to reflect the unique aspects of both postissuance and ITC proceedings.³⁶⁴ Perhaps less ambitiously, the hybrid nature of postissuance and ITC proceedings might require legal rules that are hybrids between those for patent acquisition and patent enforcement.

However, creating unique legal rules for postissuance proceedings and ITC proceedings would create a patchwork of substantive patent law with at least four different bodies of doctrine. The concerns of cost, quality, and predictability would be more salient than they would be if only the rules between patent acquisition and patent enforcement were decoupled.³⁶⁵ Put another way, the costs of a four-way division of patent law rules might outweigh the benefits of patent law rules perfectly tailored for each of the four major contexts in which they are applied.

An alternative approach would be to simply apply the patent law rules from the context (acquisition or enforcement) to which postissuance and ITC proceedings are most akin, recognizing that this may be an imperfect fit. ITC proceedings resemble patent enforcement in most relevant ways, and, therefore, rules from patent enforcement should be fairly reliable in ITC proceedings.³⁶⁶ Postissuance proceedings are more uncertain. There is room for debate as to whether postissuance proceedings more closely resemble patent

³⁶⁰ Mandel, *supra* note 355, at 333-35.

³⁶¹ See Rai, supra note 286, at 516-17.

³⁶² See id.

³⁶³ See supra Section I.C.

³⁶⁴ See supra Section II.D.1.

³⁶⁵ See supra Section II.C.

³⁶⁶ See supra notes 117-24 and accompanying text.

acquisition or patent enforcement.³⁶⁷ Whatever consensus emerges could determine whether the patent law rules developed in the acquisition or enforcement context would be applied in postissuance proceedings. One additional consideration is that decoupled patent law may result in more stringent patentability rules for patent acquisition than for patent enforcement.³⁶⁸ If this occurs, it may be appropriate to apply the more stringent patent acquisition rules during postissuance proceedings to provide a check on the Patent Office that ensures it faithfully implements the more stringent rules during initial prosecution.³⁶⁹

IV. IMPLEMENTING DECOUPLED PATENT LAW

Up to this point, this Article has focused on the argument that decoupled patent law *should* be implemented. This Part turns to whether decoupled patent law *can* be implemented within the current patent and legal landscape. For purposes of this Article, this question is secondary. If decoupled patent law is not possible within the current statutory scheme, this Article provides support for statutory reform to implement decoupled patent law. However, statutory reform is probably unnecessary because decoupled patent law is consistent with both patent law and general administrative law principles and so can be feasibly adopted.

A. Statutory Authority for Decoupled Patent Law

At first glance, decoupled patent law is arguably inconsistent with one or both of two statutes: the Patent Act itself and the Federal Courts Improvement Act of 1982 ("FCIA"), which created the Federal Circuit.³⁷⁰ On closer inspection, however, neither statute stands in the way of implementing decoupled patent law.

1. The Patent Act

The Patent Act, as codified at 35 U.S.C. § 282(b), provides that the same "condition[s] for patentability" for acquiring a patent from the Patent Office also constitute invalidity defenses "in any [enforcement] action involving the validity or infringement of a patent."³⁷¹ Because statutory provisions are often assumed to bear only a single interpretation,³⁷² § 282(b) is easily read as

³⁶⁷ See In re Cuozzo Speed Techs., LLC, 793 F.3d 1297, 1301 (Fed. Cir. 2015) (en banc) (Prost, J., dissenting).

³⁶⁸ See supra note 328 and accompanying text.

³⁶⁹ See supra notes 335-38 and accompanying text.

³⁷⁰ See Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25 (codified as amended in scattered sections of 28 U.S.C.).

³⁷¹ 35 U.S.C. § 282(b) (2012).

 $^{^{372}}$ Cf. Frost, supra note 194, at 1585 (rejecting the general "assumption that a federal statute can legitimately have one, and only one, interpretation").

mandating uniformity in the legal standards for acquisition patentability conditions and enforcement invalidity defenses.³⁷³ For example, because 35 U.S.C. § 103 makes nonobviousness of the invention a condition of patentability³⁷⁴ and § 282(b) then incorporates that condition as an invalidity defense, it is natural to assume that nonobviousness must be judged by the same tests in patent acquisition and patent enforcement. Note, however, that this is at best a partial justification for coupled patent law, which extends beyond the patentability/invalidity issues addressed by § 282(b).³⁷⁵

More broadly, the assumption that § 282(b) requires coupled patent law is overly simplistic. "While the [Patent Act] sets the basic parameters for patentability and infringement, it does not specify in detail how those basic principles are to be applied."³⁷⁶ The "patent code, much like the Sherman Act, is a common law enabling statute, leaving ample room for [decision makers] to fill in the interstices."³⁷⁷ The broad principles of the Patent Act need not be implemented in the exact same manner in both acquisition and enforcement.³⁷⁸ The same general legal principles are commonly subject to different tests or standards in different contexts or jurisdictions. For example, the Restatement (Second) of Torts leaves open whether the intent requirement of battery requires intent to harm/offend or only intent to contact. Courts in different states have filled this gap differently. To some extent, this reflects disagreement over the proper interpretation of the Restatement. But it also reflects differing policy preferences.³⁷⁹

In the statutory context, Amanda Frost has rejected the emphasis on uniformity in interpretation of federal statutes and explained that "[a]s a matter of democratic theory . . . varied judicial interpretations of a single legal text are perfectly legitimate in cases where that text can reasonably be given more than one meaning."³⁸⁰ This type of variation already occurs in patent law as a matter of a conscious design choice. The international Agreement on Trade-Related Aspects of Intellectual Proper Rights ("TRIPS Agreement") requires member states to grant patents on inventions that meet certain patentability standards, including (like the Patent Act) being useful, new, and nonobvious.³⁸¹ Because

 $^{^{373}}$ Cf. Bey & Cotropia, *supra* note 128, at 294-97 (describing "[t]he identical statutory requirements for patentability and validity" to challenge the broadest reasonable interpretation standard, without referring to § 282(b)).

³⁷⁴ 35 U.S.C. § 103.

³⁷⁵ See supra Section II.A.

³⁷⁶ Burk & Lemley, *supra* note 213, at 1638.

³⁷⁷ Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. REV. 51, 53 (2010).

³⁷⁸ Burk & Lemley, *supra* note 213, at 1638-40.

³⁷⁹ See Nancy J. Moore, Intent and Consent in the Tort of Battery: Confusion and Controversy, 61 AM. U. L. REV. 1585, 1632 (2012).

³⁸⁰ Frost, *supra* note 194, at 1585.

³⁸¹ Cynthia M. Ho, Sovereignty Under Siege: Corporate Challenges to Domestic

the TRIPS Agreement (like the Patent Act) does not define these general principles, member states implement these general principles in different ways that reflect local conditions and policy preferences.³⁸² In the domestic context, Burk and Lemley argue that application of the same general principles, including statutory patentability conditions/invalidity defenses like nonobviousness, should vary among, and be tailored for, different industries.³⁸³

Nothing in the Patent Act itself mandates coupled patent law. Nor does the precedent interpreting and applying the Patent Act. Before the Federal Circuit's creation, "[t]he patent office and its reviewing court, the Court of Customs and Patent Appeals, developed and applied standards of patentability to decide whether patents should validly issue, and the regional circuit courts developed and applied their own different standards to determine whether a given patent had validly issued."384 These different standards were criticized on functional grounds,³⁸⁵ considered in Section II.C, but not as statutory violations. In Graham v. John Deere Co.,386 the Supreme Court thought the backlog in patent applications provided "a compelling reason" for the Patent Office to "strictly adhere" to the obviousness test the Supreme Court adopted for litigation, and thereby eliminate the "notorious difference between the standards applied by the Patent Office and by the courts."387 Notably absent from this conclusion was any suggestion that the Patent Office obviousness standard *must* be the same as the litigation standard.³⁸⁸ And the Federal Circuit has permitted different standards for claim indefiniteness in light of functional differences between acquisition and enforcement, even though § 282 incorporates the definiteness requirement of acquisition as an invalidity defense in litigation.389

2. The Federal Courts Improvement Act

Even if not required by the Patent Act, some commentators suggest that coupled patent law is mandated by the creation of the Federal Circuit via the FCIA. On this view, "Congress created the Federal Circuit, in part, to establish uniformity in the substantive patent law applied in USPTO proceedings and district court patent litigation proceedings."³⁹⁰ Other than giving the Federal

³⁸² Id.

³⁸⁷ *Id.* at 18-19.

Intellectual Property Decisions, 30 BERKELEY TECH. L.J. 213, 229 (2015).

³⁸³ Burk & Lemley, *supra* note 213, at 1638-41.

³⁸⁴ Jason Rantanen & Lee Petherbridge, *Disuniformity*, 66 FLA. L. REV. 2007, 2009 (2014).

³⁸⁵ Dreyfuss, *supra* note 196, at 6-7.

³⁸⁶ 308 U.S. 1 (1966).

³⁸⁸ Id.

³⁸⁹ In re Packard, 751 F.3d 1307, 1311 (Fed. Cir. 2014); see also 35 U.S.C. § 282(b)(3). (2012).

³⁹⁰ Bey & Cotropia, *supra* note 128, at 298.

Circuit jurisdiction over patent appeals from both the Patent Office and the district courts, nothing in the text of the FCIA requires or even suggests coupled patent law. Likewise, the impetus and legislative history of the FCIA focused on forum shopping resulting from variations in the patent law applied in litigation among the regional circuits.³⁹¹ "[T]he legislative history does not discuss how appeals of patent-related agency decisions should be treated. Congress instead focused on creating a single court to hear appeals of district court patent cases."³⁹² To the extent any concern existed about divergence between the Patent Office and the courts, the concern was not about differences per se, but about the overly skeptical approach several regional circuits took to patents.³⁹³

Though not mandating it, the FCIA and the creation of the Federal Circuit are relevant to understanding coupled patent law. Once given jurisdiction over appeals from both the Patent Office and the district courts, the Federal Circuit's incentive was to apply a single body of precedent to reduce its workload, simplify its task, and consolidate its authority.³⁹⁴ It achieved this by adopting as binding the precedent of the Court of Customs and Patent Appeals, which had heard appeals from the Patent Office, but not the precedent of the regional circuits.³⁹⁵ Additionally, coupled patent law probably results from the same forces that led to creation of the Federal Circuit, especially "the desire for uniformity in the application of patent law."³⁹⁶ "Uniformity has its allure in most areas of law.... But, Congress saw the lack of uniformity in patent law as a particular concern" because it discouraged investments in technological innovation by making return on such investments unpredictable.³⁹⁷

The emphasis on uniformity that once dominated patent law is increasingly questioned. Undue focus on uniformity is criticized as undervaluing the quality of patent law,³⁹⁸ stifling experimentation and learning in patent law design,³⁹⁹ and ignoring the different needs of different industries.⁴⁰⁰ Commentators

³⁹¹ Petherbridge, *supra* note 138, at 422 (describing the motivations for creation of the Federal Circuit as "diversity in patent adjudication between the various regional circuits, as well as vigorous forum shopping and wasteful collateral litigation").

³⁹² Kumar, *supra* note 117, at 1583.

³⁹³ Dreyfuss, *supra* note 196, at 6-7 (identifying differences between the Patent Office and courts as part of reason for the Federal Circuit's creation but describing the problem as "the presumption of validity was eroded by the regional courts" and "patents were so often held invalid" in litigation).

³⁹⁴ *Id.* at 21.

³⁹⁵ South Corp. v. United States, 690 F.2d 1368, 1369 (Fed. Cir. 1982) (en banc).

³⁹⁶ Nard & Duffy, *supra* note 214, at 1620.

³⁹⁷ Rantanen & Petherbridge, *supra* note 384, at 2010; Diane P. Wood, *Keynote Address: Is It Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI.-KENT J. INTELL. PROP. 1, 2 (2013).

³⁹⁸ Nard & Duffy, *supra* note 214, at 1620.

³⁹⁹ Ouellette, *supra* note 126, at 85.

⁴⁰⁰ Burk & Lemley, *supra* note 213, at 1577.

suggest eliminating the Federal Circuit's exclusive appellate jurisdiction,⁴⁰¹ permitting state courts to handle more patent-related matters,⁴⁰² and increasing transnational variation in patent law.⁴⁰³ This Article extends the increasing skepticism of uniformity's dominance in patent law to the norm of coupled patent law.

B. Decoupled Patent Law and Administrative Law Principles

The relationship between the law applied in the Patent Office and the law applied in enforcement litigation implicates more general principles about the relationship between an expert administrative agency and the federal courts.⁴⁰⁴ Over the past few decades, administrative law trends have favored harmonization of the substantive standards used by administrative agencies and reviewing courts in a way that is arguably contrary to decoupled patent law. For example, the Supreme Court's decision in *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*⁴⁰⁵ "requires a federal court to accept the agency's construction of the statute, even if the agency's reading differs from what the court believes is the best," unless "the statute unambiguously forecloses the agency's interpretation."⁴⁰⁶ Even when *Chevron* does not apply, the reviewing court must still give weight to an agency's interpretation of a statute based on its "power to persuade."⁴⁰⁷

Principles of administrative deference are not a barrier to decoupled patent law for two reasons. First, the Federal Circuit has held that the Patent Office lacks substantive rulemaking authority and therefore is not entitled to *Chevron* deference.⁴⁰⁸ Likewise, the Federal Circuit refuses to apply even the lesser deference to Patent Office determinations.⁴⁰⁹ Unlike the general administrative law trend toward courts deferring to agencies, coupled patent law results from the Federal Circuit dictating patent law standards to both the Patent Office and the district courts.⁴¹⁰

⁴⁰¹ Nard & Duffy, *supra* note 214, at 1625; Wood, *supra* note 397, at 9.

⁴⁰² Paul R. Gugliuzza, Patent Law Federalism, 2014 WIS. L. REV. 11, 48-51.

⁴⁰³ Ouellette, *supra* note 126, at 68.

⁴⁰⁴ See Dickinson v. Zurko, 527 U.S. 150 (1999) (requiring Federal Circuit review of Patent Office decisions to comply with the Administrative Procedure Act).

⁴⁰⁵ 467 U.S. 837 (1984).

⁴⁰⁶ Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 980 (2005) (citing *Chevron*, 467 U.S. at 865-66 & n.11).

⁴⁰⁷ United States v. Mead Corp., 533 U.S. 218, 235 (2001) (quoting Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944)).

⁴⁰⁸ Wasserman, *supra* note 44, at 1973 (describing and questioning existing doctrine).

⁴⁰⁹ Stuart Minor Benjamin & Arti K. Rai, *Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law*, 95 GEO. L.J. 269, 299-300 (2007).

⁴¹⁰ Burstein, *supra* note 62, at 1754-55.

Second, administrative deference doctrines are primarily standards of appellate review applicable on direct review from agency decisions.⁴¹¹ They would most naturally apply when the Federal Circuit is reviewing Patent Office decisions. Patent enforcement litigation is not direct review of administrative action but instead a private cause of action involving the assertion of private rights (though created by prior administrative action) by one private party against another private party.⁴¹² Although commentators advocating deference to the Patent Office assume it would apply in patent enforcement litigation,⁴¹³ the law is unclear. The Supreme Court has refused to apply Chevron deference in a case where, like in patent law, "Congress has expressly established the Judiciary and not the [administrative agency] as the adjudicator of private rights of action arising under the statute."⁴¹⁴ Thus, Richard Pierce, summarizing (but disagreeing with) the weight of authority in the mid-1990s, concluded that "an agency has no power to adopt a construction of an agency-administered statute that has any effect on judicial resolutions of private actions that arise under the statute."415 On the other hand, the Supreme Court more recently has repeatedly applied *Chevron* deference in private litigation not involving direct review of administrative action, though apparently without much thought.⁴¹⁶

The problems with coupled patent law described above may be informative for administrative law more generally and suggest problems with the expansion of administrative deference into the context of private litigation. Agencies are competent at designing legal rules that they themselves apply in the first instance, and courts reviewing the issuance or application of these administrative standards sensibly defer to these administrative design

⁴¹⁴ Adams Fruit Co., Inc. v. Barrett, 494 U.S. 638, 649-50 (1990).

⁴¹¹ See Michael P. Healy, *Reconciling* Chevron, Mead, and the Review of Agency Discretion: Source of Law and the Standards of Judicial Review, 19 GEO. MASON L. REV. 1, 1-3 (2011).

⁴¹² See Masur, supra note 37, at 476.

⁴¹³ See, e.g., Burstein, *supra* note 62, at 1804 (assuming deference to Patent Office interpretations of patent law would apply in patent litigation); Wasserman, *supra* note 44, at 2003-04 (same).

⁴¹⁵ Richard J. Pierce, Jr., *Agency Authority to Define the Scope of Private Rights of Action*, 48 ADMIN. L. REV. 1, 2 (1996); *see also* Kelley v. EPA, 15 F.3d 1100, 1108 (D.C. Cir. 1994) ("[D]eference is withheld if a private party can bring the issue independently to federal court under a private right of action."); Atari Games Corp. v. Oman, 888 F.2d 878, 887 (D.C. Cir. 1988) (Silberman, J., concurring in the judgment) (noting that a Copyright Office interpretation "does not mean that the judiciary would be obliged to afford deference to that position in an infringement action, which, of course, is not a direct review of an agency action governed by the Administrative Procedure Act").

⁴¹⁶ See, e.g., Auer v. Robbins, 519 U.S. 452, 457 (1997); see also Kathryn A. Watts, Adapting to Administrative Law's Erie Doctrine, 101 Nw. U. L. REV. 997, 1001 (2007) (assuming *Chevron* applies in private litigation under current Supreme Court case law).

choices.⁴¹⁷ But administrative decision makers are less competent at designing legal rules optimal for application in the first instance by generalist judges in private litigation.

Thus, administrative law principles offer little barrier to implementation of decoupled patent law. Yet, commentators, including myself, have criticized patent law's penchant for special approaches that diverge from mainstream law even on issues that are not unique to patent cases.⁴¹⁸ One might wonder whether decoupling patent law would be another example of this patent law exceptionalism.

Decoupled patent law would not truly be unique. Agencies and courts occasionally apply different legal standards even to the same issues. For example, the question of whether a trademark creates a "likelihood of confusion" arises in opposition or cancellation proceedings in the Trademark Office, as well as in district court trademark infringement litigation.⁴¹⁹ Although the basic issue is the same in both contexts, it is implemented in different ways.⁴²⁰ Historically, the rules for registration of a trademark in the Trademark Office were decoupled in a number of ways from the rules for determining protectability of a trademark in infringement litigation in the courts, and aspects of this decoupling can still be found in modern trademark law.⁴²¹

In any event, patent law may be unique in two ways that make decoupling legal standards more appropriate for patent law than other areas of law.⁴²² First, patent law's piecemeal structure, with rights created in the Patent Office but enforced in the federal courts, is not overly common.⁴²³ Second, because of the highly technical nature of patent law, the differences in context are particularly sharp, especially between specialist patent examiners and generalist judges. With that said, it is possible that the discussion of decoupled patent law in this Article can provide insights for legal design in other areas of law where the same issues must be addressed in very different contexts.

⁴¹⁷ Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837, 866 (1984).

⁴¹⁸ See Greg Reilly, Linking Patent Reform and Civil Litigation Reform, 47 LOY. U. CHI. L.J. 179, 181 (2015).

⁴¹⁹ B & B Hardware Inc. v. Hargis Indus., Inc., 135 S. Ct. 1293, 1306-07 (2015).

⁴²⁰ See id. at 1306-08.

⁴²¹ See generally Rebecca Tushnet, *Registering Disagreement: Registration in Modern American Trademark Law*, 130 HARV. L. REV. 867, 873-81 (2017) (summarizing historical and modern differences between registration and protectability).

⁴²² See Wasserman, supra note 44, at 1994 ("[P]atent exceptionalism to administrative law is justified only to the extent it is premised on the specific context of the patent system \dots ").

⁴²³ Roger Allan Ford, *The Patent Spiral*, 164 U. PA. L. REV. 827, 829 (2016).

C. The Feasibility of Decoupled Patent Law

Eliminating the norm of coupled patent law is likely to result in subtle, not fundamental, changes to the design of patent law. District courts addressing a patent law issue would first look at existing precedent developed in the litigation context—whether from other district courts or from the appellate courts—rather than precedent arising from the examination context or the guidance and manuals the Patent Office issues to its examiners. Likewise, patent examiners and other officials within the Patent Office would first look at precedent from prior patent acquisition decisions or appellate court decisions on appeal from the Patent Office. And the Federal Circuit and Supreme Court would look at prior precedent from litigation matters if a case is on appeal from the district courts or prior precedent from acquisition matters if a case is on appeal from the Patent Office.

An impenetrable wall need not exist between enforcement precedent and acquisition precedent. If precedent is absent or insufficient from prior enforcement (or acquisition) proceedings, district courts (or patent examiners) would be free to look at precedent from prior acquisition (or enforcement) proceedings. But they would not assume that the precedent from this other context is equally applicable or binding. To import legal rules from the alternative context, decision makers would have to consider the relevant contextual differences between patent acquisition and patent enforcement, as well as the principles for decoupled patent law, and justify why the same legal rules should be applied in both contexts or identify alterations necessary to reflect contextual differences. This process would be similar to how decision makers analogize to similar statutes or areas of law in resolving questions of first impression or on which there is insufficient precedent from statute or the area of law under consideration.

Although there are growing calls to diversify appellate jurisdiction in patent cases to create greater percolation and experimentation in patent law doctrines,⁴²⁴ the unitary appellate structure (in which the Federal Circuit hears appeals from both the Patent Office and district courts) is likely beneficial for implementation of decoupled patent law. The Federal Circuit would function in a supervisory rule to ensure that patent law rules are decoupled when appropriate and designed to accurately reflect the different contexts of patent acquisition and patent enforcement.⁴²⁵

Given this role for the Federal Circuit, concerns about its competence, tunnel vision, or pro-patentee bias threaten to undermine the faithful implementation of decoupled patent law.⁴²⁶ The Federal Circuit also has incentives to minimize the decoupling of patent law rules to reduce its

⁴²⁴ See, e.g., Wood, supra note 325, at 1.

⁴²⁵ See Ouellette, *supra* note 126, at 104-06 (advocating for centralized control of legal experimentation).

⁴²⁶ See supra Section I.B.1.

workload and simplify its task.⁴²⁷ To mitigate these concerns, targeted Supreme Court involvement in patent law would be necessary, with the Court intervening if the Federal Circuit failed to adopt decoupled rules when appropriate or adopted rules that did not appropriately account for the different settings of the patent system. This is analogous to John Golden's vision of the Supreme Court as "prime percolator," "confin[ing] its review of substantive patent law to situations where there is a substantial risk that Federal Circuit precedent has frozen legal doctrine either too quickly or for too long," and issuing decisions that are "modest, seeking to spur, rather than foreclose, subsequent legal development."⁴²⁸

An additional, or alternative, way to guarantee faithful implementation of decoupled patent law would be to give deference, Chevron or otherwise, to the Patent Office's determinations of the substantive legal rules for patent acquisition. Commentators frequently call for greater deference to Patent Office decisions.⁴²⁹ If patent law rules were decoupled, the Patent Office's interpretation of patent law would be entitled to deference only within the Patent Office and on appeal from Patent Office proceedings, not in enforcement proceedings governed by different legal rules. Though the Federal Circuit has concluded otherwise, the Patent Office arguably has the authority to create substantive rules for patent acquisition (though not patent enforcement) to which reviewing courts must defer, as the Patent Office is given the authority to issue regulations that "shall govern the conduct of proceedings in the [Patent] Office."430 Limiting the deference owed to the Patent Office on rules for patent acquisition, and allowing courts to develop independent rules for patent enforcement, would reduce existing concerns about capture, tunnel vision, and bias in giving deference to the Patent Office.

CONCLUSION

Those charged with designing patent law—Congress, the Supreme Court, the Federal Circuit, and scholars—have struggled mightily with the task. One, though certainly not the only, reason for their struggles is that they are attempting an impossible task: designing a single set of legal rules that can be reliably applied in the very different settings of the patent system. Starting from the premise that legal rules must account for the relevant context and decision makers, this Article suggests that decoupling the rules for patent acquisition and patent enforcement is a useful tool to aid in the design of patent law. The substantive content of those decoupled legal rules is left for future

⁴²⁷ See Dreyfuss, supra note 196, at 21.

⁴²⁸ John M. Golden, *The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law*, 56 UCLA L. REV. 657, 662 (2009).

⁴²⁹ See, e.g., Burstein, *supra* note 62, at 1747; Wasserman, *supra* note 44, at 1959-60.

⁴³⁰ 35 U.S.C. § 2(b)(2)(A) (2012); *see also* Merck & Co., Inc. v. Kessler, 80 F.3d 1543, 1550 (Fed. Cir. 1996) (interpreting the statute as giving the Patent Office the power to create procedural rules, not substantive patent law standards).

work. But if we stop thinking of patent law as a unitary body of doctrines that must be applied equally across the patent system, the task of designing optimal patent law rules becomes far less daunting.