As the volume of intellectual property (IP) increases and businesses such as IP “trolls” that aggressively assert those exclusive rights proliferate, there is significant social value in ensuring that only valid intellectual property remains enforceable. But the federal courts have recently developed special standing rules for intellectual property challengers that are narrower than those the Supreme Court has adopted in other areas of the law. These rules confer standing only when it appears that an infringement suit is temporally or legally proximate – when challengers have come close to infringing and IP holders have signaled that they are willing to assert their rights. In this Article, I criticize this “proximity” criterion on conceptual, doctrinal, and normative grounds and provide the first comprehensive account of standing to challenge the validity of intellectual property. Conceptually, I argue that because intellectual property is effectively a form of regulation, its effects sweep more broadly than the courts currently appreciate. When the risk of infringement liability deters business and investment activities, the affected parties are injured and can bring a “quiet title” action to obtain certainty about the validity of adverse intellectual property. I situate this theory in the context of the Supreme Court’s broader standing jurisprudence and explain why there is no reason to treat intellectual property challenges differently from other cases. Finally, I argue as a normative matter that the lower courts’ restrictive approach to standing creates a misalignment between those who have incentives to challenge intellectual property and those who have access to the courts. Allowing challenges not only from actual competitors but also from potential competitors will result in more socially valuable validity litigation.
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INTRODUCTION

Intellectual property has become a serious business risk. It is produced in greater quantities than ever before.¹ A whole industry based upon threats of intellectual property infringement – patent and copyright trolls – has sprung up, leading to a surge in intellectual property litigation.² A judgment of infringement can have devastating effects for a business, subjecting it to crippling damages and an injunction against continuing any infringing operations.³

What is a business facing this risk to do in planning its activities? Innovation takes time and money. Investments in innovation often must be made well before new products or processes actually see the light of day. But it is very difficult to assess intellectual property risks because the validity of intellectual property is uncertain until it is tested in court.⁴ In most fiscal year 2012, the United States Patent and Trademark Office (PTO) issued almost 250,000 patents and more than 180,000 certificates of trademark registration. See UNITED STATES PATENT & TRADEMARK OFFICE, PERFORMANCE AND ACCOUNTABILITY REPORT: FISCAL YEAR 2012, at 175 tbl.1, 189 tbl.16 (2012). Even just ten years ago, those numbers were 161,000 and 133,000, respectively. See id. at 179 tbl.6, 192 tbl.19.


⁴ Patents and registered trademarks issue with certain presumptions that favor the rights holders when their rights are the subjects of judicial challenge, but courts retain authority finally to adjudicate their validity. For patents, see 35 U.S.C. § 282(a) (“A patent shall be presumed valid.”); Microsoft Corp. v. i4i Ltd. P’Ship, 131 S. Ct. 2238, 2244 (2011) (requiring proof of invalidity by clear and convincing evidence). For trademarks, the Lanham Act provides that registration of a mark constitutes “prima facie evidence of the validity of the registered mark,” 15 U.S.C. § 1115(a), and affords the registrant certain favorable presumptions, see id. When a mark has been registered and subsequently “is in continuous use for five consecutive years” without a successful or pending challenge to the validity of the mark in court or in the PTO, the
circumstances, innovative companies must either avoid any potentially infringing activity or must make fixed investments despite the risk that they can be held up later through infringement litigation.

If this hypothetical business were a real estate developer uncertain about whether it was authorized to build on a parcel of land, it could resolve the uncertainty through a quiet title action. But in recent years the federal courts have developed a set of standing rules that prevent most developers of intellectual property, rather than real property, from bringing such an action. Instead of making the familiar inquiry into standing – whether a plaintiff has been injured in fact, by the defendant, in a manner redressable by a favorable judicial ruling – the Federal Circuit and other courts of appeals inquire into the temporal and legal proximity of an infringement suit. A plaintiff can challenge the validity of intellectual property only if she is likely to be sued for infringement – if she has come close to infringing and the defendant has signaled a willingness to assert the intellectual property.

This Article critiques these standing rules. It argues that the courts of appeals have relied upon a mistaken conception of the injury that arises from invalid intellectual property and have therefore crafted intellectual property-specific standing rules that are more restrictive than those called for under the Supreme Court’s broader standing precedents. In so doing, the courts have also created a misalignment between those who have the incentive to challenge intellectual

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*mark “shall be incontestable” if the mark’s owner files an appropriate affidavit. 15 U.S.C. § 1065. The registration of a mark that has become incontestable is “conclusive evidence of the validity of the registered mark,” id. § 1115(b), and the grounds on which its validity may be case in doubt are narrowed, see id. §§ 1064(3), (5), 1115(b); Park ‘N Fly, Inc. v. Dollar Park & Fly, Inc., 469 U.S. 189, 196-97 (1985). Unregistered trademarks, which are nevertheless enforceable against putative infringers, see, e.g., Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 767-68 (1992), are subject only to judicial review, see id. at 768, as are copyrights.


7 See infra Part I.A.
property and those who have standing to do so, resulting in fewer and lower quality challenges than may be socially optimal.

Standing to sue has not until recently been a significant issue in intellectual property litigation. In the typical case, a patent, copyright, or trademark holder files suit against an accused infringer. The infringement defendant, in turn, can assert as a defense that the intellectual property is invalid and can seek, by way of counterclaim, a declaratory judgment voiding the intellectual property.\(^8\) In this posture, there is no question that the infringement defendant has standing to challenge the validity of the intellectual property that is being asserted against her. Her counterclaim is part and parcel of the same “[c]ase[]” or “[c]ontrovers[y]” that arose when she was sued for infringement.\(^9\)

As intellectual property and intellectual property litigation have proliferated, however, proactive validity challenges have become more common. Indeed, Congress acknowledged the importance of more and better mechanisms for weeding out invalid intellectual property when it enacted new patent review procedures as part of the America Invents Act.\(^{10}\) Validity challenges may take two forms, but both require access to the courts. The first is a declaratory judgment action filed in the district court. Although in the past these actions were usually brought only by licensees or infringement defendants seeking a favorable forum, groups such as the ACLU, the Public Patent Foundation, and the Electronic Frontier Foundation are adopting a public interest model of patent litigation reminiscent of that found in civil rights or environmental law. The

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\(^9\) U.S. CONST. art. III, § 2.

most prominent example of this litigation model is the challenge to the validity of breast cancer
gene patents in *Association for Molecular Pathology v. Myriad Genetics*.11

The second type of validity challenge is an appeal from administrative post-grant review
proceedings. As noted above, a central feature of the new America Invents Act is a set of post-
grant review procedures through which any “person who is not the owner of a patent” may file a
petition with the U.S. Patent & Trademark Office (PTO) “to cancel as unpatentable 1 or more
claims of a patent.”12 The Lanham Act has long provided similar procedures for challenging
registered trademarks.13 But those agency proceedings are not final. Any party, including the
challenger, may appeal the agency’s determination in federal court.14 A definitive ruling about
the validity of intellectual property therefore requires the challenger to have constitutional
standing to bring the action in federal court, regardless whether the challenge originates there or
in an administrative agency.15

In 2007, the Supreme Court reaffirmed in *MedImmune, Inc. v. Genentech, Inc.*16 that the
justiciability of a case challenging intellectual property is subject to the same constitutional
constraints as any other case.17 In the years since, however, the Federal Circuit’s patent cases
have become increasingly anachronistic and disconnected from the Supreme Court’s (and other
circuits’) standing jurisprudence. This doctrinal confusion has spread to trademark and

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11 133 S. Ct. 2107 (2013).
12 35 U.S.C. §§ 311(a), 321(a); 311(b), 321(b).
15 See infra note 252 and accompanying text.
17 See id. at 132 n.11 (rejecting Federal Circuit’s “reasonable apprehension of suit” test for
declaratory judgment jurisdiction in patent cases).
copyright law as well,\(^\text{18}\) as courts adjudicating non-patent intellectual property cases have looked to patent law as a model.\(^\text{19}\)

As judicial and administrative validity challenges become important mechanisms to weed out invalid intellectual property and to check the behavior of patent or copyright trolls, standing is being litigated with increasing frequency.\(^\text{20}\) Indeed, aspects of intellectual property standing appeared on the Supreme Court’s docket twice in the last Term – in *Association for Molecular Pathology*, the gene patents case, and in *Already, LLC v. Nike Inc.*\(^\text{21}\) a trademark case. Neither case definitively resolved the issue.\(^\text{22}\) Standing questions therefore continue to vex courts and litigants in validity cases.

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\(^{18}\) See, e.g., *Nike, Inc. v. Already, LLC d/b/a Yums*, 663 F.3d 89, 96 (2d Cir. 2011), aff’d 131 S. Ct. 721 (2013) (“[P]rinciples applicable to declaratory judgment actions involving patents are generally applicable with respect to trademarks.”) (quoting *Starter Corp. v. Converse, Inc.*, 84 F.3d 592, 596 (2d Cir. 1996)); *Texas v. West Pub. Co.*, 882 F.2d 171, 175 (5th Cir. 1989) (copyright).

\(^{19}\) An additional word about copyright is appropriate here. The standing analysis in this paper turns in part on the distinction between validity and infringement; that is, the delineation or definition of an exclusive right and its enforcement. This distinction is a central feature of patent and registered trademark regimes, in which applicants first demonstrate their claim to an exclusive right before the PTO, which then approves or disapproves the delineation of the right. Copyright generally does not have that structure. In copyright cases, liability turns on actual copying. It therefore makes little sense to ask the predicate question whether the copyright is valid. That *usually* is not a legal question that can be separated from the infringement defendant’s copyright. But sometimes it can be, as where there is a distinct legal question about the eligibility of a class of materials for copyright under the relevant statute, for example. See *infra* notes 43 - 44 and accompanying text. My argument is therefore limited with respect to copyright. It does not apply to the run-of-the-mill copyright case, but it does apply in those instances where the structure of copyright analysis resembles that of trademark and patent.

\(^{20}\) In 2012 alone, the Federal Circuit issued six decisions on declaratory judgment jurisdiction in patent cases.

\(^{21}\) 133 S. Ct. 721 (2013).

\(^{22}\) In *Already*, the Court considered whether a covenant not to sue for past or present infringing activity mooted a declaratory judgment action when the plaintiff alleged a continued risk of future injury. The Court, however, construed the relevant covenant to include future activity, avoiding the question whether a risk of infringement liability was sufficient for standing. See *id.* at 728-29. Although the standing issue was contested in *Association for Molecular Pathology*,
This Article offers the first comprehensive treatment of standing to challenge the validity of intellectual property. It makes three contributions. First, as a conceptual matter, I develop a novel account of the injury that may arise from the existence of invalid intellectual property. Intellectual property rights are rights in rem. They purport to exclude the world from the subject matter they cover. As such, they regulate the primary behavior of those in the relevant field. These characteristics should serve to expand rather than narrow the potential class of plaintiffs in validity challenges. Because intellectual property is of uncertain validity, its mere presence creates risk and uncertainty that deters productive investments. This risk itself is injury in fact. It prevents people from engaging in conduct that, if the intellectual property were invalid, they otherwise would be entitled to undertake.

Second, I situate the problem of intellectual property standing within the broader doctrinal context of the Supreme Court’s justiciability precedents. I argue that there is nothing about intellectual property that justifies the development of special rules that depart from the Supreme Court’s general standing principles. The Supreme Court recognizes in a variety of contexts that increases in risk or uncertainty surrounding regulation can give rise to standing the Court affirmed the Federal Circuit’s finding that at least one plaintiff had standing in a brief footnote with little reasoning. See 131 S. Ct. at 2115 n.3.

23 Megan La Belle analogizes patent litigation to traditional public law litigation. See Megan M. La Belle, Patent Law as Public Law, 20 GEO. MASON L. REV. 41 (2012). Although La Belle argues for expanded standing on that ground, see id. at __, she does not engage the question how intellectual property results in Article III injury.

where a judicial determination reduces or eliminates the risk or uncertainty. Intellectual property challenges fit easily into these precedents and their underlying normative commitments.

Finally, I move beyond the existing literature to make the normative argument not only that broader standing will produce more validity challenges, but also that a return to classic standing principles will remedy a misalignment between those who can bring intellectual property validity challenges and those who have the incentive to do so. Direct competitors, the preferred plaintiffs under current rules, often have an individual incentive to expend time and money on validity litigation that does not align with that of other competitors or society as a whole. They bring fewer validity challenges on narrower grounds than might other plaintiffs such as indirect or potential competitors. Allowing challenges from both actual and potential competitors to proceed in court would therefore enhance the social value of intellectual property litigation.

The rest of the Article proceeds as follows. In Part I, I critically describe the Federal Circuit’s patent standing jurisprudence and its adoption by other courts adjudicating intellectual property disputes. I argue that these courts have made two fundamental errors in their evaluation of the justiciability of cases alleging that intellectual property is invalid. First, they mistakenly conflate validity and infringement, two separate issues in intellectual property litigation. Second, they elide the difference between constitutional and prudential concerns in the justiciability

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25 Others have articulated a variety of reasons why expanded standing might be good policy, but have not expressly linked standing to the incentive to bring validity challenges. See Nicholas D. Walrath, Note, Expanding Standing in Patent Declaratory Judgment Actions to Better Air Public Policy Considerations, 88 N.Y.U. L. REV. 476 (2013) (increase challengers likely to raise public policy concerns); La Belle, supra note 23 (same); Chester S. Chuang, Unjust Patents and Bargaining Breakdown: When is Declaratory Relief Needed?, 64 S.M.U. L. REV. 895 (2011) (arguing that declaratory relief should be more readily available for vague patent claims); Kali N. Murray, Rules for Radicals: A Politics of Patent Law, 14 J. INTELL. PROP. L. 63 (2006) (arguing for broad standing to allow multiple stakeholders to shape patent policy).
analysis. Part II corrects these errors. It focuses on “the core component of standing,” “an essential and unchanging part of the case-or-controversy requirement.” It explains how the presence of potentially adverse intellectual property in a field of innovation creates risk and uncertainty for others working in that field. That uncertainty constitutes an injury in fact. The injury is caused by the intellectual property holder who applies for and defines the scope of the intellectual property, and the United States Patent and Trademark Office (PTO), which issues patents and trademark registrations. And the injury is redressable by a holding that the intellectual property is, in fact, invalid. My analysis results in generally broader standing than the courts’ current cases appear to permit. Part III defends this result as a normative matter. It argues that expanded standing to challenge intellectual property is consistent with sound intellectual property policy. Access to the courts should be broader than current law allows in order to enable more efficient screening of invalid intellectual property and, in particular, to facilitate challenges that those who would qualify under more stringent standing criteria might fail to bring. To the extent that broadening standing might prove unduly vexatious to rights holders, I offer a modest solution – the limited application of prudential doctrines – and a more radical solution that would direct litigation toward the government rather than individuals.

I. CONFUSION AND ERROR IN INTELLECTUAL PROPERTY STANDING

This Part explains the evolution of the courts’ intellectual property standing holdings and argues that two errors have pervaded cases in this area: the conflation of constitutional and prudential justiciability doctrines and a failure to appreciate the differences between infringement and validity actions. As the class of potential plaintiffs expands and Congress adds

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causes of action, achieving a clear and predictable IP standing doctrine will become increasingly important.

A. The evolution of intellectual property exceptionalism in standing doctrine

Most of the law concerning the justiciability of actions challenging intellectual property has been developed in the context of declaratory judgment actions. The Declaratory Judgment Act provides that “[i]n a case of actual controversy within its jurisdiction, . . . any court of the United States . . . may declare the rights and other legal relations of any interested party seeking such declaration.” The Supreme Court has long held that the “case of actual controversy” language in the statute incorporates Article III’s strictures on federal jurisdiction. So actions brought under the Declaratory Judgment Act are subject to the same justiciability analysis as any other actions. They still must satisfy the requirements of standing, mootness, and ripeness.

One of the original uses of the Declaratory Judgment Act was to seek a declaration that intellectual property was invalid. That particular use remains common. Prior to 2007, the Federal Circuit articulated and consistently applied a two-part test for determining whether a court had jurisdiction to hear a claim under the Declaratory Judgment Act that a patent was invalid. For jurisdiction to be proper, the court required “both (1) an explicit threat or other

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29 See Franchise Tax Bd. v. Construction Laborers Vacation Trust for S. Cal., 463 U.S. 1, 17 (1983) (“[T]he Declaratory Judgment Act was intended to affect only the remedies available in a federal district court, not the court’s jurisdiction.”).
30 See EDWIN BORCHARD, DECLARATORY JUDGMENTS 803 (2d ed. 1941).
action by the patentee, which creates a reasonable apprehension on the part of the declaratory plaintiff that it will face an infringement suit, and (2) present activity which could constitute infringement or concrete steps taken with the intent to conduct such activity.” The court was rarely clear about the rationale for this test. Its reasoning seemed to be simply that an “actual controversy” under the Declaratory Judgment Act was sufficient for the exercise of Article III jurisdiction, and the two-part test could be used to determine whether such an “actual controversy” existed. The court explained that there was no controversy unless the defendant expressed an “intent to enforce its patent” and the plaintiff had “a true interest to be protected by the declaratory judgment.” In the court’s view, it seems, there was only an “actual controversy” when there was “an underlying legal cause of action that the declaratory defendant could have brought or threatened to bring, if not for the fact that the declaratory plaintiff had preempted it.” Only, therefore, when a declaratory plaintiff could have been the defendant in an infringement suit was she allowed first to file a declaratory judgment action.

The Federal Circuit viewed its test as a constitutional requirement for jurisdiction. It therefore applied that test across a wide range of fact patterns and procedural postures. The most straightforward were instances where the declaratory judgment was sought as a counterclaim in an infringement suit. In that circumstance, the “reasonable apprehension” of suit had already

32 *BP Chem.*, 4 F.3d at 978.
33 See, e.g., *Teva Pharm.*, 395 F.3d at 1331 (“The [Declaratory Judgment] Act, which parallels Article III of the Constitution, requires an actual controversy between the parties before a federal court may exercise jurisdiction.”) (internal quotation marks omitted); *Gen-Probe*, 359 F.3d at 1379 (same); *Arrowhead*, 846 F.2d at 735 (same).
34 *Arrowhead*, 846 F.2d at 736.
35 *Microchip Tech.*, 441 F.3d at 943.
36 See, e.g., *MedImmune*, 427 F.3d at 964-65; *Teva*, 395 F.3d at 1333; *Gen-Probe*, 359 F.3d at 1382; Dolak, supra note 24, at 423-24.
matured into an actual suit, and so the test was satisfied. But the court also held that even after a suit was filed, the patent holder could unilaterally divest the court of jurisdiction over a declaratory judgment counterclaim by moving to dismiss the original infringement action and making a covenant not to sue again over the defendant’s then-existing products or conduct. The court held that licensees were never in reasonable apprehension of suit so long as they continued to make royalty payments and did not breach their licenses; the license agreement “obliterate[s] any reasonable apprehension” that the licensee will be sued for infringement. As to parties without a pre-existing relationship, the court developed a fact-specific jurisprudence about what constitutes sufficient threats of litigation to place a declaratory judgment plaintiff in “reasonable apprehension of suit.”

The Federal Circuit itself applied the same standards to trademark cases that it heard. Other courts adjudicating non-patent declaratory judgment disputes generally followed the Federal Circuit’s lead. In trademark litigation, for example, several circuits adopted the Federal Circuit’s two-part test in cases that paralleled patent litigation – where, for example, a competitor sought a declaration that a trademark was invalid before undertaking activity that might

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37 See Arrowhead, 846 F.2d at 736 (“If defendant has expressly charged a current activity of the plaintiff as an infringement, there is clearly an actual controversy, certainty has rendered apprehension irrelevant, and one need say no more.”).
38 See Super Sack, 57 F.3d at 1058-59. Indeed, prior to the Supreme Court’s decision in Cardinal Chemical Co. v. Morton International, Inc., 508 U.S. 83 (1993), the Federal Circuit consistently held that affirmance of a judgment of noninfringement justified vacating a declaratory judgment of invalidity because “the finding of noninfringement has entirely resolved the controversy between the litigants by resolving the initial complaint brought by the patentee.” Id. at 91-92. The Supreme Court rejected this practice and its rationale. See infra notes 130 - 137 and accompanying text.
39 Gen-Probe, 359 F.3d at 1381.
40 See, e.g., BP Chem., 4 F.3d at 978-80.
potentially have infringed the mark. Courts adjudicating copyright cases also adopted the standard set forth in the Federal Circuit’s patent jurisprudence. The Fifth Circuit, for example, did so in a case brought by the state of Texas to declare invalid West Publishing’s copyright in certain aspects of its compilation of Texas’s statutory law. And the D.C. Circuit even applied the test to a constitutional challenge to a private copyright law.

The Supreme Court rejected the “reasonable apprehension of suit” test in MedImmune, Inc. v. Genentech, Inc. In that case, the plaintiff MedImmune was a licensee of the defendant Genentech. When a dispute over whether a patent was covered by the license arose, MedImmune continued to pay the demanded royalties – it was unwilling to risk the possibility of treble damages and an injunction against selling a product that accounted for more than 80 percent of its revenue in an infringement action – but also brought a declaratory judgment to invalidate Genentech’s patent. The Federal Circuit held that the courts lacked jurisdiction over the action because, so long as MedImmune paid royalties under the license, MedImmune had no reasonable apprehension of suit. The Supreme Court reversed. The Court acknowledged that MedImmune’s “own acts . . . eliminate the imminent threat of harm” because “[a]s long as . . .

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42 See, e.g., Starter Corp. v. Converse, Inc., 84 F.3d 592, 596 (2d Cir. 1996) (“Declaratory judgment actions involving trademarks are analogous to those involving patents, and principles applicable to declaratory judgment actions involving patents are generally applicable with respect to trademarks.”) (internal citations omitted); Cardtoons, L.C. v. Major League Baseball Players Ass’n, 95 F.3d 959, 965-66 (10th Cir. 1996) (relying on Spectronics Corp. v. H.B. Fuller Co., 940 F.2d 631, 634 (Fed. Cir. 1991)).
46 Id. at 122.
47 Id.
48 See id.
payments are made, there is no risk that [Genentech] will seek to enjoin [MedImmune’s] sales.”

But the Court expressly rejected the “reasonable apprehension of suit” test. Instead, the Court reiterated that “the question in each case is whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.”

Because MedImmune sought a declaration of actively contested rights, its own reluctance to expose itself to liability was no barrier to bringing a declaratory judgment action. As the Court wrote: “The rule that a plaintiff must destroy a large building, bet the farm, or (as here) risk treble damages and the loss of 80 percent of its business before seeking a declaration of its actively contested legal rights finds no support in Article III.”

In the years since the *MedImmune* decision, the Federal Circuit and other courts of appeals have not been consistent either in their articulation of the legal standards for justiciability in IP validity actions or in their applications of those standards across different fact patterns. But a pattern has emerged in which, once again, the likelihood of standing depends upon how close the parties are to engaging in infringement litigation.

One strand of the case law has adopted a weaker version of the pre-*MedImmune* two-part test. In *SanDisk Corp. v. STMicroelectronics*, the first case the Federal Circuit decided after *MedImmune*, the court acknowledged that “[t]he Supreme Court’s opinion in *MedImmune* represents a rejection of [the] reasonable apprehension of suit test.” But it nevertheless held that “jurisdiction generally will not arise on the basis that a party learns of the existence of a

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49 *Id.* at 128.
50 *See id.* at 132 n.11.
51 *Id.* at 127.
52 *Id.* at 134.
53 480 F.3d 1372 (Fed. Cir. 2007).
54 *Id.* at 1380.
patent owned by another or even perceives such a patent to pose a risk of infringement, *without some affirmative act by the patentee.* Subsequent cases have made clear that the patent holder must take some threatening action directed at the plaintiff before the plaintiff can file a declaratory judgment action. With respect to the second prong of the pre-*MedImmune* standard, which focused on the declaratory judgment plaintiff’s conduct, the Federal Circuit has continued to hold that the plaintiff must demonstrate some “meaningful preparation to conduct potentially infringing activity.” Other courts have disagreed.

This line reached its apotheosis in *Association for Molecular Pathology*, the gene patents case. In that case, the court held that “to establish an injury in fact traceable to the patentee, a declaratory judgment plaintiff must allege both (1) an affirmative act by the patentee related to the enforcement of his patent rights, and (2) meaningful preparation to conduct potentially infringing activity.” This test is quite similar to that which the Supreme Court disapproved in *MedImmune*. The analysis is roughly the same, just less demanding. Indeed, the Federal

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55 *Id.* at 1381 (emphasis added).
56 See, e.g., *Association for Molecular Pathology v. USPTO*, 653 F.3d 1329, 1344 (Fed. Cir. 2012); *Innovative Therapies, Inc. v. Kinetic Concepts, Inc.*, 599 F.3d 1377, 1382 (Fed. Cir. 2010) (holding that “the fact that [the patent holder] had filed infringement suits against other parties . . . does not, in the absence of any act directed toward [the plaintiff], meet the minimum standard” for jurisdiction).
57 *Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 880 (Fed. Cir. 2008); see also *SanDisk*, 480 F.3d at 1380 & n.2 (noting that *MedImmune* only rejected the “reasonable apprehension of suit” prong).
58 See *Surefoot LC v. Sure Foot Corp.*, 531 F.3d 1236, 1242 n.3 (10th Cir. 2009) (“[W]e hold that both aspects of the two-part test . . . have now been retired from their status as the touchstones of declaratory judgment jurisdiction in intellectual property cases.”).
59 *Association for Molecular Pathology*, 653 F.3d at 1343 (citations omitted).
60 Compare *id.*, with *GenProbe*, 359 F.3d at 1380 (“There must be both (1) an explicit threat or other action by the patentee, which creates a reasonable apprehension on the part of the declaratory judgment plaintiff that it will face an infringement suit, and (2) present activity which could constitute infringement or concrete steps taken with the intent to conduct such activity.”).
Circuit has at times described *MedImmune*’s impact solely as “lower[ing] the bar”\(^{61}\) or creating a “more lenient legal standard”\(^{62}\) for declaratory judgment jurisdiction rather than fundamentally changing the legal analysis.

The *Association for Molecular Pathology* plaintiffs were a group of physicians, medical researchers, and professional organizations all of whom claimed that they were prevented from carrying out diagnostic genetic testing by the presence of Myriad’s patents on the human genes associated with an increased risk of breast cancer.\(^{63}\) The court first held that only those plaintiffs who Myriad had personally threatened with litigation had standing, despite the widespread knowledge that Myriad vigorously enforced its patent rights as a general matter.\(^{64}\) Of the three remaining plaintiffs who had been the targets of royalty demands, cease-and-desist letters, or the like, only one alleged that if the patents were declared invalid he would immediately begin genetic testing.\(^{65}\)

Other panels of the Federal Circuit have articulated different tests for standing in declaratory judgment actions. Some have focused on a “mirror image” theory of declaratory judgment jurisdiction, in which a case is justiciable only if there is “an underlying legal cause of action that the declaratory defendant could have brought or threatened to bring.”\(^{66}\) A few have

\(^{61}\) *Hewlett-Packard Co. v. Acceleron LLC*, 587 F.3d 1358, 1361 (Fed. Cir. 2009).

\(^{62}\) *Micron Tech., Inc. v. Mosaid Techs., Inc.*, 518 F.3d 897, 902 (Fed. Cir. 2008).

\(^{63}\) See *id.* at 1340-41.

\(^{64}\) See *id.* at 1344.

\(^{65}\) See *id.* at 1345-46. The Supreme Court affirmed the Federal Circuit’s standing holding on different grounds: that the Federal Circuit’s standing finding was consistent with *MedImmune*. See *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 131 S. Ct.

\(^{66}\) *Arris Group, Inc. v. British Telecommm.*, 639 F.3d 1368, 1374 (Fed. Cir. 2011); see also *Powertech Tech. Inc. v. Tessera, Inc.*, 660 F.3d 1301, 1306 (Fed. Cir. 2011); *Creative Compounds, LLC v. Starmark Labs.*, 651 F.3d 1303, 1316 (Fed. Cir. 2011); *Benitec Australia, Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340, 1344 (Fed. Cir. 2007). These cases cite *Microchip Tech. Inc. v. Chamberlain Group, Inc.*, 441 F.3d 936 (Fed. Cir. 2006), a pre-*MedImmune* case which held that “[t]he concepts of ‘adverse legal rights’ and ‘legal risk’ used in prior cases to describe
placed the inquiry in the context of standing or ripeness doctrines more generally. More often the court has chosen to analyze the justiciability of a particular case directly under the standards announced in *MedImmune*. The court will, for example, simply restate *MedImmune*’s holding that “the fundamental inquiry [is] ‘whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment,’” and then proceed to focus on the aspect of that statement that seems most directly implicated by the facts of the case. These cases appear to turn on ad hoc determinations whether both the plaintiff and the defendant have done enough for the court to conclude that they are in an active dispute with each other that looks and feels close to an infringement action.

B. Two errors in the courts’ assessment of intellectual property standing

The confusion above reflects two fundamental errors that courts have been making in their analysis of the justiciability of IP validity disputes. First, they have been insufficiently clear about whether their analyses arise from constitutional or prudential considerations. Second, they have conflated the characteristics of infringement and validity actions.

1. Constitutional or prudential standing

the standard for jurisdiction require that there be an underlying legal cause of action that the declaratory defendant could have brought or threatened to bring, if not for the fact that the declaratory plaintiff has preempted it.” *Id.* at 943 (emphasis added, brackets omitted).


69 See *id.* at 1328-31; *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1282-83 (Fed. Cir. 2012) (focusing on “reasonable apprehension of suit” arising from unasserted claims).
The various doctrines of justiciability – standing, mootness, and ripeness – are derived both from Article III of the Constitution and from prudential concerns about the management of the caseload of the federal courts. The former limits the jurisdiction of the federal courts to “cases and controversies.”\(^{70}\) This is generally interpreted as a strict bar on the power of the courts to hear a case. Parties cannot waive constitutional standing objections. And the courts have an independent obligation to ensure that a case or controversy exists before deciding the merits of the action.\(^{71}\) Prudential requirements, by contrast, are not jurisdictional in the same sense. They do not demarcate the boundaries of the courts’ constitutional authority, but instead represent reasonable limits on jurisdiction drawn as a matter of judicial policy.\(^{72}\)

These dual concerns can be found in each of the justiciability doctrines. Standing’s constitutional dimension, for example, can be found in the requirement that a plaintiff show injury in fact, causation, and redressability.\(^{73}\) Indeed, the Supreme Court has held that these requirements represent the “irreducible constitutional minimum” threshold for jurisdiction.\(^{74}\) Standing’s prudential dimension, by contrast, involves primarily an inquiry into whether the plaintiff is within the “zone of interests” that the statute creating a given cause of action was meant to protect.\(^{75}\) Determining whether a case is “ripe” for review requires the court to evaluate “(1) the fitness of the issues for judicial decision, and (2) the hardship to the parties of withholding court consideration.”\(^{76}\) Although the Court has held that ripeness reflects both constitutional and prudential considerations, it has never been clear about the boundary between

\(^{70}\) U.S. CONST. art III, § 2.


\(^{73}\) See Lujan, 504 U.S. at 560; Friends of the Earth, 528 U.S. at 180-81.

\(^{74}\) Lujan, 504 U.S. at 560.


\(^{76}\) National Park Hospitality Ass’n v. Department of Interior, 538 U.S. 803, 808 (2003).
the two.\textsuperscript{77} And while mootness is often thought of as “standing set in a time frame”\textsuperscript{78} – that is, the plaintiff must have standing throughout the course of the litigation – there are several well developed prudential exceptions to mootness that allow a court to retain jurisdiction.\textsuperscript{79}

The courts of appeals described above often conflate constitutional and prudential concerns. The various tests that they use to evaluate the justiciability of IP validity challenges do not track neatly the lines the Supreme Court has drawn between standing and ripeness. Take, for example, the seeming requirements that the IP holder take enforcement steps directed at the plaintiff and that the plaintiff engage in meaningful preparation to infringe. These requirements do not map clearly onto any of the traditional standing requirements. The Federal Circuit instead has simply stated that together they demonstrate an injury in fact fairly traceable to the defendant.\textsuperscript{80} But these factors also sound in more prudential ripeness concerns. They seem to be directed toward the question whether the case is appropriately well developed for judicial review, or a gestalt inquiry into whether the case is appropriate for adjudication.

To some extent, it is unsurprising that the courts of appeals have blended constitutional and prudential concerns in their analyses. As described above, most of those cases have been brought as actions under the Declaratory Judgment Act. And the Supreme Court’s jurisprudence regarding the justiciability of declaratory judgment actions itself conflates the two.\textsuperscript{81} Nevertheless, it is important to consider constitutional and prudential concerns separately. That is

\textsuperscript{78} Friends of the Earth, 528 U.S. at 190.
\textsuperscript{79} See id. at 190-91 (describing exceptions to mootness for “voluntary cessation” and “capable of repetition yet evading review”).
\textsuperscript{80} See Association for Molecular Pathology, 689 F.3d at 1318.
\textsuperscript{81} See, e.g., MedImmune, 549 U.S. at 128 n.8 (“The justiciability problem that arises, when the party seeking declaratory relief is himself preventing the complained-of injury from occurring, can be described in terms of standing . . . or in terms of ripeness . . .”).
because constitutional standards of justiciability represent an “irreducible . . . minimum” for jurisdiction. Because they arise under the Constitution, they apply across procedural postures. And they cannot be abrogated by statute. The constitutional standard for jurisdiction in IP validity cases will therefore apply equally well to cases brought under the Declaratory Judgment Act and appeals from agency post-grant review proceedings.\(^\text{82}\) Prudential concerns, on the other hand, will vary across postures.

2. Infringement or validity actions

In the declaratory judgment actions that have formed much of the basis for the courts’ existing IP standing jurisprudence, many courts treat actions for declarations of noninfringement and invalidity identically. Although the Federal Circuit, for example, has recognized that the two may be different,\(^\text{83}\) it has routinely applied its analysis of noninfringement claims to invalidity challenges.\(^\text{84}\) And in cases that raise both challenges, the court routinely decides the justiciability of both challenges on the basis of facts that are relevant only to noninfringement – whether, for example, a technology is sufficiently well developed to determine whether it infringes a patent.\(^\text{85}\)

But the two are quite different from one another. As the Supreme Court has recognized, “[a] party seeking a declaratory judgment of invalidity presents a claim independent of the

\(^{82}\) See infra note 252 and accompanying text.

\(^{83}\) See Prasco, 537 F.3d at 1342 n.12 (“Prasco had sued only for a declaratory judgment of non-infringement. We thus have no opportunity to consider whether similar facts would be sufficient to establish jurisdiction if, instead, Prasco had conceded infringement and was only arguing invalidity.”).

\(^{84}\) See, e.g., Association for Molecular Pathology, 689 F.3d at 1318 (importing into a validity challenge the “meaningful preparation to conduct potentially infringing activity” test from Cat Tech, LLC v. TubeMaster, Inc., 528 F.3d 871, 880 (Fed. Cir. 2008), an action alleging only noninfringement).

\(^{85}\) See, e.g., Matthews Int’l Corp. v. Biosafe Eng’g, LLC, 695 F.3d 1322, 1329 (Fed. Cir. 2012) (holding both infringement and validity challenges non-justiciable because technology was not sufficiently “real” to enable comparison with patent).
patentee’s charge of infringement.” An action asserting that intellectual property is invalid seeks a ruling on a question of law: Does the patent, trademark, or copyright satisfy the statutory standards for eligibility? To be sure, there are factual predicates to that determination. But the nature of the claim is that the government has recognized an exclusive right without warrant. It is a claim that does not depend on the plaintiff’s actions. And because non-mutual issue preclusion prevents patentholders from relitigating the validity issue in future proceedings, a successful validity challenge results in the IP being held invalid as against the world.

By contrast, an action asserting that particular activity does not infringe the intellectual property seeks a highly fact-specific determination whether a particular work, product, or course of conduct falls within or without the boundaries of intellectual property. This is not a claim of general applicability, nor is it a pure question of law. It is instead a request for a determination that if a particular plaintiff engages in particular activity, that activity will not infringe the patent.

Standing depends on the nature of the claim. There is a nexus between the injury required for standing purposes and the nature of the claim that a plaintiff brings; otherwise, a successful claim would not remedy the injury. The next Part develops a theory of intellectual property injury. For present purposes, however, it will suffice to note the outer boundaries of such a theory, and to note that they are different for claims of invalidity and noninfringement. A successful claim for invalidity results in the intellectual property being deemed ineffective. Any injury that arises from the existence vel non of the patent may be remedied by such a finding. By contrast, a successful claim for noninfringement is much narrower. It is a declaration that

\begin{enumerate}
\item[87] See Graham v. John Deere (“The ultimate question of patent validity is one of law.”).
\item[88] See supra note 8.
\item[89] See, e.g., DaimlerChrysler Corp. v. Cuno, 547 U.S. 332, 352 (2006).
\end{enumerate}
specific activity is permissible. The scope of the injury that would support standing for such a declaration is correspondingly narrower. It is confined to injuries that arise from an inability to engage in the specific activity. By conflating actions for invalidity and noninfringement, the Federal Circuit and the courts that follow it fail accurately to identify the relevant injury for standing purposes.

II. A THEORY OF STANDING TO CHALLENGE INTELLECTUAL PROPERTY

This Part corrects the errors described above. At bottom, the Federal Circuit and the courts of appeals that have followed it have developed a law of justiciability specific to intellectual property disputes, in which standing depends on the legal and temporal proximity of the IP holder’s enforcement action.

This scheme for determining when a case is justiciable would appear odd to a federal jurisdiction expert. In every other area of the law, federal courts apply a familiar framework for determining whether there is standing to sue. A plaintiff must demonstrate that she (1) has suffered or is “under threat of suffering ‘injury in fact’ that is concrete and particularized; the threat must be actual and imminent, not conjectural or hypothetical;” (2) that injury “must be fairly traceable to the challenged action of the defendant;” and (3) “it must be likely that a favorable judicial decision will prevent or redress the injury.” 90 Although the courts hearing intellectual property disputes sometimes reference these factors, 91 they do not really grapple with them. Yet, as the Supreme Court has reminded the Federal Circuit on several occasions,

91 See e.g., Association for Molecular Pathology, 689 F.3d at 1318.
“familiar principles” of law “apply with equal force to disputes arising under” the intellectual property statutes.\textsuperscript{92}

This Part therefore treats “intellectual property standing” as standing. Applying the standard three elements of standing analysis to disputes over the validity of intellectual property yields a broader conception of standing in IP cases than the courts of appeals have acknowledged.\textsuperscript{93} The existence of intellectual property in a given field of endeavor creates a present risk to the ongoing economic activities of participants in that field. That risk constitutes an “injury in fact” for standing purposes at least when it deters participants from engaging or investing in activity that may fall within the scope of the exclusive right. That injury is “fairly traceable” to an exclusive right holder’s actions to acquire, hold, and maintain the intellectual property. And the risk can be eliminated by a judicial finding that the right is invalid.

\textit{A. Injury in fact}

Intellectual property is an exclusive right. It is a grant that enables its holder to exclude others from taking certain actions that may fall within the boundaries of the right. A patent, for example, is a right to prevent others from “mak[ing], us[ing], offer[ing] to sell, or sell[ing] any patented invention.”\textsuperscript{94} A copyright prevents others from “reproduce[ing] the copyright work,”\textsuperscript{95} among other things. And a trademark cannot be “use[d] in commerce . . . in connection with the

\textsuperscript{92} eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006) (holding that general standard for injunctive relief applied in patent cases); see also MedImmune, 549 U.S. at 132 n.11 (holding that the “reasonable apprehension of suit” test was inconsistent with more general interpretations of the Declaratory Judgment Act); Dickinson v. Zurko, 527 U.S. 150, 165 (1999) (holding that ordinary standards of judicial review of administrative actions applied to Federal Circuit review of PTO factfinding).

\textsuperscript{93} In the analysis that follows, I attempt to work within the Supreme Court’s standing jurisprudence. For an overview of the literature critical of that jurisprudence, see infra note 202.

\textsuperscript{94} 35 U.S.C. § 271(a).

\textsuperscript{95} 17 U.S.C. § 106(1).
sale, offering for sale, distribution, or advertising of any goods or services " by anyone other than its owner. IP rights are negative rights. Viewed from the perspective of the owner, a grant of intellectual property confers the ability to exclude others from practicing the work, the invention, or the mark.

But consider what the intellectual property grant means to those others. From their perspective, intellectual property is a form of regulation. It is, as Mark Lemley explains, a "regulatory intervention in the marketplace that is designed to restrict what people can do with their own ideas and their own property." In the absence of any patent, copyright, or trademark, ideas or works or marks are freely appropriable. As the Supreme Court has explained on numerous occasions, the public has a "federal right to copy and use" that which is not or cannot be the subject of intellectual property protection. "In general, unless an intellectual property right such as a patent or a copyright protects an item, it will be subject to copying." The default rule is that an inventor or creator has the freedom to invent and create as she pleases. The presence of intellectual property, on the other hand, places a restraint on that freedom. A patent, copyright, or trademark sets off – as against the world – a portion of the public domain that no one can enter without permission. It is a regulation of inventors’ or creators’ primary behavior. Such persons cannot use the invention or copy the work without first securing a license to do so. Failing that, they are subject to liability.

99 Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 165 (1989); see Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 231 (1964) ("An unpatentable article, like an article on which the patent has expired, is in the public domain and may be made and sold by whoever chooses to do so.").
But intellectual property rights are uncertain, in several respects. First, intellectual property rights are of uncertain validity until they are tested in court. Take patents. Although the Patent Act provides that issued patents are presumed valid, the final determination whether a patent is valid remains for the courts. Similarly, a trademark registration serves as “prima facie evidence of the validity” of the mark, but that prima facie case may be refuted in court. This is true even with respect to marks that have become “incontestable.” Unregistered trademarks are never tested prior to litigation, and the same is true as a practical matter for copyrights. The holders of these various forms of intellectual property are free of course to try to enforce their rights upon grant or fixation. But the validity of their holdings is not certain until litigation. Empirical evidence suggests that this is no minor concern – some studies find a 33 to 50% chance that a patent litigated to judgment will ultimately be found invalid.

Second, the boundaries of intellectual property are often quite uncertain. This uncertainty hampers potential inventors and creators from determining precisely what actions or behavior they need to eschew to avoid the intellectual property. This problem plagues patents in particular, though other forms of intellectual property are not immune to it. In brief, patent claims define the metes and bounds of the exclusive right, but those claims are written as broadly

102 See Microsoft Corp. v. i4i Ltd. P’ship, 131 S. Ct. 2238, 2242-43 (2011).
103 15 U.S.C. § 1114(a); see supra note 4.
104 See supra note 4.
105 See Kimberly A. Moore, Judges, Juries, and Patent Cases – An Empirical Peek Inside the Black Box, 99 Mich. L. Rev. 365, 390 (2000) (reporting 33% invalidity rate for patent validity challenges litigated to judgment at trial); John R. Allison & Mark A. Lemley, Empirical Evidence on the Validity of Litigated Patents, 26 AIPLA Q.J. 185, 205 (1998) (reporting 46% invalidity rate for patent validity challenges litigated to judgment at trial). Of course, these studies do not tell us much about the validity of the very large number of patents that are never litigated or that are subject to litigation resolved prior to final judgment. But there is other evidence suggesting that a large number of invalid patents issue. See James Bessen & Michael J. Meurer, Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovation at Risk 160-63 (2008) (summarizing evidence).
as possible and often are vague or, at the very least, subject to multiple competing interpretations.\(^{106}\) The process of patent litigation does little to resolve this uncertainty. Claim constructions are not definitively resolved until appeal and even then the judges of the Federal Circuit disagree sharply about how to interpret patent claims.\(^{107}\) This uncertainty has started to spread to trademarks as well, particularly with the rising number of claims for trade dress protection. In *Already v. Nike*, for example, the purported mark was a set of design elements for an athletic shoe.\(^{108}\) Ordinarily, it is straightforward to demonstrate that a particular infringer has “use[d] in commerce any reproduction, counterfeit, copy, or colorable imitation” of a trademark.\(^{109}\) But it is more challenging to determine whether a broad set of design elements has been incorporated into a product that is not an exact “copy.”

As Lemley and Shapiro write, intellectual property rights are “probabilistic.”\(^{110}\) Because the right is neither certainly valid nor of certain boundaries, it is not a “right to exclude but rather a right to *try* to exclude.”\(^{111}\) Now consider, once again, the alternative perspective. Those working in a field in which there is an extant intellectual property right face a risk of infringement liability. It is possible that business or investing activity may run afoul of the intellectual property. But it is often quite difficult to know with any degree of certainty whether particular behavior will do so.


\(^{108}\) *See* *Already, LLC dba Yums v. Nike, Inc.*, 133 S. Ct. 721, 725-26 (2013).


\(^{111}\) *Id.* at 75.
That risk constitutes an injury in fact. Economic actors face a present risk of liability if they wish to engage in activity that might fall within the boundaries of the purported exclusive right. In determining whether and how to undertake a particular activity, those actors must account for that risk and alter their behavior in response. The risk posed by intellectual property represents, in any given instant, an actual injury. A person wishing to engage in activity that may be the subject of exclusive rights has several choices available to her: she can take a license, she can ignore the rights and proceed with the activity, she can attempt to design around the rights to the extent she can meaningfully assess them, or she can abandon the activity altogether. In all events, the presence of the intellectual property right in a particular field undoubtedly constrains the behavior of those operating in the field.

This effect is due in no small part to the severity of the penalties for infringement and their timing. As to the former, intellectual property is often enforced through injunctions. Infringers must often give up all or part of their activity. Substantial damages are also likely. Intellectual property holders may be entitled to lost profits or a reasonably royalty. But in some cases – especially relevant here, where the infringer is on notice of the existence of the intellectual property right – courts retain the discretion to enhance those damages up to three times the awarded amount. As to timing, neither the validity of the intellectual property right nor the likelihood of infringement of that right can be determined with certainty until costly litigation is undertaken.

In a world in which this uncertainty did not exist, potential infringers could reasonably determine (a) whether they are subject to regulation through an existing intellectual property

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right and, (b) whether their planned conduct would violate that regulation. But because intellectual property is uncertain, potential infringers must make decisions about their behavior in the shadow of a significant threat: that after their decisions have been made they may be subject to injunctive relief and treble damages in an infringement suit.

The risk posed by potentially adverse “probabilistic” intellectual property can affect regulated persons’ or entities’ decisionmaking in several ways. First, as Christopher Leslie explains in the patent context, the risk of infringement liability “can . . . increase entry costs by compelling rivals to research the patent’s validity, to attempt to design around the patent, or to pay (unnecessary) license fees.”\(^{114}\) Each of these responses to risk imposes some significant cost. Investigating the validity of intellectual property, for example, usually requires the payment of legal fees to produce a “freedom to operate” report.\(^{115}\) Designing around requires the expenditure of resources that could otherwise be devoted to innovation in the first instance.\(^{116}\) Innovators operating in a field occupied by potentially adverse intellectual property may find it difficult to attract capital or may face increased costs of capital.\(^{117}\)

The risk of infringement usually remains even after these costs are incurred. That makes business planning more difficult. As Leslie also observed, “it is difficult for the potential entrant to perform a proper cost-benefit analysis because it is exceedingly difficult to estimate the probability of prevailing on an invalidity defense in a patent infringement suit.”\(^{118}\) The result is a

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\(^{116}\) See id. supra note 114, at 121.

\(^{117}\) See id. at 117; see also id. at 134 (discussing difficulties of prevailing in litigation).
potentially strong deterrent effect. In some cases, a firm will find it not worth the risk to undertake activity that requires investment that can then be held up in the face of adverse intellectual property. This is especially so because many startups and technology entrepreneurs are rationally risk averse.

This effect is especially significant when investments must be made over time. Pharmaceutical research and development provides an important example of the problem. The process of discovering, developing, and then securing FDA approval to market a new drug is very time consuming and expensive. If a drug cannot, for any reason, be marketed, the costs of its development generally are sunk. They cannot meaningfully be reallocated to other projects. Pharmaceutical firms therefore must make significant asset-specific investments many years prior to marketing.

Now consider what happens when there is a potentially adverse patent in the field. At the time the firm begins making investments in research and development, it is uncertain whether

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119 Others have observed that patents may deter potentially infringing activity. See, e.g., David Fagundes & Jonathan S. Masur, Costly Intellectual Property, 65 VAND. L. REV. 677, 698 (2012) (“Firms that face the prospect of being nickel-and-dimed by the owners of dubious patents may well choose to refrain from investing in new technologies or entering new markets in the first place.”); Gideon Parchomovsky & Michael Mattioli, Partial Patents, 111 COLUM. L. REV. 207, 218 (2011) (“Surveys and practitioner accounts show that the risks of litigation and the potentially high costs of investigating existing patents deter many firms from pursuing certain lines of research and development in the first place.”); Leslie, supra note 114, at 119; Michael A. Heller & Rebecca S. Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCIENCE 698, 699 (1998); Rochelle Cooper Dreyfuss, Dethroning Lear: Licensee Estoppel and the Incentive to Innovate, 72 VA. L. REV. 677, 755 (“The existence of the patent—and the fear of an infringement action—may deter some potential rivals from competing with the patentee and his licensees.”).

120 See Leslie, supra note 114, at 116-17.


122 The facts of this discussion roughly mirror those in Benitec Australia, Ltd. v. Nucleonics, Inc., 495 F.3d 1340 (Fed. Cir. 2007), in which the Federal Circuit found that a pharmaceutical firm lacked standing to seek a declaration that a patent was invalid.
the patent is valid or whether the firm’s ultimate product may infringe.\textsuperscript{123} The firm faces a choice. If it goes ahead, it will make sunk investments of many years and many millions of dollars only to face the possibility that those investments will be held up by the patent owner, who can threaten an injunction or treble damages. Or the firm can abandon the project in the face of that risk. Many, perhaps most, rational firms will choose the latter. Indeed, the Federal Trade Commission found in this context that “firms in the biotech industry . . . avoid infringing questionable patents and therefore will refrain from entering or continuing with a particular field of research that such patents appear to cover.”\textsuperscript{124}

This dynamic is not limited to the pharmaceutical or biotechnology industries. It occurs whenever product development cycles require investment prior to potentially infringing activity. The declaratory judgment plaintiff in \textit{Already v. Nike}, for example, argued plausibly that the development of new lines of athletic shoes required resources and investment, and that the risk of liability deterred investors from supporting the business.\textsuperscript{125} There exists some empirical evidence that suggests that such a deterrent effect is a real and significant obstacle to innovation.\textsuperscript{126}

\textsuperscript{123} This uncertainty is a function both of the potentially fuzzy boundaries of the patent and of the unclear characteristics of the final product.


\textsuperscript{125} \textit{See Nike}, 663 F.3d at 97.

\textsuperscript{126} \textit{See Federal Trade Comm’n, supra} note 124, Exec. Summary at 5; Ch.2 at 7-8; Jean O. Lanjouw & Mark Schankerman, \textit{Enforcement of Patent Rights in the United States, in Patents in the Knowledge-Based Economy} 145, 146 (Wesley M. Cohen & Stephen A. Merrill eds., 2003). Mark Lemley is skeptical that deterrence is a significant problem. \textit{See} Mark A. Lemley, \textit{Ignoring Patents}, 2008 Mich. St. L. Rev. 19, 21 (“Both my own experience and what limited empirical evidence there is suggest that companies do not seem much deterred from making products by the threat of all this patent litigation.”) [hereinafter Lemley, \textit{Ignoring Patents}]; Mark A. Lemley, \textit{Rational Ignorance at the Patent Office}, 95 Nw. U. L. Rev. 1495, 1515 (2001) (“Certainly the issuance of bad patents has the potential to deter competition that should be
So long as intellectual property remains valid, the risk of infringement liability persists regardless of whether or not the owner takes enforcement actions. Judge Learned Hand recognized this dynamic when he referred to unenforced but invalid patents as “scarecrow[s].” More colorfully, Leslie refers to such a patent as “a head on a pike.” “Until a court invalidates it, or until the owner explicitly disavows it and dedicates it to the public domain,” he writes, “every patent can give pause to potential competitors who know about it.”

This account of the injury in cases challenging the validity of intellectual property finds support in the Supreme Court’s decisions in the area. In *Cardinal Chemical Co. v. Morton International, Inc*, for example, the Court held that a judgment of noninfringement does not moot a counterclaim for a declaration that a patent is invalid. In that case, Morton sued Cardinal Chemical for patent infringement. Cardinal Chemical counterclaimed for a declaration that the patents in suit were invalid. The district court found Morton’s patents to be invalid and not infringed. On appeal, the Federal Circuit affirmed the district court’s judgment of lawful in some marginal cases. But this concern can be overstated.”)

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128 Leslie, supra note 114, at 115.
129 Id. at 115-16. In related work, Leslie describes a range of threatening actions short of filing infringement suit that can deter competitive behavior. These actions include: “publicly flaunting one’s patent; stating a general intent to sue infringers; accusing competitors of infringement; threatening competitors’ business partners; and licensing activities.” Christopher R. Leslie, *Patents of Damocles*, 83 IND. L.J. 133, 143 (2008).
130 The Court’s decision in *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721 (2013), is not to the contrary. In that case, the Court interpreted a covenant not to sue to include all future products. See id. at 727-29. In that circumstance, the risk of liability is eliminated.
132 See id. at 96.
noninfringement but vacated and dismissed the judgment of invalidity, reasoning that because the patent was not infringed, no case or controversy remained with respect to validity.\textsuperscript{133} The Supreme Court reversed. As described above, the Court first drew a distinction between claims of infringement and validity.\textsuperscript{134} The Court then described the injury that would give rise to independent jurisdiction over the validity claim in terms very similar to those used above. The Court explained that the Declaratory Judgment Act was designed to relieve actors of “an \textit{in terrorem} choice between the incurrence of a growing potential liability for patent infringement and abandonment of their enterprises” by allowing suit to “clear the air.”\textsuperscript{135} The Court concluded that “[m]erely the desire to avoid the threat of a ‘scarecrow’ patent, in Learned Hand’s phrase, may therefore be sufficient to establish jurisdiction under the Declaratory Judgment Act.”\textsuperscript{136} A judgment of noninfringement in a suit brought by a right holder, in the Court’s view, did nothing to address the ongoing risk arising from the exclusive right: “A company once charged with infringement must remain concerned about the risk of similar charges if it develops and markets similar products in the future.”\textsuperscript{137} \textit{MedImmune} follows a similar logic. In rejecting the requirement that a licensee breach its contract before challenging the validity of the underlying patent, the Court necessarily acknowledged that the plaintiff was injured even though it was not presently subject to an enforcement action.\textsuperscript{138}

\textsuperscript{133} \textit{See id.} at 85-90.
\textsuperscript{134} \textit{See id.} at 96.
\textsuperscript{135} \textit{Id.} (quoting \textit{Arrowhead Indus. Water, Inc. v. Ecolochem, Inc.}, 846 F.2d 731, 734-35 (Fed. Cir. 1988)).
\textsuperscript{136} \textit{Id.} (citing \textit{Bresnick}, 139 F.2d at 242).
\textsuperscript{137} \textit{Id.} at 99-100. The Court’s holding in \textit{Cardinal Chemical} was limited to the jurisdiction of the appellate court. \textit{See id.} at 95. Nevertheless, because it was discussing the constitutional case or controversy requirement, its dicta concerning the scope of the injury remains persuasive.
\textsuperscript{138} \textit{See MedImmune}, 549 U.S. at 132-33 & n.11.
More broadly, recognizing that the risk or uncertainty posed by extant intellectual property is an injury in fact is consistent with several familiar standing principles. The first is that probabilistic harms can constitute injury in fact. This notion received its most prominent expression in *Massachusetts v. EPA*, in which the Supreme Court held that the state of Massachusetts had standing to challenge the EPA’s failure to take action to regulate greenhouse gas emission under the Clean Air Act. The injury in that case was probabilistic; it was a risk of harm from global warming. Nevertheless, the Court held that EPA’s “refusal to regulate greenhouse gas emissions presents a risk of harm to Massachusetts that is both ‘actual’ and ‘imminent.’” A decision in Massachusetts’ favor—compelling the EPA to regulate greenhouse gas emission—would reduce the risk of harm that Massachusetts faced. Similarly, in *Monsanto Co. v. Geertson Seed Farms*, the Court held that conventional alfalfa farmers had standing to challenge the Department of Agriculture’s decision to deregulate genetically modified alfalfa because that decision created “a significant risk of gene flow to non-genetically-engineered varieties of alfalfa,” and because that risk harmed the farmers in a variety of ways “even if their crops are not actually infected with” the genetically modified seed.

A series of lower court decisions have staked out similar positions. The D.C. Circuit, for example, has held that “increases in risk can at times be ‘injuries in fact’ sufficient to confer standing” and has applied that holding to find that an environmental group had standing to

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140  *Id.* at 521 (quoting *Lujan*, 504 U.S. at 560); *see id.* at 521-23 (describing risks associated with increased greenhouse gas emissions).
141  *See id.* at 525-26.
142  130 S. Ct. 2743 (2010).
143  *Id.* at 2755.
144  *Natural Res. Def. Council v. EPA*, 464 F.3d 1, 6-7 (D.C. Cir. 2006).
challenge EPA regulations that it alleged created an increased risk of cancer for its members.\footnote{See id. at 7 (holding that a “lifetime risk than an individual will develop nonfatal skin cancer” of “about 1 in 200,000” is “sufficient to support standing”); see also Mountain States Legal Found. v. Glickman, 92 F.3d 1228, 1234-35 (D.C. Cir. 1996) (holding that increased risk of forest fire created by a Forest Service logging rule was sufficient group to support standing to challenge rule).}

So too, the Second Circuit held in a case challenging the FDA’s decision to permit the use of downed livestock as food for human consumption that “enhanced risk” was “cognizable for standing purposes, where the plaintiff alleges exposure to potentially harmful products.”\footnote{Baur v. Veneman, 352 F.3d 625, 634 (2d Cir. 2003).} And the Seventh Circuit has held that “even a small probability of injury is sufficient to create a case or controversy – to take a suit out of the category of the hypothetical – provided of course that the relief sought would, if granted, reduce the probability.”\footnote{Village of Elk Grove Vill. v. Evans, 997 F.3d 328, 329 (7th Cir. 1993) (Posner, J.).}

To be sure, these cases are in tension with the Court’s cases holding that speculative future injuries do not give rise to standing.\footnote{The courts of appeals are split on the issue as well. See, e.g., See, e.g., Public Citizen, Inc. v. Nat’l Highway Traffic Safety Admin., 489 F.3d 1279, 1298-99 (Sentelle, J., concurring in part and dissenting in part); Baur, 352 F.3d at 651 & n.3 (Pooler, J., dissenting); Shain v. Veneman, 376 F.3d 815, 818 (8th Cir. 2004). There is also debate among the courts of appeals and in the academic literature over whether all increases in risk constitute injury in fact or whether only a subset of risks that are judged sufficiently substantial should qualify. See, e.g., F. Andrew Hessick, Probabilistic Standing, 106 Nw. U. L. Rev. 55, 61-65 (2012) (describing case law that finds injury in fact only when risk is sufficiently high); Amanda Leiter, Substance or Illusion? The Dangers of Imposing a Standing Threshold, 97 GEO. L.J. 391, 404 (2009) (arguing that risk thresholds are unique to the D.C. Circuit).} In City of Los Angeles v. Lyons,\footnote{461 U.S. 95 (1983).} for example, the Court held that a plaintiff who had previously been subject to a police “chokehold” did not have standing to seek an injunction against future police use of the maneuver because he could only state a “subjective apprehension” that the event might occur again in the future.\footnote{Id. at 105-06.} In Lujan, the Court famously denied standing to plaintiffs to challenge an Interior Department determination.
that the Endangered Species Act applied only to domestic activities when they could only assert that they might one day travel to foreign countries, where the Department’s rule made it less likely they would be able to see endangered species.\textsuperscript{151} Most recently, in \textit{Clapper v. Amnesty International USA},\textsuperscript{152} the Court held that plaintiffs challenging the government’s warrantless wiretapping authority under the Foreign Intelligence Surveillance Act lacked standing because the risk that they might be subject to government monitoring was too speculative and actions taken to mitigate therefore were unreasonable.\textsuperscript{153}

The Court’s cases in this area are notoriously difficult to harmonize.\textsuperscript{154} But there are reasons to believe, at the very least, that those cases do not preclude standing for plaintiffs who assert the injury in fact arising from IP described above.\textsuperscript{155} As several scholars have recently argued, there is a conceptual distinction between actual, that is, present, injuries based on uncertain facts and threatened future injuries.\textsuperscript{156} F. Andrew Hessick argues that “[a] plaintiff facing a threat of injury from a defendant’s illegal conduct . . . has an interest in preventing that injury from occurring, or at least an interest in reducing the risk of its occurrence.”\textsuperscript{157} This interest is a case or controversy under Article III “[s]o long as (1) the challenged activity

\textsuperscript{151} See 504 U.S. at 558-59, 562; \textit{id} at 564 (‘Such ‘some day’ intentions – without any description of concrete plans, or indeed even any specification of \textit{when} the some day will be – do not support a finding of the ‘actual or imminent’ injury that our cases require.’).

\textsuperscript{152} 133 S. Ct. 1138 (2013).

\textsuperscript{153} See \textit{id}. at 1147-49.

\textsuperscript{154} See \textit{infra} note 202.

\textsuperscript{155} The Court appeared to be skeptical of this theory of IP standing in \textit{Already v. Nike}. See 133 S. Ct. at 730-31. But the Court in that case construed the relevant covenant to completely eliminate any risk of infringement liability for past, present, or future activities. \textit{See id}. at 728-29. Its statements regarding risk-based theories of standing are therefore dicta.


\textsuperscript{157} Hessick, \textit{supra} note 148, at 66.
increases the plaintiff’s risk of suffering harm and (2) a judicial order could stop the challenged activity, thereby removing the risk of harm.”

Taking a slightly different approach, Jonathan Remy Nash argues that the risk of injury can be characterized in terms of expected value, proceeding from the common sense premise that one can assign a dollar value to various risks. In his view, “[i]f a positive expected value would be sufficient to support standing were it to arise as a typical ‘actual harm,’ then the expected value should be deemed sufficient to support standing.” In other words, when a risk has present effect, the risk itself is the actual injury and a person who experiences that risk in a concrete and particularized manner has standing to sue to bring about action that may reduce or eliminate the risk.

The difficult question then is how to sort such presently existing injuries from speculative future harms. Of particular relevance here, the Court appears more likely to find standing on the basis of present risk when the plaintiff is within or very close to the zone of primary conduct regulation and the costs of uncertainty are high. Consider, for example, two lines of decisions. The first are cases that confer standing on plaintiffs seeking to challenge the validity of statutes or regulations before they are enforced. As the Supreme Court noted in *MedImmune*, “where threatened action by government is concerned, we do not require a plaintiff to expose himself to liability before bringing suit to challenge the basis for the threat – for example, the constitutionality of a law threatened to be enforced.”

In the First Amendment context, for example, the Court has emphasized that standing is appropriate where the “alleged danger . . . is . . . one of self-censorship; a harm that can be realized even without” enforcement.

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159 *MedImmune*, 549 U.S. 129-30 (emphasis omitted).

has similarly held with respect to criminal prohibitions that “it is not necessary that [a litigant] first expose himself to actual arrest or prosecution to be entitled to challenge a statute that he claims deters the exercise of constitutional rights.”

In these cases, the plaintiff is subject to regulation by the government. There is a statute telling him what he can or cannot do. And the penalties for noncompliance are high – the plaintiff either ceases otherwise constitutionally protected activity or risks criminal sanctions. IP validity litigation follows this structure. There is an exclusive right in place that purports to regulate others in the field; they must avoid the subject matter of the right or take a license. The penalties for not doing so are high – injunctive relief and significant damages awards. But the lawfulness of the regulation is uncertain. In those circumstances, the plaintiff need not risk liability before bringing suit.

Consider too another source of analogy: real property. We ordinarily presume, as the MedImmune court stated, that a developer of real property need not build on that property before going to court to clear title to the property. Indeed, it has long been recognized that resolving disputes over property prior to fixed costs being incurred is a legitimate use of the courts.

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161 Steffel v. Thompson, 415 U.S. 452, 459 (1974); see also Holder v. Humanitarian Law Project, 130 S. Ct. 2705, 2717 (2010); Babbitt v. United Farm Workers National Union, 442 U.S. 289, 298 (1979); 13B WRIGHT, MILLER & COOPER, supra note 77, § 3532.5, at 585-86 (“If there is a present desire to engage in apparently criminal activity . . . existence of a criminal prohibition should alone be sufficient basis for adjudication. Fear that courts may find the statute valid will deter many from risking violation; defense of criminal proceedings on constitutional grounds simply is not an adequate remedy.”).

162 See id. My argument from real property is limited. I do not make any claim that intellectual and real property are broadly similar. Cf. Mark A. Lemley, Property, Intellectual Property, and Free Riding, 83 TEX. L. REV. 1031 (2005). I note only the parallel structure of the justiciability problem: in both cases, one litigant must make decisions under a cloud of uncertainty with potentially far-reaching consequences.

163 See MedImmune, 549 U.S. at 134; Lemley, Ignoring Patents, supra note 126, at 23 (“If I want to build a house, I’d better be darn sure that I own the land on which the house is built.”).

164 See BORCHARD, supra note 30, at 741.
Federal courts appear to follow this presumption.\(^{165}\) There is little difference for standing purposes between a real estate developer confronting uncertain land title and an innovator confronting uncertain intellectual property in her field. Each experiences a present injury from the uncertainty in the underlying property rights, and each ought to be able to sue to clear the field prior to making costly investments.

These kinds of injuries are distinguishable from those found insufficient for standing in *Lujan*, *Lyons*, and *Clapper*. Take *Lujan*, to start. In that case, there was no question that the “plaintiff’s asserted injury ar[ose] from the government’s allegedly unlawful regulation . . . of *someone else*.\(^{166}\) The Court therefore characterized the plaintiffs’ injuries not a present risk of harm, but as threatened harm that would arise upon the unfolding of a long chain of events, none of which were particularly imminent.\(^{167}\) The plaintiff’s “apprehension” about the chokehold procedure in *Lyons* was “subjective” because the authorization for such a move, if any, did not directly impact the plaintiff’s current behavior. So too in *Clapper*, the risk that one of the plaintiffs might have her communications intercepted was speculative because the wiretapping was directed at *someone else* and it would only be through a long chain of happenstance that the

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\(^{165}\) Because most property litigation takes place in state courts, the question who has standing under Article III to clear title to real property arises only rarely. In *MedImmune*, the Court described the facts of a prior case, *Willing v. Chicago Auditorium Assn.*, 277 U.S. 274 (1928), in which a lessee brought suit to remove a “cloud” on its lease, and observed that there would likely have been standing under the (subsequently enacted) Declaratory Judgment Act. *See* 549 U.S. at 133-34. The Quiet Title Act, 28 U.S.C. § 2409a, authorizes suit against the United States “to adjudicate a disputed title to real property in which the United States claims an interest.” Courts have held that there is broad standing under the Act to remedy the effects of uncertainty as to land titles. *See*, e.g., *Avista Corp. Inc. v. Sanders County*, 405 F. App’x 225, 226 (9th Cir. 2010) (“The injury to Avista is caused by the lack of resolution of the question of land ownership. The requested relief of resolution of the title dispute and a determination of the owner of the right of way would redress that injury.”); *United States v. Carpenter*, 526 F.3d 1237, 1240 (9th Cir. 2008) (finding Article III standing to intervene in action to settle land title dispute).

\(^{166}\) 504 U.S. at 562.

\(^{167}\) *See id.* at 564-65.
plaintiff’s found themselves caught up in the interceptions.\textsuperscript{168} The \textit{Clapper} court went further, and held that steps the plaintiffs undertook to minimize their risk did not themselves establish standing, but that holding only follows logically from the first.\textsuperscript{169}

The risk of harm arising from invalid IP is, if nothing else, significantly more direct than in the cases above. In an IP validity case, the plaintiff is the object of the regulation. The only barriers to liability are the plaintiff’s choice to engage in activity that may fall within the IP holder’s exclusive right and the IP holder’s choice to enforce those rights. That is precisely the same structure described in the cases allowing pre-enforcement challenges to government statutes or rules. As the Court held in \textit{MedImmune}, it makes no difference whether the enforcement of proscriptions on primary conduct is in the hands of the government or private individuals.\textsuperscript{170} In either circumstance, the plaintiff faces a risk of enforcement that forces changes to its present behavior.

Of course, to establish standing, a plaintiff challenging the validity of IP must demonstrate that the risk of liability is “concrete and particularized,” that is, it “must affect the plaintiff in a personal and individual way.”\textsuperscript{171} It must be the plaintiff herself who claims that she is under a risk of liability on account of the potentially adverse intellectual property. These allegations must, as in every case, be supported “with the manner and degree of evidence required at the successive stages of the litigation.”\textsuperscript{172} As a practical matter, that means that the plaintiff must introduce credible facts sufficient to demonstrate the risk – evidence, for example, that the plaintiff is in the same line of business as the IP holder, that the plaintiff is engaged in

\textsuperscript{168} See 2013 WL 673253, at *8-*10.
\textsuperscript{169} See \textit{id.} at *11-*12.
\textsuperscript{170} See \textit{MedImmune}, 549 U.S. at 128-32.
\textsuperscript{171} \textit{Lujan}, 504 U.S. at 560 & n.1.
\textsuperscript{172} \textit{Id.} at 561.
business planning under the shadow of the IP, or that the plaintiff has made or plans to make investments that are at risk. A plaintiff need not be actually deterred from undertaking valuable activity. That is, a plaintiff need not cease valuable activity before going to court to clear the field of potentially adverse IP. Evidence of actual deterrence will, however, be highly probative of the risk the plaintiff confronts.

B. Causation and redressability

With a proper understanding of the nature of the injury in claims alleging that intellectual property is invalid, causation and redressability follow with considerably greater ease. For an injury to be the subject of judicial relief, it must be “fairly traceable” to the defendant. There must be “a causal connection between the injury and the conduct complained of.” The defendant’s conduct must be a “but for” cause of the injury, and the causal chain between the injury and the defendant cannot be so attenuated that there is no “substantial likelihood” that the relief sought will redress the injury.

The injury described above – increased risk and uncertainty – is caused by the existence of intellectual property in a given field. So long as the intellectual property remains, it can serve as a scarecrow and create a meaningful risk of liability for others working in the field. The existence of the intellectual property, in turn, is caused both by the right holder and, in some cases, by the government agency responsible for issuing the right. Under traditional

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173 Cf. MedImmune, 549 U.S. at
174 See 13A Wright, Miller & Cooper, supra note 77, § 3531.5, at 305 (“The choice among alternative definitions of the injury may control the determination of causation.”).
175 Lujan, 504 U.S. at 560 (internal quotation mark and alterations omitted).
176 Id.
179 See supra notes 127 - 129 and accompanying text.
standing principles, either is an acceptable defendant in an action challenging the validity of intellectual property.\textsuperscript{180}

In an action against a private party seeking to invalidate that party’s intellectual property, the injury described above arises from the defendant’s having acquired and then subsequently holding or maintaining the intellectual property. Intellectual property only comes into being through actions of the inventor, creator, or user. An inventor must apply to the PTO for a patent.\textsuperscript{181} A trademark owner acquires her right by using a distinctive mark in commerce to identify her goods.\textsuperscript{182} The owner can then apply to the PTO for a federal trademark registration.\textsuperscript{183} A copyright arises when a work’s creator fixes the work in a tangible medium of expression.\textsuperscript{184} In these ways, intellectual property holders cause intellectual property to come into existence. That IP then presents a risk to others working in the field.

But right holders do more than merely conjure up intellectual property. They define its scope and boundaries. They therefore affirmatively shape the risks to which they expose others who may be working in their fields. A patent applicant, for example, must disclose her new, useful, and nonobvious invention and must conclude her application with “one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention.”\textsuperscript{185} The claims define the scope of the invention, its metes and bounds.\textsuperscript{186}

\textsuperscript{180} For the purpose of this argument, I am agnostic about which is the proper defendant as a matter of policy. I address that question \textit{infra} Part III.C.

\textsuperscript{181} \textit{See} 35 U.S.C. § 111.

\textsuperscript{182} \textit{See} 15 U.S.C. § 1127

\textsuperscript{183} \textit{See id.} § 1051.

\textsuperscript{184} \textit{See} 17 U.S.C. §§ 102(a), 302(a).

\textsuperscript{185} 35 U.S.C. § 112(2).

\textsuperscript{186} \textit{See Markman v. Westview Instruments, Inc.}, 517 U.S. 370, 372 (1996) (describing the claim as “the portion of the patent document that defines the scope of the patentee’s rights”); \textit{Philips v. AWH Corp.}, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (“It is a bedrock principle of patent
patent applicant drafts the claims. In so doing, patentees try to draft their claims as broadly as possible. And as a practical matter, patentees then engage in a negotiation with the patent examiner with the goal of having as broad a claim as possible issue. Trademark holders similarly define the bounds of the mark first by using it in commerce and then by filing a registration application that includes a depiction or description of the mark. And copyright owners define their work by creating and fixing it. These right holders then hold their intellectual property and often must take affirmative steps to maintain it. These steps include, for example, a trademark owner’s policing use of her mark to guard against abandonment, or a patent owner’s paying periodic maintenance fees to the PTO.

As discussed above, an IP owner need not engage in any further actions to create or maintain a risk directed toward others in the field. To the extent that some courts have held in suits against private parties that the injury is traceable to the IP owner only when the IP owner takes steps to enforce her IP, those courts have made two related mistakes. The first is to construe the injury as the infringement suit and, therefore, to ask whether the IP owner has taken action that caused the infringement suit itself to become more imminent. The second is effectively to ignore the fact that IP owners have agency in acquiring their IP. Because it is the law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” (internal quotation marks omitted).

192 See supra notes 114 - 117 and accompanying text.
193 See, e.g., Association for Molecular Pathology, 689 F.3d at 1319; SanDisk, 480 F.3d at 1380-81.
owners that cause exclusive rights to come into existence, it is the owners that cause the imposition of risk on those working in the field in which they have carved out such exclusive rights.

Turning to the PTO, it too is a direct cause of the injury when it issues a patent or a trademark registration. Because those forms of intellectual property do not exist absent government action, the agency that takes such action is a but for cause of the risk that derives from extant exclusive rights. It is true in a sense that causation is shared between the applicant and the government. In order for a patent or a trademark registration to come into existence, an applicant needs to file an application and then the government needs to approve the application and issue the right. Both are necessary causes of the injury and neither is a sufficient cause alone. But such shared causation does not ordinarily defeat standing.\footnote{See 13A Wright, Miller & Cooper, supra note 77, at 311-15 ("It may be enough that the defendant’s conduct is one among multiple causes.") (citing cases).}

Redressability, finally, is straightforward. The risk caused by intellectual property is removed by a judicial finding that the intellectual property is invalid. In litigation, it is well established that a judicial finding that a patent or a trademark is invalid has preclusive effect against the owner.\footnote{See Blonder-Tongue Labs., Inc. v. University of Illinois Found., 492 U.S. 313, 333-34 (1971) (patent); Miller Brewing Co. v. Falstaff Brewing Corp., 655 F.2d 5, 9 (1st Cir. 1981) (trademark).} It is a finding that is good against all potential infringers. In appeals of administrative actions, the result of a judicial finding of invalidity would be to order the agency to cancel the patent or trademark.\footnote{See 35 U.S.C. §§ 311(b), 321(b) (patent); 15 U.S.C. § 1064 (trademark).} These decisions would “redress[]” the injury.\footnote{Lujan, 504 U.S. at 561-62.}

\textbf{C. Summary – intellectual property standing}
The application of ordinary standing principles yields broader standing to challenge the validity of intellectual property than the Federal Circuit and other courts of appeals have acknowledged. Under the existing doctrine, standing requires that an infringement suit be temporally or legally proximate. It is limited for the most part to direct competitors who can be sued by the IP holder. This is why, for example, the only plaintiff with standing in Association for Molecular Pathology was a doctor who (a) received a cease-and-desist letter from the patent holder, and (b) alleged that he would immediately begin infringement upon a judicial finding that the patent he challenged was invalid.

That case would come out differently under the analysis that I propose. Physicians who might consider offering their own genetic testing services for the genes that are linked with breast cancer face a risk of liability regardless whether they have actually been contacted by Myriad Genetics or not. And they face a risk of liability not only if they would immediately be able to infringe, but also if they would need time to plan their businesses or facilities. That risk of liability that operates is a constraint on their innovative activity. That risk is caused by the intellectual property holders’ applying for and maintaining their exclusive rights. And it would be eliminated if a court were to find the intellectual property invalid.

Following this analysis, intellectual property would be subject to challenge by a wider range of persons. In addition to direct competitors, broader standing would enable indirect competitors and potential competitors to clear the field before making the costly investments required to compete with intellectual property holders. It would also enable academics or other noncommercial actors who might be at risk to file suit. Those groups or persons would, of course, still need to allege facts sufficient to justify a credible finding that they are at risk. They

198 See supra Part I.A.
199 See Association for Molecular Pathology, 689 F.3d at 1319.
would have to allege that they work in the relevant fields or plan to, or that such plans are backed with enough detail that they are legitimate.

It is worth pausing to consider two further doctrinal points. First, limits on standing remain under this analysis. Ideological opponents of intellectual property, for example, who offer no other basis for standing will be excluded.200 Most consumers also will continue to be excluded from challenging intellectual property. Consumers typically buy a protected product from a manufacturer. If the manufacturer is making the product under license, the only basis for the consumer’s suit is that the consumer would pay less money for the product in the absence of intellectual property. That is not the risk described above. If, on the other hand, a consumer may be liable for direct infringement, that consumer could have standing to sue depending on the nature of the risk that the consumer asserts and supports.201

Second, quite apart from the fit between the Supreme Court’s standing cases and the theory of standing described above, nothing in the principles underlying those cases supports treating standing to challenge intellectual property differently from any other case.202 Standing is often said to ensure that the courts are acting as courts by adjudicating only “questions presented in an adversary context and in a form historically viewed as capable of resolution through the

judicial process.” In other words, courts are not supposed to issue advisory opinions. In most IP validity disputes, there is little question that the dispute affects the present legal interests of the parties involved. The plaintiff in a declaratory judgment suit or the petitioner in an appeal from administrative review asserts that intellectual property is invalid. She asks for a judgment that, if granted, would have immediate and lasting legal effect: the IP holder would no longer have the ability to exclude others from practicing the subject matter of the invalid IP, and those others could do so free of the shadow of potential liability. The parties to such a dispute – the challenger and either the IP holder or the government – take adverse positions with respect to the legal question whether the IP is valid, and the adjudication of that question results in “specific relief through a decree of a conclusive character, as distinguished from an opinion advising what the law would be upon a hypothetical state of facts.”

The Federal Circuit has sometimes invoked the spectre of advisory opinions in declining to take jurisdiction over a declaratory judgment of invalidity. But in doing so, it has mistakenly conflated actions seeking a declaration of invalidity and those seeking a declaration of noninfringement. Noninfringement actions may run the risk of seeking hypothetical judgments. If the plaintiff has not yet started to infringe a patent, for example, there is nothing to compare with the patent’s claims. A judgment of noninfringement requires a detailed, fact-specific comparison of the allegedly infringing activity and the patent. A judgment of invalidity,

by contrast, does not take place in comparison to hypothetical activity. It is an inquiry into whether the issuance of the patent complied with the law.

Standing may also be thought to ensure that the courts do not decide questions that are better left to the representative branches of government.\(^{208}\) This is often expressed as a prohibition on hearing “generalized grievance[s].”\(^{209}\) Citizens, for example, do not have standing \textit{qua} citizens to vindicate an interest in making sure that the law is enforced. As the Court has explained, an injury is not a generalized grievance merely because it is widely shared.\(^{210}\) The question ultimately is whether the injury is abstract or concrete. In the case of IP validity challenges, it is true that a large number of potential competitors may have standing under the principles described above. But this does not detract from the concreteness of any particular plaintiff’s injury.

Finally, the Court has suggested in some recent cases that standing functions to prevent the courts from serving as general purpose watchdogs of the executive. As Justice Scalia, writing for the Court in \textit{Lujan} observed, standing keeps the courts from becoming “virtually continuing monitors of the wisdom and soundness of Executive action.”\(^{211}\) \textit{Lujan} was fundamentally concerned with the ability of citizens to assert an injury arising at governmental action not specifically aimed at them. Standing in such circumstances allows a much broader range of persons to utilize the Court to test the validity of executive action than might otherwise be thought affected by that action.\(^{212}\)

\(^{208}\) See Elliott, supra note 202, at 475-77.
\(^{210}\) See id. at 24-25.
\(^{211}\) Lujan, 504 U.S. at 577 (quoting Allen v. Wright, 468 U.S. 737, 760 (1984)).
But even the Lujan court acknowledged that this concern was not implicated when “the plaintiff is himself the object of the action (or foregone action) at issue.”213 “If he is,” the Court wrote, “there is ordinarily little question that the action or inaction has caused him injury, and that a judgment preventing or requiring the action will redress it.”214 An action challenging IP is brought either against the holder of the IP or the government.215 In either posture, the challenger’s asserted injury is based on her status as a regulated party.216 As described above, because intellectual property is a form of market regulation, the actors in that market are the direct objects of the executive action in granting the IP. As such, they do not implicate the Lujan court’s concern with wholesale monitoring of the executive branch.217

III. BROADER INTELLECTUAL PROPERTY STANDING IS CONSISTENT WITH SOUND POLICY

The previous part described how intellectual property may injure those working in fields it occupies, even in the absence of enforcement efforts by the IP holder, and argued that such injuries are sufficient for standing purposes under current doctrine. That analysis yields a broader concept of standing to challenge the validity of IP than the courts of appeals currently contemplate. This Part defends that broader standing as a normative matter.

213 Lujan, 504 U.S. at 561.
214 Id. at 561-62; see also Sunstein, supra note 212, at 164-65 (emphasizing importance of Justice Scalia’s distinction between standing for those who are subject to regulation and those who allege injury due to the regulation of another).
215 In the former posture, it is unclear why a particular injury in fact must be asserted separately from a legal cause of action. See F. Andrew Hessick, Standing, Injury in Fact, and Private Rights, 93 CORNELL L. REV. 275 (2008) (arguing that injury in fact is not a necessary predicate to private actions between two parties).
216 See supra notes 98 - 100 and accompanying text.
217 Historically, economic competitors have long had standing to challenge government regulation of their market. See, e.g., Elizabeth Magill, Standing for the Public: A Lost History, 95 VA. L. REV. 1131 (2009).
Invalidity litigation provides a significant social benefit. It weeds out intellectual property that should not exist in the first place and therefore reduces the social cost of innovation. Indeed, it is a necessary component of a well-functioning intellectual property system that rationally chooses to depend upon private actors to determine the value of exclusive rights. But our current standing rules are misaligned with the incentives to bring socially valuable invalidity actions. The current standing rules limit access to the courts largely to direct competitors. A direct competitor, however, often lacks the incentive to challenge intellectual property because it incurs the full expense of the litigation while sharing the benefits of a favorable judgment with its fellow competitors. Broader standing therefore facilitates challenges to intellectual property that those who qualify under more stringent standing rules might fail to bring. Of course, this added benefit is not without cost. Invalidity litigation is asymmetric. A finding of invalidity bars future attempts to enforce the intellectual property while a finding of validity does not insulate the holder against future challenges. This dynamic raises the spectre of harassing or vexatious litigation. But courts have several mechanisms short of constitutional limits on access to the courts that can limit the scope of that cost. More radically, that problem can be eliminated by shifting litigation away from private parties and toward the government.

A. The need for invalidity litigation

Intellectual property is generated in vast quantities in the United States.218 The PTO now receives, for example, more than 500,000 utility patent applications every year and issues more than 200,000 patents.219 It receives more than 300,000 applications for trademark registration

218 We have reliable statistics on the numbers of patents and trademark registrations issued, but data on unregistered trademarks is sparse and, of course, it is difficult to estimate the volume of copyrighted material generated each year. It is fair to assume that the quantity of such material is vast.
219 See UNITED STATES PATENT & TRADEMARK OFFICE, supra note 1, at 175 tbl.1 (2012).
annually, and issues close to 200,000 certificates of registration.\textsuperscript{220} At that volume, the PTO does not have the resources accurately to examine every one of them. It is estimated, for example, that each patent examiner spends roughly eighteen hours examining each application.\textsuperscript{221} The PTO approves about 75\% of all applications for trademark registration.\textsuperscript{222} In these conditions, errors are inevitable. That is, the PTO will necessarily issue patents or trademarks that do not meet the standards for patent or trademark eligibility and that should not have been issued. Some empirical work in patents suggests that such errors are frequent – between 33\% and 46\% of patents litigated to judgment are found invalid.\textsuperscript{223}

Invalid intellectual property is socially costly. It is intellectual property that should not have been granted or recognized in the first instance. As such, its recognition is in derogation of the background principle that those works ineligible for protection under state or federal law are presumptively available to the public. As the Supreme Court has explained, “[s]haring in the goodwill of an article unprotected by patent or trade-mark is the exercise of a right possessed by all – in the free exercise of which the consuming public is deeply interested.”\textsuperscript{224}

Invalid intellectual property imposes social costs both when it is enforced and when it is merely extant.\textsuperscript{225} The classic justification for intellectual property is that the costs of excluding others from practicing the subject of the intellectual property are outweighed by the benefits that

\textsuperscript{220} See id. at 189 tbl.16.
\textsuperscript{222} See Barton Beebe, Is the Trademark Office a Rubber Stamp?, 48 Hous. L. Rev. 751, 770 (2011). As Beebe points out, it is difficult to determine whether or not the grant rate for trademark applications is optimal. See id. at 774-75.
\textsuperscript{223} See supra note 105.
\textsuperscript{224} Id. at 231 (internal quotation marks omitted).
it creates with respect to some other social goal – encouraging innovation in the case of patent and copyright, and preventing consumer confusion in the case of trademark.\textsuperscript{226} If an invention is not eligible for patent protection, for example, it is thought that the patent is not necessary to provide incentives to produce the invention.\textsuperscript{227} That implies that invalid IP imposes all of the social costs of exclusive rights but confers none of the social benefits. And those social costs are significant – exclusive rights not only restrict access and create deadweight losses when consumer demand cannot be satisfied at marginal cost, but also impose significant restraints on further downstream innovation.\textsuperscript{228}

As described above, however, invalid intellectual property need not be enforced to remain socially harmful. Its mere existence can serve as a powerful competitive deterrent, stifling the development of competitive markets and distorting innovative resources to less socially productive ends.\textsuperscript{229} The proliferation of intellectual property in itself poses challenges. Multiple, potentially overlapping intellectual property rights give rise to the risk of “patent thickets” that companies must work through in order to commercialize products covered by

\textsuperscript{229} \textit{See supra} notes 114- 117 and accompanying text; Leslie, \textit{supra} note 114.
Multiple patents, and “anticommons” scenarios in which multiple dispersed rights must be aggregated in order to engage in innovative activity.

These costs are especially salient in light of the development of new business models based on the assertion of intellectual property. I refer here to the phenomena of patent or copyright “trolls.” These are entities that use intellectual property primarily to obtain licensing fees or litigation settlements rather than to support the development or transfer of technology or creative work. The IP troll business model takes advantage of the asymmetry of costs between plaintiffs and defendants to extract nuisance settlements. Because these entities do not themselves practice any inventions or use any creative works that may be subject to counterclaims, the cost of asserting their intellectual property is far lower than defendants’ costs of defense. Yet infringement judgments may subject defendants to devastating losses – injunctive relief and very high damages multiples. As a result, many defendants choose to settle. Trolls increase the social cost associated with invalid intellectual property. Because their business model depends less on success in court than on the extraction of nuisance settlements, and because they source most of their intellectual property from other parties that

231 See Michael A. Heller & Rebecca S. Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 Science 698, 698 (1998). To be sure, empirical evidence about the scale of the anticommons problem is mixed. See Rebecca S. Eisenberg, Noncompliance, Nonenforcement, Nonproblem? Rethinking the Anticommons in Biomedical Research, 45 House L. Rev. 1059 (2008). I assume that the anticommons remains a viable theoretical threat that might be alleviated by reducing the number of existing invalid patents.
232 There is no single definition of an “intellectual property troll.” I follow Colleen Chien’s definition, in the patent context, of “patent assertion entities.” See Chien, supra note 2, at 300.
have no interest in or ability to commercialize it, their assertions may be of disproportionately invalid IP.\textsuperscript{234}

An exponential increase in the amount of issued intellectual property coupled with increasing concerns about the behavior and social costs of IP assertion entities has led to widespread calls to increase the “quality” of extant IP – that is, to reduce the amount of invalid IP and its attendant social costs.\textsuperscript{235} There are, broadly speaking, two ways one can do this. The PTO can be more thorough in applying the criteria for patent or trademark validity during its initial examination. Or the agency and courts can apply a light initial screen and then a deeper review in litigation after the IP issues. Mark Lemley has argued in the patent context that it makes little sense to improve patent quality solely by increasing the resources expended in patent examination.\textsuperscript{236} In brief, a large number of patents are applied for and issue, but very few are ever the subject of litigation or licensing. In Lemley’s view, the cost of more detailed examination to weed out bad patents is not justified because few of those patents ultimately will be of any importance. Instead, he argues that it is rational to apply a light screen at the

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\textsuperscript{234} There are several sources of evidence to suggest that trolls press particularly weak IP claims. Lemley, Allison, and Walker, in a study of the most-litigated patents, find that non-practicing entities (NPEs) who file multiple lawsuits to enforce a single patent are likely to settle and, indeed, win only 9.2% of the cases that they litigate to judgment. See John R. Allison, Mark A. Lemley & Joshua Walker, Patent Quality and Settlement Among Repeat Patent Litigants, 99 GEO. L.J. 677, 691-95 & fig.4 & tbl.9 (2011). 69% of the most-litigated patents in their study were found invalid. Id. at 706. Risch reports similar results for most-litigated patents, but is skeptical about the connection between this finding and the asserting entity’s status as a troll. See Michael Risch, Patent Troll Myths, 42 SETON HALL L. REV. 457, 481-84 (2012). Finally, Chien reports based on survey data that some 40% of startup companies targets by patent trolls “stated that they were being targeted because of their use of another’s or a widely available technology.” Colleen Chien, Startups and Patent Trolls 2 (Sept. 28, 2012), available at http://ssrn.com/abstract=2146251.

\textsuperscript{235} See, e.g., R. Polk Wagner, Understanding Patent Quality Mechanisms, 157 U. PA. L. REV. 2135, 2136-37 & n.1 (2009) (citing sources); id. at 2138-39 (defining patent quality as “the capacity of a granted patent to meet (or exceed) the statutory standards of patentability”).

\textsuperscript{236} See Lemley, Rational Ignorance, supra note 126, at 1497.
examination stage and then allow interested parties to devote the more significant resources necessary for a detailed examination in litigation once it becomes clear which patents will be important and which will not. 237 Although this argument has its limits, 238 its basic logic suggests at the very least that the problem of invalid intellectual property cannot be solved by administrative solutions alone, or even primarily. The costs of such a solution will inevitably exceed its benefits.

The courts therefore have a critical role to play in screening out invalid intellectual property. Indeed, the courts are the ultimate arbiters of IP validity. 239 Recognizing this role, the Supreme Court has, on numerous occasions, “emphasized the importance to the public at large of resolving questions of [intellectual property] validity.” 240 And it has “encourage[d] authoritative testing” of the validity of intellectual property rights in court. 241 Importantly, the courts enjoy primacy in determinations of IP validity notwithstanding Congress’s enactment of procedures for administrative post-grant review. Those procedures – found in both the Lanham Act and the America Invents Act 242 – aim to provide a less costly way to challenge the validity of IP. 243 But

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237 See id. at 1508-11.
238 Importantly, Lemley’s argument is not an argument against any improvements to the screening process. And, indeed, a number of proposals for reform make sense even accounting for the “rational ignorance” that Lemley describes. See, e.g., Douglas Lichtman & Mark A. Lemley, Rethinking Patent Law’s Presumption of Validity, 60 STAN. L. REV. 45 (2007).
239 See supra note 8 and accompanying text.
240 Cardinal Chem., 508 U.S. at 100.
241 Blonder-Tongue, 402 U.S. at 344. The Court has done so through a number of mechanisms. See MedImmune, 549 U.S. at 130-34 (licensee need not violate license to bring action for declaratory judgment of invalidity); Cardinal Chem., 508 U.S. at 100-01 (finding of noninfringement does not moot counterclaims for invalidity); Blonder-Tongue, 402 U.S. at 346-48 (patent holder estopped from re-litigating finding of invalidity); Lear, Inc. v. Adkins, 395 U.S. 653, 663-68 (1969) (licensees not estopped from asserting invalidity of a patent as a defense in contract action for unpaid royalties).
243 See Matal, supra note 10, at 600-05.
because their results too can be appealed to the federal courts,\textsuperscript{244} it is those courts that retain the final word.

\textbf{B. The misalignment between current standing rules and incentives to bring invalidity litigation}

Most basically, expanded standing along the lines I describe in Part II will promote more “authoritative testing” of intellectual property. It stands to reason that if it is easier for plaintiffs to bring invalidity cases, more such cases will be brought. Broader standing can also discourage certain bad behaviors that have become common among IP holders. One common tactic, for example, is for an IP holder to threaten potential infringers in a way that falls just short of the now malleable standard for declaratory judgment jurisdiction.\textsuperscript{245} That way the IP owner can induce behavioral changes yet shield its IP from challenge.\textsuperscript{246} Similarly, some IP holders will file suit and then, when it appears that their IP is legitimately threatened, settle and make a unilateral covenant not to sue that may moot any declaratory judgment counterclaim.\textsuperscript{247} The risk-based standing analysis proposed above reduces the effectiveness of this gamesmanship.\textsuperscript{248} No particular behavioral trigger controlled by the IP holder is necessary for jurisdiction, and mooting a present infringement controversy generally would have no effect on an infringement defendant’s standing to eliminate the risk that such a dispute might arise again in the future.\textsuperscript{249}

\begin{footnotesize}
\begin{enumerate}
\item See Leslie, supra note 114.
\item See, e.g., Already, LLC, dba Yums v. Nike, Inc., 133 S. Ct. 721, 733-34 (Kennedy, J., concurring); Benitec Australia, Ltd. v. Nucleonics, Inc., 495 F.3d 1340, 1351-52 (Dyk, J., dissenting).
\item See Rochelle Cooper Dreyfuss & Lawrence S. Pope, Dethroning Lear? Incentives to Innovation After MedImmune, 24 BERKELEY TECH. L.J. 971, 979-82 (2009).
\item The courts in Already LLC v. Nike, Inc., 133 S. Ct. 721, 728-29 (2013), and Organic Seed Growers & Trade Assn. v. Monsanto Co., 718 F.3d 1350, 1357-58 (Fed. Cir. 2013), read covenants not to sue broadly enough to cover future conduct, thereby leaving open the question
\end{enumerate}
\end{footnotesize}
This could also help alleviate the asymmetric structure of troll litigation that contributes to nuisance settlements.\footnote{250} Broader standing would allow potential infringers to make credible threats of validity litigation even in the absence of direct threats from the troll. That in itself would serve as a check on troll behavior similar to the threat of counterclaim suits for practicing entities. It would also, as described above, help to reduce trolls’ ability to engage in strategic behaviors that allow them to simultaneously assert their IP and shield it from challenge.\footnote{251}

Finally, broader standing also is consistent with – and indeed, is necessary to implement completely – Congress’s schemes for administrative review of intellectual property. The statutes allow any interested person to challenge the grant of a patent or a trademark registration before the agency. But while “[a]n administrative agency is not subject to Article III of the Constitution,” and an agency petitioner has “no need to establish . . . standing to participate in the proceedings before the agency,” “[w]hen the petitioner later seeks judicial review, the constitutional requirement that it have standing kicks in.”\footnote{252} Restrictive standing rules in federal court create a disconnect between the persons who can bring an petition before the agency and the persons who can appeal that determination in court. But because agency determinations are not final, as described above, it is highly unlikely that a person would incur the expense of an action before the PTO if that person would then be unable to appeal an adverse decision in court. Such a rule would frustrate congressional intent and significantly diminish the effectiveness of the new post-grant review procedures.

\footnote{250} See supra notes 232 - 234 and accompanying text.
\footnote{251} It is worth noting that trolls engage in a variety of legal strategies, which may be affected to varying degree by the possibility of easier validity challenges. See Mark A. Lemley & A. Douglas Melamed, Missing the Forest for the Trolls, manuscript at 10-11 (2013).
\footnote{252} Sierra Club v. EPA, 292 F.3d 895, 899 (D.C. Cir. 2002) (internal quotation marks and alterations omitted; emphasis added).
There is, however, a deeper reason why broader standing is justified. The current standing rules result in an under-production of invalidity litigation. Even where sufficient incentives exist in plaintiffs that can qualify under the current rules, the standing rules may distort the types of challenges to intellectual property that the courts hear. This is because, as described above, the current standing regime largely limits standing to presently existing competitors. Those competitors are unlikely to bring the most socially valuable validity challenges.

Several scholars have observed that the Supreme Court’s decision in Blonder-Tongue, which gives findings of invalidity preclusive effect in subsequent litigation between different parties, makes invalidity litigation a “public good,” subject to familiar problems of under-production. In the typical case, a single challenger bears the full cost of the invalidity litigation. But the rule in Blonder-Tongue, that a judgment of invalidity precludes the patentholder from re-litigating the issue even against different parties, means that the challenger must share the fruits of her labors with the world. This creates several problems. The first is free riding. Because the costs of challenging IP are borne singly but the benefits are spread globally, parties who might be interested in such a challenge have an incentive to free ride on the

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253 See supra notes 198 - 199 and accompanying text.
efforts of others. In other words, because IP challenges generate positive spillovers, we can expect to see fewer of them than is optimal.

But the dynamics of IP challenges are even more pernicious. The free rider problem described above is exacerbated by the fact that those who would benefit from patent challenges are often competitors of one another. A successful challenger therefore not only shares the benefits of his challenge with the world at large, but more particularly shares them with his competitors. This means not only that the collective action problem described above is that much harder to overcome, but also that challengers may have an incentive to engage in collusive settlement with IP holders. Beyond a simple desire not to benefit competitors, it may be advantageous for one competitor armed with a strong invalidity argument to strike a deal with the IP holder. As Thomas writes in the patent context, “so long as sufficient supracompetitive profits exist to go around, the patentee ordinarily possesses incentives to suppress the prior art by means of a favorable license. Both parties may then extract information rents from the consuming public by maintaining artificially high prices due to an invalid patent.” Reverse payment settlements from branded drug manufacturers to generic drug manufacturers are a

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255 See Miller, supra note 254, at 687-88 (“Blonder-Tongue, considered alone, eliminates a patent attacker's ability to exclude others from appropriating the benefit of its successful patent attack. It thus turns patent invalidity judgments into public goods. And the resulting free rider problem, which discourages patent challenges, is at least as stark as the one that justifies providing a patent system in the first place.”); Thomas, supra note 254, at 334 (same).
257 See Thomas, supra note 254, at 335-37.
258 Id. at 335. See also Rochelle Cooper Dreyfuss, Dethroning Lear: Licensee Estoppel and the Incentive to Innovate, 72 VA. L. REV. 677, 701-02 (1986) (noting that, contra to the Supreme Court’s reasoning in Lear, licensees often have little incentive to challenge patents).
particularly salient example of this problem.\textsuperscript{259} In those cases, a generic manufacturer chooses to accept payment to stay off the market rather than proceed with its challenge to a patent covering a branded pharmaceutical product. This arrangement may be in both parties’ interests – the branded manufacturer protects its patent and the challenger receives a large sum to drop the challenge – but it is in derogation of the broader social interest in eliminating the potentially invalid pharmaceutical patent.

The existing literature suggests several ways to better align the incentive of potential IP challengers with the socially optimal amount of challenges: bounties,\textsuperscript{260} fee shifting,\textsuperscript{261} and defensive cost-sharing.\textsuperscript{262} But there is another solution: broader standing.\textsuperscript{263} The challenges of collective and collusive action described above are most severe with respect to competitors. Because the current standing rules largely permit suit only by that class of challengers, there is a mismatch between the optimal incentives to challenge IP and the justiciability rules governing who can bring such suits.

The standing principles described in Part II would authorize suit by a variety of persons who face different incentives to challenge IP but who are currently precluded from doing so. These persons include potential competitors, indirect competitors, and those who respond to nonpecuniary incentives. Begin with potential competitors. There are reasons to believe that

\textsuperscript{260} See Thomas, supra note 254, at 340-42; Miller, supra note 254, at 704-11.
\textsuperscript{261} See Kesan, supra note 254, at 795-97.
\textsuperscript{262} See Lemley & Shapiro, supra note 110, at 90.
\textsuperscript{263} The analyses above all were made during the time when the “reasonable apprehension of suit” test defined the limits of declaratory judgment jurisdiction and appear to assume this restrictive test for standing as the baseline for determining who can bring suit. See, e.g., Merges & Farrell, supra note 254, at 946-47. Lemley & Shapiro do suggest “encourag[ing] public interest organizations to challenge suspect patents,” supra note 110, at 90, but do not link the feasibility of this suggestion to standing rules.
potential competitors may be in a position to overcome the collective action problem described above. Their cost-benefit calculus tends to focus more on investments over time than on present competitive positioning. The relevant question for a potential competitor is whether the costs of challenging IP exceed the risk-adjusted costs of potential holdup by that IP after several years of costly investments. It may then be rational to bear the full cost of litigation if it either saves the company from potential losses due to holdup or clears the way for investments over time. The fact that others may free ride upon such efforts does not enter that calculus. Free riding may be of less importance to potential competitors for another reason. These competitors usually play in nascent or under-developed markets where direct competition does not yet exist. While it is true that their efforts to challenge IP may benefit others who are developing the nascent market, that benefit does not represent a direct and presently existing competitive threat in the absence of well-defined products and markets.

Indirect competitors similarly may be less sensitive to free riding. These are entities that do not compete in the same market as the patentholder and therefore are unlikely themselves to be infringers. Instead, they typically compete “upstream” as suppliers to direct infringers. That business model usually involves either licensing technology or facilitating the use of patented technology by others. Their revenues are dependent not upon their own exploitation of patented technology, but on the widespread exploitation of that technology by others. They should therefore be relatively indifferent to – and indeed, supportive of – widespread adoption of

264 Abramowicz and Duffy have argued that there may be under-production of new markets when competitors can appropriate the information generated by the first experimenter. See Michael Abramowicz & John F. Duffy, Intellectual Property for Market Experimentation, 83 N.Y.U. L. Rev. 337 (2008). In previous work, I have disputed that intellectual property is necessary to solve that production problem. See Michael J. Burstein, Exchanging Information Without Intellectual Property, 91 Tex. L. Rev. 227, 240 (2012).

the patented technology should they be successful in their suit. Indeed, collusion with the patent holder to limit the spread of the technology is unlikely to be in their interest.

Finally, there is a class of plaintiffs whose incentives to bring suit are not limited to pecuniary interests. Among this class are public interest groups like the Public Patent Foundation or the Electronic Frontier Foundation and the test plaintiffs they recruit such as nonprofit or academic researchers or technologists. Academic researchers, for example, may be motivated by a desire to spread the benefits of scientific research more widely and this motivation may trump financial motivations to exploit the technology for monetary gain. Because these plaintiffs see it as part of their mission to encourage widespread dissemination of technology, they are willing to expend the funds and share the benefits broadly. Indeed, to these plaintiffs, free riding is a feature rather than a bug.

Of course, IP challenges do happen even under existing rules, and potential challengers do have some incentive to bring suit, though perhaps with less frequency than optimal. But even where the incentive exists to challenge IP, there is a further under-explored problem. The precise nature of the challenge will of course depend on the challenger’s interests. Competitors’ interests may again diverge from the social optimum. In patent law, for example, there are a number of different ways to contest the validity of any given patent. Some are specific to the patent itself. A claim that the patent fails the requirements of novelty and nonobviousness

266 See, e.g., Arti Kaur Rai, Regulating Scientific Research: Intellectual Property and the Norms of Science, 94 NW. U. L. REV. 77, 88-94 (1999) (describing traditional norms of sharing in scientific communities). This view is necessarily a simplification. See, e.g., Peter Lee, Patents and the University (2013), available at http://ssrn.com/abstract=2217719. I do not mean to argue that all academics experience these incentives, but rather that enough do that a legal change granting broader standing would likely result in more challenges brought by those who have incentive to do so.
267 See Lemley & Shapiro, supra note 110, at 89 (concluding that the incentive to challenge invalid IP depends on a myriad of fact-specific circumstances).
usually has this structure. It is a claim based on specific facts about whether the subject matter claimed in the patent existed in the world prior to invention or application or whether the subject matter of the patent would have been obvious to a person having ordinary skill in the art. But other defenses operate more categorically. A claim that a patent falls outside of eligible subject matter, for example, purports to exclude from patentability certain content altogether. Take the example of human gene patents. A patent-specific claim of invalidity, say, that the patent is not novel, is a claim that someone else had previously discovered the particular gene. By contrast, an argument that the patent does not claim eligible subject matter is an argument that genes are not patentable. That latter argument affects far more than the single patent; it potentially has the effect of invalidating a large number of issued patents. Similar arguments may be found in trademark and copyright. An argument that a particular trademark is generic and has failed to acquire secondary meaning, for example, applies only as to that trademark. An argument that a class of marks—say the use of a single color in the fashion industry—cannot be protected under federal trademark law sweeps more broadly.

Now consider who has an incentive to bring a particular kind of challenge. Competitors are likely to bring only patent- or trademark-specific challenges. Any challenge that sweeps more broadly likely impacts their intellectual property as well. So a competitor challenging a gene patent will argue that that patent is invalid, but not that genes as a category are

268 See 35 U.S.C. § 102(a). I am over-simplifying here. The more specific argument is that the subject matter of the claim existed in the prior art prior to the date of application.
270 See id. at 1347-48 (Moore, J., concurring in part).
272 See Parchomovsky & Stein, supra note 256, at 8-10 (drawing a distinction between “individualized” and “class” or “general” defenses).
unpatentable. If he owns similar patents, then that latter argument will redound to his detriment.\textsuperscript{273} This phenomenon may explain why the question whether genes constitute patentable subject matter has remained unresolved for almost 30 years since the PTO began issuing such patents.\textsuperscript{274} The current standing rules, by limiting standing for the most part to competitors, distort the development of the substantive law of intellectual property. By limiting standing to a particular class of plaintiffs, they encourage challenges based on arguments that are in those plaintiffs’ interests, rather than based on the full spectrum of validity issues that any given intellectual property may present.

Broader standing along the lines described in this article could help solve that more specific under-production problem. Just as those plaintiffs other than direct competitors may have more incentive to bring IP challenges in the first place, so too may they have incentive to bring a wider range of challenges. Potential and indirect competitors often operate in markets adjacent to the intellectual property they are challenging. They are therefore less likely to shy away from broader challenges to that intellectual property. Similarly, those motivated by nonpecuniary concerns are likely to be relatively uninhibited in the scope of challenges that they bring.

\textit{C. Mitigating the potential costs of expanded standing}

Of course, broader standing is not costless. It encourages more litigation. The costs of that litigation will be borne primarily by intellectual property holders who need to defend against cases that they otherwise could avoid. This section briefly explains why those increased costs likely do not outweigh the benefits described above.

\textsuperscript{273} See id. at 26-27 (noting that class and general defenses suffer may suffer from under-production relative to individualized defenses because they are accompanied by significant spillovers).

\textsuperscript{274} See Association for Molecular Pathology, 689 F.3d at 1343-44 (Moore, J., concurring in part).
Broader standing increases the possibility that an IP holder may have to incur costs to defend her IP in an administrative action or a lawsuit. One objection to broader standing, then, is that an IP holder should not have to bear such costs. There are two ways to conceptualize this objection. The first is to argue that once IP has issued, an IP holder that chooses not to enforce it for whatever reason should not be compelled to defend it in court. This formulation of the objection, however, assumes that unenforced intellectual property is harmless. As described above, that assumption is not justified. It also reflects a view that IP holders should be left alone once their IP has issued. But patents and trademark registrations are only presumed to be valid when they issue. They are not actually valid until they are tested in court. And Congress, by providing for administrative review after grant or registration has at least indicated that patent and trademark owners must be prepared to defend their exclusive rights upon application by a third party. There is no reason why the expectation should be any different with respect to actions brought initially or subsequently to administrative review in the federal courts.

A different formulation of the objection posits that IP applicants will have to factor the possibility of incurring post-grant litigation costs into their decision whether to obtain the IP in the first instance. Broader standing in this view makes it more expensive on average to obtain a grant of exclusive rights.\textsuperscript{275} It is far from clear, however, that increasing the expense of intellectual property results in a social welfare loss. At the margin, it is likely to result in fewer issued patents or registered trademarks. But as David Fagundes and Jonathan Masur write, the

\begin{quote}
\textsuperscript{275} Justice Harlan, writing in dissent in \textit{Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.}, 382 U.S. 172 (1965), expressed concern that validity challenges might “chill” patenting activity. \textit{Id.} at 180 (Harlan, J., concurring). That case, however, involved the threat of treble damages in an antitrust suit. Suits or administrative actions seeking a declaration of invalidity do not subject IP holders to such damages.
\end{quote}
costly nature of the patent acquisition process is a “classic costly screen.” 276 The cost of acquisition “forc[es] actors who are seeking to acquire legal rights to consider whether acquisition of the right will be worth doing so.” 277 With respect to intellectual property, there is reason to believe that the effect of the costly screen is to deter the production of low private value rights that also have low social value. 278 Taking patents as an example, the argument is that because the PTO employs only a rough screen, as described above, 279 it is highly likely that patents of low social value will issue – that is, patents whose mere existence imposes costs but whose issuance is unaccompanied by a significant social benefit because they are invalid. Imposing a cost deters applicants whose private valuation of the patent does not meet the cost threshold. It is then highly likely that patents of low private value also have low social value, so this cost is socially beneficial.

It is of course difficult to determine the optimal cost of the screen, and therefore difficult to say with certainty that increasing the cost of obtaining IP by making it more likely the holder will have to defend that IP in a subsequent proceeding will confer a social benefit. But there is reason to believe it is so. Consider, for example, that the cost of patenting has remained roughly similar for the last several years even as the volume of patent applications has skyrocketed. 280 Meanwhile, the problems associated with low social value patents, like patent trolls in the software and telecom industries, have gained increasing public salience. This suggests that additional deterrence may be socially valuable.

277 Id. at 679-80.
278 See id. at 696-700.
279 See supra notes 218 - 223 and accompanying text.
Aside from imposing costs on IP holders, which may do more good than harm, there is a different and more concerning problem that arises from the operation of Blonder-Tongue’s preclusion rule. Recall that Blonder-Tongue gives judgments of invalidity preclusive effect in subsequent litigation between different parties. It does not extend that preclusion, however, to judgments of validity. 281 This asymmetry means that an IP holder must defend against every claim of invalidity. If she loses only once, her IP is invalid. But challengers can bring actions repeatedly. This rule therefore presents a real threat of vexatious or harassing litigation. Broader standing may increase this risk to IP holders.

There are several mechanisms, however, that can help to mitigate this risk. One is simply the cost of litigation. Validity cases are expensive for both plaintiffs and defendants. Plaintiffs in such cases can obtain a declaration that the IP in question is invalid, but cannot collect damages or attorneys’ fees. The nuisance value of such suits is therefore limited. 282 For the most part, we can expect such suits to be legitimate. Plaintiffs will not be incentivized to bring the suit for a reason other than actual invalidation of the intellectual property.

But suppose that cost is no issue. Say that a large corporation decides to set up a $1 billion fund to attack any and all software patents that it can find. Again, as to meritorious suits, there are reasons to think that the cost to patent holders is justified, as described above. Repeated or harassing litigation enabled by this structure, however, represents a real danger. I offer both a set of modest solutions based on the application of existing preclusion law and

281 See 6 DONALD S. CHISUM, CHISUM ON PATENTS § 19.02[2][e], at 19-112 (2011).
282 One potential exception may be in the context of licensing negotiations, where a credible threat to initiate invalidity proceedings could give a potential licensee significant leverage. See Dreyfuss & Pope, supra note 248, at 984-91; SanDisk Corp. v. STMicroelectronics, Inc., 480 F.3d 1372, 1383-85 (Bryson, J., concurring in the result). One solution to this problem, which Dreyfuss & Pope advocate, is reconsideration of the doctrine of licensee estoppel. See Dreyfuss & Pope, supra note 248, at 1006. This is a more tailored solution to a particular problem of incentives to innovate than is a blanket restriction on standing.
prudential or discretionary limits on jurisdiction and a more radical solution to redirect validity litigation away from IP holders and toward the government.

Ordinary preclusion principles are likely to prevent repeated litigation. Although Blonder Tongue establishes an asymmetry between findings of validity and invalidity as a matter of issue preclusion, principles of claim preclusion continue to bar subsequent validity suits by the same parties. A challenger who is unsuccessful in asserting a claim of invalidity cannot simply assert the same claim against the same patentholder in a different forum, even if the precise grounds for challenge are different or there has been an intervening change of law in between the suits. It is also worth noting in this context that Congress has designed post-grant review proceedings with these principles in mind.

Claim preclusion does not, of course, bind different parties. A subsequent challenger can still bring a substantially identical suit, forcing the IP holder to litigate multiple proceedings. A solution to this problem might be to soften or eliminate the asymmetry that Blonder Tongue creates. Many courts have recognized the potential unfairness to IP holders that results from having to relitigate “wins” but not “losses” and therefore grant some weight to previous judgments of validity under principles of comity. The danger in extending full preclusive effect to judgments of validity is that it may not be the case that a single plaintiff has an interest

283 See Roche Palo Alto LLC v. Apotex, Inc., 531 F.3d 1372, 1380 (Fed. Cir. 2008) (“[C]laim preclusion applies where: ‘(1) the same parties, or their privies, were involved in the prior litigation, (2) the prior litigation involved the same claim or cause of action as the later suit, and (3) the prior litigation was terminated by a final judgment on the merits.’”) (quoting Cent. Delta Water Agency v. United States, 306 F.3d 938, 952 (9th Cir. 2002)).
284 See id. at 1380-81 (holding that subsequent counterclaim of invalidity was barred by claim preclusion where parties litigated previous claim arising out of same operative facts).
285 Under the new procedures in the America Invents Act, for example, a petitioner before the agency may not bring a subsequent petition for review “on any ground that the petitioner raised or reasonably could have raised during the post-grant review.” 35 U.S.C. § 325(e)(1). That principle applies as well to subsequent actions brought in court. See id. § 325(e)(2).
286 See 6 CHISUM, supra note 281, § 19.02[2][e], at 19-112-19 (collecting cases).
in bringing every possible challenge to a particular IP grant.\textsuperscript{287} So a finding in one litigation that a patent is valid likely should not bar subsequent challenges on different grounds \textit{by different parties} who could not litigate \textit{their} claims in the first action. A useful middle ground would be to grant issue preclusive effect in subsequent cases that raise the same grounds for or turn on the same evidence of invalidity as a previous case.

The courts also have a variety of prudential or discretionary mechanisms that they can use to screen out cases that appear to be particularly vexatious. Parties that satisfy the Article III minimum must still demonstrate that their asserted injuries “fall[] within the zone of interests to be protected or regulated by the statute in question.”\textsuperscript{288} That prudential component of standing may pose a hurdle to parties that appear to be using the mechanisms of the intellectual property laws to achieve ends unrelated to the promotion of incentives for innovation. Similarly, the ripeness doctrine allows courts to decline to hear a case where the issue presented is unfit for judicial decision at the time and there would be no significant hardship to the parties from withholding adjudication.\textsuperscript{289} This mechanism provides courts with a means to delay adjudication until particular issues become more focused between the parties, and could be used in this context to screen out particularly attenuated claims of injury that nonetheless meet the Article III standing bar described above. Finally, the federal courts have broad discretion under the Declaratory Judgment Act to decline to hear a suit seeking declaratory relief.\textsuperscript{290}

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\textsuperscript{287} \textit{See supra} notes 267 - 271 and accompanying text.
\textsuperscript{289} \textit{See, e.g.}, \textit{National Park Hospitality Ass’n v. Department of Interior}, 538 U.S. 803, 808 (2003).
\textsuperscript{290} \textit{See MedImmune}, 549 U.S. at 136 (“The Declaratory Judgment Act provides that a court \textquoteleft may declare the rights and other legal relations of any interested party,’ not that it \textit{must} do so.”) (quoting 28 U.S.C. § 2201(a)).
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These prudential or discretionary mechanisms are flexible. They operate for the most part on a case-by-case basis. They allow courts, therefore, to selectively deny access to the court for a variety of reasons without erecting a firm doctrinal barrier. Judicious application of these doctrines can likely prevent abuses by validity challengers while at the same time allowing for the benefits of broad standing described above.

A more radical solution to the problem of vexatious litigation against IP holders would be to redirect validity litigation away from private parties and toward the government. In a sense the existing administrative review procedures are an attempt to encourage this. In those procedures, the PTO is the defendant and incurs the litigation cost. The America Invents Act procedures even go so far as to preclude a petitioner electing administrative review from bringing the same claims against a private party in court. But the Federal Circuit in particular has been reluctant to apply ordinary principles of administrative review to IP validity challenges. It may be time to reconsider that position. To the extent that a validity challenge is fundamentally an argument that the PTO acted wrongly when it issued the patent or registered the trademark, the agency is the more natural defendant. The PTO can defend its ruling according to ordinary principles of administrative review; the IP holder can intervene if necessary to develop additional facts. Symmetry between infringement litigation and challenger-initiated validity litigation could be achieved through mandatory joinder of the PTO or the use of something akin to a primary jurisdiction referral to give the PTO the first opportunity to defend

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291 See 35 U.S.C. § 325(a)(2) (providing for automatic stay of subsequently-filed civil action); (e)(2) (precluding subsequent civil suits for same claim of invalidity).
its action.\textsuperscript{293} Putting the burden of validity defense on the agency that issues the intellectual property also can help solve a particular asymmetry in the law that encourages patent grants rather than denials. Because the PTO currently receives greater scrutiny for its denials than its grants, it is incentivized to grant more and to take an expansive view of the law.\textsuperscript{294} Requiring administrative defense of IP validity may simultaneously relieve this problem and reduce the burden on IP holders described above.

CONCLUSION

“IP standing” is just standing. There is no justification for treating IP standing differently from any other justiciability problem. And the application of traditional standing principles to cases challenging the validity of IP yields a broader concept of standing than the courts addressing the issue currently contemplate. The injury in such cases is the risk and uncertainty that intellectual property creates for others working in the same field. When those other market participants are deterred from engaging in innovative activity – when they rationally choose to forego making costly investments before resolving the uncertainty – they have standing to bring what amount to a quiet title action. They can clear the field of the adverse IP before making those investments. And, as described above, this result is consistent with sound policy – it supports the innovation-promoting goals of the IP laws while avoiding the ills that standing doctrine is supposed to prevent. Broader standing should help to rein in some of the abuses of the IP system that have become increasingly prevalent in recent years. It will contribute to more


meaningful public participation in developing IP policy. And it will help to ensure that IP serves not just private interests but those of public more broadly.