

Stanford Technology Law Review

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Fall 2014

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MANDATING FINAL-OFFER ARBITRATION OF FRAND ROYALTIES FOR STANDARD-ESSENTIAL PATENTS

J. Gregory Sidak*

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ABSTRACT

Mark Lemley and Carl Shapiro propose that standard-setting organizations (SSOs) mandate that their members henceforth submit to binding, final-offer arbitration (commonly called “baseball arbitration”) to set fair, reasonable, and nondiscriminatory (FRAND) royalties in licensing disputes concerning standard-essential patents (SEPs). SSOs should reject this proposal. It does not rest on sufficient facts or data, nor does it apply intellectually rigorous principles and methods of law and economics in a reliable manner. This is not to say that the voluntary use of arbitration to resolve FRAND licensing disputes is inherently problematic. However, the incremental efficiency that Lemley and Shapiro claim that their proposal would achieve over litigation or conventional commercial arbitration is illusory. For one, it is much harder to value a portfolio of SEPs over the span of five years than to value an individual baseball player for a single season. The Lemley-Shapiro version of mandatory baseball arbitration would not shed light on the question of what constitutes a FRAND offer. To the contrary, Lemley-Shapiro arbitration by design collapses questions of validity, infringement, and essentiality of the patent to the standard into a single damage calculation in which the arbitrator’s sole responsibility is to choose one of two

* Chairman, Criterion Economics, L.L.C., Washington, D.C. Email: jgsidak@criterioneconomics.com. I have served various companies as a consulting or testifying economic expert in disputes over FRAND licenses for standard-essential patents. However, the views expressed here are solely my own. I have benefited from helpful comments from, or discussions with, Thomas Bell, Marvin Blecker, Gary Bornstein, Thomas Folsom, Damien Geradin, Kirti Gupta, John Harkrider, Roy Hoffinger, Sir Robin Jacob, Michael Kenneally, Kurt Kjelland, Geoffrey Manne, Mark Snyder, Bo Vesterdorf, and participants at the IP Investments & Markets Conference organized by Ocean Tomo in Chicago on June 16-18, 2014. I thank the John Templeton Foundation and the Federalist Society, whose Faculty Division awarded this article a prize and selected it for presentation at the Federalist Society’s Intellectual Property and Free Enterprise colloquium in Warrenton, Virginia on November 7-8, 2014.

disparate estimates of reasonable royalties. Yet, a FRAND offer contains not only a price, but also terms and conditions that (because they are nuanced and possibly tailored to the unique needs of an individual licensee) are not easily standardized, let alone summarized in a single number, as the description of Lemley-Shapiro arbitration might incorrectly lead some to assume. Lemley-Shapiro arbitration would not say whether a royalty offer was fair, reasonable, and nondiscriminatory. Lemley and Shapiro claim that their arbitration proposal offers “best practices” for SSOs. That label is unsupported and misleading. The package that Lemley and Shapiro call “best practices” is in fact not a narrow proposal for binding baseball arbitration but rather a roadmap to redefine patent rights in a manner that would transfer wealth from inventors to infringers. Embedded within Lemley-Shapiro arbitration are normative changes in patent law and policy that Lemley and Shapiro have previously advocated but that SSOs and courts have not adopted. An SSO that adopted Lemley-Shapiro arbitration could expect its members to commercialize their next generation of inventions outside that particular SSO, if not outside an open standard altogether.

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INTRODUCTION

Final-offer arbitration, commonly called “baseball arbitration” because of its use in Major League Baseball disputes over player salaries, requires an arbitrator to pick exclusively one of the two offers made by the opposing parties to a negotiation.¹ Mark Lemley and Carl Shapiro have proposed binding baseball arbitration as a mandatory procedure to determine royalties in disputes over the licensing of standard-essential patents (SEPs) on fair, reasonable, and nondiscriminatory (FRAND) terms and conditions. Specifically, Lemley and Shapiro urge standard-setting organizations (SSOs) to adopt rules—purportedly constituting “best practices”—that would mandate binding baseball arbitration for resolving FRAND disputes.² Presumably, an SSO would need to adopt these “best practices” by voluntarily amending its bylaws.

FRAND disputes are important because manufacturers of standard-compliant products may need to procure licenses to patented technologies that are incorporated into the standard. To facilitate this process, prospective licensors (and frequently prospective licensees) participate in an SSO, which develops “agreements containing technical specifications or other criteria,” promotes “efficient resource allocation and production by facilitating

1. See, e.g., J. Gregory Sidak, *Court-Appointed Neutral Economic Experts*, 9 J. COMPETITION L. & ECON. 359, 389 (2013).

2. Mark A. Lemley & Carl Shapiro, *A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents*, 28 BERKELEY TECH. L.J. 1135, 1138 (2013) [hereinafter Lemley & Shapiro, *A Simple Approach*].

interoperability among complementary products,” and, in general, participates in the advancement of the standard and associated technology within an industry.³

An SSO typically requires one of its members to disclose or declare any patent that the member believes is potentially essential to a proposed standard. A patent that claims an invention that is necessary to practice a technical standard is a standard-essential patent. The declarant agrees to offer to license its SEPs to third parties on FRAND terms. Scholars in law and economics actively debate the meaning of “fair, reasonable, and nondiscriminatory” licensing terms.⁴

Lemley and Shapiro propose that, when an SEP holder and an implementer cannot agree “over what is FRAND,”⁵ the parties shall enter into binding baseball arbitration.⁶ Each party must present its final offer as its first offer, leaving the arbitrator the limited discretion to award one of the two parties’ offers as the final binding FRAND royalty. In conventional arbitration, the arbitrator receives the parties’ final offers and then determines the award based on the arbitrator’s own judgment and independent evaluation of the parties’ arguments and offers of proof.⁷ In determining the FRAND royalty, the arbitrator ultimately may set a royalty that differs from both parties’ proposals. In contrast, under baseball arbitration, the arbitrator is limited to choosing between the respective royalties proposed by the SEP holder and the implementer.

Lemley and Shapiro champion mandatory baseball arbitration as an alternative to traditional district court litigation of SEP-licensing disputes. Such

3. United States Department of Justice and United States Patent & Trademark Office Policy Statement on Remedies for Standards-Essential Patents Subject to Voluntary F/RAND Commitments 2–3 (Jan. 8, 2013) [hereinafter Remedies for SEPs].

4. See, e.g., Damien Geradin, *The European Commission Policy Towards the Licensing of Standard-Essential Patents: Where Do We Stand?*, 9 J. COMPETITION L. & ECON. 1125, 1127 (2013). For discussion of the different suggested definitions of a FRAND royalty, see Philippe Chappatte, *FRAND Commitments—The Case for Antitrust Intervention*, 5 EUR. COMPETITION J. 319, 328–31 (2009); John M. Golden, “Patent Trolls” and Patent Remedies, 85 TEX. L. REV. 2111, 2161 (2007); Anne Layne-Farrar, A. Jorge Padilla & Richard Schmalensee, *Pricing Patents for Licensing in Standard Setting Organizations: Making Sense of FRAND Commitments*, 74 ANTITRUST L.J. 671, 693 (2007); Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2043 (2007); David J. Salant, *Formulas for Fair, Reasonable and Non-Discriminatory Royalty Determination*, 7 INT’L J. IT STANDARDS & STANDARDIZATION RES. 66, 67 (2009); J. Gregory Sidak, *The Meaning of FRAND, Part I: Royalties*, 9 J. COMPETITION L. & ECON. 931, 996 (2013); Daniel G. Swanson & William J. Baumol, *Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power*, 73 ANTITRUST L.J. 1, 6–7, 10, 12–14 (2005).

5. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1144.

6. *Id.* at 1138.

7. See, e.g., Orley Ashenfelter & Janet Currie, *Negotiator Behavior and the Occurrence of Disputes*, 80 AM. ECON. REV. 416, 416 (1990); Orley Ashenfelter, *Arbitration and the Negotiation Process*, 77 AM. ECON. REV. 342, 343 (1987).

arbitration, they argue, may induce the parties to produce offers and counteroffers closer to the patent's "true" value, may reduce transaction and error costs of dispute resolution, and may provide greater incentives for the parties to settle.⁸ I disagree. Arbitration is not inherently problematic as a means to resolve FRAND licensing disputes. Indeed, in certain circumstances, parties to a licensing negotiation may find that arbitration offers distinct advantages over traditional litigation. However, Lemley-Shapiro arbitration is ill suited to resolve disputes over FRAND royalties for SEPs. The proposal would address neither the objectives of setting open standards nor what makes FRAND commitments distinctive, and it would prevent the parties from agreeing on the meaning of FRAND prices, terms, and conditions.

I analyze the Lemley-Shapiro proposal, as well as the critique of it by Pierre Larouche, Jorge Padilla, and Richard Taffet.⁹ Baseball arbitration may work to resolve a dispute over a player's salary in Major League Baseball, but it is ill suited to resolve a dispute over FRAND terms for SEPs for complex consumer products such as smartphones. Moreover, the errors of Lemley-Shapiro arbitration would not be randomly distributed. Larouche, Padilla, and Taffet show analytically what should be intuitively obvious and compelling—that baseball arbitration as envisioned by Lemley and Shapiro would consistently undercompensate SEP holders, a result that would destabilize the standardization process.¹⁰

In addition, Lemley and Shapiro prescribe rigid "best practice" rules for SSOs to adopt in lieu of relying on the more flexible and reasoned standards that courts would develop incrementally, case by case. The Lemley-Shapiro prescriptions proceed from the false premise that one can identify—and then should pledge obedience to—"best practices" to address all foreseeable contingencies. Assuming (unrealistically) that complete-contingency "best practices" are possible to identify for a technologically dynamic industry in which many firms cooperate to create an open standard, who first determines that a given practice is "best?" Lemley and Shapiro answer that question by declaring their own prior prescriptions to be "best practices," regardless of whether anyone has actually adopted those practices and regardless of whether they are biased toward the infringer. Analysis of those "Lemley-Shapiro best practices" reveals that they are in fact riddled with errors of legal and economic reasoning. FRAND disputes cannot be encapsulated in one arbitrary number, as Lemley and Shapiro claim. In addition, the Lemley-Shapiro proposal conflates the SEP holder's duty to make a FRAND offer and the duty to enter into a license. Lemley-Shapiro arbitration also ignores the question of whether an

8. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1144 n.25 (citing Sidak, *Court-Appointed Neutral Economic Experts*, *supra* note 1, at 389).

9. Pierre Larouche, Jorge Padilla & Richard S. Taffet, *Settling FRAND Disputes: Is Mandatory Arbitration a Reasonable and Nondiscriminatory Alternative?*, 10 J. COMPETITION L. & ECON. 581 (2014).

10. *Id.* at 584.

SEP is truly essential, which is determinative for whether the FRAND obligations apply. Lemley and Shapiro claim that their arbitration procedure is free from bias, yet they provide no evidence supporting this claim. Moreover, the hypothetical negotiation framework used in Lemley-Shapiro arbitration is one-sidedly biased against the SEP holder.

An additional factor that would reduce compensation to SEP holders is the requirement in Lemley-Shapiro arbitration that the arbitrator's chosen royalty be based on an *ex ante* probability of validity of the SEP holder's entire portfolio.¹¹ Lemley and Shapiro further argue that a court's subsequent confirmation that the patent in suit is actually valid should not change the FRAND royalty determination, which had been predicated on the Lemley-Shapiro assumption that the patent in suit was only possibly valid.¹² The Lemley-Shapiro notion of probabilistic patent validity is problematic. Lemley and Shapiro fail to explain how an arbitrator could rigorously assess the probabilistic value of the licensed patents in choosing which of two proposed rates is FRAND—a factual determination that typically requires an entire court case. Evaluating the probabilistic validity of an entire patent portfolio would require the patent-by-patent review of hundreds or thousands of patents, which renders Lemley-Shapiro arbitration infeasible in the real world.¹³

A given arbitral procedure can affect the incentives and bargaining positions of the parties to the dispute. Key factors affecting the parties' bargaining strategies include the degree of information revealed during the arbitration and the binding nature of the arbitration. The restrictions of Lemley-Shapiro arbitration may bias royalty awards in favor of net implementers and thereby reduce expected returns to SEP holders. Any unintentional cognitive bias among arbitrators that would favor smaller royalty payments would systematically undercompensate SEP holders. This bias would harm innovation and investment in new SEPs. Over time, Lemley-Shapiro arbitration would cause SEP holders to reduce or withhold participation in SSOs and would reduce incentives for innovation.

What is the implication of Lemley-Shapiro arbitration for the public's understanding of the meaning of FRAND? Lemley-Shapiro arbitration would not inform the current debate over what constitutes fair, reasonable, and nondiscriminatory terms for SEPs. Because the arbitrator would be constrained to pick one of the parties' two opposing offers and could not determine an intermediate FRAND rate of her own, the final award could not result from the

11. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1162–63.

12. *Id.*

13. This one of several infeasible aspects of Lemley-Shapiro arbitration is reminiscent of Nobel laureate Oliver Williamson's observation about the prohibitively high transactions costs of writing complete-contingency contracts. *See, e.g.*, OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS, RELATIONAL CONTRACTING* 79 (1985) (examining “the impossibility (or costliness) of enumerating all possible contingencies and/or stipulating appropriate adaptations to [the transactions] in advance”).

arbitrator's informed assessment of what constitutes a FRAND royalty. The arbitrator would be constrained to choose one of the parties' two offers, even if neither offer was in the FRAND range. The additional Lemley-Shapiro requirement that arbitration decisions be disclosed to willing licensees in future negotiations¹⁴ would not provide useful benchmarks for future negotiations. To the contrary, doing so would undermine future negotiations, reduce the incentives of SEP holders to participate in SSOs, and promote buyer collusion among implementers.¹⁵

The Lemley-Shapiro proposal claims to resolve FRAND royalty disputes more efficiently than court litigation. However, the proposal contains errors of legal and economic reasoning that tend to reduce compensation to SEP holders. Lemley-Shapiro arbitration would not provide guidance on what constitutes a FRAND royalty, and in the long run it would reduce incentives for innovation and participation in the setting of open standards.

I. WOULD LEMLEY-SHAPIRO ARBITRATION BE PLAUSIBLE AND EFFICACIOUS?

Even a superficial examination of the Lemley-Shapiro proposal for mandating baseball arbitration as the dispute-resolution mechanism for SEP-licensing disputes reveals that the salient economic differences between salary disputes in Major League Baseball and SEP-licensing disputes render Lemley-Shapiro arbitration inappropriate for resolving these patent disputes. Although Lemley-Shapiro arbitration has received the attention of bloggers in the patent community,¹⁶ the only scholarly scrutiny of the proposal as of June 2014 has come from Larouche, Padilla, and Taffet.

14. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1145.

15. There are other problems with Lemley-Shapiro arbitration that exceed the scope of this Article. For example, Lemley and Shapiro do not explain the implications of their proposal for the nondiscrimination requirement in the FRAND royalty obligation. Another example is that Lemley and Shapiro claim that mandating baseball arbitration for SEP holders does not infringe an SEP holder's First Amendment right to petition government (that is, to seek remedies for patent infringement in the U.S. courts) because the SSO mandating Lemley-Shapiro arbitration would not be a state actor. *See id.* at 1142. This Pollyannaish assessment is disingenuous. It implies that Lemley and Shapiro are unaware of the efforts of U.S. antitrust officials to influence not merely public opinion, but also the nonpublic deliberations of SSOs, including international treaty organizations.

16. *See, e.g.*, David W. Long, *Lemley, Shapiro Propose "Baseball-Style" Arbitration as Solution to FRAND Disputes*, ESSENTIAL PATENTS BLOG (Apr. 8, 2013), <http://essentialpatentblog.com/2013/04/lemley-shapiro-propose-baseball-style-arbitration-as-solution-to-frand-disputes>; Florian Müller, *Google's Plan B for Motorola's Standard-Essential Patents: B as in "Baseball-Arbitration,"* FOSS PATENTS (May 9, 2013), <http://www.fosspatents.com/2013/05/googles-plan-b-for-motorolas-standard.html>; Tim West, *Anyone for Baseball? The Rise of "Baseball Arbitration" in FRAND Patent Disputes*, ASHURST (Nov. 2013), http://www.ashurst.com/publication-item.aspx?id_Content=9808.

A. *Is Lemley-Shapiro Arbitration Suitable for Resolving FRAND Royalty Disputes?*

Lemley and Shapiro make several faulty claims about the advantages of their proposal over the status quo. According to Lemley and Shapiro, because both parties risk “losing the case”¹⁷—the SEP holder by asking for too much, and the implementer by offering too little—both parties have an incentive to submit a reasonable offer in binding baseball arbitration.¹⁸ But the Lemley-Shapiro proposal strives to settle in a few pages the complex disputes over FRAND licensing and neglects that an implementer offering a substantially lower royalty base and a higher royalty rate can confuse the arbitrator.¹⁹ FRAND disputes include the determination of FRAND terms; they are not limited to the meaning of the FRAND royalty rate. I expand on the problematic oversimplifications of the Lemley-Shapiro proposal in Part III.A.

Lemley and Shapiro claim that their proposal would limit opportunities to challenge the validity or infringement of the patents at issue.²⁰ In addition, because the royalty chosen by the arbitrator rests on an assessment of the entire portfolio, Lemley and Shapiro argue that the invalidity of any one of the licensed patents would not compromise the royalty determination.²¹ Moreover, when patents within the portfolio are more likely to be considered invalid, then, according to Lemley and Shapiro, the relative royalties proposed by parties would be correspondingly lower. Of course, alleged infringers are free to challenge the validity or infringement of the patents in the courts or the Patent Office, and Lemley and Shapiro concede that their proposal “won’t make declaratory judgments of invalidity impossible.”²² (In other words, the implementer will get two bites at the apple.) I analyze the economic and legal flaws of the Lemley-Shapiro proposal’s probabilistic assessment of validity in more detail in Part V.C. Finally, Lemley and Shapiro contend that arbitration is “more predictable than litigation,” and that consequently arbitration would more efficiently resolve FRAND disputes.²³

17. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1144.

18. *Id.* (citing Sidak, *Court-Appointed Neutral Economic Experts*, *supra* note 1, at 389 (“Baseball arbitration has the effect of generating more credible estimates by altering the incentives of experts for either side to generate extreme values for their clients.”)).

19. For a detailed legal and economic analysis of the problems associated with using the smallest salable unit (or smallest salable patent-practicing component) as the royalty base in FRAND disputes and in patent-infringement cases generally, see J. Gregory Sidak, *The Proper Royalty Base for Patent Damages*, 10 J. COMPETITION L. & ECON. 989 (2014).

20. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1146, 1162–63.

21. *Id.* at 1151–52.

22. *Id.* at 1162.

23. *Id.* at 1152.

1. *Why is Lemley-Shapiro arbitration necessary when parties to SEP-licensing disputes already may resort to arbitration?*

Of course, the parties to an SEP license agreement are already entitled to pursue arbitration. For example, in 2012 Motorola suggested arbitration as a means to settle its SEP-licensing disagreements with Apple.²⁴ Either party may propose that the dispute be subjected to binding arbitration, if the party finds it useful in its particular case.²⁵ However, arbitration should not be mandatory.²⁶ In the Federal Trade Commission's investigation of Google's acquisition of Motorola Mobility, Google and the FTC agreed to settle the case through a consent decree that envisions, for FRAND disputes concerning the acquired SEPs, the willingness of parties "to resolve the Contested [license's] Terms through Binding Arbitration."²⁷ Similarly, in Europe the European Commission and Samsung settled the antitrust investigation against Samsung through a commitment decision (akin to a consent decree). Under this decision, Samsung and the European Commission agreed that "any dispute over what are fair, reasonable and non-discriminatory (so-called 'FRAND') terms for the SEPs in question will be determined by a court, or if both parties agree, by an arbitrator."²⁸ Lemley and Shapiro would deny parties the right to choose to resolve FRAND disputes through litigation.

Jorge Contreras and David Newman observe that voluntary arbitration and mandatory arbitration differ significantly. Parties to voluntary arbitration "have wide latitude to craft arbitration procedures that best suit their circumstances in an arbitration agreement,"²⁹ and, if they fail to agree, they are not limited to a particular arbitration procedure. In contrast, parties subject to mandatory arbitration lack such options. They must arbitrate even if they disagree on the arbitral procedures. Arbitration should be an option instead of an obligation.

24. *Apple Inc. v. Motorola Mobility, Inc.*, No. 11-cv-178-bbc, 2012 WL 7989412, at *3 (W.D. Wis. Nov. 8, 2012).

25. See Ashenfelter, *Arbitration and the Negotiation Process*, *supra* note 7, at 342.

26. See Ashenfelter & Currie, *Negotiator Behavior and the Occurrence of Disputes*, *supra* note 7, at 417 ("[I]t is very unlikely that parties would ever voluntarily agree to submit their dispute to a deterministic system since this is tantamount to agreeing on a settlement [P]arties may go to arbitration solely because they have differing beliefs about the expected outcome of arbitration.").

27. Decision and Order in the Matter of Motorola Mobility LLC and Google Inc., File No. 121-0120, Dkt. No. C-4410 (F.T.C. 2013).

28. Press Release, European Commission, Antitrust: Commission Accepts Legally Binding Commitments by Samsung Electronics on Standard Essential Patent Injunctions (Apr. 29, 2014), http://europa.eu/rapid/press-release_IP-14-490_en.htm.

29. Jorge L. Contreras & David L. Newman, *Developing a Framework for Arbitrating Standards-Essential Patent (SEP) Disputes*, 2014 J. DISP. RESOL. 23, 35 (forthcoming), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2335732.

2. *Is a FRAND royalty really analogous to a baseball player's salary?*

Some may find a superficial appeal in the Lemley-Shapiro proposal. However, it does not even begin to untangle the complexity of FRAND royalties. For at least four reasons, Major League Baseball players do not resemble standard-essential patents, such that mandating baseball arbitration for disputes over the licensing of SEPs is tantamount to forcing a square peg into a round hole.

First, a vast supply of publicly available data exists to evaluate the performance (and hence the commercial value) of an individual baseball player. Owners and general managers have access to disaggregated statistics that enable one to quantify each player's marginal contribution to his team and the league.³⁰ Baseball teams have the luxury of watching a player's performance before negotiating a contract. Each player has a batting average and a fielding percentage. Each pitcher has an earned-run average. And each team has a win-loss record. These statistics have been compiled for decades, and economists have long published articles in scholarly journals that empirically test hypotheses using such data.³¹ In contrast, there is no comparable valuation information publicly available for individual standard-essential patents.

Second, because of the wealth of information publicly available on the performance and the commercial value of a given professional baseball player, it is not likely that a player and the owner of the player's baseball team will approach a binding baseball arbitration with salary proposals that differ by orders of magnitude—a situation that routinely occurs in the opposing expert damage testimony of patent holders and alleged infringers. Consequently, in a baseball player's salary dispute the arbitrator's binary choice of one party's proposal over the other will not have such stark economic consequences for the losing party—or implications for technological innovation for that matter. The error costs and the potential for cognitive bias on the part of the arbitrator is less in a baseball salary dispute than in an arbitration to set a FRAND royalty. In *Apple v. Motorola*, for example, the damage estimates of the opposing economic experts diverged by two orders of magnitude (with the larger estimate exceeding one billion dollars)³² and had the potential to influence incentives for innovation in mobile communications. I discuss in Part IV.B this potential for cognitive bias due to larger error costs.

30. See, e.g., MICHAEL LEWIS, *MONEYBALL: THE ART OF WINNING AN UNFAIR GAME* (2004).

31. See, e.g., Kenneth Lehn, *Property Rights, Risk-Sharing, and Player Disability in Major League Baseball*, 25 J.L. & ECON. 343 (1982); Gerald W. Scully, *Pay and Performance in Major League Baseball*, 64 AM. ECON. REV. 915 (1974).

32. *Apple, Inc. v. Motorola, Inc.*, No. 1:11-cv-08540, 2012 WL 1959560, at *4 (N.D. Ill. May 22, 2012), *aff'd in part, rev'd in part*, Nos. 2012-1548, 2012-1549, 2014 WL 16435 (Fed. Cir. Apr. 25, 2014).

Third, Major League Baseball players could manifest a degree of substitutability that SEPs do not. From the team owner's perspective, there could be, for example, alternative outfielders with excellent batting averages, alternative left-handed pitchers, alternative shortstops with base-running speed. For the player, there could be alternative teams on which he could play and thus commercialize his athletic skill. Consequently, the negotiation and the subsequent binding baseball arbitration between the player and the team owner might occur with knowledge of the existence of substitutes for both parties. The arbitration also benefits from relatively contemporaneous observations of actual salaries negotiated or arbitrated by other combinations of players and teams. The baseball club must offer the player a salary that is not less than seventy percent of the player's compensation from two years earlier, and that is not less than eighty percent of the total compensation of the player from the prior year. The opposing proposals in arbitration over the salary for a Major League Baseball player are therefore subject to external checks for plausibility and robustness in ways that are lacking in typical disputes over FRAND royalties for SEPs.

Fourth, a baseball player's contract that is the result of arbitration will apply for only one year.³³ In contrast, a license for SEPs typically has a longer duration (such as five years), and a party will therefore be bound to the good or bad consequences of its negotiation for a longer period. Like the large differences in the opposing offers in FRAND disputes, the extended time frame of the royalty increases the error costs, and thus the potential for cognitive bias.

In short, it is unrealistic for at least four reasons to expect mandatory baseball arbitration, in the terms proposed by Lemley and Shapiro, to be appropriate for resolving disputes over FRAND royalties even though it may be effective in resolving Major League Baseball salary disputes.

B. *The Larouche-Padilla-Taffet Critique of Lemley-Shapiro Arbitration*

Larouche, Padilla, and Taffet criticize Lemley-Shapiro arbitration and emphasize that mandating baseball arbitration for FRAND disputes would weaken the standardization process. They argue that Lemley-Shapiro arbitration would fail to ensure that the interests of both the implementer and the SEP holder are considered and balanced. To the contrary, they argue, Lemley-Shapiro arbitration would undercompensate SEP holders, and SEP holders would potentially obtain less than they would expect to obtain through bilateral negotiations.³⁴ This is a problematic failure of Lemley-Shapiro arbitration, and I continue to address this issue and some of its consequences

33. See, e.g., Ben Einbinder, *What FINRA Can Learn from Major League Baseball*, 12 PEPP. DISP. RESOL. L.J. 333, 342 n.89 (2012); Jeff Monhait, *Baseball Arbitration: An ADR Success*, 4 HARV. J. SPORTS & ENT. L. 105, 133 (2013).

34. See Larouche, Padilla & Taffet, *supra* note 9, at 599–603.

throughout this article. Larouche, Padilla, and Taffet also observe that mandatory baseball arbitration, “by effectively lowering the overall cost of disagreement, [would] increase the incidence of disagreement relative to the status quo.”³⁵ This result would create a “socially costly”³⁶ chilling of voluntary, bilateral negotiations.

Larouche, Padilla, and Taffet note that the “numerous high-stakes disputes”³⁷ over FRAND terms that Lemley and Shapiro invoke ignore the “[t]housands of license negotiations involving FRAND-committed SEPs [that] have occurred successfully.”³⁸ According to Larouche, Padilla, and Taffet, although Lemley-Shapiro arbitration might resolve the FRAND dispute on the royalty rate, “implementers remain free to bring additional challenges regarding the *validity* of the patents.”³⁹ In other words, Lemley-Shapiro arbitration requires the arbitral award to consider the likelihood of the patent’s validity. Because the arbitrator must decide the dispute with substantially incomplete knowledge, Lemley-Shapiro arbitration would bundle the question of validity with the determination of the royalty. I analyze several effects of this bundled approach in Part III.A.5.

Larouche, Padilla, and Taffet note that Lemley and Shapiro assume that patent holdup, allegedly caused by the imprecise meaning of FRAND, jeopardizes the standardization process.⁴⁰ Larouche, Padilla, and Taffet dispute this assumption on multiple grounds.⁴¹

First, they say that “[t]here is no evidence that the adoption or implementation of any standard has been defeated or delayed as a result of claimed-SEPs reading on the standard or because of FRAND disputes.”⁴² Second, they observe that, in the most recent lawsuits concerning the infringement of SEPs, the implementers failed to provide evidence of patent holdup,⁴³ which calls into question the “existence of a hold up problem.”⁴⁴ In *Microsoft v. Motorola*, for example, Microsoft’s expert witness, Kevin Murphy of the University of Chicago, invoked the theory of holdup but on cross-examination could not identify a single real-world instance of holdup.⁴⁵ Third,

35. *Id.* at 597 (citation omitted).

36. *Id.* at 599 (citation omitted).

37. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1135.

38. Larouche, Padilla & Taffet, *supra* note 9, at 582.

39. *Id.* at 600 (emphasis added).

40. *Id.* at 585.

41. *Id.*

42. *Id.* at 590.

43. *Id.* at 591.

44. *Id.*

45. *Id.* (citing Testimony of Kevin Murphy (Hr’g Tr. at 180, *Microsoft Corp. v. Motorola, Inc.*, No. 10-cv-01823 (W.D. Wash. Nov. 13, 2012), ECF No. 629)); *see also* *Ericsson Inc. v. D-Link Systems, Inc.*, No. 6:10-cv-00473, 2013 WL 4046225 (E.D. Tex. Aug. 6, 2013) (determining that defendants had not presented “any evidence any licensee ever complained to Ericsson about hold-up”); *Ericsson Inc. v. D-Link Systems, Inc.*, Nos.

Larouche, Padilla, and Taffet highlight the lack of any supporting evidence that the remedies currently available to resolve disputes over FRAND terms (including remedies available through litigation⁴⁶) harm innovation or competition.⁴⁷ Fourth, Larouche, Padilla, and Taffet argue that the meaning of FRAND and particularly “a standard of ‘reasonableness’ has proven workable throughout the law.”⁴⁸ They illustrate that the current interpretation of “reasonable” has been successfully employed in many fields of law, including contract law and intellectual property law.⁴⁹ Because the reasonableness standard is flexible enough to be adapted to varied circumstances, they believe that it represents a “workable standard” for evaluating FRAND terms and that Lemley-Shapiro arbitration is not a more efficient alternative.⁵⁰

Larouche, Padilla, and Taffet conclude that Lemley-Shapiro arbitration is rooted in assumptions instead of facts⁵¹ and, if adopted, would harm the standardization process.⁵²

II. DO SELF-PROCLAIMED “BEST PRACTICES” THAT ARE BUNDLED WITH THE LEMLEY-SHAPIRO PROPOSAL FOR BASEBALL ARBITRATION WITHSTAND SCRUTINY?

Lemley and Shapiro claim to have derived “a simple, practical set of rules regarding patents that SSOs can adopt”⁵³ to minimize the transaction costs associated with FRAND disputes. However, Lemley-Shapiro arbitration is a tie-in sale: along with mandatory baseball arbitration, the customer also must take the self-proclaimed “best practices”⁵⁴ that Lemley and Shapiro say are integral to arbitrating FRAND royalty disputes. Lemley and Shapiro cannot, however, confer upon practices the status of “best” by mere declaration. In fact, the “best practices” they suggest involve severe legal and economic errors.

A. *Errors of Legal and Economic Reasoning, Contradictions, and Ambiguities*

Lemley-Shapiro arbitration relies on multiple erroneous propositions, flawed assumptions, and ambiguities.

2013-1625, 2013-1631–33, 2014 WL 6804864, at *25–26 (Fed. Cir. Dec. 4, 2014) (affirming the district court’s finding that the defendant failed to provide actual evidence of patent holdup and royalty stacking).

46. Larouche, Padilla & Taffet, *supra* note 9, at 608.

47. *Id.* at 593.

48. *Id.* at 594.

49. *Id.*

50. *Id.* at 594–95.

51. *Id.* at 593.

52. *Id.* at 595.

53. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1135.

54. *Id.* at 1138.

1. *The Lemley-Shapiro proposal's oversimplification of FRAND disputes*

Lemley and Shapiro say that “FRAND disputes are well suited to baseball-style arbitration, because the only thing at issue is which of two numbers in fact represents the more reasonable royalty.”⁵⁵ This assertion is wrong and simplistic. The meaning of a FRAND royalty, which Lemley and Shapiro pretend to set using mandatory baseball arbitration, is only one of several potential licensing terms that are in dispute. Three points deserve attention.

First, Lemley and Shapiro fail to recognize that the use of mandatory baseball arbitration would be legitimate only if both the offer and the counteroffer submitted to the arbitral tribunal were certifiably FRAND, so that the royalty that the arbitrator selects is FRAND. The dispositive question that Lemley and Shapiro pose—which offer is “the *more* reasonable royalty”?—may be meaningless (besides being illegitimate) because one or both of the royalty offers submitted may be outside of the FRAND range and therefore one cannot determine the *more* reasonable offer.

Second, once the SEP holder has made a FRAND offer, it has discharged its duty pursuant to its FRAND commitment to the SSO (and, derivatively, its duty to implementers as third-party beneficiaries of that commitment).⁵⁶ Consequently, from that moment forward the SEP holder has no duty arising from its FRAND commitment to make another offer. From that moment forward, the successful conclusion of a FRAND license agreement depends on the infringer, who—if he is a willing licensee—will accept the FRAND offer. Why would an arbitrator have any need to set a FRAND price when the SEP holder has already made an offer within the FRAND range, which a genuinely willing licensee should therefore accept? In Part III.A.2 below, I address the problematic effects of Lemley and Shapiro’s flawed interpretation of the FRAND commitment on implementers’ actions and the determination of FRAND royalties.

Third, Lemley and Shapiro assume that licenses between two negotiating parties can be encapsulated into one arbitrary number. This assumption neglects the fact that licensing terms are multifaceted and often include forms of consideration beyond the royalty itself. The scope and term of the license, the nature of the royalty payment, and pass-through rights are important components that shape the agreement. In a FRAND negotiation, these matters would be part of the SEP holder’s offer and the licensee’s offer. To reduce the entire dispute to a single number is not only arbitrary, but also not indicative of actual FRAND terms.

55. *Id.* at 1144.

56. I explain this conclusion in detail in J. Gregory Sidak, *The Meaning of FRAND, Part II: Injunctions*, 11 J. COMPETITION L. & ECON. 201 (2015).

2. *Conflating the SEP holder's duty to make a FRAND offer and the (nonexistent) duty of an SEP holder to enter into a license*

By obscuring the distinction between the SEP holder's duty to make a FRAND offer and a wider (but nonexistent) obligation to enter into a license, Lemley and Shapiro would saddle the SEP holder with an obligation that does not exist in the FRAND contract—and, indeed, would fundamentally change the terms of that contract. Three points deserve attention.

First, the imprecise use by Lemley and Shapiro of the verb “to license” demonstrates their misunderstanding of the nature of the SEP holder's contractual obligation. The commitment to “make a FRAND offer” is distinct from a “commitment to license,” a phrase which Lemley and Shapiro use at least five times, each time rendering their argument flawed from the outset.⁵⁷ Lemley and Shapiro conflate the SEP holder's obligation to make a FRAND offer and a (nonexistent) duty to reach an agreement:

A commitment to license on reasonable terms is not a commitment to be whipsawed by a potential licensee. An implementer who agrees to participate only if it gets a result it likes is no different than a patentee who agrees to license on reasonable terms only if it gets to decide what is reasonable A patentee who makes a FRAND commitment is obligated to agree to reasonable licensing terms, but does not have to license to someone who will not make a similar commitment to accept reasonable terms set by the arbitrator.⁵⁸

This conceptualization is unsound. Contractually, an SEP holder has a duty to make a single FRAND offer to a would-be licensee. On this question, I concur with the conclusion of Judge Bo Vesterdorf.⁵⁹ A FRAND commitment does not constitute, as Lemley and Shapiro claim, “an executory license without a price term.”⁶⁰ Such a qualification would force the SEP holder to continue submitting lower and lower FRAND offers until the implementer accepted one. To the contrary, a FRAND commitment does not impose on the SEP holder a duty to offer the implementer a royalty that is near the lower bound of the FRAND range or, even worse, below the floor of the FRAND range. Transforming the SEP holder's duty to make a FRAND offer into a duty to

57. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1149, 1153, 1156, 1159, 1160.

58. *Id.* at 1153 (citation omitted).

59. See Bo Vesterdorf, *IP Right and Competition Law Enforcement Questions*, 4 J. EUR. COMPETITION L. & PRAC. 109–10 (2013) (“Once the SEP holder has given the commitment to grant licences on FRAND terms, it follows that he cannot legally refuse to grant the licence to someone applying for it *as long as the applicant is willing to accept the FRAND terms offered by the SEP holder*. . . . It must necessarily follow from the idea behind the system that if the licence applicant is not willing to pay royalties on or accept other FRAND terms, the licensor must be entitled to refuse to grant the licence and as a normal consequence must be entitled to prevent the other party from using the IP right (the SEP).” (emphasis added)).

60. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1159.

enter into a license would, in the words of former Lord Justice Robin Jacob, create an incentive for implementers to “string things out for as long as possible, and [pay] as little as possible in the end, a sensible commercial tactic if you can get away with it.”⁶¹ The legal meaning of the FRAND commitment cannot defy common sense: If the implementer does not accept the first FRAND offer, then the SEP holder nonetheless has fully complied with the FRAND commitment by making that first offer within the FRAND range. Consequently, there cannot be any valid justification to compel the SEP holder to keep offering lower terms beyond the scope of the contractual obligation to third-party beneficiaries by which the SEP holder agreed to be bound.

Second, the confusion that Lemley and Shapiro create by imposing a larger (but nonexistent) duty on the SEP holder to enter into a contract to license its SEPs illustrates the bias in Lemley-Shapiro arbitration toward implementers. Lemley and Shapiro misstate the scope of the SEP holder’s FRAND obligation and then use that error to construct the untenable argument that the parties’ failure to reach an agreement should trigger a binding baseball-arbitration proceeding. To support this legal reasoning, Lemley and Shapiro assume the existence of a “promise” that the SSO member would make with respect to a future standard “that, if it cannot come to terms with another party implementing the standard, the question of the proper FRAND royalty rate [would] be subject to binding [arbitration].”⁶² Elsewhere, Lemley and Shapiro say more bluntly that, “if an implementer thinks that an offer is not FRAND, the implementer can just say ‘no.’”⁶³ This possibility is an option for the implementer under the current regime, but not a particularly plausible option. However, in the Lemley-Shapiro proposal, the implementer can refuse a FRAND offer and force the dispute into arbitration, without his refusal being deemed a refusal to an offer that was legitimately FRAND. Moreover, without at least a preliminary adjudication of whether the SEP holder’s initial offer was truly within the FRAND range—which Lemley and Shapiro deem unnecessary—it is impossible to verify as a matter of contract law whether the SEP holder has discharged its FRAND commitment. If the SEP holder has indeed discharged this commitment, then the SEP holder should otherwise retain its entire freedom to contract and to litigate in court in case of a dispute. By limiting the SEP holder’s right to go to court and its freedom to contract, Lemley-Shapiro arbitration could be used against the SEP holder as a means of diminishing the SEP holder’s contractual rights in a way that would reduce the value of its SEPs.⁶⁴ Under Lemley-Shapiro arbitration, the SEP holder may be

61. Robin Jacob, *Competition Authorities Support Grasshoppers: Competition Law as a Threat to Innovation*, 9 COMPETITION POL’Y INT’L 15, 24 (2013).

62. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1141.

63. *Id.* at 1161.

64. *Id.* at 1142 (“Under [Lemley-Shapiro arbitration], if a standard-essential patent owner and an implementer of the standard cannot agree on license terms, the patent owner is obligated to enter into binding arbitration to determine the FRAND royalty rate for its entire

compelled to accept a lower FRAND royalty rate offered by the implementer instead of disputing the suitability of that offer in court. Lemley-Shapiro arbitration would simply ignore the legal significance of whether the SEP holder has made an offer that legitimately qualifies as FRAND and thus has established that the SEP holder has not breached its FRAND commitment.

Third, contrary to what Lemley and Shapiro assert, it is *not* the “very point of [a FRAND] commitment . . . to comfort implementers that they will not be held up by parties refusing to license patents essential to the standard.”⁶⁵ Lemley and Shapiro unrealistically portray the FRAND commitment as a one-sided bargain. If an SEP holder were made to bear the contractual duty to persuade implementers to accept its FRAND terms, this obligation—far more burdensome than the duty simply to make a FRAND offer—would lead the SEP holder to cease participating in SSOs.

3. *Why does Lemley-Shapiro arbitration ignore the question of essentiality in FRAND disputes?*

Lemley-Shapiro arbitration is an ambiguous arbitral framework. The idea of determining a reasonable rate by instructing an arbitrator to make a binary choice between two FRAND offers is seductively uncomplicated, but it cannot account for all the elements of a FRAND commitment.⁶⁶ Lemley and Shapiro contend nonetheless that the arbitration should focus solely on deciding which of the offered rates—the implementer’s or the SEP holder’s—is the appropriate royalty:

The arbitrator does not need to decide whether any given patent is valid and infringed. Nor does she need to decide whether a particular patent is essential except in unusual circumstances. Both of those things may be contested, and the evidence on each question will likely influence the reasonableness of the competing royalty proposals. But unlike a court that might have to rule on any number of subsidiary factual issues, the only thing the arbitrator needs to do is pick the better of two proposed royalty rates.⁶⁷

By authorizing the arbitrator only to “pick the better of two proposed royalty rates,” Lemley and Shapiro assume that the resolution of FRAND disputes depends solely on the price of the license. As I explained in Part III.A.1, this view is a gross oversimplification of FRAND disputes. In addition to

portfolio of standard-essential patents, so long as the implementer makes a reciprocal FRAND commitment for patents reading on the standard in question.”).

65. *Id.* at 1158.

66. Lemley-Shapiro “best practices” do not discuss in detail how Lemley-Shapiro arbitration would satisfy the nondiscrimination requirement of the FRAND commitment. Lemley and Shapiro do not explain the consequences of an arbitral award that announces a royalty that is lower than previous licenses. Nor do they account for the possibility that, in case of a dispute, such an award would generate more arbitration proceedings or the need to litigate the terms of the FRAND license.

67. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1145.

overlooking the additional licensing terms beyond the royalty itself and whether the SEP holder's initial offer was FRAND, this proposition ignores the premise underlying the FRAND requirement. Commanding an arbitrator not to decide what Lemley and Shapiro dismiss as "subsidiary factual issues," such as the essentiality of the patent in suit, contradicts the "subsidiary" prerequisite that only the essentiality of the SEP triggers the FRAND commitment in the first place—and hence the possible need for arbitration over FRAND rates. The Lemley-Shapiro arbitrator would act like a U.S. district judge who rules on the merits of a case without pausing to confirm that federal jurisdiction exists. The Lemley-Shapiro binary choice appears a gross oversimplification that is not designed to do substantive justice.

Lemley and Shapiro do recognize that the narrow mandate they give their arbitrator could produce bad results. In a footnote, they retreat from the simplicity of their proposal by qualifying that "it would be best if the arbitrator specified whether the patent in question is 'essential' to minimize future litigation."⁶⁸ Otherwise, the arbitrator could make a FRAND royalty determination based on a non-essential patent and consequently subject the licensee to a (higher) FRAND royalty for a patent not subject to the SEP holder's FRAND commitment. There is no reason to believe that Lemley-Shapiro arbitration would resolve FRAND disputes better than a court empowered to make findings of fact or law on anterior questions necessary to setting the FRAND royalty rate.

4. *Why believe that Lemley-Shapiro arbitration is free from bias?*

Lemley and Shapiro claim that, "so long as the arbitration procedure itself is unbiased, bargaining in the shadow of binding arbitration will tend to lead to reasonable rates."⁶⁹ This big assumption completely neglects the historical role of judges in evaluating what is reasonable. Lemley and Shapiro imply that their arbitration proposal is unbiased, yet they do not compare their proposal with other possible solutions. Lemley and Shapiro, having flagged the issue, never actually establish that their arbitration model is free from bias. Consequently, their conclusions about bias are unproven. Their "best practices" would counsel the SSO to select a "reputable arbitration association with established, unbiased rules for the conduct of the proceeding."⁷⁰ There is less to this aspiration than meets the eye, for it amounts to saying that Lemley-Shapiro arbitration will be free from bias as long as "the patentee [does not get] to choose the arbitration service, [because otherwise] it will choose one known to be biased in its favor."⁷¹ Lemley-Shapiro arbitration reserves its concern for biased royalty

68. *Id.* at 1145 n.27.

69. *Id.* at 1143.

70. *Id.* at 1141.

71. *Id.* at 1146 n.30.

awards that could favor the patent holder, but it conspicuously manifests no symmetrical concern for arbitral bias that could favor the implementer.

Denying the parties any choice of the arbitral forum would hardly suffice to ensure that the arbitrator or arbitrators, once chosen, would reach a fair and unbiased decision. To date, the meaning of “fair” within the FRAND commitment has focused on the economic substance of an offer’s prices, terms, and conditions. It has been an unspoken premise that FRAND proceedings would be procedurally fair, and surely procedural fairness is part of the FRAND commitment. That premise might be true only if parties have the ability to bring a court case. Lemley and Shapiro do mention, as a kind of safeguard for Lemley-Shapiro arbitration, that courts “have proven willing to intervene to reject arbitration agreements that are procedurally unfair.”⁷² Citing the Supreme Court’s 2008 decision in *Hall Street Associations LLC v. Mattel, Inc.*, however, Lemley and Shapiro observe on the same page that an arbitration award may be appealed to a court (and thereby possibly reversed) only on “limited grounds”⁷³—in contrast to a district court judgment, which is appealable as a matter of course.

Which is it? Are the courts a procedural safeguard to Lemley-Shapiro arbitration, or are they not? In other words, Lemley and Shapiro imply that courts will not correct an unfair arbitral outcome as long as the arbitrator followed the specified arbitral rules. Thus, they in effect concede that binary arbitration could violate the fairness commitment of FRAND—which contradicts their central premise that Lemley-Shapiro arbitration is a better way to resolve FRAND disputes. In fact, I show in Part IV that Lemley-Shapiro arbitration would be systematically biased against SEP holders and consistently render unfair results.

5. *Is the hypothetical-negotiation framework in Lemley-Shapiro arbitration accurate and workable?*

Lemley-Shapiro arbitration relies on incomplete analysis. Two conspicuous problems exist. First, what might be termed “*ex ante* commercialization

72. *Id.*

73. *Id.* (citing *Hall St. Assocs. LLC v. Mattel, Inc.*, 552 U.S. 576 (2008)). For a more recent statement of the Supreme Court’s deference to arbitral rulings, see *BG Group PLC v. Republic of Arg.*, 134 S. Ct. 1198, 1206–07 (2014) (“Where ordinary contracts are at issue, it is up to the parties to determine whether a particular matter is primarily for arbitrators or for courts to decide On the one hand, courts presume that the parties intend courts, not arbitrators, to decide what we have called disputes about ‘arbitrability.’ . . . On the other hand, courts presume that the parties intend arbitrators, not courts, to decide disputes about the meaning and application of particular procedural preconditions for the use of arbitration.”). Lemley and Shapiro presumably consider their self-declared “best practices” and other policy prescriptions incident to Lemley-Shapiro arbitration to constitute “particular procedural preconditions for the use of arbitration,” which the Supreme Court makes clear a court would not review.

competition” is thoroughly absent from the Lemley-Shapiro analysis. Second, Lemley and Shapiro base the calculation of a reasonable royalty rate on the assumption that the parties would have had complete information at the time of their hypothetical negotiation.

With respect to the first problem, Lemley and Shapiro argue that, for the calculation of a reasonable royalty, the hypothetical negotiation should be placed “at the time the SSO is setting the standard.”⁷⁴ To ensure an accurate *ex post* measure of the reasonable royalty, the tribunal must evaluate all pertinent elements that may have influenced the negotiation between the parties. As I previously explained in *The Meaning of FRAND, Part I: Royalties*, an *ex ante* hypothetical negotiation (if it is to be used at all in a FRAND royalty dispute) should take place at an earlier moment—when the patent holder, upon considering the alternative options for monetizing its invention, decided to contribute its patent to the standard.⁷⁵ The SEP holder could have chosen to exploit its technology in a different way. For example, the SEP holder could have chosen to gain competitive advantage in the market through exclusive use of its technology—the so-called “walled garden.” Lemley and Shapiro do not address *ex ante* commercialization competition. By calculating the reasonable royalty at the time the standard has been set, Lemley and Shapiro incorrectly assume that committing its patented invention to this particular SSO is the patent holder’s *only* option for monetizing that invention. This is a grave error of economic reasoning. Without explanation, Lemley and Shapiro make the strong (but silent) assumption that the outside options available to the parties to the hypothetical negotiation are highly asymmetrical in a way that always favors the implementer. That economic assumption lacks any foundation in theory or fact.

Second, Lemley and Shapiro also include an unworkable number of conditions under which the hypothetical negotiation would have transpired. They contend:

The hypothetical negotiation is not intended to reflect what an actual *ex ante* negotiation would have looked like [T]he point of the hypothetical negotiation rule in patent damages is to determine what hypothetical reasonable parties might have done, *had they had all the facts*, including knowledge of non-infringing alternatives.⁷⁶

The assumption that the parties would have known all the potential noninfringing alternatives to the standard is unrealistic. (Notably, Lemley and Shapiro are not even consistent because this perfect knowledge selectively excludes knowledge about validity,⁷⁷ which I examine in Part III.A.6 below.)

The Lemley-Shapiro rendition of the hypothetical negotiation also ignores

74. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1147.

75. Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 4, at 975–76.

76. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1148 n.37 (emphasis added).

77. *Id.* at 1151.

the acquisition cost of noninfringing substitutes—it does so by setting the upper bound of the hypothetical negotiation at the incremental value of the patent in suit over the next best noninfringing alternative.⁷⁸ As I explained in *The Meaning of FRAND, Part I: Royalties*, this reasoning for the determination of the royalty is a fallacy.⁷⁹ Using only the incremental value of the patent in suit to set the royalty is far from being reasonable because it assumes without justification that there is no opportunity cost of acquiring the lawful right to use the next best noninfringing substitute.

Failing to address these two issues, Lemley-Shapiro arbitration produces a FRAND royalty to which the SEP holder never would have agreed in an *ex ante* hypothetical negotiation.

6. *Why should the Lemley-Shapiro arbitrator assume that a share of the SEP holder's portfolio is invalid?*

Lemley and Shapiro incorporate into their patent portfolio valuation methodology the requirement that their arbitrator assume that a share of the SEPs in the SEP holder's portfolio is invalid.⁸⁰ This assumption contradicts U.S. patent law. It also ignores the market's ability to assess risk, does not encourage licensing efficient outcomes, and lacks methodological soundness. The price of any good already accounts for risk associated with uncertainty over the good's value. There is no reason to assume that the market values patents differently from other goods. Discounting the value of an SEP holder's portfolio by the probability of its being found partially invalid would assign principally to the SEP holder the risk that one of its SEPs will be found invalid. For the reasons explained below, the more efficient way to allocate risk would be to place that risk on the implementer. Further, the Lemley-Shapiro "ex ante probabilistic assessment of the entire portfolio"⁸¹ is a flawed valuation methodology and prevents the parties best equipped to determine a FRAND royalty from doing so.

a. *The legal assumptions regarding the determination of reasonable royalties for patents*

The Lemley-Shapiro arbitrator would be instructed to base the FRAND royalty on the probabilistic validity of the SEP holder's portfolio of SEPs.⁸² This instruction misstates the law in the United States as of 2014. Section 282(a) of the Patent Act provides: "A patent shall be presumed valid. . . . The

78. *Id.* at 1148.

79. Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 4, at 983–84.

80. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1152.

81. *Id.* at 1162.

82. *Id.* at 1162–63.

burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.”⁸³ Furthermore, U.S. courts determine a reasonable royalty on the assumption that the patent in suit is valid and infringed.⁸⁴

This unorthodox feature of Lemley-Shapiro arbitration confirms that it is more than a modest proposal to employ a special variety of arbitration to resolve FRAND disputes. It is in fact an attempt to alter various substantive principles of patent law by hardwiring those altered principles into the specified arbitral procedures that would tilt, if not prejudice, cases in the implementer’s favor.

b. *The ubiquity of risk in asset value*

Lemley-Shapiro arbitration requires the arbitrator to engage in an “ex ante probabilistic assessment”—that is, to make a subjective judgment with respect to how many patents in the SEP holder’s portfolio are potentially invalid.⁸⁵ It may be unreasonable to expect an arbitrator to determine the validity of each patent in a portfolio that may contain thousands of patents. Though some patents might indeed be found invalid, free markets routinely assess asset-performance risk and assign value to risk-laden assets. Every asset contains some risk, and the market imputes that risk into the asset’s price. The market (in this case, the SEP holder and the implementer), not the arbitrator, should be allowed to do the same for patent portfolios.

In any transaction, the buyer faces some risk that the good being purchased will be less valuable than the buyer expected or will depreciate at a rate faster than the buyer expected.⁸⁶ The buyer therefore adjusts its valuation of the good accordingly, which is reflected in the market price. Thus, the market value of any good already incorporates all the known risk in the asset value.

The SEP holder and the implementer negotiating a patent portfolio license would have already considered the possibility that a portion of the patent portfolio is invalid when submitting their offers and counteroffers for a FRAND royalty. If the patent portfolio in question was found to contain invalid patents, the SEP holder and the implementer would discount their offers for a FRAND royalty in response. Lemley-Shapiro arbitration’s *ex ante* probabilistic assessment assumes that markets are myopic: it would require the arbitrator to deduct some probabilistic value of invalidity from the value of the portfolio of SEPs *in addition to* the already-discounted rates that the SEP holder and the implementer have proposed. This double counting is a bias that would drive the

83. 35 U.S.C. § 282(a).

84. See *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325 (Fed. Cir. 2009).

85. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1162–63.

86. See, e.g., Charles O. Hardy, *Risk and Risk-Bearing*, in *THE ECONOMICS OF CONTRACT LAW* 26, 26 (Anthony T. Kronman & Richard A. Posner eds., 1979).

arbitrated FRAND royalty rate downward. By adding a non-market mechanism (the Lemley-Shapiro arbitrator) to reduce price for a risk that the market has already assessed, Lemley-Shapiro arbitration would consistently undercompensate the SEP holder.

c. Is the Lemley-Shapiro arbitrator equipped to assign a probabilistic value to patents?

Lemley and Shapiro say that the “ex ante assessment necessarily assumes that some patents in the portfolio may be invalid or not infringed.”⁸⁷ It is puzzling that the Lemley-Shapiro arbitrator would be instructed to undertake a complex assessment of the probabilistic validity and value of the licensed patents when choosing which submitted royalty is FRAND, given that typically an entire court case is necessary to determine the validity of a single patent. There is no reason to believe that evaluating a patent’s validity would be substantially less costly for an arbitrator than it is for a judge.⁸⁸ Evaluating the probabilistic validity of a portfolio of SEPs would require a patent-by-patent review of hundreds or thousands of patents, which would be prohibitively costly and time-consuming. It is also puzzling that, having limited their arbitrator’s role to deciding what amounts to a coin-flip, Lemley and Shapiro think that the parties to a FRAND licensing dispute would seriously believe that this same arbitrator could determine the probabilistic validity of the patents in their respective portfolios.

If the Lemley-Shapiro arbitrator erroneously assumes that too many SEPs are invalid or not infringed, then the arbitrator’s resulting *ex ante* probabilistic valuation of the SEP holder’s portfolio grants the implementer a free option. Suppose that in a later patent-infringement case, the court finds the specific patent to be valid and infringed. Nothing in Lemley-Shapiro arbitration would give the SEP holder the right to receive an upward adjustment of the FRAND royalty (either prospectively or retroactively) to correct the erroneously low estimate that the Lemley-Shapiro arbitrator made of the probabilistic value of the SEP holder’s portfolio.

d. The flawed nature of portfolio valuation by ex ante probabilistic assessment

Lemley and Shapiro claim that their requirement that the arbitrator assume that some portion of the SEP holder’s portfolio is probabilistically invalid would allow for “finality” with respect to the FRAND royalty of patent

87. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1162–63.

88. *See* Larouche, Padilla & Taffet, *supra* note 9, at 28–32 (arguing that arbitration is not necessarily more efficient than litigation).

portfolios.⁸⁹ Lemley and Shapiro assume that, even if a disputed patent in the SEP holder's portfolio is found to be valid in a subsequent judgment, because the portfolio was valued under the assumption that a portion of it was invalid, the FRAND royalty need not be revised upward.

However, Lemley and Shapiro offer very little guidance for how to execute their *ex ante* probabilistic assessment of a patent portfolio. They mention—almost in passing, without any hint of irony—that “FRAND arbitration will often involve extensive discovery.”⁹⁰ Determining what percentage of a patent portfolio (that may consist of thousands of patents) is actually valid is a complication that Lemley and Shapiro should not brush aside. A patent-by-patent examination of such a portfolio is not feasible. Therefore, the *ex ante* probabilistic assessment of the validity of a portfolio must rely on assumptions about how the value of the individual patents in a portfolio is distributed. In their article proposing mandatory arbitration, Lemley and Shapiro do not provide any empirical data with respect to how the values of individual patents in a portfolio of SEPs are typically distributed. In an article published in 2005, Lemley and Shapiro observed generally that the “distribution of value of patents appears to be highly skewed, with the top 1 percent of patents more than a thousand times as valuable as the median patent.”⁹¹ This information allows one to infer that the distribution of patent values is heavily left-skewed. Even though this inference provides a generalization about the distribution of patent values, using that generalization to value a single portfolio is problematic.

Lemley and Shapiro may object that their arbitrator could and should account for the quality of the portfolio in dispute, relative to other portfolios in general, during the *ex ante* probabilistic assessment, but such a task would entail a costly, time-consuming examination of each patent in the portfolio, as well as examination of similar portfolios. In addition to being prohibitively costly, that task would no longer be what Lemley and Shapiro define the *ex ante* probabilistic assessment to be—that is, the Lemley-Shapiro arbitrator would no longer be *assuming* that some patents in a portfolio are invalid or not infringed, but rather would be painstakingly examining whether they are. The *ex ante* probabilistic assessment could have costs that exceed the costs associated with existing methods of determining a FRAND royalty. It bears emphasis that Lemley and Shapiro do not claim anywhere that their proposal would reduce the cost of determining FRAND royalties.

Lemley and Shapiro seek to simplify a dauntingly complicated task—valuation of a portfolio consisting of thousands of SEPs. However, assigning probabilities so as forcibly to quantify this irreducible uncertainty produces a

89. *Id.*

90. *Id.* at 1152.

91. Mark A. Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PERSP. 75, 80 (2005).

methodology that neither accurately values patent portfolios nor promotes efficient exchange. It is not “a simple approach.”

7. *Would Lemley-Shapiro arbitration assume that the FRAND royalty would reflect legal rules in effect at the time of the hypothetical negotiation?*

When determining a FRAND royalty, one must account for the legal rules that provide the available remedies in cases of patent infringement. The available remedies affect the value of patents.⁹² Strong rules increase the value of patents and are consequently likely to result in a higher royalty. Conversely, legal rules that only weakly protect patents decrease the value of patents and will generally result in a low royalty. Concerns may arise if, as in the context of SEPs, legal rules change materially over time and therefore affect patent value.

The relevant question is whether, in determining a reasonable royalty, the court should use the legal rules that existed at the time of the litigation and apply them retroactively, or whether it should instead use the legal rules that existed at the time of the hypothetical negotiation. The latter option—that is, the reliance on the legal rules that existed at the time of the hypothetical negotiation—is more intellectually defensible. How could a patent owner foresee the development of the legal rules and account for them during a hypothetical negotiation? It would be more logical to assume that both the SEP holder and the licensee would negotiate the FRAND royalties in light of the legal rules that existed at the time of the hypothetical negotiation.

Surprisingly, the question does not seem to have been addressed by courts or scholarly articles, despite the important effect it might have on the determination of a FRAND royalty. It is a question that Lemley and Shapiro neglect to address in their arbitration proposal.

8. *Summation*

Lemley-Shapiro arbitration has at least seven serious conceptual flaws. First, the Lemley-Shapiro proposal oversimplifies FRAND disputes, ignoring the additional terms in dispute for a FRAND license and the question of whether the initial offer made by the SEP holder was FRAND. Second, Lemley-Shapiro arbitration conflates the SEP holder’s duty to make a FRAND offer and its (nonexistent) duty to enter into a license. The FRAND commitment does not turn the SEP holder into a guarantor of contract formation with respect to the prospective licensee. Third, the scope of Lemley-Shapiro arbitration is ambiguous. Fourth, Lemley and Shapiro recognize that the arbitral panel may be biased, yet their arbitration model fails to establish a

92. Robert Cooter, Stephen Marks & Robert Mnookin, *Bargaining in the Shadow of the Law: A Testable Model of Strategic Behavior*, 11 J. LEGAL STUD. 225, 228–29 (1982).

procedure to eradicate potential bias. Fifth, Lemley-Shapiro arbitration rests on an *ex ante* hypothetical negotiation that simultaneously assumes perfect information about noninfringing substitutes and perfect ignorance about both the validity of SEPs and the outside options from which the patent holder could have chosen to monetize its invention. Sixth, the Lemley-Shapiro proposal suggests a probabilistic assessment of the validity of patents within a portfolio, which contradicts U.S. patent law and is infeasible. Seventh, Lemley and Shapiro do not address whether their proposed arbitration would reflect the legal rules in effect at the time of the hypothetical negotiation.

B. *Are Lemley-Shapiro “Best Practices” Better than Court Decisions?*

SSOs create a public good by setting standards. Still, they are, in Lemley’s words, “industry groups” with private economic interests.⁹³ An SSO is no court or regulator. By requiring an SSO to adopt “best practices,” Lemley and Shapiro seem to imply that the SSO will voluntarily adopt such rules as mandatory practices for its members—according to whatever voting procedures control changes to the SSO’s governance—and then will apply those rules to their members (meaning, of course, SEP holders). By commending this path, Lemley and Shapiro presume that SSOs are more competent than courts to formulate legal principles to resolve legal disputes over FRAND licenses.

Does the weight of evidence justify such a presumption? An inherent conflict of interest exists between the SSO as the supervisor on the one hand and the discrete and insular subset of SSO members that constitute the supervised subjects on the other hand. Courts at least are impartial fora whose independence better enables them to prevent opportunism motivated by a conflict of interest.

In the absence of Lemley-Shapiro arbitration, arbitration over FRAND licenses today is facultative. An SSO already can recommend arbitration to its members. An individual patent holder may state at the time of standard adoption whether and under what terms it will submit a FRAND licensing dispute to arbitration. In contrast, under Lemley-Shapiro arbitration the SSO’s suggestion that members submit to binding arbitration becomes imperative and peremptory. Mandating arbitration, rather than leaving it voluntary, has significant disadvantages, as I have explained in Part II.A.

93. Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1892 (2002); see also Kai-Uwe Kühn, Fiona Scott Morton & Howard Shelanski, *Standard Setting Organizations Can Help Solve the Standard Essential Patents Licensing Problem*, 3 COMPETITION POL’Y INT’L: CPI ANTITRUST CHRON., Mar. 2013 (SPECIAL ISSUE), at 2, 2 available at <https://www.competitionpolicyinternational.com/assets/Free/ScottMortonetalMar-13Special.pdf>.

Lemley and Shapiro claim to provide “a simple, practical set of rules regarding patents that SSOs can adopt”⁹⁴ to arbitrate FRAND disputes. In reality, Lemley-Shapiro arbitration is an unsubstantiated platform from which Lemley and Shapiro opine that “best practices” announced by an SSO derive their virtue precisely from the fact that they will moot certain legal questions. However, those legal questions concern the essence of the FRAND commitment. Lemley and Shapiro do not explain why an SSO’s vague incantation of “best practices” would provide better guidance than the impartial standards that courts develop through the accretive process of litigation, especially in the United States, where there is even a specialized appellate court for patent cases.

III. WOULD LEMLEY-SHAPIRO ARBITRATION ADVANCE OR RETARD INNOVATION AND THE SETTING OF OPEN STANDARDS?

Lemley-Shapiro arbitration is an apologia for infringement. It would lower royalty revenue for SEP holders and reduce their investment in—and therefore the value of—open standards.

A. *How Does Arbitral Procedure Affect Bargaining Offers?*

Henry Farber and Harry Katz have explained that “any analysis of the impact of dispute settlement procedures must recognize that the mere presence of the procedure directly affects . . . arbitrated outcomes.”⁹⁵ Lemley and Shapiro argue that parties to binding baseball arbitration of FRAND disputes are likely to make “reasonable proposals” because “the party that asks for too much (or offers too little) risks losing the case altogether.”⁹⁶ However, Lemley and Shapiro fail to account for a fundamental principle of bargaining: parties in any bargaining situation, including baseball arbitration, have “incentives . . . to maximize the expectation of [their] private gain from the process [of bargaining].”⁹⁷ Moreover, “the parties can manipulate the arbitration outcome in [final-offer arbitration] by manipulating their final offers.”⁹⁸ Therefore, the parties have the incentive to propose values that are not their most accurate estimates of a true FRAND royalty if doing so will maximize their expected

94. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1135.

95. Henry S. Farber & Harry C. Katz, *Interest Arbitration, Outcomes, and the Incentive to Bargain*, 33 *INDUS. & LAB. REL. REV.* 55, 56 (1979).

96. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1144. Lemley and Shapiro cite my article, *Court-Appointed Neutral Economic Experts*, *supra* note 1, at 389, to corroborate this argument. However, nowhere in that article do I argue that baseball arbitration is well suited to resolve FRAND royalty disputes.

97. John Kennan & Robert Wilson, *Bargaining with Private Information*, 31 *J. ECON. LIT.* 45, 53 (1993).

98. Henry S. Farber, *An Analysis of Final-Offer Arbitration*, 24 *J. CONFLICT RESOL.* 683, 684 (1980).

gain in the dispute.

Consider a handset manufacturer that is an implementer of patents essential to the LTE wireless communications standard. Suppose the implementer expects that the arbitrator believes that \$2 per licensed handset is an accurate FRAND royalty. However, the implementer would benefit privately by securing a lower royalty—say, of \$1 per handset. The supposition underlying Lemley-Shapiro arbitration is that the implementer has the incentive to propose a royalty close to \$2 because that price is closer to the implementer's expectations of what the arbitrator believes is a FRAND royalty and what is therefore more likely to be selected. However, as Farber has explained, "each party faces a fundamental trade-off in setting its final offer: in submitting a more 'reasonable' final offer, a party is gaining some probability that its offers will be selected while giving up some utility if its offer is selected."⁹⁹ Thus, the implementer will not necessarily have the incentive to propose a royalty close to \$2 per handset, because doing so would reduce its private gain from "winning" the arbitration—that is, from successfully persuading the arbitrator to select the implementer's proposal. Thus, depending on the implementer's expectations of what the SEP holder will propose and what the arbitrator will choose, the implementer still might have the incentive to propose an award significantly below \$2 per handset. If the SEP holder behaves the same way, then the SEP holder also will propose a royalty that differs significantly from \$2 per handset. The arbitrator is left to choose between two proposals that deviate from what the arbitrator believes is a true FRAND value. In this case, the final award will diverge from the FRAND royalty that would emerge either in a more informed negotiation, in traditional arbitration, or in litigation.

The magnitude of the difference between the parties' proposals and a true FRAND royalty depends in part on the information revealed through the arbitration about the parties' beliefs concerning the FRAND value. John Kennan and Robert Wilson have explained that "[b]argaining with private information is indeed an important context where truthful revelation might promote efficiency."¹⁰⁰ Robert Mnookin, the Harvard Law School scholar on conflict resolution, has observed that some limitations of arbitration arise from the lack of information "in the hands of the other party" and the "binding nature and comparative finality of an arbitrator's award," which bars appellate review of the award.¹⁰¹ For at least three reasons, each party in baseball arbitration lacks complete information about the value that the other party will propose.

First, discovery in arbitration is typically far more limited compared with discovery in American-style litigation. Discovery enables both parties and the judge to access, in a graduated manner, probative information on the true range

99. *Id.* at 685.

100. Kennan & Wilson, *supra* note 97, at 49.

101. Robert H. Mnookin, *Alternative Dispute Resolution*, in 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 56, 57 (Peter Newman ed., 1998).

of FRAND values for the SEPs at issue. With greater information relevant to determining a FRAND royalty, the parties will be more aware of each other's bargaining strategy, and they will adjust their proposed royalties accordingly.¹⁰² In contrast, baseball arbitration permits no graduated disclosure of information that might cause the parties to revise their bid and ask.

Second, in conventional commercial arbitration "the procedural rules may be set by the parties,"¹⁰³ such that the parties can agree on a procedure in which each party has an expanded opportunity to observe the other party's views on the appropriate award amount. In this fashion, the parties can agree to increase mutual bargaining. For example, the parties could propose awards in one round and then revise their proposed awards in a second round, after which the arbitrator chooses one party's final proposal.¹⁰⁴ Additional rounds of negotiation in such an arbitration procedure would enable the parties to adjust their proposals to converge on a true FRAND value in the given dispute. Suppose that in the first round the SEP holder proposes a royalty of \$3.50 per handset, and the licensee proposes \$0.05 per handset. The parties will observe that their proposed royalties differ by two orders of magnitude. Both parties then have the opportunity to adjust their proposals based on the other party's revealed beliefs about the magnitude of the FRAND royalty. If each party believes that the arbitrator will consider its proposal to be extreme, then both parties have an incentive to adjust their proposed royalties closer to a true FRAND royalty. In contrast, Lemley-Shapiro arbitration and other forms of baseball arbitration deny the parties the opportunity to observe information about the other party's beliefs regarding the magnitude of the true FRAND royalty. The parties lack the ability and incentive to adjust their proposals closer to each other's proposal. Baseball arbitration therefore has the potential to distort the parties' incentives when proposing a FRAND royalty. Of course, it is possible that a party might unilaterally or bilaterally volunteer information to the other party, outside the formal arbitral process and before the parties submit their sealed offers to the arbitrator. But if this kind of strategic disclosure of information is what would happen in practice under Lemley-Shapiro arbitration, then the bargaining process would not really be binding baseball arbitration—and its efficiency properties would differ from those that Lemley and Shapiro claim.

102. Kennan & Wilson, *supra* note 97, at 50 ("Discovery procedures provide opportunities for intrusive recovery of relevant information and attorneys can provide expert advice on both parties' costs and prospects at trial.").

103. Mnookin, *supra* note 101, at 57.

104. There is an obvious resemblance here to the information-disseminating effect of a multi-round open-outcry auction. There, of course, the information is disseminated to rival bidders, typically in an ascending auction, rather than between a single buyer and a single seller within a defined bargaining range. See Paul R. Milgrom & Robert J. Weber, *A Theory of Auctions and Competitive Bidding*, 50 *ECONOMETRICA* 1089 (1982).

A third significant aspect of the rules of baseball arbitration is that one party's proposal will be binding, because the arbitrator's decision is binding.¹⁰⁵ The binding effect of the arbitrator's decision precludes "the safeguard of ordinary judicial review,"¹⁰⁶ as I explained in Part III.A.4. In addition to precluding a check of fairness of the arbitration award, the absence of judicial review surely will affect the parties' bargaining strategies. They would have a greater incentive to propose values that are closer to their preferred royalties than to a true FRAND royalty, because they would know that there would not be an opportunity to challenge—and correct—the arbitrator's selected award, nor would there be further opportunity (until the license renewal) to reevaluate a FRAND royalty for the licensed SEPs.

In sum, the chosen arbitral procedure will affect the parties' bargaining positions and strategies. The availability of information and the binding nature of arbitration will affect the parties' incentives to deviate from or adhere to "reasonable" royalty proposals.

B. *Is the Lemley-Shapiro Arbitrator Susceptible to Cognitive Bias?*

Impartiality is a cornerstone of due process. Judges and arbitrators must be free from bias. The judicial system provides rules to disqualify a judge who is biased with respect to one of the parties.¹⁰⁷ However, bias might be implicit in the adjudicator's mental process, rather than overt or intentional.¹⁰⁸ I do not propose that arbitrators in general are inherently biased toward either party to an SEP-licensing dispute. Nevertheless, I do suggest that the restrictions of Lemley-Shapiro arbitration on the arbitrator may precipitate a biased award. If the procedural design of a specific mechanism for dispute resolution biases an arbitrator toward a specific outcome, then mandating the use of that mechanism would deny due process to the victims of that systemic bias. The Lemley-Shapiro arbitrator, despite her principled intentions, would likely have a cognitive bias to pick the lower royalty rate, to the benefit of the net implementer and to the detriment of the net SEP licensor. Thus, taking into account cognitive bias, Lemley-Shapiro arbitration would lack procedural fairness.

It is a common perception in conventional commercial arbitration that

105. See, e.g., Farber, *supra* note 98, at 683–84.

106. Mnookin, *supra* note 101, at 57.

107. The Judicial Code requires any justice, judge, or magistrate judge to "disqualify himself in any proceeding in which his impartiality might reasonably be questioned." 28 U.S.C. § 455(a); see also *Liteky v. United States*, 510 U.S. 540, 558 (1994) (Kennedy, Blackmun, Stevens & Souter, JJ., concurring) ("One of the very objects of law is the impartiality of its judges in fact and appearance."); Martin H. Malin & Monica Biernat, *Do Cognitive Biases Infect Adjudication? A Study of Labor Arbitrators*, 11 U. PA. J. BUS. L. 175, 175 (2008) (citing *Aetna Life Ins. Co. v. Lavoie*, 475 U.S. 813, 821–25 (1986); *Ward v. Vill. of Monroeville*, 409 U.S. 57, 60 (1972)).

108. See, e.g., Malin & Biernat, *supra* note 107, at 175–76.

arbitrators have an incentive to render a compromise award (or, at least, not to favor a particular class of party). In the assessment of Judge Richard Posner, there is “a tendency for arbitrators to ‘split the difference’ in their awards, that is, to try to give each side a partial victory (and therefore partial defeat).”¹⁰⁹ Two factors drive this result.

First, parties in arbitration jointly select their arbitrator and pay her fees. In contrast, the parties neither choose nor pay the judge in litigation. Income and reputation are two factors that influence an arbitrator’s utility function (which is simply the economist’s shorthand for the complex of objectives that guide the arbitrator’s rational actions).¹¹⁰ The presence of those factors wittingly or unwittingly could motivate the arbitrator to increase the likelihood of being selected as an arbitrator again in future matters. To paraphrase and extend Judge Posner’s analysis of judges, an arbitrator’s reputation for favoring one side or the other in a class of cases “will be unacceptable to one of the parties in any such dispute, and so the demand for [the arbitrator’s] services will wither.”¹¹¹ Therefore, one would expect arbitrators to have an incentive to render compromise awards.

Second, evidence exists that individuals are biased to avoid extreme results. Cass Sunstein has observed in his research on behavioral law and economics that “[e]xtremeness aversion gives rise to compromise effects. As between given alternatives, most people seek a compromise.”¹¹² Similarly, an arbitrator would be inclined to avoid extreme positions and instead render a compromise award.

However, baseball arbitration by definition compels an extreme outcome. The arbitrator may not “split the baby”¹¹³ and therefore cannot moderate the payout. Under this restriction, an arbitrator would blink—he or she would be biased to choose, on balance, the lower royalty rate. Some evidence indicates that arbitrators—particularly in high-stakes cases—are disinclined to grant large sums of money. Studies on awards in high-stakes investment arbitrations have found that arbitrators in these disputes do *not* tend to render compromise

109. Richard A. Posner, *Judicial Behavior and Performance: An Economic Approach*, 32 FLA. ST. U. L. REV. 1259, 1261 (2005) [hereinafter Posner, *Judicial Behavior and Performance*]; see also Daphna Kapeliuk, *The Repeat Appointment Factor: Exploring Decision Patterns of Elite Investment Arbitrators*, 96 CORNELL L. REV. 47, 49 nn.4–5 (2010) (citing nine scholarly articles arguing that arbitrators have an incentive to render compromise judgments).

110. Cf. RICHARD A. POSNER, HOW JUDGES THINK 35–36 (2008) (enumerating seven elements, among others, that influence the judicial utility function); Richard A. Posner, *What Do Judges and Justices Maximize? (The Same Thing Everybody Else Does)*, 3 SUP. CT. ECON. REV. 1, 10 (1993) (evaluating various elements of the judicial utility function, including income and reputation).

111. Posner, *Judicial Behavior and Performance*, *supra* note 109, at 1261.

112. Cass R. Sunstein, *Behavioral Law and Economics: A Progress Report*, 1 AM. L. & ECON. REV. 115, 135 (1999) (emphasis omitted).

113. See, e.g., Contreras & Newman, *supra* note 29, at 43.

awards¹¹⁴ and actually tend to favor lower amounts.¹¹⁵ Most awards in investment arbitration dismissed all investors' claims, and over 80 percent of all decisions rendered an award of less than 40 percent of the amount claimed.¹¹⁶

Judge Posner observes that an arbitrator is expected to have "a lower error rate than juries,"¹¹⁷ and others reason that an arbitrator has incentives to exercise "greater care."¹¹⁸ Under Lemley-Shapiro arbitration, however, an error will be inevitable if neither party submits a genuine FRAND royalty for the arbitrator's consideration. The Lemley-Shapiro arbitrator will necessarily err when choosing a proposed royalty exceeding the true FRAND range (thereby overcompensating the SEP holder) or when choosing a proposed royalty below the true FRAND range (thereby undercompensating the SEP holder). The Lemley-Shapiro arbitrator will seek to minimize the difference between the selected royalty and a true FRAND royalty—that is, the difference between the selected royalty and the boundary of the FRAND range (either upper or lower, as the case may be).

From a *static* perspective, the arbitrator may perceive that the greater evil to avoid is overcompensating—not undercompensating—the SEP holder, since the royalties that the implementer pays on its downstream products may affect consumer prices and may be observable in the near term. In contrast, the diminished investment in open standards that would, in a *dynamic* sense, result from undercompensating the SEP holder is a social cost that will not be measurable until the current dispute that the Lemley-Shapiro arbitrator is resolving is long forgotten.¹¹⁹ I explain these effects in Part IV.C below. Because of the subject matter's complexity, knowledge of patent law's effect on economic incentives for investment in innovation would be indispensable for the Lemley-Shapiro arbitrator to factor the risk of dynamic inefficiency into her arbitral award. The arbitrator, facing a dichotomous choice in the overly simplistic Lemley-Shapiro proposal, would likely not appreciate how to evaluate arguments about dynamic efficiency, which might seem to lack concreteness and immediacy. It is therefore reasonable to expect that the

114. See Stephanie E. Keer & Richard W. Naimark, *Arbitrators Do Not "Split the Baby": Empirical Evidence from International Business Arbitrations*, 18 J. INT'L ARB. 573 (2001).

115. Kapeliuk, *supra* note 109, at 81.

116. *Id.* Empirical research indicates that judges grant lower damages than do juries. See Christopher R. Drahozal, *A Behavioral Analysis of Private Judging*, 67 LAW & CONTEMP. PROBS. 105, 122–23 (2004) (citing Eric Helland & Alexander Tabarrok, *Runaway Judges? Selection Effects and the Jury*, 16 J.L. ECON. & ORG. 306, 330 (2000); Joni Hersch & W. Kip Viscusi, *Punitive Damages: How Judges and Juries Perform* 36 (Harvard-John M. Olin Discussion Paper No. 362, 2002)).

117. Posner, *Judicial Behavior and Performance*, *supra* note 109, at 1261.

118. Drahozal, *supra* note 116, at 126.

119. For an analogous discussion of the tension between static efficiency and dynamic efficiency in competition law, see J. Gregory Sidak & David J. Teece, *Dynamic Competition in Antitrust Law*, 5 J. COMPETITION L. & ECON. 581 (2009).

Lemley-Shapiro arbitrator would be less concerned about committing an error that reduces dynamic efficiency than committing an error that reduces static efficiency.

C. *How Would Lemley-Shapiro Arbitration's Bias Against SEP Holders Reduce Their Incentive to Invest in Open Standards?*

Lemley-Shapiro arbitration favors net implementers and would reduce the expected return to SEP holders. As that expected return falls, the optimal level of investment in SEPs will also fall. This reduction in investment will manifest itself in three respects, each of which will reduce the value of open standards in the future.

First, a reduction in the expected return to SEP holders will reduce expenditures in research and development (R&D) that could generate future SEPs. The return to holding an SEP is a function of the total expected return to R&D expenditure. As the total expected return to any particular investment falls, the profit-maximizing level of expenditure on that investment will also fall. Thus, because Lemley-Shapiro arbitration biases royalty rates downward, expenditures on R&D will fall if Lemley-Shapiro arbitration is the mandatory dispute-resolution mechanism. Reduced expenditure in R&D will produce fewer and less valuable patented innovations and thus reduce the value of future standards.

Second, a reduction in the expected return to SEP holders will make inventors less willing to monetize their inventions by contributing their technologies to an open standard. Consequently, an SEP holder may choose to withhold more valuable technologies from the standard in the hope of receiving a higher reward by licensing its patents without subjecting itself to a FRAND commitment. Reducing the return to holding SEPs will discourage a firm from participating in setting open standards altogether. The withholding of the most valuable patents from the SSO would induce adverse selection: the new standard would incorporate only low-value patented technologies, such that the standard's total value would be low relative to earlier standards.¹²⁰ If the most valuable patents are not included in the standard, commercial acceptance of the standard will suffer, as the technology of the standard may not be sufficiently differentiated with respect to alternative technologies.

Third, lower returns to SEP holders will discourage expenditures on attempting to have one's own patents incorporated into the standard. Higher expenditures during the selection process, including expenditures by patent holders lobbying for inclusion in the standard, generate socially useful information and help SSO members accurately identify and select the most valuable technologies for the standard. The more information that the lobbying

120. See, e.g., George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

process reveals, all else being equal, the more accurately will the SSO's working groups identify the most valuable technologies to incorporate into the standard. As a result, a reduction in expenditures related to a firm's efforts to have its own patents incorporated into the standard would reduce the quality of technologies chosen for incorporation into the standard, which in turn and would thereby reduce the value that the standard generates.

IV. WHY WOULD LEMLEY-SHAPIRO ARBITRATION NOT ILLUMINATE THE CALCULATION OF FRAND ROYALTIES?

Lemley-Shapiro arbitration would not provide SEP holders and implementers guidance on what constitutes FRAND royalties. The Lemley-Shapiro arbitrator is not required to publish a reasoned analysis of his decision, and therefore she would provide no guidance for future decisions. Moreover, the Lemley-Shapiro proposal to publish arbitration awards—contrary to the real-world industry norm—could cause parties to use unreliable non-FRAND benchmarks to set FRAND royalties. More striking is the Lemley-Shapiro proposal for compulsory publication of awards and communication among SSO members concerning their bilateral negotiations with a given SEP holder, which would promote buyer collusion in violation of antitrust law.

A. *Why Would Lemley-Shapiro Arbitration Awards Be Unable to Inform the Proper Magnitude of FRAND Royalties?*

The Lemley-Shapiro arbitrator is forbidden to set the royalty as a result of an independent and intellectually rigorous assessment of what, on the facts and data of the specific case, constitutes a FRAND royalty. Rather, the arbitrator is constrained to choose between the royalty that the SEP holder submits and the lower royalty that the implementer submits. It may happen that neither of the proposed royalties is FRAND, such that the arbitrator must choose the lesser of two evils. As I explained in Part III.A.1, an accurate FRAND royalty could significantly deviate from the less erroneous of two bad estimates that the parties supply. This deviation creates the possibility that in a subsequent dispute one of the parties would use the awarded royalty as a benchmark for what supposedly constitutes a FRAND royalty.

Lemley and Shapiro say that “courts are very familiar” with “the concept of reasonable royalties from U.S. patent law[,] . . . which they calculate in most patent damages cases.”¹²¹ The Lemley-Shapiro arbitrator, however, would not have the benefit of this familiarity drawn from the experience with patent-royalty cases. Nor would the arbitrator necessarily be bound by U.S. patent law precedent. Although a judge or a jury can make an independent determination based on all available evidence, the Lemley-Shapiro arbitrator would have little

121. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1146.

discretion to engage in fact finding and thereupon apply rigorous economic principles and methods to the facts and data of the case to calculate a FRAND royalty.

Lemley and Shapiro address only vaguely whether their arbitrator would need, and would be authorized by the parties, to make an initial determination of whether a party's offer qualified as a FRAND offer. If Lemley-Shapiro arbitration envisions no such process of verification, then the Lemley-Shapiro arbitrator would have no assurance that the awarded royalty was in fact a FRAND royalty, and the arbitration would be stripped of its legitimacy. Further, there would be no determination of whether the patent holder actually fulfilled its contractual obligation under its FRAND commitment—namely, to make an offer to license its SEPs on FRAND terms. I have addressed the legal and economic issues with this oversight in Part III.A. On the other hand, if Lemley and Shapiro concede that their arbitrator must first certify an offer to be FRAND before issuing a binding arbitral award, then the arbitrator's role becomes considerably more complicated than Lemley and Shapiro represent. In fact, the Lemley-Shapiro arbitrator's task would then increasingly resemble that of a district court judge. And so the claimed efficiencies of Lemley-Shapiro arbitration over district court litigation would evaporate.

Litigation presents another benefit over arbitration in FRAND disputes. The concept of what constitutes a FRAND royalty is advanced by the publication of a detailed court opinion explaining how the judge calculated the FRAND royalty. The same is true of the court's jury instructions on damages, and its post-trial order on the defendant's motion for remittitur, when (as is usually the case) the plaintiff has demanded a jury trial. Although court opinions and jury instructions are sometimes redacted, they still provide the benefit of a reasoned analysis—an intellectually rigorous description of the methodology used to determine what is a FRAND royalty (or, more generally, what are FRAND licensing terms). As in common law adjudication generally, these opinions are a public good. They create a roadmap for judges ruling in similar cases in the future and act as precedent on what constitute FRAND licensing terms. In contrast, Lemley-Shapiro arbitration would not provide future guidance (to arbitrators, judges, or juries) on what constitute FRAND terms, given that the arbitrator's decision is between two choices—each of which may or may not be consistent with FRAND—and that the decision need not rest on the application of intellectually rigorous economic principles and methods to the specific facts and data of the dispute.

Lemley and Shapiro avoid answering the important question of whether their arbitrator would be required to provide the parties a “principled decision supported by a reasoned opinion.”¹²² The alternative would be, as in any commercial arbitration, to leave the arbitrator “free simply to announce the

122. Mnookin, *Alternative Dispute Resolution*, *supra* note 101, at 57.

award without any explanation.”¹²³ These two competing arbitral scenarios obviously do not produce the same amount of useful information. Furthermore, if the Lemley-Shapiro arbitrator need not explain the arbitrator’s principled decision in a reasoned opinion, then the parties in effect excuse the arbitrator from the most direct form of quality control. The Lemley-Shapiro arbitrator’s value-added becomes obscure. As Contreras and Newman observe, “baseball arbitration leaves the door open for an arbitrator to ‘flip a coin,’ rather than following any particular methodology.”¹²⁴

Although Lemley and Shapiro propose that the awards from Lemley-Shapiro arbitration be disclosed to third parties as a means to support the nondiscrimination requirement of the FRAND commitment,¹²⁵ the publication of the awards would be of limited use in future negotiations because the awards (and each of the parties’ offers) might not contain genuine FRAND terms. Consequently, disclosing these awards may hinder rather than assist future parties in securing prices, terms, and conditions that are genuinely FRAND.

At the same time, the compulsory publication of royalty awards assumes away a concern that significantly affects the plausibility of Lemley-Shapiro arbitration. One reason that parties to a commercial contract choose arbitration over litigation is to keep their disputes from the public eye. The desire for confidentiality drives much of the demand for commercial arbitration. Lemley and Shapiro do not explain how much their elimination of confidentiality in FRAND arbitrations would suppress the demand for such arbitration. If the demand for FRAND arbitration is highly elastic with respect to the degree of confidentiality, then Lemley-Shapiro arbitration could be unappealing to SEP holders and implementers alike. Several SSOs that do have arbitration provisions have *not* mandated baseball arbitration for FRAND-royalty disputes, nor have they mandated that arbitration (in whatever form) forgo the customary confidentiality surrounding its outcome.¹²⁶

The compulsory publication of awards under Lemley-Shapiro arbitration raises another concern that Lemley and Shapiro neglect to address—oligopsonistic collusion.¹²⁷ This concern is present in the smartphone litigation wars. The FRAND commitment obligates the SEP holder to make a FRAND-compliant offer to any interested party. The offer must be FRAND, which is to say that it must be within an identifiable price range. The FRAND obligation does not commit the SEP holder to make a FRAND-compliant offer of a price at any specific point within that permissible range. However, the public disclosure of arbitrated FRAND prices would have the effect of sharing contemporaneous price information among implementers that are horizontal

123. *Id.*

124. *Cf.* Contreras & Newman, *supra* note 29, at 44.

125. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1141.

126. *See* Contreras & Newman, *supra* note 29, at 15–17.

127. *See* J. Gregory Sidak, *Patent Holdup and Oligopsonistic Collusion in Standard-Setting Organizations*, 5 J. COMPETITION L. & ECON. 123 (2009).

competitors in the downstream market (such as the market for smartphones). Sharing this contemporaneous price information would depress the prices that implementers bilaterally offer the SEP holder. The process would simulate the outcome of a buyers' cartel. Nothing in the FRAND obligation authorizes implementers to extract rents from SEP holders by consolidating their market power as buyers.¹²⁸ Indeed, nothing in an SSO's bylaws could purport to confer this power on implementers, for it would obviously violate section 1 of the Sherman Act¹²⁹ and analogous statutes in other countries. Yet, Lemley-Shapiro arbitration would give implementers a means to simulate the results of collusive bidding for SEPs.

B. *Why Would Lemley-Shapiro Arbitration Fail to Inform One-Way Royalties?*

Lemley and Shapiro note that, "in a FRAND royalty arbitration, there is no need to determine the reasonable royalty on a patent-by-patent basis [T]he FRAND concept involves a reasonable rate for a party's entire portfolio of standard-essential patents[,] match[ing] more closely . . . real-world licensing practices."¹³⁰ In fact, the SEP holder and the implementer often agree to cross license one another's entire portfolios. Consequently, the parties may propose royalties structured in terms of a net balancing payment between their two portfolios, rather than proposing reciprocal one-way royalties.

In Lemley-Shapiro arbitration, the parties' proposals would likely reflect this practice and amount to the net balancing royalty calculated in a cross-licensing agreement. The royalty awarded would not indicate the underlying one-way FRAND royalty of each party's portfolio of SEPs but rather would reflect the offset of the relative portfolio strength of the parties. This practice would conflict with court decisions in which judges have labored to determine the one-way FRAND royalty representing the value of the SEP holder's own portfolio of SEPs.¹³¹ As I explained in *The Meaning of FRAND, Part I: Royalties*, "[e]stablishing a net balancing payment without first establishing the FRAND one-way royalties for each party's SEPs would enable the parties to avoid charging other parties consistent royalties, which would reduce the transparency of pricing and thus confound the nondiscrimination requirement of the FRAND commitment."¹³²

128. See Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 4, at 985; Sidak, *Patent Holdup and Oligopsonistic Collusion in Standard-Setting Organizations*, *supra* note 127, at 168.

129. 15 U.S.C. § 1 (2011).

130. Lemley & Shapiro, *A Simple Approach*, *supra* note 2, at 1151.

131. See, e.g., *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 2111217, at *20 (W.D. Wash. Apr. 25, 2013) (Robart, J.); Jury Verdict Form, *Realtek Semiconductor Corp. v. LSI Corp.*, No. 5:12-cv-03451-RMW (N.D. Cal. Feb. 26, 2014), ECF No. 299.

132. See Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 4, at 1003 n.186.

CONCLUSION

Mark Lemley and Carl Shapiro propose that standard-setting organizations mandate that their members henceforth submit to binding, final-offer arbitration (commonly called “baseball arbitration”) to set fair, reasonable, and nondiscriminatory royalties in licensing disputes concerning standard-essential patents. SSOs should reject this proposal. It does not rest on sufficient facts or data, nor does it apply intellectually rigorous principles and methods of law and economics in a reliable manner. This is not to say that the voluntary use of arbitration to resolve FRAND licensing disputes is inherently problematic. However, the incremental efficiency that Lemley and Shapiro claim that their proposal would achieve over litigation or conventional commercial arbitration is illusory. For one, it is much harder to value a portfolio of SEPs over the span of five years than to value an individual baseball player for a single season.

The Lemley-Shapiro version of mandatory baseball arbitration would not shed light on the question of what constitutes a FRAND offer. To the contrary, Lemley-Shapiro arbitration by design collapses questions of validity, infringement, and essentiality of the patent to the standard into a single damage calculation in which the arbitrator’s sole responsibility is to choose one of two disparate estimates of reasonable royalties. Yet, a FRAND offer contains not only a price, but also terms and conditions that (because they are nuanced and possibly tailored to the unique needs of an individual licensee) are not easily standardized, let alone summarized in a single number, as the description of Lemley-Shapiro arbitration might incorrectly lead some to assume. Lemley-Shapiro arbitration would not say whether a royalty offer was fair, reasonable, and nondiscriminatory. Lemley and Shapiro claim that their arbitration proposal offers “best practices” for SSOs. That label is unsupported and misleading. The package that Lemley and Shapiro call “best practices” is in fact not a narrow proposal for binding baseball arbitration but rather a roadmap to redefine patent rights in a manner that would transfer wealth from inventors to infringers. Embedded within Lemley-Shapiro arbitration are normative changes in patent law and policy that Lemley and Shapiro have previously advocated but that SSOs and courts have not adopted. An SSO that adopted Lemley-Shapiro arbitration could expect its members to commercialize their next generation of inventions outside that particular SSO, if not outside an open standard altogether.

SLAPPING PATENT TROLLS: WHAT ANTI-TROLLING LEGISLATION CAN LEARN FROM THE ANTI-SLAPP MOVEMENT

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ABSTRACT

In the last eighteen months, a wave of new state legislation has been passed, aimed at curbing bad faith patent assertions. To the extent that this “anti-trolling” legislation seeks to detect and deter frivolous claims, it has much in common with the anti-SLAPP movement. This paper examines the new state laws using lessons learned from the anti-SLAPP movement and investigates the scope of the problem of bad faith patent assertions, ultimately concluding that federal patent reform legislation is needed and should be modeled on certain aspects of anti-SLAPP statutes. In chief, federal law should provide an expedited, special motion to dismiss bad faith infringement suits, based on factors that are tailored to help courts identify frivolous patent assertions early on, with a stay of discovery and other procedural safeguards to reduce the up-front costs of defending against a baseless claim. Drawing on the innovative tools developed in the new state anti-trolling statutes and recently proposed federal bills to formulate the necessary tests, this paper proposes a workable new procedure that would provide comprehensive federal protection against nuisance patent suits without over-burdening access to courts for meritorious claims.

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INTRODUCTION

There has been a recent explosion of new state laws aimed at curbing patent litigation abuse.¹ These “anti-patent-trolling” statutes have been fueled by the perception among state legislatures that patent litigation abuse is chilling innovation and imposing unnecessary costs on the businesses in their jurisdictions.² The number of patent infringement suits filed each year has more than doubled since 2009.³ A record 5,411 infringement suits were filed in 2013, an increase of fifteen percent over the number filed in 2012.⁴ Meanwhile, the cost of litigating such suits is higher than ever, especially for smaller companies, which may face litigation costs that approach the amounts at stake.⁵

1. *Patent Progress’s Guide to State Patent Legislation*, PATENT PROGRESS, <http://www.patentprogress.org/patent-progress-legislation-guides/patent-progresss-guide-state-patent-legislation> (last visited Feb. 16, 2015).

2. *See, e.g.*, S.B. 585, 2014 Gen. Assemb., 2014 Sess. (Md. 2014), available at http://mgaleg.maryland.gov/2014RS/fnotes/bil_0005/sb0585.pdf; S.B. 303, 2014 Sess., ¶ 1(V) (N.H. 2014); VT. STAT. ANN. tit. 9, § 4195(a)(4), (6), (7) (2013) (legislative findings).

3. RPX Corporation, *2013 NPE Litigation Report* (May 2014), <http://www.rpxcorp.com/wp-content/uploads/2014/05/The-full-2013-NPE-Litigation-Report.pdf>. Some portion of the increase in 2012 was due to the implementation of the anti-joinder provisions of the America Invents Act, which became effective September 16, 2011. *See* PriceWaterhouseCoopers, *2013 Patent Litigation Study*, 3, 6, (June 2013), http://www.pwc.com/en_US/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf.

4. RPX Corp., *supra* note 3. *But cf.* PriceWaterhouseCoopers, *2014 Patent Litigation Study*, 5 (July 2014), http://www.pwc.com/en_US/us/forensic-services/publications/assets/2014-patent-litigation-study.pdf (citing a figure of 6500). But note that the PriceWaterhouseCoopers study tracks all patent-related lawsuits, including ownership disputes and false-marking suits, while the RPX study focuses only on infringement suits.

5. A recent survey reports that the estimated median total cost of a patent infringement suit with less than one million dollars at risk was \$700,000 in 2013; with more than \$25 million at risk, the number goes up to \$5.5 million. AM. INTELL. PROP. LAW ASS’N,

Further, more than half of the suits are filed by non-practicing-entities (NPEs),⁶ sometimes referred to as “patent trolls,” who have the following distinct advantages at trial: 1) their litigation costs as plaintiffs tend to be lower than those of companies that produce products because they do not have as many records to turn over at discovery, and 2) they are immune to countersuits for infringement because they do not themselves practice any inventions.⁷

This creates the concern that certain kinds of NPEs, recently dubbed “bottom-feeder trolls,” will make a business model of pressuring the companies they target to settle for amounts that are less than the cost of litigating the infringement claim, regardless of whether the claim has any merit.⁸ In the words of the legislative findings in Vermont:

Abusive patent litigation, and especially the assertion of bad faith infringement claims, can harm Vermont companies. A business that receives a letter asserting such claims faces the threat of expensive and protracted litigation and may feel that it has no choice but to settle and to pay a licensing fee, even if the claim is meritless.⁹

The states’ concern has been focused on not only the direct costs of litigation, but also on the indirect and social costs imposed more generally by threat of litigation:

Not only do bad faith patent infringement claims impose a significant burden on individual Vermont businesses, they also undermine Vermont’s efforts to attract and nurture . . . knowledge based companies. Funds used to avoid the threat of litigation are no longer available to invest, produce new products, expand or hire workers, thereby harming Vermont’s economy.¹⁰

In this respect, the new state laws have much in common with anti-SLAPP laws, which were developed to reduce both the private and social costs of strategic lawsuits against public participation. A strategic lawsuit against public

REPORT OF THE ECONOMIC SURVEY 34 (2013) [hereinafter AIPLA]. Both numbers are up from the reported costs in 2011 (by 10 percent for lawsuits with more than \$25 million at risk). *Id.* “Total cost” includes attorney’s fees, court costs, and expenses such as “courier services, exhibit preparation, analytical testing, expert witnesses, translators, surveys, jury advisors and similar expenses.” *Id.*

6. RPX Corp., *supra* note 3, at 12. The exact number depends on how one defines a non-practicing entity. The latest RPX report calculates that 67 percent of new patent infringement lawsuits in 2013 were filed by NPEs, where NPEs include “entities believed to earn revenue predominantly through asserting patents, universities and research institutions, individual inventors, [and] . . . operating companies asserting patents outside their areas of products or services.” *Id.* at 6.

7. Christopher A. Harkins, *Fending Off Paper Patents and Patent Trolls: A Novel ‘Cold Fusion’ Defense Because Changing Times Demand It*, 17 ALB. L.J. SCI. & TECH. 407, 442-44 (2007); Randall R. Rader, Colleen V. Chien, & David Hricik, *Make Patent Trolls Pay in Court*, N.Y. TIMES, June 4, 2013, at A25.

8. Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2126 (2013).

9. VT. STAT. ANN. tit. 9, § 4195(a)(6) (2013).

10. *Id.* § 4195(a)(7).

participation (“SLAPP”) is a lawsuit in which a filer brings suit with the primary objective of punishing or deterring public advocacy. This paper examines the new state laws using lessons learned from the anti-SLAPP movement and ultimately proposes that federal patent reform legislation should be modeled on certain aspects of anti-SLAPP state statutes. In chief, federal law should provide an expedited, special motion to dismiss bad faith infringement suits, based on factors that are tailored to help courts identify frivolous patent assertions early on, with a stay of discovery and other procedural safeguards to reduce the up-front costs of defending against a baseless threat.

This paper leverages the anti-SLAPP model to propose a workable new procedure that will help courts to triage and dismiss baseless cases prior to extensive discovery, reducing the social costs of nuisance suits. The challenge is in finding an appropriate standard for dismissal that will filter frivolous suits and deter abusive assertion tactics without burdening access to the courts for meritorious claims. Drawing on the innovative tools developed in the new anti-trolling statutes and recently proposed federal bills, this paper develops such a test. Though a new civil procedure for patent infringement suits may sound like an extreme measure, it is in reality a compromise proposal. A Senate bill requiring a heightened pleading standard for all patent infringement suits was recently shelved, apparently because application of the new standard to all patent holders was deemed too burdensome—“it would treat all patent holders as patent trolls.”¹¹ This paper proposes a mechanism by which heightened pleading standards are imposed only when indicia of bad faith are detected.

This Article begins by exploring briefly the analogy between patent reform legislation and the anti-SLAPP movement, which is based on a commonly shared goal of reducing frivolous litigation. Part II then reviews the evidence for the scope of the problem with bad faith patent litigation. Though finding evidence of such “bottom feeding” litigation tactics is notoriously difficult, recent focus on the issue has begun to bring new evidence to light that suggests the problem is substantial. Part III evaluates the new state anti-trolling laws. While the state anti-trolling laws have broken significant ground in building legislative tools to help courts identify nuisance suits and bottom-feeding tactics early on, they will not be enough to deal with the scope of patent litigation abuse, in part because they will largely be preempted by federal law. Further federal legislative reform is needed. Only federal legislation with the power to alter civil procedure with respect to patent infringement suits can truly change the balance of power in bad faith patent litigation. Part IV then explores how to adapt the tools of anti-SLAPP legislation for the patent litigation context, including how to strike the right balance by protecting against

11. Brian Fung, *Who’s Behind the Last-Minute Push to Thwart Patent Reform?*, WASH. POST (May 21, 2014), <http://www.washingtonpost.com/blogs/the-switch/wp/2014/05/21/whos-behind-the-last-minute-push-to-thwart-patent-reform>.

frivolous suits while not overburdening access to the courts for legitimate claims and how to tailor any special protective measures so that they will not be abused.¹²

I. WHAT'S SLAPP GOT TO DO WITH IT: THE ANALOGY TO NUISANCE PATENT SUITS

The last year and a half has seen a wave of new patent reform legislation, with new bills signed into law in eighteen states,¹³ most recently in Alabama,¹⁴ and proposed in several more.¹⁵ In general, these laws create a cause of action against bad-faith assertions of patent rights and a patchwork of remedies for the damage caused by “bottom-feeding” entities that seek to extort settlements through demand letters asserting meritless infringement claims. Meanwhile, fourteen bills were introduced at the federal level this congressional year (2013-2014) suggesting a variety of patent litigation reform measures, though none have yet been passed into law by both houses.¹⁶ In July 2014, another bill (the Targeting Rogue and Opaque Letters Act, or “TROL Act”) particularly aimed at deterring bad faith demand letters, was approved by the Subcommittee

12. This paper does not suggest using anti-SLAPP laws themselves in the patent infringement context, though the suggestion has been made in the context of battling “trademark bullies,” where there is a connection with free speech policy concerns. See Irina D. Manta, *Bearing Down on Trademark Bullies*, 22 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 853, 862-63 (2012). As Manta acknowledges, this would require the passing of a federal anti-SLAPP law, as it is now settled that current state anti-SLAPP law does not apply to federal claims. *Id.* at 863.

13. GA. CODE ANN. §§ 10-1-770 to 10-1-774 (2014); IDAHO CODE ANN. §§ 48-1701 to 48-1708 (2014); 815 ILL. COMP. STAT. 505 / 2RRR (2014); LA. REV. STAT. ANN. § 51:1428 (2014); ME. REV. STAT. tit. 14, § 8701 (2014); MD. CODE ANN. COM. LAW § 11-1603 (West 2014); MO. REV. STAT. § 416.652 (2014); N.H. REV. STAT. ANN. §§ 359-M:1 to 359-M:5 (2014); N.C. GEN. STAT. §§ 75-140 to 75-145 (2014); OKLA. STAT. tit. 23, § 111 (2014); OR. REV. STAT. § 19.2 (2014); S.D. CODIFIED LAWS § 37-36-3 (2014); TENN. CODE ANN. §§ 29-40-101 to 29-40-104 (2014); UTAH CODE ANN. §§ 78B-6-1901 to 78B-6-1905 (2014); VT. STAT. ANN. tit. 9, §§ 4195-99 (2014); VA. CODE ANN. §§ 59.1-215.1 to 59.1-215.4 (2014); WIS. STAT. § 100.197 (2014); PATENT PROGRESS, *supra* note 1.

14. S.B. 121, 2014 Reg. Sess. (Ala. 2014).

15. S.B. 258, Gen. Assemb., Reg. Sess. (Conn. 2014); H.B. 2663, 85th Leg., Reg. Sess. (Kan. 2014); S.B. 116, 2014 Gen. Assemb., Reg. Sess. (Ky. 2014); H.B. 5701, 97th Leg., Reg. Sess. (Mich. 2014); Leg. B. 677, 103d Leg., 2d Reg. Sess. (Neb. 2013) (indefinitely postponed); S.B. 1563, 216th Leg., 1st Ann. Sess. (N.J. 2014); H.B. 573, 130th Gen. Assemb., 2013-2014 Sess. (Ohio 2014); S.B. 1222, 197th Gen. Assemb. (Penn. 2014); S.B. 2822, Gen. Assemb., 2014 Leg. Sess. (R.I. 2014); S.B. 1121, 120th Gen. Assemb. 2d Reg. Sess. (S.C. 2013).

16. See *Guide to Federal Patent Reform Legislation*, PATENT PROGRESS, <http://www.patentprogress.org/patent-progresss-guide-patent-reform-legislation> (last visited Nov. 21, 2014). For the failure of Congress to advance a patent reform bill this year, and some explanation for the loss of impetus at the federal level, see Joe Mullin, *How the Patent Trolls Won in Congress*, ARS TECHNICA (May 23, 2014, 2:08 PM PDT), <http://arstechnica.com/tech-policy/2014/05/how-the-patent-trolls-won-in-congress>.

on Commerce, Manufacturing and Trade,¹⁷ but it has proved controversial, as it is arguably less stringent than the state laws and is drafted expressly to preempt them.¹⁸

The rapid development of laws at the state level is remarkable, but it is not the first time that legislation has been crafted in order to deter certain kinds of litigation threats. Beginning in the 1970s, legal scholars observed a rise in the use of lawsuits to discourage public advocacy, such as the filing of a suit “claiming injury from citizen efforts to influence a government body or electorate on an issue of public significance.”¹⁹ George Pring and Penelope Canan coined the term “Strategic Lawsuits Against Public Participation” or “SLAPPs” to describe these lawsuits, which might occur, for instance, when a developer brings a claim of tortious interference against a private citizen who testifies at a zoning hearing.²⁰ Among the chief concerns of early observers of SLAPPs was that the cost of defending against SLAPPs was too high, both in terms of the direct costs of defense imposed on the target and the social costs of chilled public advocacy.²¹ In response, several state legislatures adopted statutes using a range of tools to grapple with this problem: how to lower the cost of defending against meritless intimidation suits while maintaining access to the courts for legitimate claims.²²

To the extent that patent litigation reform is concerned with the deleterious effects of nuisance patent suits, it has much in common with the anti-SLAPP

17. *Subcommittee Approves Bills to Protect Small Businesses, Boost Economic Growth*, ENERGY & COMMERCE COMMITTEE (July 10, 2014), <http://energycommerce.house.gov/press-release/subcommittee-approves-bills-protect-small-businesses-boost-economic-growth>.

18. See Joe Mullin, *New Anti-Patent-Troll Bill Advances, But Some Say It Hurts More Than Helps*, ARS TECHNICA (July 11, 2014, 12:50 PM PDT), <http://arstechnica.com/tech-policy/2014/07/new-anti-troll-bill-advances-but-reformers-say-it-may-hurt-more-than-help>; see also Daniel Nazer, *The TROL Act is Not Enough to Stop Patent Trolls*, ELECTRONIC FRONTIER FOUNDATION (July 11, 2014), <https://www.eff.org/deeplinks/2014/07/when-it-comes-stopping-patent-trolls-trol-act-not-enough>.

19. Penelope Canan & George W. Pring, *Strategic Lawsuits Against Public Participation*, 35 SOC. PROBS. 506, 507 (1988). For an early identification of the problem in the form of countersuits filed against citizen plaintiffs in environmental protection enforcement actions, see Note, *Counterclaim and Countersuit Harassment of Private Environmental Plaintiffs: The Problem, Its Implications, and Proposed Solutions*, 74 MICH. L. REV. 106 (1975) [hereinafter *Counterclaim and Countersuit Harassment*]. For the genesis of Canan and Pring’s research, see PENELOPE CANAN & GEORGE W. PRING, *SLAPPS: GETTING SUED FOR SPEAKING OUT* ix (1996) [hereinafter, CANAN & PRING, *SLAPPS*].

20. George W. Pring & Penelope Canan, “Strategic Lawsuits Against Public Participation” (“SLAPPs”): *An Introduction for Bench, Bar and Bystanders*, 12 BRIDGEPORT L. REV. 937, 938 (1992).

21. See, e.g., CANAN & PRING, *SLAPPS*, *supra* note 19, at 11 (quoting Judge J. Nicholas Colabella, who notes the expenses of defense and “the ripple effects of such suits in our society”).

22. For an account of the early development of state anti-SLAPP laws, see CANAN & PRING, *SLAPPS*, *supra* note 19, at 188-201.

movement.²³

Anti-SLAPP laws have provided states with a wealth of experience in the use of particular tools to deter and deal with nuisance suits, such as an expedited motion to dismiss with a stay of discovery. This paper uses the analogy with the anti-SLAPP movement to propose a new legislative measure at the federal level to help the courts and the targets of frivolous patent assertions deal with such cases efficiently, with the ultimate goal of deterring the use of baseless litigation threats.

Of course, there are limits to the analogy between bad faith patent assertions and strategic lawsuits against public participation. The point of this Article is not to push the analogy to its limits, but rather to find inspiration for patent litigation reform in the tools used against SLAPPs, to the extent that nuisance litigation threats are burdening the patent system. Nonetheless, the differences in the types of cases pose challenges in adapting the tools of anti-SLAPP statutes to the patent nuisance suit context. For instance, in the usual cases, SLAPP-filers intend to go to trial in order to inflict defense costs on their targets and the more costs they impose, the better.²⁴ By contrast, those seeking to extract settlement rents with meritless patent assertions would presumably prefer not to go to trial, leaving a larger portion of the unspent defense costs to be co-opted in settlement and avoiding the risk of a patent invalidation or a finding of non-infringement.²⁵ Publicly available data on the numbers of patent demand letters that are sent does not exist, but anecdotal evidence suggests only a very small percentage of patent threats result in lawsuits being filed.²⁶ Thus the effectiveness of the kinds of civil procedure tools employed by anti-SLAPP statutes in the patent nuisance suit context would depend on public awareness of the changes in the law. Targets of demand letters would have to be familiar enough, for instance, with new parameters for early dismissal of suits to change their analysis of the costs and benefits of settling before a suit is filed.

In addition, it might be argued that SLAPPs implicate a public interest in protecting First Amendment freedoms that is absent in the patent infringement context. However, a policy concern about the cost of litigation abuse, not just to private parties, but to society at large, is something the patent litigation reform

23. Colleen Chien has similarly suggested an analogy with the tort reform movement. See Colleen V. Chien, *Reforming Software Patents*, 50 HOUS. L. REV. 325, 331 (2012).

24. CANAN & PRING, SLAPPS, *supra* note 19, at 11 (quoting Judge J. Nicholas Colabella, “SLAPP suits function by forcing the target into the judicial arena where the SLAPP filer foists upon the target the expenses of a defense. The longer the litigation can be stretched out, the more litigation that can be churned, the greater the expense that is inflicted and the closer the SLAPP filer moves to success.”).

25. For an economic model of how nuisance patent suits work, see Ranganath Sudarshan, *Nuisance-Value Patent Suits: An Economic Model and Proposal*, 25 SANTA CLARA COMPUTER & HIGH TECH. L. J. 159 (2008).

26. See *infra* notes 98-99 and accompanying text.

movement clearly shares with the anti-SLAPP movement. As is becoming increasingly clear, bad faith patent assertions also impose social costs by chilling innovation, undermining the Constitutional basis for the patent system “[t]o promote the Progress of Science and useful Arts.”²⁷ This chilling of innovation justifies a solution aimed at minimizing the damage done by nuisance patent suits, just as anti-SLAPP laws aim to reduce the harm done by strategic lawsuits against public participation. Part II of this Article examines the extent of the harm caused by nuisance suits in the patent system in order to demonstrate that reform of this type is necessary.

II. DEFINING THE SCOPE OF THE PROBLEM

The new anti-trolling state legislation is sharply focused on bad faith patent assertions, while abusive litigation tactics have also recently arisen to the attention of the White House and the Supreme Court.²⁸ But is this focus on bad faith justified by evidence of abusive tactics in patent litigation? Can we estimate the scope of the problem? The harm that poor-quality litigation causes particularly small companies is clear. The case of Peter Braxton’s start-up company, Jump Rope, Inc., provides an illustration of how the patent system still fails innovators,²⁹ even when a court eventually detects what it calls an infringement suit “with no reasonable factual basis.”³⁰ While waiting in a long line to get into a club in Las Vegas, Peter Braxton got the idea for developing an app that would make it possible for people to pay to move to the front of the line.³¹ He raised \$250,000, hired two employees, and launched the app in November 2011.³² The next month, he got a call from a lawyer representing a company with a patent, saying “we have reason to believe you’re infringing on our patent, and we’d like to find a reasonable solution that involves some kind of license agreement.”³³ Braxton hired a lawyer, who conducted an infringement analysis and determined that Braxton’s app did not infringe the patent owned by Smart Options, Patent No. 7,313,539 (‘539 patent).³⁴ Nonetheless, according to their own lawyer, Smart Options tried “for months to negotiate any number of deals with Peter Braxton, including an outright

27. U.S. Const. art. I, § 8, cl. 8.

28. Hayden W. Gregory, *Combatting So-Called Patent Trolls: Demand Letters Demand Attention*, 6 *LANDSLIDE* (ISSUE 5) 2 (2014).

29. Catherine Tucker, *The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity* 7 (MIT Sloan School, Working Paper No. 5095-14, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2457611.

30. *Smart Options, LLC v. Jump Rope, Inc.*, No. 12 C 2498, 2013 WL 500861, at *9 (N.D. Ill. Feb. 11, 2013).

31. David Segal, *How a Typical Patent Battle Took an Unexpected Turn*, *N.Y. TIMES*, July 13, 2013, at BU5.

32. *Id.*

33. *Id.*

34. *Id.*

purchase, or an investment in exchange for equity.”³⁵ When Braxton refused these deals, Smart Options sued Jump Rope, Inc. for infringement of the ‘539 patent.³⁶ Peter Braxton returned the money of his investors because he felt that “nobody wants to buy a lawsuit.”³⁷ He paid for the defense out of his own pocket and he won so clearly that the court awarded him attorney’s fees, but by that time Peter Braxton was out of money, his business was no longer running, and Smart Options appealed the finding of non-infringement to the Federal Circuit.³⁸ At that point, Braxton commented, “I have about the same amount of money in my bank account as I did when I was 15 years old. I’m practically bankrupt. If you’re a start up, you have no chance with this kind of litigation.”³⁹

The infringement analysis in this case was straightforward. The key terms for claim construction had been construed in a previous case and the parties agreed to those definitions.⁴⁰ Jump Rope’s application makes it possible for users to purchase entrance (or, a “Jump”) to certain events or facilities without waiting in line.⁴¹ Once the user purchases the Jump, no further purchase is necessary for admission to the chosen venue; the user has paid a fee for entrance that includes the right to jump the line.⁴² The user may show the Jump on the screen of his or her phone at the door and gain immediate access any time that day.⁴³ Some vendors allow a Jump to be purchased up to six days in advance, but in every case the Jump includes the price of admission.⁴⁴ By contrast, the ‘539 patent covers an application by which users can buy options, meaning the right to purchase goods or services at a later time.⁴⁵ The claim limitations require that the “option fee is *not* part of a reservation price paid to purchase desired goods or services at a desired future time” and that “the electronic option does *not* obligate a purchaser to actually purchase the desired goods or services for the reservation price at the desired future time.”⁴⁶ The court quickly found that Jump Rope’s application did not meet either of these limitations. On a later motion for sanctions under Federal Rule of Civil Procedure 11, the court found that this information had been readily available

35. *Id.*

36. *Id.*

37. *Id.*

38. *Id.*

39. *Id.*

40. Smart Options, LLC v. Jump Rope, Inc., No. 12 C 2498, 2012 WL 5499434, at *4 (N.D. Ill. Nov. 13, 2012).

41. *Id.* at *5. Terms of use for the Jump Rope, Inc.’s app can be found at <https://jumpropetheapp.com/legal/terms>.

42. *Smart Options*, 2012 WL 5499434, at *5-6.

43. *Id.*

44. *Id.* at *3.

45. *Id.* at *5.

46. *Id.* at *5 (emphasis added).

at the time of the filing of the lawsuit.⁴⁷ In fact, Braxton's lawyer had communicated exactly that information to Smart Options, LLC with a Rule 11 motion within sixty days of the lawsuit filing.⁴⁸ Nevertheless, it took months of litigation to reach this point and the judge's finding did not end the prospect of further litigation. By that time, the litigation, now considered frivolous by the court from the time of its filing, had arguably cost Braxton his life savings, his investors, and his business.

In evaluating what happened to Jump, Inc., it's important to understand that the case went as well as it possibly could have for Braxton. Summary judgment was rendered in Jump Rope's favor in a little over seven months. Patent cases can take years to resolve. The median time-to-trial in patent suits has recently been calculated at 2.5 years, up from a median of two years in 2004, when the case volume was much lower.⁴⁹ Because Braxton's trial was resolved without the need for extensive discovery, he presumably also avoided the bulk of the costs imposed by litigation. In the American Intellectual Property Law Association's most recent survey, the costs of discovery amounted to at least half of the estimated median overall cost of a trial, no matter how much is at risk.⁵⁰

The high up-front cost of patent litigation in general is a feature of the system that creates the opportunity for bottom-feeding litigation tactics to be used to hold up targets for settlements under their defense costs. Event studies of what happens to a defendant's stock price when patent litigation is filed have recently shown that litigation by NPEs alone has caused defendants to lose over half a trillion dollars of wealth from 1990 through 2010.⁵¹ The loss of wealth averaged \$80 billion dollars a year in the last four years covered by the study, little of which was found to represent a transfer of wealth to plaintiffs—suggesting that much of that loss represents a net loss of social welfare and a reduction of incentive to innovate.⁵² The event studies reflect the market's estimation of “all the costs the firm faces from the suit, including lost business, fees paid to settle the case, etc., depending on how investors expect the suit to be resolved.”⁵³ A subsequent survey study reported that the direct costs borne by firms targeted by NPE patent assertions amounted to \$29 billion in 2011 (those costs limited to “cost of outside legal services, licensing fees, and other

47. *Smart Options, LLC v. Jump Rope, Inc.*, No. 12 C 2498, 2013 WL 500861, at *1 (N.D. Ill. Feb. 11, 2013).

48. *Id.* at *1, *6.

49. PriceWaterhouseCoopers, *supra* note 4, at 16.

50. AIPLA, *supra* note 5, at 34.

51. James Bessen, Jennifer Ford, & Michael J. Meurer, *The Private and Social Costs of Patent Trolls* 1 (Bos. Univ. Sch. of Law, Working Paper No. 11-45, 2011), available at <http://ssrn.com/abstract=1930272>.

52. *Id.* at 2.

53. *Id.* at 4.

costs incurred in response to NPE-litigation risk”).⁵⁴ There is some disagreement among scholars about the numbers used to estimate the costs associated with NPE patent assertions.⁵⁵ There is also some disagreement in the literature about the role of NPEs in the patent system⁵⁶ and whether NPE disputes are more costly than strategic suits by practicing entities.⁵⁷ Increasingly, however, there is agreement that excessive litigation, regardless of whether it is brought by NPEs or companies that practice inventions, is burdening the system and that something should be done to reduce the costs imposed at least by frivolous patent assertions.⁵⁸

Multiple recent studies have found that receipt of a patent demand can make a significant impact on the future of a company. Robin Feldman conducted a survey study in which 100 percent of venture capitalists responded that an existing patent demand could potentially be a major deterrent in deciding whether to invest in a company.⁵⁹ Seventy percent of venture capitalists in the sample reported that they had portfolio companies that had received patent demands in the form of demand letters, threats of litigation, or an infringement suit.⁶⁰ The vast majority of respondents reported that patent

54. James Bessen & Michael J. Meurer, *The Direct Costs from NPE Disputes*, 99 CORNELL L. REV. 387, 389-90 (2014).

55. *See id.* (arguing that firms experienced \$29 billion of direct costs in 2011). *But see* David L. Schwartz & Jay P. Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 CORNELL L. REV. 425, 441 (2014) (critiquing the methodology used in the Bessen & Meurer study).

56. *See, e.g.*, Robert Merges, *The Trouble with Trolls: Innovation, Rent-Seeking, and Patent Law Reform*, 24 BERKELEY TECH. L.J. 1583, 1586-1591, 1597-1603 (2009); Michael Risch, *Patent Troll Myths*, 42 SETON HALL L. REV. 457, 458-466 (2012); James F. McDonough III, Comment, *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 EMORY L. J. 189, 190 (2006).

57. Lemley & Melamed, *supra* note 8, at 2169-2170.

58. *See* Bessen & Meurer, *supra* note 54, at 422 (recommending policy reforms, such as “greater use of fee shifting” to reduce “the bargaining power of trolls seeking nuisance settlements” and “more stringent pleading requirements . . . as a method of reducing frivolous lawsuits”); Chien, *supra* note 23, at 369-387 (reviewing proposals to reduce the incentive to bring nuisance suits); Lemley & Melamed, *supra* note 8, at 2177-2178 (asserting that “the law should do more to discourage frivolous suits or those driven by the expectation that the cost of litigation will drive defendants to settle even when faced with unmeritorious claims”); Schwartz & Kesan, *supra* note 55, at 455-456 (arguing that “the better question is whether the lawsuits are being brought because the defendants are infringers of a valid patent or whether the defendants are merely easy targets for a nuisance lawsuit” and suggesting that reform should focus “on reducing transaction costs . . . in patent litigation, . . . and providing cheaper and quicker adjudication through a new small-claims court for patent lawsuits”); Tucker, *supra* note 29, at 2, 15, 40-41 (study finding “that litigation by frequent litigators, a proxy for PAE litigation, is directly associated with decreased VC investment with no positive effects initially”).

59. Robin Feldman, *Patent Demands & Startup Companies: The View from the Venture Capital Community* 3 (UC Hastings Research Paper No. 75, 2013), available at <http://ssrn.com/abstract=2346338>.

60. *Id.* at 34.

demands “had either a highly significant or a moderately significant impact on the company that received them, including distracting management, expending resources, or altering business plans.”⁶¹ Catherine Tucker has estimated that venture capital investment “would have likely been \$21.772 billion higher over the course of five years but-for litigation brought by frequent [patent] litigators [defined as an entity that has filed twenty or more patent lawsuits].”⁶²

Colleen Chien’s work has similarly found that the direct costs of litigation alone do not begin to estimate the true cost of patent assertion. In a recent survey of 223 tech study start-ups, she found that the vast majority of respondents said that “resolving the demand required founder time (73 [percent]) and distracted from the core business (89 [percent]).”⁶³ Many (40 percent) reported one or more significant operational impacts, such as a delay in hiring or milestone achievement, a change in the product or business strategy, shutting down a business line or the business as a whole, or lost valuation.⁶⁴ Most troublingly, Chien found that “[t]o the extent patent demands ‘tax’ innovation, . . . they appear to do so regressively, with small companies targeted more as unique defendants, and paying more in time, money and operational impact, relative to their size, than large firms.”⁶⁵

A case in point is what happened to Ditto, a startup that runs a website enabling users to try on glasses virtually with software that models the face in three dimensions.⁶⁶ Ditto was hit by two lawsuits in 2013.⁶⁷ Even though one of them was quickly dismissed by agreement of the parties, the remaining lawsuit left the company in a bind.⁶⁸ In an interview with Chien, founder Kate Endress explained:

After doing our own assessment and talking with a host of talented lawyers, I still don’t think we infringe. But how expensive it would be! Every attorney I spoke with estimated it would take several million dollars over several years to prove that we didn’t infringe. Obviously we weren’t [in] a position to be able to afford that! I stopped all marketing spending to ensure every dollar went to support our litigation, I laid off several employees to further stem costs, and then I went searching for someone who could help.⁶⁹

61. *Id.* at 40 (finding that 74 percent of respondents in the sample reported these effects).

62. Tucker, *supra* note 29, at 10, 31.

63. Colleen Chien, *Startups and Patent Trolls*, 17 STAN. TECH. L. REV. 461, 472 (2014).

64. *Id.* at 474.

65. *Id.* at 465.

66. Tucker, *supra* note 29, at 6.

67. Anthony Ha, *Ditto Defeats Patent Claim After Teaming up with a ‘Troll’*, TECHCRUNCH (Oct. 12, 2013), <http://techcrunch.com/2013/10/12/ditto-wins-defeats-patent-claim-after-teaming-up-with-a-troll>.

68. *Id.* (article includes embedded copies of the motion to dismiss and the court order granting the motion).

69. COLLEEN V. CHIEN, NEW AM. FOUND., OPEN TECH. INST., PATENT ASSERTION AND

High anticipated costs of litigation initially prevented Endress from striking any kind of deal to fund their defense, despite receiving some assurance from counsel that they were not infringing:

I worked my tail off to find a lawyer to work for equity on my case, to no avail. Several were willing to take half equity or quarter equity in my company but it wasn't enough given their outrageous hourly fees. . . . I also worked hard to find an investor to fund our fight, but the feedback was consistent: "You have a \$25 [billion] competitor who put a target on your back. Why wouldn't they just keep purchasing patents to keep suing you to run you out of business? It's too risky." The fact that legal fees are often sunk costs (given that there isn't a [mandatory] fee-shifting mechanism in place yet) also makes it harder to raise money for litigation. I even went so far as to run a sale process for my business, which was incredibly depressing. Buyers were dinging our valuation \$3 to 4 [million] for the lawsuit, so I felt we couldn't even sell it for what it was worth.⁷⁰

The lawsuit caused Ditto to slash its operation and lay off employees, leaving it unable to raise funds for its litigation defense and facing sale at a depressed value, without any court review of the quality of the infringement allegations.⁷¹

Given the high costs of any patent litigation, the opportunity is open to exploit litigation threats for settlement payments. The social cost of bottom-feeding patent demands is clearly high and the benefits are non-existent,⁷² but how prevalent are such tactics? Because demand letters are not public⁷³ and settlement agreements are often covered by non-disclosure agreements, it is difficult to estimate the scope of the problem.⁷⁴ Nuisance suits have long been

STARTUP INNOVATION 49 (2013), available at http://www.newamerica.net/sites/newamerica.net/files/policydocs/Patent%20Assertion%20and%20Startup%20Innovation_updated.pdf.

70. *Id.*

71. Perhaps the best anecdotal evidence that predatory patent assertions are disproportionately depressing the valuation of small companies is the fate of both Ditto and Jump Rope, the case studies described above. Both have thus far survived their patent battles by striking a deal with a self-described patent troll, Erich Spangenberg, in which Spangenberg evaluated the suits against them and struck a deal for equity in exchange for helping the start-ups dispatch with their infringement suits. For Ditto's deal, see Ha, *supra* note 67; for Jump Rope's deal, see Segal, *supra* note 31. In the words of Ditto's founder, Spangenberg is "not doing this out of the goodness of his heart. He sees a big opportunity here." Ha, *supra* note 67.

72. Lemley & Melamed, *supra* note 8, at 2176-77.

73. A federal bill that was introduced to the House in February 2013 would require demand letters that are sent to more than twenty entities to be submitted to the Patent and Trademark Office for inclusion in a public database. See H.R. 3540, 113th Cong. (2013). There have also recently been privately funded efforts to create public databases of patent demand letters. See Chien, *supra* note 69, at 52 (listing two public databases of demand letters, each launched in the summer of 2013, at www.trollingeffects.com and www.thatpatenttool.com).

74. Tucker, *supra* note 29, at 4.

suspected to be a problem in the patent system.⁷⁵ When measured by the number of cases in which attorney's fees are shifted to defendants in patent cases, abusive litigation appears to be on the rise. In a 2005 study, James Bessen and Michael Meurer suggested that the number of cases in which fees were shifted to alleged infringers under 35 U.S.C. § 285 might serve as a proxy for opportunistic litigation.⁷⁶ Bessen and Meurer calculated that alleged infringers were awarded attorney's fees in only 1 percent of patent suits reaching final determination during the fiscal years 1994 through 1999.⁷⁷ Bessen and Meurer acknowledge that the proxy likely underestimates the scope of the problem for three reasons: "First it is difficult for alleged infringers to prove the patentee was acting opportunistically. Second, it may be difficult for alleged infringers to recognize that they are subject to abusive litigation. Third, presumably, opportunistic patent litigation often succeeds and alleged infringers settle."⁷⁸ In a more recent study of fee-shifting in patent litigation between the year 2003 and May 15, 2013, fees were found to have been shifted to defendants in 66 out of an estimated 3400 cases that came to judgment in that period,⁷⁹ or approximately 1.9 percent, nearly twice the rate calculated by Bessen and Meurer from 1994 through 1999. This result is consistent with the theoretical prediction made by Meurer in 2006: that the rate of opportunistic suits is likely to increase as the number of legitimate suits increases.⁸⁰

Courts have recently noted evidence of nuisance value patent suits in opinions dealing with fee-shifting under section 285 and sanctions under Rule 11. In *Eon-Net LP v. Flagstar Bancorp*, the Federal Circuit affirmed the district court's finding that patent holder Eon-Net had "acted in bad faith by exploiting the high cost to defend complex litigation to extract a nuisance value settlement."⁸¹ The court cited "indicia of extortion" such as "Eon-Net's history of filing nearly identical patent infringement complaints against a plethora of diverse defendants, where Eon-Net followed each filing with a demand for a quick settlement at a price far lower than the cost to defend litigation."⁸² The court also affirmed the district court's finding that the infringement allegations were objectively baseless because the written description of the invention in the

75. Michael J. Meurer, *Controlling Opportunistic and Anti-Competitive Intellectual Property Litigation*, 44 B.C. L. REV. 509, 510 (2003).

76. James Bessen & Michael J. Meurer, *Lessons for Patent Policy From Empirical Research on Patent Litigation*, 9 LEWIS & CLARK L. REV. 1, 17-18 (2005).

77. *Id.* at 18. Bessen and Meurer calculated that number by examining all cases that were reported by the Federal Judicial Center as having terminated in that time period, 651 cases in pre-trial motions and 389 cases after a trial. *Id.* at 18 n.89. Of the total 1040 cases, fees were shifted to the alleged infringer in 11 cases or 1 percent of the total. *Id.*

78. *Id.* at 18.

79. Mark Liang & Brian Berliner, *Fee Shifting in Patent Litigation*, 18 VA. J.L. & TECH. 61, 87-88 (2013).

80. Meurer, *supra* note 75, at 519-20.

81. *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1327 (Fed. Cir. 2011).

82. *Id.* at 1326.

patent “clearly refute[d] Eon-Net’s claim construction.”⁸³ The claims in question were expressly limited to the processing of information from hard copy documents, while the defendant was processing information entered by customers on its own website.⁸⁴ In this context, the court seemed particularly disturbed that Eon-Net and related entities filed over one hundred suits against “diverse defendants,” followed by “demand for a quick settlement at a price far lower than the cost of litigation.”⁸⁵ The court expressly noted that the choice of most targets to settle was rational: “Viewed against Eon-Net’s \$25,000 to \$75,000 settlement offer range, it becomes apparent why the vast majority . . . chose to settle early in the litigation rather than expend the resources required to demonstrate to a court that the asserted patents are limited to processing information that originates from a hard copy document.”⁸⁶

Similarly, in *Raylon, LLC v. Complus Data Innovations, Inc.*, the Federal Circuit reversed a denial of Rule 11 sanctions because Raylon’s claim constructions were frivolous.⁸⁷ Raylon’s patent was directed to a “hand-held identification investigating and ticket issuing system,” with “a display that ‘is pivotally mounted on the housing for displaying data entered into the input assembly.’”⁸⁸ Raylon claimed that “pivotally mounted” displays would include any display that could be moved relative to the viewer’s perspective, regardless of how it was mounted.⁸⁹ For instance, Raylon’s construction would cover a fixed, mounted display that could be moved via the wrist of the person holding it, thus effectively reading the “pivotally mounted” limitation out of the claims.⁹⁰ The court noted that “[r]easonable minds can differ as to claim construction positions and losing constructions can nevertheless be nonfrivolous. But, there is a threshold below which a claim construction is ‘so unreasonable that no reasonable litigant could believe it would succeed’ Raylon’s construction . . . is a prime example of a construction that falls below this threshold.”⁹¹

The *Raylon* case is particularly notable because the court expressed frustration with how readily apparent the frivolity of the case was. Though plaintiff’s counsel argued that “claim construction is kind of [an] arcane subject that gets ordinary lawyers like me in trouble a lot of times,” the court sharply disagreed in the case of one claim construction, remarking that “[t]here is nothing arcane about the location of the printer assembly in the claimed

83. *Id.*

84. *Id.* at 1319, 1321.

85. *Id.* at 1327.

86. *Id.* at 1327.

87. *Raylon LLC, v. Complus Data Innovations, Inc.*, 700 F.3d 1361, 1371 (Fed. Cir. 2012).

88. *Id.* at 1363.

89. *Id.* at 1368.

90. *Id.* at 1375 (Reyna, J., concurring).

91. *Id.* at 1368.

invention.”⁹² The concurrence emphasized that there was early notice of the weakness of the plaintiff’s case, asserting that “[h]ere the likelihood of success on infringement could have been projected simply by examining the accused devices and comparing those features element-by-element and claim-by-claim with the disclosures in the ‘589 patent.”⁹³

These cases suggest scenarios in which evidence that a suit is baseless is available at or very near the time of filing, and yet the analysis of whether there had been sanctionable behavior did not occur until after summary judgment or other final adjudication. In Eon-Net’s case, it cost defendant Flagstar more than \$600,000 to litigate the case through claim construction alone, despite an order that limited discovery.⁹⁴ The Federal Circuit reversed an initial victory on summary judgment and a grant of attorneys’ fees for Flagstar in 2007, ruling that “[w]ithout a full claim construction analysis, including a consideration of Eon-Net’s claim construction arguments, we held that it was impossible to determine if Eon-Net’s claim construction and infringement positions were without merit.”⁹⁵ The Federal Circuit did not finally affirm the summary judgment and sanctions on this objectively baseless suit until after six years of litigation.⁹⁶ Under current procedures, evidence concerning the kind of “indicia of extortion” eventually found in the Eon-Net case may not even be admissible prior to final adjudication.⁹⁷

Yet, the most troubling aspect of abusive litigation threats is that, given the economic incentives to avoid litigation costs, it seems probable that most targets settle before a suit is ever filed. When CISCO Systems and other manufacturers of wireless network products sued Innovatio IP Ventures LLC, a NPE, for a declaratory judgment of non-infringement, the manufacturer’s complaint alleged that Innovatio sent out 8000 demand letters, largely to end users of Wi-Fi technology, but only twenty-three lawsuits were filed as a result.⁹⁸ E-Data Corporation reportedly sued forty-three companies in the mid-1990s, but offered licenses to “at least” 25,000 more.⁹⁹

92. *Id.* at 1370.

93. *Id.* at 1374 (Reyna, J., concurring).

94. Eon-Net LP v. Flagstar Bancorp, 653 F.3d 1314, 1327 (Fed. Cir. 2011).

95. *Id.* at 1319 (citing Eon-Net LP v. Flagstar Bancorp, 249 F.App’x 189, 196 (Fed. Cir. 2007)).

96. *Id.* at 1319 (noting that Eon-Net initially sued Flagstar in 2005).

97. See GPNE Corp. v. Apple, Inc., No. 12-CV-02885-LHK, 2-3 (N.D. Cal. June 24, 2014) (order granting plaintiff’s motion in limine) (precluding defendant Apple, Inc. from referring to plaintiff as a “patent troll,” “pirate,” “bounty hunter,” “privateer,” “bandit,” “paper patent,” “stick up,” “shakedown,” “playing the lawsuit lottery,” “corporate shell game,” or “a corporate shell,” and remarking that evidence of plaintiff’s other litigations and licensing activities are “admissible [only] for calculation of the reasonable royalty”).

98. *In Re Innovatio IP Ventures, LLC Patent Litig.*, 921 F. Supp. 2d 903 (N.D. Ill. 2014) (Memorandum Opinion and Order Granting in Part and Denying in Part Innovatio’s Motion to Dismiss the Defendant’s Amended Complaint).

99. Jeffery A. Berkowitz, *Trends in Enforcing and Licensing Patents*, FINNEGAN,

The costs imposed by actual lawsuits filed represent only a fraction of the impact that bad faith assertions have made. For this reason, Rule 11 sanctions and cost-shifting under section 285, while helpful in deterring some level of abusive litigation, are not likely to reach the full scope of the problem caused by bad faith patent assertions. While a focus on bad faith assertions of patents will not solve all the challenges faced by the patent system, the level of harm caused by bad faith assertions now appears high enough to warrant action aimed precisely at identifying and deterring bad faith assertions. Such action carries the hope of minimizing the social cost of abusive patent assertion tactics in the form of lost jobs, deadweight loss, and chilled innovation, while restoring the proper use of the patent system in the interest of “the progress of Science and useful Arts.”¹⁰⁰

III. THE LIMITS OF STATE ANTI-TROLLING LAWS

Having explored the evidence that bad faith patent assertions are a problem worth addressing, this Article now turns to the new state anti-trolling laws and leverages the analogy with the anti-SLAPP movement to draw lessons that may help to improve anti-trolling legislation. In contrast to their anti-SLAPP counterparts, these statutes are limited by two factors. The first is the likelihood that state anti-trolling statutes will be preempted to a certain extent by federal patent law.¹⁰¹ The second is that, because patent infringement suits themselves must be adjudicated in federal court, the state anti-trolling laws cannot modify the civil procedure of a patent infringement suit. Instead, the state anti-trolling laws create a separate cause of action to sue for damages (and in some cases

HENDERSON, GARRETT & DUNNER, LLP (Apr. 2003), <http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=c032e6c4-e575-40cf-99b4-72e7753c1359>.

100. U.S. Const. art. I, § 8, cl. 8.

101. At this early stage in the life of state anti-trolling laws, commentators have disagreed as to whether the state laws will be preempted by federal law. See T. Christian Landreth, *The Fight Against “Patent Trolls:” Will State Law Come to the Rescue?*, 15 N.C.J. L. & TECH. ON. 100, 120-125 (2014), (arguing that Vermont’s law avoids preemption); Eric Goldman, *Vermont Enacts the Nation’s First Anti-Patent Trolling Law*, FORBES (May 22, 2013, 2:22 PM), <http://www.forbes.com/sites/ericgoldman/2013/05/22/vermont-enacts-the-nations-first-anti-patent-trolling-law> (stating that federal preemption doctrine may apply); Camilla A. Hrady, *What Is Happening In Vermont? Patent Law Reform From the Bottom Up*, PATENTLY-O PATENT BLOG (May 27, 2013), <http://patentlyo.com/patent/2013/05/what-is-happening-in-vermont-patent-law-reform-from-the-bottom-up.html> (arguing that the state laws will not necessarily be preempted, if interpreted in manner consistent with the federal standards for bad faith assertions); David Hricik, *Story on the Main Page About Preemption of State “Anti-Troll” Laws*, PATENTLY-O PATENT BLOG (Sept. 24, 2013), <http://patentlyo.com/hricik/2013/09/story-on-the-main-page-about-preemption-of-state-anti-troll-laws.html> (stating that federal preemption of the state anti-trolling laws is predictable); Justin McCabe, *High Hurdle for State Laws to Curtail Patent Troll Activities*, Green Mountain IP (Apr. 30, 2013), <http://greenmountainip.com/tag/vermont-legislation> (arguing that application of the Federal Circuit standard would cause patent trolls to “avoid any state law claims”).

equitable relief) from a bad faith patent assertion. Here the analogy between SLAPPs and nuisance value patent suits takes an ironic twist. The *Noerr-Pennington* doctrine, a common law doctrine that aided the anti-SLAPP movement by immunizing the exercise of First Amendment rights from liability, arguably also limits the imposition of liability for pre-litigation communication such as patent demand letters.¹⁰²

There are subtle differences between the state anti-trolling laws, but they fall into three general patterns: the Vermont model, the Oklahoma model, and the Virginia model.

The vast majority of states that have enacted anti-trolling laws follow the Vermont model.¹⁰³ Vermont's law creates a cause of action against bad faith patent assertions, which may be enforced by the Attorney General or pursued privately by any person who is the target of a bad faith assertion or whose customers have been targeted.¹⁰⁴ The statute lays out factors a court may use to determine whether an assertion of patent infringement has been made in bad faith. These factors focus on the following four categories:

- 1) whether the demand letter lacks information crucial to the target's ability to assess its true infringement liability,¹⁰⁵
- 2) whether the sender of a demand letter successfully conducted an analysis to identify specific areas in which the target's "products, services, and technology are covered by the claims in the patent" prior to sending a demand letter,¹⁰⁶
- 3) the quality of the allegations themselves (such as whether the claim of infringement is meritless or deceptive),¹⁰⁷ and
- 4) the quality of a sender's assertion campaign in general (such as whether the sender demands payment within an unreasonably short time, "offers to license the patent for an amount that is not based on a reasonable estimate of the value of the license," or has previously filed or threatened to file suit on similar claims that have been found to be meritless).¹⁰⁸

This last category of factors is reminiscent of the "indicia of extortion" that were noted by the Federal Circuit in the *Eon-Net* case.¹⁰⁹ The statute also sets

102. *See infra* notes 127-30, 145-50 and accompanying text.

103. Alabama, Georgia, Idaho, Maine, Maryland, Missouri, New Hampshire, Oregon, South Dakota, Tennessee, Utah, and Vermont have adopted variations of this model.

104. VT. STAT. ANN. tit. 9, §§ 4197, 4199(a), 4199(b) (2013).

105. This is information including the patent number, contact information of the patent owner, and "factual allegations concerning the specific areas in which the target's products, services, and technology infringe the patent or are covered by the claims in the patent." *Id.* § 4197(b)(1).

106. *Id.* § 4197(b)(2).

107. *Id.* § 4197(b)(6)-(7).

108. *Id.* § 4197 (b)(8).

109. *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1326 (Fed. Cir. 2011).

out factors the court may consider as evidence of good faith, including that the sender provides the requested information within a reasonable period of time, the sender is the inventor of the patent or is an institution of higher education, or that the sender demonstrated good faith in previous enforcements of the patent.¹¹⁰ The statute provides for remedies including equitable relief (such as enjoining the sending of bad faith demand letters), damages, discretionary cost and fee-shifting, and exemplary damages of \$50,000 or three times the total of damages, costs, and fees, whichever is greater.¹¹¹ Finally, the statute has a provision requiring a bond in an amount equal to a good faith estimate of the target's litigation costs and the potential damages award.¹¹²

The Oklahoma model¹¹³ is similar to Vermont's law in that it creates a private and public cause of action, but differs in two important aspects. First, the law protects only recipients of patent demands who are end-users of technology and not, for instance, manufacturers or commercial retailers of the allegedly infringing product.¹¹⁴ Second, the factors triggering liability focus primarily on the falsity of the allegations in a demand letter. Under this model, the cause of action is triggered if the demand letter falsely claims that litigation has been filed against the recipient or threatens litigation when there is a consistent pattern of threats without suits filed thereafter. Alternatively, a cause of action is triggered if the assertions in the letter lack a reasonable basis in fact or law because, for instance, the person asserting the patent does not have the right to assert it, is asserting it against activities undertaken after expiration, or because the assertion does not contain specific factual allegations informing the recipient of the infringement risk.¹¹⁵ This model does not consider the factors in category two of the Vermont model (whether the sender completed an infringement analysis prior to sending the letter), and practically does not consider the factors in category four (the qualities of the patent assertion campaign in general), except to detect a pattern of false threats to sue. Wisconsin's law is similar to this model, requiring the inclusion of specific factual allegations and prohibiting false, misleading or deceptive information, but Wisconsin's law applies to all recipients of demand letters.¹¹⁶

The Virginia model¹¹⁷ creates only a public enforcement action, giving the state attorney general the sole authority to bring a suit. Though the triggers for liability in Virginia cover all four categories seen in the Vermont model, in Virginia the quality of the allegations under category three are evaluated on

110. VT. STAT. ANN. tit. 9, § 4197(c).

111. *Id.* § 4199(b).

112. *Id.* § 4198.

113. OKLA. STAT. tit. 23, § 111 (2014). *See also* Illinois's similar new law, 815 ILL. COMP. STAT. 505 / 2RRR (2014).

114. Note the definition of "Intended recipient" in OKLA. STAT. tit. 23, § 111(2).

115. *Id.* § 112.

116. WIS. STAT. ANN. § 100.197 (2014).

117. VA. CODE ANN. § 59.1-215.2 (2014).

slightly different terms. The Virginia statute expressly calls for the court to consider whether the person making the assertion “acts in subjective bad faith” or, alternatively, whether “a reasonable actor in the person’s position would know or reasonably should know that such assertion is baseless.”¹¹⁸ Under Virginia’s public enforcement action, the remedies are more limited than under Vermont’s law, with the civil penalty capped at not more than \$2,500 per violation.¹¹⁹ Louisiana’s law is a variation of this model that protects only end-users of the allegedly infringing product.¹²⁰

The anti-trolling state laws have made significant contributions to the patent reform movement by focusing attention on demand letters that seek to extort settlement with dubious threats of infringement litigation. The greatest strength of the anti-trolling statutes is that they may offer a remedy for damages that current fee-shifting sanctions never reach, since, as Chien has noted, fee-shifting remedies are limited to the costs caused by litigation and not the “fees companies spend analyzing and worrying about cease and desist letters and negotiating with patent holders.”¹²¹ As we have seen, demand letters sent without a reasonable basis can cause damage. As Eric Goldman has argued, these “threats actions” reach abuse prior to the filing of suit, beyond the reach of more traditional sanctions.¹²² The hope is that “the risks that a patent asserter will find itself subject to a lawsuit and potential damages just for sending an assertion will encourage patent asserters to do their homework,” so that fewer demand letters will be sent and those sent will be of higher quality.¹²³ The most valuable aspect of this legislation is the thinking that has gone into developing the bad faith factors, which, particularly under the Vermont model, pick up on the qualities of cases that the Federal Circuit has eventually found to be meritless.¹²⁴ Though Goldman has also criticized the bad faith factors of the Vermont statute on the grounds that, “as trolling tactics inevitably will evolve over time, the factors progressively will become useless,” it should be noted that if the state statutes succeed in changing the behavior of patent asserters, for example, so that specific allegations of infringement and the true identity of the patent owner are included in demand letters, it should make meritless claims easier to detect and defend against and

118. *Id.* § 59.1-215.2(B)(5). In contrast, Vermont’s model calls for the court to consider the merit of the claim both in terms of what the sender subjectively knew and whether the claim was objectively meritless. VT. STAT. ANN. tit. 9, § 4197(b)(6) (2013) (listing the factor, “the claim or assertion of patent infringement is meritless, *and* the person knew, or should have known, that the claim or assertion is meritless”) (emphasis added).

119. VA. CODE ANN. § 59.1-215.3(C).

120. LA. REV. STAT. ANN. § 51:1428 (2014).

121. Chien, *supra* note 23, at 382.

122. Goldman, *supra* note 101, at 1.

123. *Id.*

124. For instance, the evaluation of the qualities of the patent assertion campaign (discussed as category four above), see *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1326 (Fed. Cir. 2011).

at least reduce some of the up-front cost to targets who must analyze their infringement risk.

The statutory bond requirement and the opportunity for fee-shifting in the state anti-trolling statutes help to ensure that the more poorly-funded, and therefore most vulnerable, targets of frivolous patent demands will be encouraged to bring suit under the statute. The statutory bond requirement is a tool that was suggested early in the anti-SLAPP movement to protect poorly funded environmentalists who were targets of harassment lawsuits.¹²⁵ Without this bond requirement, patent trolls can potentially avoid paying attorney's fees even in the rare cases when costs are awarded under section 285 because patent trolls may sue using entities such as shell corporations that have no assets.¹²⁶ However, the bond requirement in the Vermont model will ensure that patent trolls who lose when sued under these statutes will not be able to avoid collection of attorney's fees and damages through the use of shell corporations.

Nevertheless, the state anti-trolling statutes will likely be limited in their application by federal preemption doctrine and the *Noerr-Pennington* doctrine, at least as these doctrines are currently applied in the Federal Circuit. Because the Federal Circuit has held that pre-litigation demand letters are a necessary part of patent enforcement,¹²⁷ a possible restriction on an alleged patent holder's right to send demand letters "implicates a substantive issue 'intimately involved in the substance of enforcement of the patent right'" that requires the application of Federal Circuit law.¹²⁸ The state laws include equitable relief in their remedies, so they all clearly pose the possibility of an injunction literally restricting the right of the patent holder to send patent demand letters in addition to the right to damages liability.¹²⁹ In *Globetrotter Software, Inc. v. Elan Computer Group, Inc.*, the Federal Circuit directly addressed the question

125. *Counterclaim and Countersuit Harassment*, *supra* note 19, at 127.

126. *See, e.g.*, Chien, *supra* note 23, at 382-83 (asserting that "sophisticated trolls sue using shell companies created for the specific purpose of shielding their investors from liability and scrutiny"); Tucker *supra* note 29, at 11 (noting that "because PAEs often hide under multiple shell companies and names . . . it is often hard to identify them precisely by name").

127. *See* Va. Panel Corp. v. Mac Panel Co., 133 F.3d 860, 869 (Fed. Cir. 1997) ("[A] patentee must be allowed to make its rights known to a potential infringer so that the latter can determine whether to cease its allegedly infringing activities, negotiate a license if one is offered, or decide to run the risk of liability and/or the imposition of an injunction.").

128. *In Re Innovatio IP Ventures, LLC Patent Litig.*, 921 F. Supp. 2d 903, 921 (N.D. Ill. 2013) (Memorandum Opinion and Order Granting in Part and Denying in Part Innovatio's Motion to Dismiss the Defendant's Amended Complaint) (citing *Ferguson Beauregard/Logic Controls, Div. of Dover Res., Inc. v. Mega Sys., LLC*, 350 F.3d 1327, 1337 (Fed. Cir. 2003)).

129. *See, e.g.*, VT. STAT. ANN. tit. 9, § 4199(b) (2013). Nebraska Attorney General has already issued an injunction against further sending of patent demand letters in an enforcement action under general consumer protection laws. *See* *Activision TV, Inc. v. Pinnacle Bancorp, Inc.*, 976 F. Supp. 2d 1157, 1160 (D. Neb. 2013) (memorandum and order granting preliminary injunction).

of whether state-law claims based on patent demand letters are preempted by federal law, holding that “federal patent laws . . . bar state-law liability for communications concerning alleged infringement so long as those communications are not made in ‘bad faith.’”¹³⁰ Thus, “[s]tate-law claims . . . can survive federal preemption only to the extent that those claims are based on a showing of ‘bad faith’ action in asserting infringement.”¹³¹ The Federal Circuit further defined the standard for bad faith patent assertion to require that a “plaintiff claiming that a patent holder has engaged in wrongful conduct by asserting claims of patent infringement must establish that the claims of infringement were objectively baseless.”¹³²

The Federal Circuit imported the “objectively baseless” standard from a line of cases developed by the Supreme Court in the context of immunizing lawsuits from anti-trust liability under what is generally known as the *Noerr-Pennington* doctrine.¹³³ A narrowly defined exception from this immunity was developed for sham litigation, but in order for a lawsuit to lose *Noerr* immunity, the Supreme Court has ruled that it must meet a two-part definition. First, the “lawsuit must be objectively baseless in the sense that no reasonable litigant could realistically expect success on the merits.”¹³⁴ Second, “only if challenged litigation is objectively meritless may a court examine the litigant’s subjective motivation.”¹³⁵ To determine subjective bad faith in the antitrust context, the Supreme Court has indicated that “the court should focus on whether the baseless lawsuit conceals ‘an attempt to interfere *directly* with the business relationships of a competitor’ . . . through the ‘use of the governmental process—as opposed to the *outcome* of that process—as an anti-competitive weapon.”¹³⁶ When applying this standard to tort law claims arising from pre-suit communications in the patent infringement context, courts have required both “that the underlying infringement claim is objectively baseless and that it was asserted with subjective bad faith.”¹³⁷

While there is a circuit split as to whether protection under the *Noerr* standard applies to pre-suit communications, the Federal Circuit explicitly

130. *Globetrotter Software, Inc. v. Elan Computer Grp., Inc.*, 362 F.3d 1367, 1374-1375 (Fed. Cir. 2004).

131. *Id.* at 1374.

132. *Id.* at 1377.

133. *Id.* at 1375; *see also In Re Innovatio IP Ventures*, 921 F. Supp. 2d at 911.

134. *Globetrotter*, 362 F.3d at 1376 (quoting *Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49, 60 (1993)).

135. *Id.* at 1376 n.8 (quoting *Prof'l Real Estate Investors*, 508 U.S. at 57).

136. *Prof'l Real Estate Investors*, 508 U.S. at 60-61 (emphasis in original) (internal citations omitted).

137. *Contech Stormwater Solutions v. Baysaver Tech.*, 534 F. Supp. 2d 616, 631 (D.Md. 2008) (citing *Globetrotter*, 362 F.3d at 1375-77); *see also 800 Adept, Inc. v. Murex Sec., Ltd.*, 539 F.3d 1354, 1370 (Fed. Cir. 2008); *Dominant Semiconductors Sdn. Bhd. v. OSRAM GmbH*, 524 F.3d 1254, 1260 (Fed. Cir. 2008); *In Re Innovatio IP Ventures*, 921 F. Supp. 2d at 912.

extended such protection to patent demand letters in *Globetrotter*.¹³⁸ It therefore appears clear that the *Noerr* standard requiring a showing of objective baselessness will be applied to claims under the state anti-trolling laws. It is less clear, as a matter of policy, whether the *Noerr* standard *should* apply in these cases. In support of the extension of *Noerr* immunity from litigation to pre-suit communication, the Federal Circuit quoted an anti-trust law treatise by Hovenkamp and Areeda: “Although a mere threat directed at one’s competitor to sue . . . does not involve or ‘petition’ the government, it would be anomalous and socially counterproductive to protect the right to sue but not the right to threaten suit.”¹³⁹ The Federal Circuit then remarked that “the same First Amendment policy reasons that justify the extension of *Noerr* immunity to pre-litigation conduct in the context of federal antitrust law apply equally in the context of state-law tort claims.”¹⁴⁰ However, in contrast, the Tenth Circuit has ruled that private pre-suit communications outside the antitrust context are not protected by the *Noerr-Pennington* doctrine because there is “no petition addressed to the government” in such cases. In the Tenth Circuit’s view, extending immunity to such private communications is a matter for state law: “While there are many persuasive policy arguments in favor of granting immunity to private threats of litigation, these do not override the clear language of the *First Amendment*. Such arguments are best addressed to the state legislative bodies which can craft state law accordingly.”¹⁴¹

The state governments that have passed anti-trolling laws clearly perceive the patent context as one in which a lower standard for finding bad faith in pre-suit communications is desirable. The high up-front cost of patent litigation and the high social cost of excessive demands make the potential for harm particularly real in the patent infringement context.¹⁴² The objectively baseless standard is so high that even patent demand letters that contain false or

138. *Globetrotter*, 362 F.3d at 1376.

139. *Id.* at 1376 (citing 1 PHILIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 205e, at 237–38 (2d ed. 2000)). It is worth noting that Hovenkamp has acknowledged the harm that ill-considered litigation threats can cause in the patent infringement context: “On the other hand, threats communicated to numerous parties can cause considerable competitive harm if widely communicated without regard to individual merit. . . . Consider, for example, the patentee who sends numerous potential customers of rivals a warning of contributory infringement without regard to the fact that only some rivals may be guilty of infringement. The customer who receives such a letter, having little at stake, is likely to go elsewhere rather than risk the suit.” 1 PHILIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 205f, at 307-08 (4th ed. 2013). A similar dynamic would apply if the sender were seeking nuisance value settlements, rather than using frivolous threats anti-competitively: the customer might well pay rather than risk suit.

140. *Globetrotter*, 362 F.3d at 1377.

141. *Cardtoons v. Major League Baseball Players Ass’n*, 208 F.3d 885, 893 (10th Cir. 2000) (emphasis in original).

142. See *supra* Part II (defining the scope of harm caused by bad faith patent assertions).

misleading information are likely to be immunized from liability under it.¹⁴³ A lower standard for a finding of bad faith in a patent demand letter would not threaten the patentee's right to petition the government in any way and would allow the state anti-trolling laws to reduce the harm caused by frivolous patent demands, particularly in scenarios in which the patent holders never really intend to bring suit. The Supreme Court has recently reversed the Federal Circuit's importation of the *Noerr* standard into the fee-shifting analysis under section 285, emphasizing the original contours of the doctrine and contrasting its requirements to those of the patent statute.¹⁴⁴ Perhaps it is time for the Federal Circuit to reconsider the application of the *Noerr* standard to claims arising from patent demand letters.

Under current law, however, the application of the *Globetrotter* standard to the state anti-trolling laws will preempt most claims under them. While it would be possible for the laws following the Vermont model to be interpreted in a manner consistent with *Globetrotter*,¹⁴⁵ none of the laws actually require a finding that the infringement allegations in the demand letter be both objectively baseless and brought in subjective bad faith. The Vermont model includes factors that might be considered on each of the objective and subjective parts of the test, but the statute leaves the exact standard for bad faith up to the discretion of the court.¹⁴⁶ Under the Oklahoma model, liability may be found if any one of the factors is satisfied, such as if the letter "falsely states that litigation has been filed against the recipient," or if the letter lacks the information required by the statute.¹⁴⁷ There is no requirement that the violation be in subjective bad faith.¹⁴⁸ Finally, the Virginia model, as noted

143. When applying the *Noerr* standard to Innovatio IP's patent licensing campaign, the Northern District of Illinois found that the letters that Innovatio IP sent were protected under the *Noerr* standard, though the licensing campaign allegedly included more than 8000 letters to targets containing various misrepresentations and omissions, such as the assertion of patents against targets who may be covered by an existing license, without mentioning the existence of such licenses, and alleged misrepresentations as to "the number of locations that Innovatio had licensed under the patents, the value of the licenses, [and] the number of patents that had been held to be valid in court" *In re Innovatio IP Ventures, LLC Patent Litig.*, 921 F. Supp. 2d 903, 907, 908, 920 (N.D. Ill. 2013) (Memorandum Opinion and Order Granting in Part and Denying in Part Innovatio's Motion to Dismiss the Defendant's Amended Complaint). The Court found that Innovatio IP had no duty to disclose the licenses and, even if the allegations of the other misrepresentations are taken as true, "[n]one of those alleged misstatements is sufficiently central to Innovatio's infringement claims to make its entire licensing campaign a sham." *Id.* at 921.

144. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1757-58 (2013).

145. For such an argument, see Landreth, *supra* note 101, at 120-125.

146. VT. STAT. ANN. tit. 9, § 4197(b)(6) (2013) asks the court to consider both whether the claim "is meritless" and whether "the person knew or should have known, that the claim or assertion is meritless," but sections 4197(b) and 4197(b)(9) clearly make the list of factors non-exclusive.

147. OKLA. STAT. tit. 23, § 111 (2014).

148. *Id.*

above, appears to allow the courts to examine objective, or subjective bad faith in the alternative.¹⁴⁹ If the laws were interpreted in such a way as to require both findings of objective and subjective bad faith, it would remove much of their bite.¹⁵⁰

Even if the state anti-trolling statutes were not limited in this way by federal preemption doctrine, they remain limited in two important ways. First, the reforms at the state level have created a patchwork of different causes of action, with a range of subtle differences.¹⁵¹ This patchwork may ultimately end up raising the costs of dealing with patent demands, as defendants must also track the differences in the laws to the extent that their businesses may cross state borders. Practitioners have already taken notice of the “inconsistencies in legal standards that may prove troublesome for both plaintiffs and defendants.”¹⁵² Though, as Camilla Hrdy has argued, a “robust federalism” in which the states are allowed to develop local solutions undoubtedly has benefits,¹⁵³ a federal legislative solution would provide more consistent protection for targets of frivolous suits. We have seen the same concern regarding the lack of federal protection in the anti-SLAPP movement.¹⁵⁴ There, the disparities in the availability of protection have been said to create “a state of injustice.”¹⁵⁵ Consistency is particularly desirable in the patent infringement context, in which patent trolls may issue thousands of demand letters to similarly situated recipients in multiple states. Further, it has been observed that the diversity of state anti-SLAPP laws only increases the uncertainty faced by litigants,¹⁵⁶ and increased uncertainty is a form of increased cost. In the patent infringement context, it seems clear that the state anti-trolling laws are intended to increase the cost of sending patent demand letters. Those increased costs are beneficial if they represent increased investment in reasonable investigation of infringement before sending a patent

149. See VA. CODE ANN. § 59.1-215.2 (2014).

150. Hrdy, *supra* note 101.

151. In addition to the broad differences between the three models, discussed *supra* notes 103-18 and accompanying text, there are further differences in detail. For instance, some but not all of the laws exempt claims for relief arising under 35 U.S.C. § 271(e)(2) or 42 U.S.C. § 262. Cf. GA. CODE ANN. § 10-1-774 (2014) (granting both exemptions); IDAHO CODE ANN. §§ 48-1701 to 48-1708 (2014) (granting only the exemption for claims arising from 35 U.S.C. § 271(e)(2)); VT. STAT. ANN. tit. 9, §§ 4195-4199 (with neither exemption in place).

152. Trevor Nagel & Ruchita Dhawan, *Anti-Patent Troll Legislation: What is Proposed and What It Could Mean*, WHITE & CASE LLP (Apr. 2014) <http://www.whitecase.com/articles/2014/anti-patent-troll-legislation-what-is-proposed-and-what-it-could-mean/#.U-BHOIZycds>.

153. Hrdy, *supra* note 101.

154. See Marc J. Randazza, *The Need for a Unified and Cohesive National Anti-SLAPP Law*, 91 OR. L. REV. 627 (2012).

155. *Id.* at 628.

156. Carson Hilary Barylak, Note, *Reducing Uncertainty in Anti-SLAPP Protection*, 71 OHIO ST. L.J. 845, 849 (2010).

demand letter and in providing the recipient of such a letter with good faith information about the alleged infringements. However, the increased costs imposed by the new laws are not beneficial if the costs are primarily sunk in attempting to understand a patchwork of differing legal standards.

Second, the separate cause of action that the state anti-trolling statutes create is not the ideal tool for reducing the actual filing of frivolous suits. In a scenario in which a state court has granted equitable relief against the sending of a bad faith patent assertion, such an injunction could not prevent a frivolous patent infringement suit from going forward.¹⁵⁷ Suits brought against patent trolls under existing consumer protection statutes provide a sense of how enforcement actions under the new anti-trolling suits are likely to play out. For example, the state Attorney General of Nebraska filed a cease and desist order prohibiting a law firm, Farney Daniels, “from initiating new patent infringement enforcement efforts” within the state. The federal district court, however, has ruled that the law firm may continue to pursue the case it filed for its client, Activision TV, Inc., before it received the cease and desist letter or “any other federal cases without running the risk of violating the . . . cease and desist order.”¹⁵⁸ The district court later granted a preliminary injunction against the enforcement of the cease and desist order itself, in part on the grounds that the order would be preempted by federal law under the *Globetrotter* standard.¹⁵⁹ Vermont’s Attorney General is similarly proceeding against MPHJ Technology Investments under the general Vermont consumer protection law, alleging that MPHJ has sent patent demand letters “containing threatening false and misleading statements to Vermont businesses and non-profit organizations.”¹⁶⁰ The Attorney General has succeeded in remanding the case

157. The same problem would exist in the case of a damages award. It is worth noting that some of the state statutes appear to apply to both patent demand letters and patent infringement lawsuits. *See, e.g.*, VT. STAT. ANN. tit. 9, § 4196(2)(B) (2014) (defining a “Target” who may bring suit under the statute as “a Vermont person who has been threatened with litigation or against whom a lawsuit has been filed alleging patent infringement”). Nonetheless, even if the anti-trolling cause of action arose from the filing of an infringement lawsuit in bad faith, a state court could not enjoin the patentee from going forward with the lawsuit because of the exclusive federal jurisdiction in patent cases. *See Gunn v. Minton*, 133 S. Ct. 1059, 1064 (2013). Nevertheless, state courts could impose damages liability based on a finding that a patent infringement claim was pursued in bad faith, precisely because that finding would not affect the patentee’s ability to enforce the patent in federal court. *See id.* at 1067 (ruling that a state court may decide a question of legal malpractice liability that turns on a finding of whether a patent was valid because the state court’s validity finding would “not change the real-world result of the prior federal patent litigation”).

158. *Activision TV, Inc. v. Pinnacle Bancorp, Inc.*, No. 8:13CV215, at 3 (D. Neb. Sept. 26, 2013) (memorandum and order).

159. *Activision TV, Inc. v. Pinnacle Bancorp, Inc.*, 976 F. Supp. 2d 1157, 1166-69 (D. Neb. 2013).

160. *Vermont v. MPHJ Tech. Invs., LLC*, No. 2:13-CV-170, 2014 WL 1494009, at *1 (D. Vt. Apr. 14, 2014). For background on the case, see Joe Mullin, *Patent Troll That Wants \$1000 Per Worker Gets Sued By Vermont A-G*, ARS TECHNICA (May 22, 2013, 11:40 AM

to state court, but in ruling on the motion, the federal district court noted that federal preemption doctrine under the *Globetrotter* standard may provide a defense to MPHJ and “will inevitably be litigated down the line.”¹⁶¹ Even if Vermont wins the remedies that it is seeking, however, those remedies will not end any pending infringement suits against Vermont companies, no matter how frivolous they may be.¹⁶² Though improving the quality of information in patent demand letters might help to lower the initial costs of analyzing the risk of infringement for alleged infringers, it will not ultimately lower the litigation costs of defendants hit with frivolous suits. Even with the cost-shifting provisions available in the anti-trolling statutes, recipients of bad faith assertions may be reluctant to pursue an additional cause of action, given the upfront investment, monetary and non-monetary, that it would likely require. Though the state anti-trolling laws have developed factors that are likely to be effective in identifying patentees whose licensing campaigns employ bottom-feeding tactics, the separate cause of action is not enough to eliminate the use of such tactics in the courtroom.

In sum, the harm caused by frivolous patent litigation is real, but the current proposals at the state level will not be adequate to fight the problem. Federal legislation that can directly target frivolous suits and dismiss them early in the litigation process would have clear advantages over the separate cause of action created by the state anti-trolling statutes. Drawing inspiration from the anti-SLAPP statutes, the next Part of this Article advocates for an early motion to dismiss frivolous patent suits.

IV. BORROWING FROM THE ANTI-SLAPP TOOLBOX

The ultimate conclusion of the anti-SLAPP movement was that the “best means of managing SLAPPs and protecting Petition Clause activity is early, fair, effective court dismissal review.”¹⁶³ A special, expedited motion to strike is the central tool of anti-SLAPP statutes and it has proved to be very powerful.¹⁶⁴ As recognized by Pring and Canan, the challenge, of course, is “how to articulate a simple, objective rule or test of what actions should be

PDT), <http://arstechnica.com/tech-policy/2013/05/patent-troll-that-wants-1000-per-worker-gets-sued-by-vermont-a-g>.

161. *MPHJ Tech. Invs.*, 2014 WL 1494009, at *8 n.5.

162. Vermont is seeking the following relief: a permanent injunction prohibiting MPHJ from business activity that violates Vermont law, restitution of damages suffered by Vermont businesses due to MPHJ’s acts, civil penalties of up to \$10,000 per violation of the Vermont Consumer Protection Act, and litigation costs and fees to the state. First Amended Consumer Protection Complaint at 2, *Vermont v. MPHJ Tech. Invs., LLC*, No. 13CV00170 (D. Vt. Mar. 7, 2014) (No. 282-5-13), 2014 WL 2178325.

163. CANAN & PRING, *SLAPPS*, *supra* note 19, at 26.

164. Douglas A. Hedenkamp, *Avoiding the Pitfalls of the Anti-SLAPP Statute*, 49 ORANGE CNTY. LAW. 46, 46 (Sept. 2007).

dismissed.”¹⁶⁵ A similar observation has been made regarding a test for identifying abusive patent infringement suits, but it has been relegated to the context of when to sanction frivolous suits with fee-shifting provisions, rather than developing a mechanism to dismiss such suits early.¹⁶⁶ This Part of the Article proposes a solution for deterring frivolous patent infringement suits, beginning with how to craft a test for early dismissal and then working through a few other tools used by anti-SLAPP statutes that may prove helpful in managing frivolous patent litigation. This Part concludes with some anticipation of the objections to this solution and an argument in its support.

A. *Special Motion to Dismiss a Bad Faith Patent Infringement Suit*

A special motion to dismiss in the patent infringement context would have several advantages. A well-crafted test for early dismissal would promote the efficiency of the courts by culling objectively baseless suits as early as possible. It would reduce the social cost of such suits by dismissing them before they cause hundreds of thousands of dollars in attorney’s fees and deadweight loss in the value of the target.¹⁶⁷ A process for early dismissal should also ameliorate harm caused by patent demand letters, even before suit is filed, by changing the cost-benefit analysis targets must go through when they receive a patent demand letter. If targets know that there is a clear test for dismissal on an expedited timeline that will limit their litigation costs, fewer of them should be induced to pay settlement fees for frivolous claims. A well-crafted test should help targets identify frivolous threats when they receive them and provide patentees with guidance as to how to meet a minimum standard of good faith diligence in their licensing campaigns. Improvement in the quality of assertion tactics should then minimize the losses caused by frivolous claims. Finally, if the test is workable, it should avoid burdening access to the courts for meritorious claims, a key point of political resistance to federal patent reform.

The central challenge in drafting a special motion to dismiss is how to set the standard for identifying a “frivolous” suit worthy of dismissal. The *Noerr-Pennington* standard, requiring showings of both objective baselessness and subjective bad faith, arguably sets the standard too high to deter many of the behaviors that the state anti-trolling statutes have identified as undesirable. The special motion to dismiss would ideally deal quickly with suits that can be seen to be objectively baseless at or before claim construction is completed, but if our goal is to deter abusive litigation tactics more widely, the special motion should also take into account the kinds of subjective factors noted in the state

165. CANAN & PRING, SLAPPS, *supra* note 19, at 26.

166. *See, e.g.*, Chien, *supra* note 23 at 381-82 (outlining the “definitional challenge” for when to apply fee-shifting sanctions, and making a number of proposals).

167. On the costs of patent litigation, *see supra* notes 50-55 and accompanying text.

anti-trolling statutes and the “indicia of extortion” cited by the Federal Circuit in *Eon-Net*. Yet, dismissing a suit on a finding of subjective bad faith alone runs the risk of dismissing a patentee’s meritorious claims that have been badly handled by counsel. My proposal is to adopt a two-tiered test that uses a burden-shifting mechanism that is a familiar tool of anti-SLAPP statutes.¹⁶⁸ The statutory provision could be drafted in the following way:

A patent infringement claim that is objectively baseless, or brought in subjective bad faith, shall be subject to a special motion to strike, unless, in the case of a finding of subjective bad faith only, the plaintiff can demonstrate on the pleadings that the claim has a reasonable basis in fact and law, which would be defined as a heightened standard of particularity in the pleadings.

This provision is modeled on the structure of California’s anti-SLAPP statute, which consists of a two-part test that identifies suspect claims in the first part, and then shifts the burden to the non-moving party to show probability of success on the merits in the second part.¹⁶⁹ I have modified this structure for the patent infringement context in two important ways. First, I have bifurcated the treatment of cases that are objectively baseless from those that are merely found to be brought in subjective bad faith. If the court determines that there is no reasonable basis for the claim in the first prong, then there is no further work to be done in the second prong of the test. This makes sense in the patent infringement context because the court would in those cases already have considered the merits in the first prong of the test. Second, where there is only a finding of subjective bad faith, then the burden does shift to the non-moving party, but the standard that the non-moving party must meet in order to avoid dismissal is much lower than that of the California anti-SLAPP statute, which has been described as equivalent to defeating summary judgment before discovery has commenced.¹⁷⁰ The summary judgment standard, while highly protective, is unfair in the patent infringement context, as it likely establishes too high a burden for some meritorious patent claims to meet prior to discovery. Yet, a stay of discovery and early availability of the motion to dismiss, both of which are anti-SLAPP tools that control the costs of litigation, are likely to be key to the success of the protective measures in the first place. Therefore, I have here proposed a compromise that preserves some measure of protection against frivolous claims by heightening the standard of legal sufficiency, which could be applied without extensive discovery, as further

168. For the use of burden shifting in the California anti-SLAPP statute, see Hedenkamp, *supra* note 164, at 47.

169. In the first part of California’s anti-SLAPP test, the moving party bears the burden of showing that the lawsuit arises out of conduct protected by the First Amendment, or, in other words, is potentially suspect as a frivolous SLAPP. The suit will then be dismissed unless the non-moving party, under the second part of the test, can show “a probability that the plaintiff will prevail on the claim.” CAL. CIV. PROC. CODE § 425.16 (West 2011); *see also* Hedenkamp, *supra* note 164, at 47.

170. Hedenkamp, *supra* note 164, at 46.

explained below.

In the first part of the test proposed above, the moving party would bear the burden of demonstrating that the suit meets the standard of objective baselessness, which could be determined based on a set of factors imported both from the state anti-trolling statutes and the Federal Circuit's long experience in analyzing sanctionable conduct under Rule 11 and section 285. For example, a patent infringement claim could be ruled objectively baseless when:

- 1) on its face, the claim language precludes the plaintiff's claim construction, the written description clearly refutes the patentee's construction, or the prosecution history precludes the patentee's construction;¹⁷¹
- 2) the claim construction position adopted by the plaintiff is otherwise so unreasonable that no reasonable litigant could believe it would succeed;¹⁷²
- 3) the patent is asserted against activity undertaken after the patent has expired;¹⁷³
- 4) the asserted patent has been held to be invalid or unenforceable in a final, unappealable or unappealed judicial or administrative decision;¹⁷⁴ or
- 5) the infringement allegations are otherwise so objectively baseless that no reasonable litigant could realistically expect success on the merits.¹⁷⁵

Suits that meet this test would be immediately dismissed with prejudice, once the moving party has carried its burden to show objective baselessness. Admittedly, this test could not catch all suits *ex ante* that might eventually be found objectively baseless under a Rule 11 analysis later in the litigation process. The complex nature of patent law may obscure the poor quality of a case early on in the process.¹⁷⁶ In the *Eon-Net* case itself, the Federal Circuit ruled that “[w]ithout a full claim construction analysis, including a consideration of Eon-Net’s claim construction arguments . . . it was impossible to determine if Eon-Net’s claim construction and infringement positions were

171. *Cf.* *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1326 (Fed. Cir. 2011) (citing *iLOR v. Google, Inc.*, 631 F.3d 1372, 1378-79 (Fed. Cir. 2011) (holding that failure to meet this standard caused reversal of a finding of objective baselessness)).

172. *Cf.* *Raylon LLC, v. Complus Data Innovations, Inc.*, 700 F.3d 1361, 1368 (Fed. Cir. 2012) (describing the threshold below which a claim construction is “so unreasonable that no reasonable litigant could believe it would succeed”).

173. *Cf.* OKLA. STAT. tit. 23, § 111 (2014).

174. *Cf. id.*

175. *Cf.* *800 Adept, Inc. v. Murex Secs., Ltd.*, 539 F.3d 1354, 1370 (Fed. Cir. 2008) (describing the standard for objectively baseless infringement allegations).

176. Chien, *supra* note 23, at 381.

without merit.”¹⁷⁷ Nonetheless, in the rare case in which a showing can be made that a claim is objectively baseless near the time of filing, for instance, by applying the patentee’s own claim construction to the accused device or process, the opportunity to conduct such analysis prior to the summary judgment stage, and prior to entering into extensive discovery, would be highly beneficial to the defendant and the court. With the availability of early review and dismissal, we might achieve court review of frivolous demands that previously settled before a suit was filed.

Where the moving party does not carry the burden to show objective baselessness in the proposal above, but does make a showing of subjective bad faith, then the burden would shift to the patentee, who would have to meet a heightened standard of particularity in the pleadings in order to avoid dismissal. This second half of the test would deter abusive assertion tactics by placing a higher burden of pleading on cases brought using such tactics, but would avoid dismissing meritorious claims based purely on a judgment of subjective bad faith. The heightened pleading standard would help to ensure both that there was probable cause to bring the infringement suit and that defendants have been provided with adequate information to evaluate their infringement risk, which should reduce some of the cost of that analysis.

Here, there are two challenges: 1) to identify factors that would aid the court in recognizing subjective bad faith, and 2) to articulate a heightened pleading standard appropriate for the patent infringement context. In the latter case, heightened pleading standards have already been prescribed as a treatment “for curbing litigation abuse and reining in troll-like behavior.”¹⁷⁸ There have been multiple bills introduced at the federal level that would increase pleading requirements for all patent litigation,¹⁷⁹ but the political will to pass a bill in both houses has been lacking, apparently due to opposition that felt the reforms would have the effect of “treating every patent holder as a patent troll.”¹⁸⁰ This proposal offers a compromise position that would subject patent litigation to a heightened pleading standard only where the court has found reason to suspect a frivolous claim due to evidence of subjective bad faith. The state anti-trolling laws have already developed a series of factors for detecting subjective bad faith in the patent infringement context.¹⁸¹ Below, I set forth proposals for a set of subjective bad faith factors, based on the state anti-trolling laws and Federal Circuit opinions on sanctionable cases, and a set of heightened pleading standards, taken from a recently shelved federal bill.

In the proposal above, the moving party could make a showing that the

177. *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1319 (Fed. Cir. 2011).

178. Jonathan L. Moore, *Particularizing Patent Pleading: Pleading Patent Infringement in a Post-Twombly World*, 18 TEX. INTELL. PROP. L.J. 451, 506 (2010).

179. *See, e.g.*, S. 1013, 113th Cong. (2013); H.R. 3309, 113th Cong. (2013).

180. Fung, *supra* note 11.

181. *See supra* notes 105-08 and accompanying text.

plaintiff has brought a case in subjective bad faith by providing evidence of a combination of factors. The Vermont model of the state anti-trolling statutes provides a very workable structure with a non-exclusive list of factors, which the court may balance according to its discretion. The factors proposed below closely track the subjective factors listed in the Vermont anti-trolling statute, as noted, with small adjustments to account for the new context under a motion to dismiss. The provision could be drafted as follows:

A court may consider the following factors as evidence that a patent infringement suit has been brought in subjective bad faith:

- 1) Pre-suit communications from the patentee did not include sufficient information to enable the defendant to analyze its infringement risk, including the relevant patent number(s), the name and address of all the patent owner(s) and assignee(s), if any, and factual allegations concerning the specific areas in which the target's products, services and technology infringe the patent or are covered by the claims in the patent;¹⁸²
- 2) During pre-suit communications, the defendant requested the information in subsection (1), but the patentee failed to provide the information within a reasonable period of time;¹⁸³
- 3) Patentee demanded payment of a license fee or response to a demand letter within an unreasonably short period of time;¹⁸⁴
- 4) The patentee has offered to license the patent for an amount that is not based on a reasonable estimate of the value of the license;¹⁸⁵
- 5) The patentee did not successfully conduct a reasonable pre-suit investigation prior to sending a demand letter, or, if no demand letter was sent, prior to filing suit, with such pre-suit investigation including an attorney interpreting the asserted patent claims and comparing the accused device with those claims before filing suit;¹⁸⁶
- 6) The claim or the assertion of patent infringement in pre-suit communications or in the pleadings is deceptive;¹⁸⁷
- 7) The plaintiff or its subsidiaries or affiliates have previously filed

182. VT. STAT. ANN. tit. 9, § 4197(b)(1) (2014).

183. *Id.* § 4197(b)(2).

184. *Id.* § 4197(b)(4).

185. *Id.* § 4197(b)(5); *see also* Eon-Net LP v. Flagstar Bancorp, 653 F.3d 1314, 1327 (Fed. Cir. 2011) (characterizing low settlement offers, which are calculated to be under the cost of litigation, as a mechanism to keep baseless infringement allegations from coming to light).

186. *See* Smart Options, LLC v. Jump Rope, Inc., No. 12 C 2498, 2012 WL 5499434, at *8 (N. D. Ill. Nov. 13, 2012) (quoting Q-Pharma, Inc. v. Andrew Jergens Co., 360 F.3d 1295, 1300–01 (Fed. Cir. 2004), for the standard for a reasonable pre-suit investigation under Rule 11); *see also* VT. STAT. ANN. tit. 9, § 4197(b)(2).

187. VT. STAT. ANN. tit. 9 § 4197(b)(7).

one or more lawsuits based on the same or similar claim of patent infringement and a court found the claim of patent infringement to be objectively baseless or imposed sanctions for the assertion; or¹⁸⁸

8) Any other factor the court finds relevant.

To ensure fairness for patentees, like the Vermont model, the provision could also include factors the court could consider as evidence of good faith, such as a good faith effort to establish infringement before asserting the patent and a history of successful enforcement of the patent in litigation.¹⁸⁹

These subjective bad faith factors would allow the court to take early notice of assertion tactics that impose high costs on targets and that may be concealing suits that are frivolous.¹⁹⁰ The factors also have the advantage of being based on information that should be readily available to the moving party from its own records of pre-suit communications and the pleadings.¹⁹¹ As noted above, these factors take into account abuses that have been cited by courts under Rule 11 and section 285, but under current procedures those analyses regularly occur after summary judgment, when the defendants may have spent years and considerable resources to demonstrate the baselessness of the case. Accelerating this analysis will allow the court to triage cases and require those cases that show such “indicia of extortion” to meet a higher standard of legal sufficiency on the pleadings, thereby making it more difficult to conceal a case that has been brought without sufficient regard to a rational basis for the claim.

In the event that the moving party succeeds in making a showing of the patentee’s subjective bad faith in the proposal above, then the patentee would

188. *Cf. id.* § 4197(b)(8), but in this case I have more closely followed a similar factor from the Virginia statute, which connects explicitly with sanctioned behavior. *See* VA. CODE ANN. § 59.1-215.2(B)(7) (2014). I believe this approach is preferable because sanctions are public information (as opposed to the approach in Vermont’s factor, as to whether previous litigation threats had included the information in subdivision 1) and will widen the net of behavior that is seen as subjective bad faith, since sanctioned conduct would include suits brought without reasonable pre-suit investigation under Rule 11 and suits considered exceptional under section 285.

189. *Cf. VT. STAT. ANN.* tit. 9, § 4197(c)(3), (6). There is also opportunity to build in some protection for institutions of higher learning, original inventors, or practicing entities with a high level of investment in the invention by including their status as evidence of good faith in the assertion. *Id.* at §4197(c)(3),(6). However, because the purpose of the provision would be to deter use of abusive litigation tactics, I believe it is preferable to hold all parties to the same standards.

190. This was precisely the concern that the Federal Circuit voiced regarding Eon-Net’s licensing campaign: that the low settlement offers were calculated to keep baseless claims from ever coming to light, because the cost to litigate the claims would be so much higher than the cost to settle them. *Eon-Net*, 653 F.3d at 1326.

191. California’s anti-SLAPP law is similarly structured so that the moving party can satisfy its burden on the first prong of the test without discovery. Hedenkamp, *supra* note 164, at 47.

have to meet a heightened standard of particularity in the pleadings in order to avoid dismissal. I propose adopting the heightened pleading requirements that were recently introduced in a Senate bill, the Patent Abuse Reduction Act of 2013.¹⁹² For ease of reference, below is the summary of those requirements, authored by the Congressional Research Service:

A party alleging infringement in a civil action arising under any Act of Congress relating to patents [shall] include in the court pleadings:

- 1) an identification of each patent and claim allegedly infringed as well as the accused apparatus, product, feature, device, method, system, process, function, act, service, or other instrumentality (referred to as an “accused instrumentality”) alleged to infringe any such claim;
- 2) an identification of the name or model number of accused instrumentalities that allegedly result in the practice of a claimed invention;
- 3) for each accused instrumentality, an explanation of where each element of each asserted claim identified is found within the accused instrumentality, whether each such element is infringed literally or under the doctrine of equivalents, and how the terms in each asserted claim correspond to the functionality of the accused instrumentality;
- 4) for each claim alleged to have been infringed indirectly, a description of: (1) the direct infringement; (2) any person alleged to be a direct infringer known to the party alleging infringement; and (3) the acts of the alleged indirect infringer that contribute to or are inducing the direct infringement;
- 5) a description of the right of the party alleging infringement to assert each identified patent and claim;
- 6) the principal business of the party alleging infringement;
- 7) a list of each complaint filed, of which the party alleging infringement has knowledge, that asserts or asserted any of the identified patents;
- 8) whether any identified patent is subject to any licensing term or pricing commitments through any agency, organization, or other standard-setting body;
- 9) the identity of any person other than the party alleging infringement, known to the party alleging infringement, who: (1) owns or co-owns an identified patent or is the assignee of, or an exclusive licensee to, such patent; or (2) has a legal right to enforce an identified patent through a civil action under any Act of Congress relating to patents or is licensed under such patent; and the identity of any person with a direct financial interest in the outcome of the action and a description of any agreement or other legal basis for such financial interest.¹⁹³

The use of a heightened pleading standard like this one has multiple advantages. First, it is an inquiry that can go forward without discovery, thus limiting the defendant’s costs. Second, it provides a standard that is easily

192. S. 1013, 113th Cong. § 2(a) (2013).

193. *Summary: S.1013—113th Congress (2013-2014)*, CONGRESS.GOV, <https://beta.congress.gov/bill/113th-congress/senate-bill/1013> (last visited Dec. 18, 2014).

interpreted and predictably applied. In most cases, targets of patent assertions should be able to anticipate whether they will be able to meet their burden on the first prong of the test and whether the pleadings are likely to be adequate enough to meet the standard for avoiding dismissal. In order to give this provision teeth, like the California anti-SLAPP statute, this provision would not allow leave to amend the pleadings after the motion to dismiss is granted.¹⁹⁴ The plaintiff's only opportunity to draft a claim that is legally sufficient would be before the motion is granted. Targets of the most egregious licensing campaigns could then rest assured that they would not face discovery costs without at least receiving specific infringement allegations, the patentee's claim construction, identification of the true parties in interest, the litigation history of the patent, and whether any licensing term or pricing commitments apply. Imposing the cost of providing this information on the patentee before filing suit would likely reduce the costs faced by the target in evaluating the claim and, depending on the timing of the motion, preparing an answer.¹⁹⁵ In the case in which the heightened pleading standard could not be met, the suit would be dismissed prior to discovery, again reducing the cost to defendants.¹⁹⁶

For patentees, this proposal would undoubtedly raise the costs of enforcement, but it differs from a proposal that would impose heightened pleading standards for all plaintiffs. Raising the pleading standards for all plaintiffs may well make it very difficult to enforce some types of patents, such as process patents, for which specific facts of infringement may be impossible to find without broad discovery.¹⁹⁷ Under this proposal, however, the heightened pleading standard would only be applied if the court found evidence of bad faith in the assertion. Thus, as long as the patentee in such a case has made a good faith effort to investigate any publicly available information to establish a rational basis for the claim and has reasonably shared the results of its investigation with the target, the case should be allowed to go forward on the current more liberal pleading standards. Most importantly, under this proposal patentees would have greater incentive to avoid abusive tactics in their pre-suit communications and less incentive to file nuisance patent suits in the hopes that high litigation costs would force a settlement before the court could detect a baseless suit.

B. *Other Procedural Safeguards from the Anti-SLAPP Toolbox*

There are a number of additional procedural safeguards employed by anti-SLAPP statutes that would be helpful in the patent infringement context. These

194. For this aspect of the California anti-SLAPP statute, see Hedenkamp, *supra* note 164, at 46.

195. Moore, *supra* note 178, at 495.

196. Moore, *supra* note 178, at 496.

197. Moore, *supra* note 178, at 502.

include an expedited timeline for review of the motion to dismiss, stay of discovery, the ability to appeal the court's decision on the motion to dismiss, fee-shifting, and a role for the attorney general to intervene.¹⁹⁸ This Subpart will briefly propose adaptations of these safeguards to the patent infringement context.

1. *Expedited Timeline, Stay of Discovery, and Availability of Appeal*

The timing of the special motion to dismiss, stay of discovery and the availability of interlocutory appeal under this proposal will be critical to the provision's ability to limit the costs imposed on defendants by frivolous suits. Some anti-SLAPP laws include provisions requiring the court to review the motion to dismiss as a preferred or expedited motion.¹⁹⁹ California's anti-SLAPP statute simply requires the court to hear the motion within thirty days if docket conditions allow.²⁰⁰ A similarly expedited timeline would be crucial in the patent infringement context. Even aside from the cost of litigation itself, in the patent infringement context, the longer the patent demand hangs over the head of the defendant, the longer the defendant will be exposed to the negative effects we have seen above on its ability to maintain funding and continue operations. Ideally the special motion to dismiss would be brought within sixty days of the claim being filed, but could be available at the discretion of the court any time before final adjudication.²⁰¹ Like a motion to dismiss for failure to state a claim upon which relief can be granted,²⁰² the special motion to dismiss could be brought before answering the claim. The motion would then be heard within thirty days.

Stay of discovery upon filing of the motion should be workable in all but the most exceptional cases, as the defendant's burden on the first prong can be carried using evidence from its own records of pre-suit communications and the pleadings. The plaintiff's burden on the second prong similarly rests on the pleadings. Limited, specified discovery could be made available at the discretion of the court where it is necessary to argue the motion,²⁰³ but under the current proposal such proceedings should be rare. This procedure could resolve some cases in ninety days.

198. See, e.g., CANAN & PRING, SLAPPS, *supra* note 19, at 203 § 5, 205 (proposing and discussing a model anti-SLAPP statute).

199. *Id.* at 203, § 5(a)(1); see also MO. REV. STAT. § 537.528.1 (2013).

200. CAL. CIV. PROC. CODE § 425.16(f) (West 2011).

201. This would be similar to the procedure under the California statute. See *id.* It would allow the defendant to make the motion after claim construction, for instance, in cases where the plaintiff's claim construction position is not revealed until later in the process and then exposes an objectively baseless claim.

202. Fed. R. Civ. P. 12(b); see also Moore, *supra* note 178, at 495.

203. This is the procedure under the California anti-SLAPP law, see CAL. CIV. PROC. CODE § 425.16(g).

Immediate availability of appeal on the motion decision has been identified as one of the safeguards “essential to make the review process effective.”²⁰⁴ Like expedited review and stay of discovery, swift appeal can keep costs down.²⁰⁵ In the patent infringement context, interlocutory appeal could also aid the development of consistent precedent, as decisions would be appealed to the Federal Circuit. Therefore, the provision should include explicit availability of appeal if a motion is denied or if a decision on the motion is delayed.²⁰⁶

2. *Shifting Fees*

Another powerful tool in the anti-SLAPP toolbox is fee-shifting. California’s statute, for instance, requires automatic fee-shifting to the moving party if the anti-SLAPP motion is granted, but discretionary fee-shifting to the non-moving party only if the motion was brought frivolously.²⁰⁷ The provision has been said to help poorly funded defendants gain representation.²⁰⁸ In the patent infringement context, the literature on fee-shifting and its effects is extensive.²⁰⁹ Chien has argued that a “limited one-way rule is cheaper to administer than a more expansive two-way rule, and can act to level the playing field between parties,” at least where there is a clear definition of which suits merit the sanction and when there are provisions in place to prevent avoidance of the remedy.²¹⁰ The proposal above meets these criteria. The motion to dismiss is narrowly tailored to identify cases that are either objectively baseless or brought in subjective bad faith without a reasonable basis in fact or law. Automatic fee-shifting if the moving party prevails will encourage targets of patent assertions to allow court review of the claims before settling, a key policy goal of the proposal. In order to prevent avoidance of the remedy by trolls using shell corporations, the provision should also include a requirement that plaintiffs post a bond of the reasonable estimate of court costs and attorney’s fees for defendants to argue the motion.²¹¹ The wisdom of a discretionary rule to shift the patentee’s fees in the event that the defendant does not prevail on the motion is discussed below.²¹²

204. CANAN & PRING, SLAPPS, *supra* note 19, at 205.

205. *Cf.* Barylak, *supra* note 156, at 880 (to the effect in the anti-SLAPP context).

206. *Cf.* CANAN & PRING, SLAPPS, *supra* note 19, at 203 § 5(a)(2), 205 (the model anti-SLAPP statute).

207. CAL. CIV. PROC. CODE § 425.16(c); *see also* Hedenkamp, *supra* note 164, at 46.

208. Jerome I. Braun, *California’s Anti-SLAPP Remedy After Eleven Years*, 34 MCGEORGE L. REV. 731, 764 (2003).

209. For an analysis of the literature on fee-shifting as a disincentive to bringing nuisance suits in particular, see Chien, *supra* note 23, at 369-83.

210. Chien, *supra* note 23, at 377.

211. Chien, *supra* note 23, at 383. A number of the state anti-trolling laws include similar provisions. *See supra* notes 126-27 and accompanying text.

212. *See infra* notes 220-21 and accompanying text.

3. *Government Defense*

Some anti-SLAPP statutes include a provision allowing the state Attorney General or “the governmental body to which the moving party’s acts were directed” to defend or otherwise support the moving party.²¹³ There may be room for a similar provision in the patent infringement context. The state Attorneys General have recently become active in pursuing patent trolls via consumer protection statutes²¹⁴ and may soon begin pursuing actions under the state anti-trolling laws. Given the availability of a motion to dismiss, state Attorneys General might find it in the public interest to assist against particularly egregious cases, for instance, cases brought against non-profits or large numbers of consumers using off-the-shelf technology. There might also be a role for the Solicitor General’s office to intervene, given its interest in ethical violations within the patent system.²¹⁵

C. *Minimizing the Downside of a Special Motion to Dismiss*

Finally, the states’ experiences with special motions to dismiss under anti-SLAPP statutes suggest ways to minimize the downside risk of adopting a special motion to dismiss. First, there is some risk of unintended consequences caused by over-inclusiveness. California’s initial anti-SLAPP law was amended to enlarge an exemption for enforcement actions in 2003. The state found that courts struggled to apply the initial exemption, which was limited to enforcement actions, to other forms of lawsuits brought “solely in the public interest or on behalf of the general public.”²¹⁶ Other states have cabined the scope of the anti-SLAPP special motion to dismiss by making it available only in particular circumstances.²¹⁷ Certainly, the more narrowly tailored the provision is, the less likely that it will result in unintended consequences. In the patent infringement context, for instance, it would be possible to further cabin the scope of the proposal by exempting infringement suits brought by non-profit institutions of higher education, in light of the likelihood that institutions of higher education are benefiting society with pure research,²¹⁸ or by targeting

213. See the model anti-SLAPP statute proposed by Pring and Canan, CANAN & PRING, *SLAPPS*, *supra* note 19, at 203 §5(f), 205. Massachusetts is among the states that have enacted such a provision. MASS. GEN. LAWS ch. 231, § 59H (1996).

214. See *supra* notes 158-162 and accompanying text.

215. See *Office of the Solicitor*, USPTO (Aug. 13, 2014, 4:12 PM ET), <http://www.uspto.gov/ip/boards/solicitor/index.jsp> (noting that the office prosecutes attorneys that appear before the PTO for alleged ethical violations).

216. Braun, *supra* note 208, at 768.

217. For instance, Florida has a law that applies only to actions arising from a homeowner’s appearance before a governmental entity on matters related to the homeowners’ association. FLA. STAT. § 720.304(4) (2010).

218. *But see* Mark A. Lemley, *Are Universities Patent Trolls?*, 18 *FORDHAM INTELL. PROP. MEDIA & ENT. L.J.* 611, 630 (2008).

non-practicing entities only. But because the proposal is aimed at deterring litigation abuse tactics that are as harmful when brought by manufacturers or universities as they are when brought by NPEs,²¹⁹ it may be best to make the motion available against any patent infringement suit that meets the test. There should be no need to exempt particular actors or confine the scope of the motion to particular kinds of suits.

Second, there is the risk that the motion will be brought in every case as a delaying tactic, regardless of whether there are indicia of bad faith. California's anti-SLAPP statute addresses this problem by awarding attorney's fees to the non-moving plaintiff in cases where the plaintiff can show that the motion was "frivolous or solely intended to cause unnecessary delay."²²⁰ A recent commentator has noted that "[s]urprisingly few published opinions in 2010 involved an anti-SLAPP motion that was denied because the plaintiff met its burden in step two," suggesting that "the statutory threat of attorney's fees being awarded to a successful plaintiff may be having its desired effect."²²¹ Including a provision that gives the court the discretion to shift fees for frivolously brought motions may make sense in the patent infringement context as well, if not in the initial enactment of the proposal, then by amendment if the motion is frequently abused.

CONCLUSION

The harm caused by nuisance patent suits is real and substantial. Though the recently passed state anti-trolling laws have developed innovative mechanisms for identifying bad faith patent assertions, the remedies these laws can offer are too limited by federal preemption to deal with the full scale of the problem. Nuisance patent suits, like strategic lawsuits against public participation, cause social harm. The chilling of innovation is a social loss on par with the chilling of free speech. The ideal tool to deal with nuisance patent suits, then, is a special motion to dismiss, with procedural safeguards like those developed in anti-SLAPP statutes. A patent infringement claim that is objectively baseless, or brought in subjective bad faith, should be subject to a special motion to strike, unless, in the case of a finding of subjective bad faith only, the plaintiff can demonstrate on the pleadings that the claim has a reasonable basis in fact and law, which would be defined as a heightened standard of particularity in the pleadings. Workable factors that can identify objectively baseless suits that should be immediately dismissed can be taken from the state anti-trolling statutes and Federal Circuit opinions dealing with

219. *Id.* at 630 (arguing that "[i]nstead of singling out bad actors, we should focus on the bad *acts* and the laws that make them possible") (emphasis in original).

220. CAL. CIV. PROC. CODE § 425.16(c) (West 2011).

221. Michael C. Denison, *SLAPP Happy: Courts Continued to Refine the Reach of the Anti-SLAPP Law in Numerous Decisions in 2010*, 34 L. A. LAW 21, 24 (2011).

conduct sanctionable under Rule 11 and section 285. The state anti-trolling statutes have also developed factors for the identification of subjective bad faith that are practical and easy to apply. Recent proposals of bills at the federal level have suggested that heightened pleading requirements should apply to all patent infringement suits, but here I have proposed a compromise position in which only suits that show indications of subjective bad faith would be submitted to the heightened pleading standard. This solution is a powerful tool for triaging cases and dismissing frivolous, nuisance value suits as early as possible, while minimally burdening access to the courts for meritorious claims. Here, the patent reform movement has an opportunity to achieve, with respect to patent infringement litigation, what the anti-SLAPP movement has yet to do for SLAPPs: implement comprehensive federal protection against nuisance suits.

WEEDS, SEEDS & DEEDS REDUX: NATURAL AND LEGAL EVOLUTION IN THE U.S. SEED WARS

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ABSTRACT

Ever since the U.S. Patent and Trademark Office began issuing utility patents for plants, the United States has sat squarely on the frontlines of what have come to be known as the “seed wars.” In the last two decades, the majority of battles in the U.S. seed wars have been waged in the form of patent infringement lawsuits. Typically these suits are filed by biotechnology corporations such as Monsanto against farmers accused of saving and planting patented seed that self-replicates to produce progeny embodying—and thus infringing—the biotech corporations’ patented inventions.

Yet in recent years, the seed wars have begun to evolve. Not only has nature itself taken on a starring role, waging its own weed-fueled battle against the territorial creep of big biotech’s intellectual property interests, but so have farmers, who previously stood only on the defensive end of the seed wars, struggling to protect their rights to use traditional agricultural practices that have been observed for millennia.

This Article looks at current developments in the seed wars through the lens of these two major shifts by examining the ways in which both nature and farmers have started to fight back, as well as the results of their labors. In so doing, the

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Article provides an in-depth critique of the Federal Circuit's most recent effort to ignore the pressing voice of nature and to thwart farmers' attempts to regain some of the rights that they have lost as corporate interests have taken control of what was once a free and common American resource: the life embodied in a seed.

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INTRODUCTION

Ever since the U.S. Patent and Trademark Office began issuing utility patents for plants, the United States has sat squarely on the frontlines of what have come to be known as the “seed wars,”¹ a term made prominent in legal literature by the late Keith Aoki² in his groundbreaking article *Weeds, Seeds & Deeds: Recent Skirmishes in the Seed Wars*,³ from which this Article takes its title. Although these wars are of worldwide proportion⁴ and have raged for as long as the natural barriers to the commodification of seed have been threatened,⁵ most recently the seed wars have largely featured battles between

1. The term “seed wars” itself appears to have originated with former Wall Street Journal Energy and Environment Reporter Bill Paul. See Bill Paul, *Third World Battles for Fruit of its Seed Stocks*, WALL ST. J., June 15, 1984 at I (“You have heard of ‘Star Wars.’ Now there are seed wars.”), quoted in JACK R. KLOPPENBURG, JR., FIRST THE SEED: THE POLITICAL ECONOMY OF PLANT BIOTECHNOLOGY, 1492-2000, 152 (1998).

2. Keith Aoki was a celebrated artist, musician, theorist, Professor of Law (most recently at U.C. Davis), and voice for the voiceless. For a tribute to Professor Aoki, including an introduction to the scope and breadth of his genre-crossing works, see generally John Shuford, *In the Key of Aoki: Immigration Regionalism (ECO)*, 45 U.C. DAVIS L. REV. 1655 (2012); Margaret Chon, *Law Professor as Artist: Themes and Variations in Keith Aoki’s Intellectual Property Scholarship*, 90 OR. L. REV. 1251 (2012). See also Sumi Cho, *Becoming Asian American and the Magic of Historical Accident*, 90 OR. L. REV. 1203, 1215 (2012) (describing Professor Aoki’s solidarity with the scholar of color community and noting that “[w]hat makes the story of Keith Aoki so poignant is that it is surprising that someone like him existed in legal academe”).

3. Keith Aoki, *Weeds, Seeds & Deeds: Recent Skirmishes in the Seed Wars*, 11 CARDOZO J. INT’L & COMP. L. 247, 286-304 (2003) [hereinafter Aoki, *Weeds, Seeds & Deeds*] (analyzing, *inter alia*, key U.S. Supreme Court cases from 1980-2001 that shed light on different aspects of the debate over the early legal treatment of plant genetic resources). Professor Aoki went on to investigate other developments in the seed wars over the next several years. See, e.g., KEITH AOKI, SEED WARS: CONTROVERSIES AND CASES ON PLANT GENETIC RESOURCES AND INTELLECTUAL PROPERTY, 41-58 (2008) [hereinafter AOKI, SEED WARS]; Keith Aoki, *Food Forethought: Intergenerational Equity and Global Food Supply—Past, Present, and Future*, 2011 WIS. L. REV. 399, 442 n.154 (2011) [hereinafter Aoki, *Food Forethought*]. This Article picks up (temporally, though surely not as adroitly), where Professor Aoki might have carried on had he not passed in 2011.

4. See, e.g., Deborah M. Strauss, *The Application of TRIPS to GMOs: International Intellectual Property Rights and Biotechnology*, 45 STAN. J. INT’L L. 287, 303-19 (2009) (discussing global approaches to property rights, traditional knowledge protection, and equitable benefit sharing).

5. See *infra* Part I.A. (discussing the commodification of seed in the United States). For a concise history of the international commodification of seed and the early appropriation of germplasm from developing nations, see Lara E. Ewens, *Seed Wars: Biotechnology, Intellectual Property, and the Quest for High Yield Seeds*, 23 B.C. INT’L & COMP. L. REV. 285, 288-90 (2000). Where such appropriation is viewed as misappropriation, disputes over traditional knowledge and ownership rights and policies have continued. See, e.g., Yousaf Ishaq Khan, *Traditional Knowledge, Genetic Resources, & Developing Countries in Asia: The Concerns*, 8 WAKE FOREST INTELL. PROP. L.J. 81, 85 (2007) (discussing the negative impacts of patent protection on the “sovereign rights of countries over their genetic resources and to some extent on sustainable use, in the form of direct and

two opposing sets of rights-holders. Biotechnology corporations such as Dow, Syngenta, and Monsanto,⁶ often referred to as “seed giants,”⁷ have generally taken the offensive side of these skirmishes, litigating both to protect and expand the right to assert intellectual property ownership over transgenic⁸ plant material.⁹ On the defensive side of the ideological battlefield typically lie farmers, attempting to protect their customary rights to utilize traditional agricultural practices, including the rights to grow crops free from transgenic contaminants and to save and replant seed.¹⁰

indirect misappropriation of biodiversity, genetic resources, and traditional knowledge,” referred to as “biopiracy”); Jacques de Werra, *Fighting Against Biopiracy: Does the Obligation to Disclose in Patent Applications Truly Help?*, 42 VAND. J. TRANSNAT’L L. 143, 169-70 (2009) (predicting the persistence of patent infringement and related litigation internationally, even where biopiracy could, theoretically, be addressed by co-ownership proposals).

6. Dow, Syngenta, and Monsanto are among the so-called “Big Six” seed, biotech, and agrichemical giants. Diana L. Moss & C. Robert Taylor, *Short Ends of the Stick: The Plight of Growers and Consumers in Concentrated Agricultural Supply Chains*, 2014 WIS. L. REV. 337, 342 n.24 (2014). They, along with BASF, Bayer, and Pioneer Hi-Bred (owned by DuPont), account for \$50 billion per year in sales of biotech seeds, genetic traits, and agrochemicals. Hope Shand, *The Big Six: A Profile of Corporate Power in Seeds, Agrochemicals & Biotech*, HERITAGE FARM COMPANION, Summer 2012, at 10.

7. See, e.g., Strauss, *supra* note 4, at 297; Juli Weiner, *How Seed Giant Monsanto Went from 2009 Company of the Year to Worst Stock of 2010*, VANITY FAIR, Oct. 7, 2010, <http://www.vanityfair.com/online/daily/2010/10/how-seed-giant-monsanto-went-from-2009-company-of-the-year-to-worst-stock-of-2010>.

8. Transgenic plant materials are also commonly referred to as genetically modified (“GM”) plants or seed, or bioengineered or genetically modified organisms (“GMOs”). See, e.g., Maria R. Lee-Muramoto, *Reforming the “Uncoordinated” Framework for Regulation of Biotechnology*, 17 DRAKE J. AGRIC. L. 311, 315 n.12 (2012) (citing PEW INITIATIVE ON FOOD & BIOTECHNOLOGY, ISSUES IN THE REGULATION OF GENETICALLY ENGINEERED PLANTS AND ANIMALS 2 (2004)) (noting and explaining the variety of terms). Although there is disagreement over the appropriate use of such terminology, see Margo Bagley, *The Wheat and the (GM) Tares: Lessons for Plant Patent Litigation from the Parables of Christ*, 10 U. ST. THOMAS L.J. 683, 684 n.3 (2013), this Article uses the terms essentially interchangeably, reflecting the tendency of courts and commentators to do the same.

9. See, e.g., *Monsanto Co. v. Scruggs*, 459 F.3d 1328 (Fed. Cir. 2006) (involving an infringement suit filed by Monsanto against a farmer who saved its patented transgenic seed in violation of the licensing agreement that typically accompanies such seed, despite the fact that the farmer had never signed such an agreement); *Monsanto Co. v. Parr*, 545 F. Supp. 2d 836 (N.D. Ind. 2008) (involving a claim by Monsanto against a seed processor for inducing his farmer customers to infringe Monsanto’s patents by violating seed-saving restrictions in their license agreements, pursued in addition to separate settlements made with the farmers for direct infringement).

Occasionally, of course, these ideological bedfellows wind up litigating opposite one another. See, e.g., *Syngenta Seeds, Inc. v. Monsanto Co.*, 231 F. App’x 954 (Fed. Cir. 2007); *Monsanto Co. v. Syngenta Seeds, Inc.*, 431 F. Supp. 2d 482 (D. Del. 2006).

10. See, e.g., *Monsanto v. McFarling*, No. 4:00CV84 CDP, 2005 WL 1490051, at *2-5 (E.D. Mo. 2005) (recognizing that the defendant farmer had infringed Monsanto’s patents by “simply farm[ing] the way he had always farmed,” noting both that “the ability to harvest and replant seeds is, of course, the essence of farming, and it is a time-honored practice even in modern agriculture,” and that it was “not in the least surprising that a farmer such as [the

Yet in recent years, the U.S. seed wars have started to evolve. Not only has nature itself taken on a starring role,¹¹ but the parties' compositions and their positions on the battlefield have also begun to change.¹² This Article takes a look at the most recent developments in the seed wars through the lens of these two major shifts by examining the ways in which both nature and farmers have started to fight back, as well as the results of their efforts. As discussed further in Part II, although both nature and farmers have made advancements against the seed giants in recent years, the progress of nature has been fraught with trouble. Moreover, the overall progress of farmers has been slow, besieged by difficulties in proceeding beyond the decision to take to the offense in the fight against the territorial creep of the seed giants' intellectual property interests. Thus, this Article also provides an in-depth critique of the efforts of the latest tribunal to ignore the pressing voice of nature and to thwart farmers' attempts to regain some of the rights that they have lost as the seed giants have increased their monolithic hold on what was once free and common American germplasm. That tribunal is the Federal Circuit, whose ill-considered opinion in *Organic Seed Growers and Trade Ass'n v. Monsanto Co.*¹³ both exploited and

defendant] would legitimately and in good faith question the right of any seed company to change the way farmers have done business for centuries"). *See generally* *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013) (involving a farmer who unsuccessfully attempted to defend himself against an infringement suit by Monsanto on grounds that he had saved seed from plants grown not from seed purchased from a Monsanto-licensed seed producer but from a local grain elevator, believing the seeds, which were comingled with other commodity seeds, to be free from patent protection).

Although the seed wars have occasionally extended beyond these parties to include other individuals and entities such as research scientists, *see* Andrew Pollack, *Crop Scientists Say Biotechnology Seed Companies Are Thwarting Research*, N.Y. TIMES, Feb. 20, 2009, at B3 (describing research scientists' plea to the U.S. Environmental Protection Agency to curb industry's ability to launder research data by the imposition of restrictions on access to seed), and U.S. states, *see, e.g.*, Laura Murphy et al., *More than Curiosity: The Constitutionality of State Labeling Requirements for Genetically Modified Food*, 38 VT. L. REV. 477, 481-83 & n.6 (2014) (analyzing states' interests in the development of food labeling bills to address health, economic, and environmental concerns arising from the use of transgenic seed in light of "inevitable litigation" threats by biotech firms to sue state governments and the "seemingly limitless resources of industry opponents"), the focus of this Article is on the continuing tension between those wishing to protect traditional agricultural practices such as seed saving and organic farming and those arguing for intellectual property protection that thwarts such traditional rights, as these are the entities that have been most involved in litigating the seed wars in recent years.

11. *See infra* Part II.A.

12. This began with *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010) (involving a challenge initiated by farms and environmental groups to a federal agency's decision to deregulate a particular type of genetically modified alfalfa). *See also* *Organic Seed Growers & Trade Ass'n v. Monsanto Co.* (*Organic Seed Growers II*), 718 F.3d 1350 (Fed. Cir. 2013) (involving a combination of plaintiff farmers, seed businesses, and related membership organizations seeking, *inter alia*, to invalidate transgenic seed patents), *cert. denied*, 134 S. Ct. 901 (2014), which is the principal subject of Part II.B., *infra*.

13. *Organic Seed Growers II*, 718 F.3d at 1350.

created numerous gaps, conflicts, and ambiguities¹⁴ in the fabric of the legal discourse that enmeshes the rights of those using seed traditionally, as chattel, with those claiming legal entitlement to the intellectual property embodied therein.

Accordingly, the Article proceeds in two parts. Part I sets the stage for the Article's discussion of recent seed patent litigation by providing a brief background describing the shift in American agricultural germplasm from a free and open shared resource to the commoditized seeds that are the subject of today's patent disputes, with a collection of pertinent resources noted for those wishing to delve further into the history of the seed wars. In addition, Part I introduces the most significant player on the agribusiness side of the seed wars to date: the Monsanto Corporation, which has pursued hundreds of patent infringement claims against farmers in recent years, a practice that led farmers to take to the offense in the *Organic Seed Growers* case.

Part II discusses the roles that both nature and farmers have taken in fighting back against the territorial push of the Big Six¹⁵ seed giants. While these two entities do not occupy the same ground in their fights against the seed giants—and indeed, are often at odds with one another¹⁶—they nevertheless are united in the sense that they have both begun to push back against the onslaught of the agrochemical corporations' efforts to control both man and nature. Thus, Part II.A details the rise of “superweeds” in nature, examining their effects on farmers as well as the efforts of the agrochemical giants both to curtail their progress and to profit from them. Part II.B then goes on to discuss the farmers' fight in the *Organic Seed Growers* case in detail, examining the gaps, conflicts, and ambiguities left by the courts' treatment of the case and the myriad open questions that remain for future farmers hoping to protect their traditional property rights and to make advancements on the offensive line of the U.S. seed wars.

14. Legal realists argue that judicial lawmaking takes place in the context of gaps, conflicts, and ambiguities in the structure of legal rules. See DUNCAN KENNEDY, *A CRITIQUE OF ADJUDICATION: FIN DE SIÈCLE* 28-30, 133-35 (1997). The pervasiveness of these omissions allows their exploitation both by jurists and by practitioners. See Duncan Kennedy, *Distributive and Paternalist Motives in Contract and Tort Law, with Special Reference to Compulsory Terms and Unequal Bargaining Power*, 41 MD. L. REV. 563, 581 (1982). The *Organic Seed Growers* litigation, as discussed in Part II.B, is illustrative of a particular type of judicial advocacy that is able to arise in the unique context of the Federal Circuit's patent jurisprudence, which is put in check only by the discretionary authority of the Supreme Court and gains no influence from sister circuits due to the Federal Circuit's near-exclusive jurisdiction over patent appeals. See generally Paul R. Gugliuzza, *The Federal Circuit as a Federal Court*, 54 WM. & MARY L. REV. 1791 (discussing the Federal Circuit's expanding jurisdictional reach in patent cases and numerous examples of Federal Circuit jurisdictional rules that are inconsistent with Supreme Court precedent).

15. Note 6, *supra*, lists the entities included in the so-called “Big Six.”

16. See *infra* notes 81-105 and accompanying text (discussing the effects of the emergence of superweeds on farmers).

I. BACKGROUND: THE COMMODIFICATION OF AMERICAN AGRICULTURAL GERMPLASM AND THE MONSANTO CORPORATION

A. *The Commodification of Seed in America*

Less than a century ago, farmers in the United States freely planted, harvested, saved, traded, and replanted a wide variety of seeds,¹⁷ just as humankind has done for millennia.¹⁸ Weeds and pests were managed by physical and mechanical means,¹⁹ and crop yields varied depending on factors such as the weather²⁰ and the quality of each year's seed.²¹ Seeds were viewed, quite uncontroversially, as products of nature;²² thus, farmers could use them

17. See Aoki, *Weeds, Seeds & Deeds*, *supra* note 3, at 257 (noting that until about seventy years ago, germplasm was not even considered characterizable as property, and was thus free from restriction); A. Bryan Endres, *State Authorized Seed Saving: Political Pressures and Constitutional Restraints*, 9 DRAKE J. AGRIC. L. 323, 326, 328 (2004) (relating that "until 1930, only common law trade secret theory protected plant-based intellectual property," such that "self-pollinating seeds could be saved from season to season and traded among farmers without restriction" and describing farmers' traditional practice of selecting seed from plants with desirable traits to save and trade with neighbors); Benjamin Ikuta, *Genetically Modified Plants, Patents, and Terminator Technology: The Destruction of the Tradition of Seed Saving*, 35 OHIO N.U. L. REV. 731, 731 (2009) (observing that despite the successful transplant of numerous crops into the American west, the failure of certain varieties to thrive encouraged the wide practice of seed saving techniques, which "deeply enrooted" them into America's history).

18. See JARED DIAMOND, GUNS, GERMS, AND STEEL: THE FATES OF HUMAN SOCIETIES 115, 124 (1997) (noting the domestication of plants going back some 10,000 years); Aoki, *Food Forethought*, at 442 n.154 (2011) (opining that intellectual property ownership of plant genetic resources jeopardizes "farming as it has been practiced over the last ten millennia"); *cf.* AOKI, SEED WARS, *supra* note 3 at 9-25 (detailing the history of seed cultivation and the development of industrial farming).

19. See F. L. Timmons, *A History of Weed Control in the United States and Canada*, 53 WEED SCI. 294, 296 (2005) (discussing the variety of non-herbicidal weed control methods used in the early 1900s, from hand methods to mechanical means, ranging from the early use of horse-powered implements to the development of tractor-drawn tools and specialized machines such as the flame cultivator).

20. See, e.g., John Kerr Rose, *Corn Yield and Climate in the Corn Belt*, 26 GEOGRAPHICAL REV. 88, 88-89 (1936) (discussing the effects of changing weather on corn yields). See generally A.M. HANNAY, U.S. DEP'T OF AGRIC., MISC. PUB. NO. 118, THE INFLUENCE OF WEATHER ON CROPS, 1900-1930: A SELECTED AND ANNOTATED BIBLIOGRAPHY (1931) (collecting numerous contemporaneous publications concerning the effects of weather on the development of various crops, including the crops' final yields).

21. See, e.g., H. J. Metcalf, *How About Your Seed Corn for 1920?: Seed Corn Selection and Tests for Bigger Yields Bring Out Best Strains for Localities*, FARM MECHANICS, Feb. 1920, at 64, 66, 68 (noting the relationship between seed quality and yield in corn and how careful testing and selective seed saving can bring higher yields); *cf.* Endres, *supra* note 17, at 326 (mentioning farmers' traditional practice of exploiting chance mutations in order to select seeds of the highest quality for saving and trading).

22. STEPHEN B. BRUSH, FARMERS' BOUNTY: LOCATING CROP DIVERSITY IN THE CONTEMPORARY WORLD 231, 290 (James C. Scott ed., 2004) (citing Karl Bozicevic, *Distinguishing "Products of Nature" from Products Derived from Nature*, 69 J. PAT. &

without the same concerns that today's farmers have for running afoul of licensing restrictions or the infringement of intellectual property rights.²³ In fact, in the mid-1800s, the United States Patent Office itself induced Congress to appropriate money for the collection and distribution of free seed, a program that worked successfully for decades.²⁴

Yet as America grew, incentives changed. With the development of hybrid seed (which can be bred to produce desirable traits but will not reliably reproduce such traits if saved and replanted)²⁵ came the development of private seed companies, which, over time, effectively dismantled the public seed research and distribution programs that had created the free and common American germplasm upon which farmers had relied in planting generations of crops, and upon which seed companies relied in developing germplasm that

TRADEMARK OFF. SOC'Y 415, 426 (1987) (noting that plant genetic resources are traditionally considered products "of nature" rather than products derived "from nature," and thus should lie in the public domain); see also Keith Aoki, *Malthus, Mendel, and Monsanto: Intellectual Property and the Law and Politics of Global Food Supply: An Introduction*, 19 J. ENVTL. L. & LITIG. 397, 409 (2004) [hereinafter Aoki, *Malthus, Mendel, and Monsanto*] (discussing the prevalent conceptualization of the genetic components of major food crops as the "common heritage of humankind" until the late 1970s); Endres, *supra* note 17, at 326 (noting that although seeds themselves were owned as personal property, even when farmers engaged in plant breeding by selecting seed from plants with desirable mutations and traits, such farmers did not thereby consider themselves owners of the new variety's germplasm or subsequent reproductions thereof, as it was still considered a part of nature and of the public domain); cf. Keith Aoki, "Free Seeds, Not Free Beer": *Participatory Plant Breeding, Open Source Seeds, and Acknowledging User Innovation in Agriculture*, 77 FORDHAM L. REV. 2275, 2279-87 (2009) [hereinafter Aoki, *Free Seeds*] (detailing the shift, between 1980 and 2001, from the view of seeds as the common heritage of mankind to seeds as "sovereign property").

23. For a recent example of the quandaries into which farmers are put due to modern licensing schemes related to intellectual property, see *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013) (finding that a farmer who saved seed from crops grown from seed purchased not under any license agreement but from a grain elevator was nevertheless subject to suit for patent infringement, where the farmer had purchased similar seed of the patentee's in previous years that had itself been sold subject to a licensing agreement prohibiting the saving of such seed).

24. See Debra L. Blair, *Intellectual Property Protection and Its Impact on the U.S. Seed Industry*, 4 DRAKE J. AGRIC. L. 297, 300-01 (1999) (describing the Patent Office's seed distribution program). Such programs were but a small portion of the United States' early involvement in encouraging the development of a common and free American agricultural germplasm. In the latter half of the 1800s, the passage of the Morrill and Hatch Acts resulted in the establishment and funding of land grant college systems that ran agricultural experiment stations to help propagate and distribute new varieties of germplasm for the U.S. public, see Aoki, *Weeds, Seeds & Deeds*, *supra* note 3, at 266; Endres, *supra* note 17, at 327, and in 1862, the U.S. Department of Agriculture (USDA) was created, expressly to encourage the procurement, propagation, and distribution "among the people" of "new and valuable seeds and plants," 7 U.S.C. § 2201 (2012).

25. See JORGE FERNANDEZ-CORNEJO, ECON. RESEARCH SERV., U.S. DEP'T OF AGRIC., AGRIC. INFO. BULLETIN NO. 786, THE SEED INDUSTRY IN U.S. AGRICULTURE: AN EXPLORATION OF DATA AND INFORMATION ON CROP SEED MARKETS, REGULATION, INDUSTRY STRUCTURE, AND RESEARCH AND DEVELOPMENT 2 (2004).

could eventually be owned and protected as intellectual property.²⁶ The history of this shift in the development of American agricultural germplasm and its commodification from common cultural heritage to a patentable and licensable form of life is a tale that has been extensively told and retold in the available legal literature²⁷ and thus need not be rehashed yet again in these pages. Critically, however, the emergence of patent protection for plants progressed in fits and starts, stemming in part from the hesitation of Congress, which had instituted intellectual property protection for asexually reproduced plants in 1930,²⁸ to extend similar protection to sexually reproduced plants²⁹ (which it finally did in 1970)³⁰ and from the Supreme Court's hesitation, until 1980, to extend utility patent protection under the United States' Patent Statute³¹ to

26. See Jennifer Wai-shing Maguire, *The Seed 2.0: Evolving Intellectual Property Rights of Agricultural Germplasm*, 8 BUFF. INTELL. PROP. L.J. 51, 56-58 (2012) (describing the shift of seed development in the United States from a public enterprise to a private one, with publicly-funded seed research devolving into the raw material from which the private seed industry drew for the creation of its own profitable hybrid seed); cf. Elizabeth I. Winston, *Sowing the Seeds of Protection*, 2014 WIS. L. REV. 445, 452 (2014) (describing the connection between two trends: the shift in market view of seed as chattel rather than a common good, and the erosion of farmers' rights in the seed, both of which, the author proposes, began with the development of hybrid seed, "which is economically sterilized but not biologically sterilized").

27. See, e.g., Aoki, *Food Forethought*, *supra* note 3, at 425-34; Aoki, *Free Seeds*, *supra* note 22, at 2277-79; Aoki, *Malthus, Mendel, and Monsanto*, *supra* note 22, at 417-27; Keith Aoki, *Seeds of Dispute: Intellectual Property Rights and Agricultural Biodiversity*, 3 GOLDEN GATE U. ENVTL. L.J. 79, 81-105 (2009); Aoki, *Weeds, Seeds & Deeds*, *supra* note 3, at 261-304; Blair, *supra* note 24, at 299-306; Nathan A. Busch, *Jack and the Beanstalk: Property Rights in Genetically Modified Plants*, 3 MINN. INTELL. PROP. REV. 1, 5-34 (2002); Anne E. Crocker, *Will Plants Finally Grow Into Full Patent Protection on an International Level? A Look at the History of U.S. and International Patent Law Regarding Patent Protections for Plants and the Likely Changes After the U.S. Supreme Court's Decision in J.E.M. Ag Supply v. Pioneer Hi-Bred*, 8 DRAKE J. AGRIC. L. 251, 256-80 (2003); A. Bryan Endres & Peter D. Goldsmith, *Alternative Business Strategies in Weak Intellectual Property Environments*, 14 J. INTELL. PROP. L. 237, 251-53 (2007); Endres, *supra* note 17, at 326-35; Meghan Marrinan Feliciano, Note, *We Are What We Eat: Securing Our Food Supply by Amending Intellectual Property Rights for Plant Genetic Resources*, 8 U. ST. THOMAS L.J. 546, 551-61 (2011); Rita S. Heimes, *Post-Sale Restrictions on Patented Seeds: Which Law Governs?*, 10 WAKE FOREST INTELL. PROP. L.J. 98, 102-11 (2010); Ikuta, *supra* note 17, at 732-38; Mark D. Janis & Stephen Smith, *The Protection of Rights in Plant Varieties: Technological Change and the Design of Plant Variety Protection Regimes*, 82 CHI.-KENT L. REV. 1557, 1558-59 (2007); Daryl Lim, *Self-Replicating Technologies and the Challenge for the Patent and Antitrust Laws*, 32 CARDOZO ARTS & ENT. L.J. 131, 139-47 (2013); Scott D. Locke, *Intellectual Property for the Botanist and Plant Breeder: An Overview of Protection Afforded by Plant Patents and Plant Variety Protection Certificates*, 6 CHI.-KENT J. INTELL. PROP. 198, 199-201 (2007); Maguire, *supra* note 26, at 54-59.

28. This was accomplished through the Plant Patent Act of 1930 ("PPA"), 35 U.S.C. §§ 161-64 (2012).

29. See AOKI, SEED WARS, *supra* note 3, at 4.

30. This was accomplished through the Plant Variety Protection Act of 1970 ("PVPA"), 7 U.S.C. §§ 2321-2583 (2012).

31. 35 U.S.C. § 101 (2012).

living organisms.³²

The result of this somewhat splintered history of plant patent protection, combined with novel contractual methods utilized by the modern seed giants to extend their patents' reach,³³ is that today's farmers are left with a complex scheme of ownership rights through which to wade when deciding how to do something that was once as simple as planting a crop from last year's harvest. As Parts I.B and II.B of this Article illustrate, the modern web of patent-protected plants and germplasm and their treatment in the U.S. courts has transformed what were once formerly straightforward and automatic practices of growing crops by traditional methods and saving and replanting seeds into risky economic and social choices involving mounting financial disincentives

32. This occurred in the landmark case *Diamond v. Chakrabarty*, 447 U.S. 303 (1980), which held by a 5-4 majority that a genetically modified bacterium could be patentable subject matter, because it was no longer simply "nature's handiwork," and thus could be patentable as the patentee's "manufacture or composition of matter." *Id.* at 310-11.

After *Chakrabarty* and a follow-up opinion issued by the U.S. Board of Patent Appeals and Interferences indicating that the PPA and PVPA did not preempt the authority of the U.S. Patent and Trade Office (PTO) to issue utility patents for germplasm, *Ex Parte Hibberd*, 227 U.S.P.Q. 443 (1985), the PTO began doing so. Sixteen years and 1,800 utility patents later, in a decision authored by Justice Thomas (who, in the 1970s, had worked as in-house counsel for one of the Big Six seed giants, see Nate Hausman, *Monsanto Co. v. Geertson Seed Farms: Breathing a Sigh of Equitable Relief*, 25 TUL. ENVTL. L.J. 155, 175 (2011)), the U.S. Supreme Court upheld the PTO's practice, holding that newly developed plant breeds were patentable subject matter under the United States' general utility patent statute, notwithstanding the additional protections potentially available under the PPA and PVPA. *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124, 127, 147 (2001).

33. See Mark R. Patterson, *Contractual Expansion of the Scope of Patent Infringement Through Field-of-Use Licensing*, 49 WM. & MARY L. REV. 157, 179-84, 205-09 (2007) (examining the ways in which enforcement rights considered to fall within the patent grants on technology embedded in self-replicating seeds have expanded as a result of not only field-of-use restrictions, but also licensing restrictions on use of goods produced by licensed products); see also Peter Carstensen, *Post-Sale Restraints via Patent Licensing: A "Seedcentric" Perspective*, 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1053, 1066-79 (2006) (analyzing infringement cases involving transgenic seed to illustrate that the expansion of patent rights into the post-sale context allows the patent holder to frustrate the market); Harry First, *Controlling the Intellectual Property Grab: Protect Innovation, Not Innovators*, 38 RUTGERS L.J. 365, 389-90 (2007) (discussing the effect of single-use licensing schemes for patented seed, which extend the patent rights beyond the functional sale of the product containing the patented elements); Douglas Fretty, Note, *Both a License and a Sale: How to Reconcile Self-Replicating Technology with Patent Exhaustion*, 5 J. BUS. ENTREPRENEURSHIP & L. 1, 3-9 (2011) (discussing similar effects of so-called "bag-tag" licenses); cf. AOKI, SEED WARS, *supra* note 3, at 45-46 (discussing the shift toward licensing, rather than sale, of commoditized seed, which has transformed what was once purchased as a good with no strings attached into a good subject to numerous conditions, "effectively turn[ing] farmers from 'owners' of the seeds they grow into 'renters/tenants,' with agrochemical corporations operating and holding rights analogous to 'landlords'"); Winston, *supra* note 26, at 452 (noting the spread of limited-use licensing schemes from hybrid to non-hybrid seed, "as contract law continued the trend of divorcing the farmers' rights from the seed itself and limiting the farmers' rights to the contract signed instead").

and the threat of potentially bankrupting litigation.³⁴ At the forefront of much of the litigation that has transformed farmers' lives in this way has been the Monsanto Corporation, which in recent years has litigated close to 150 infringement suits against farmers and settled some 700 more.³⁵ Not

34. Even the intended "release valve" (so to speak) put in place by the inherently limited life of patents does little to ameliorate this practical shift in the lives of farmers, as transgenic seed is protected not only by utility patents but also by plant variety patents and other forms of intellectual property, *see* note 32, *supra* (mentioning these other available protections for plant life), and the licensed seed producers that insert patented transgenes into seed varieties have begun "stacking" older patented traits with new ones (and stacking different patentees' cross-licensed traits with one another), thus extending the overall patentable life of certain seeds embodying the various protected traits, *see* Brianna M. Schonenberg, *Twenty Years in the Making: Transitioning Patented Seed Traits into the Generic Market*, 97 MARQ. L. REV. 1039, 1043 n.15 (2014) (describing the process of "stacking"). These factors make it difficult for a farmer to know when and by whom a particular seed is patent protected, even as popular patents are known to be expiring.

For instance, the world's most adopted biotech trait—which makes certain transgenic seeds known as "Roundup Ready" soybeans resistant to an herbicide marketed as "Roundup," *see infra* notes 72-73—goes off-patent in 2015. *See Roundup Ready Soybean Patent Expiration*, MONSANTO CO., <http://www.monsanto.com/newsviews/pages/roundup-ready-patent-expiration.aspx> (last visited Aug. 24, 2014). Farmers may thus believe that they can soon begin saving their Roundup Ready soybean seed (an act that is currently prohibited under the licensing agreements governing the sale of these seeds) without fear of infringement. Yet according to the patentee's website, such a decision could prove more complex than farmers might imagine:

The first possibility of planting seeds saved from Roundup Ready soybean varieties will occur in spring 2015. . . . Farmers who are interested in replanting saved Roundup Ready soybeans will need to check with their seed supplier to find out if the variety they are interested in can legally be saved and replanted. In addition to the trait patent, most Roundup Ready soybeans are protected by other forms of intellectual property, such as varietal patents. These variety patents will continue to be valid after (and usually long after) the Roundup Ready trait patent expires.

Id. This website (and the associated expiring transgenic trait) belongs to Monsanto, the corporation that is the subject of Part I.B., *infra*, as well as a party to the Organic Seed Growers case discussed in Part II. After providing visitors with this introduction to the various intellectual property protections surviving on its expiring utility patent, Monsanto's site goes on to warn farmers about the dangers of "assuming" that they can save and replant its seed after its patented traits expire, noting that all seed sold under Monsanto's brand is not necessarily developed by Monsanto breeders. *Id.* Adding to the complexity, some of the varieties it offers have been in-licensed by Monsanto from third party breeders, requiring a separate license to save and replant seed under the variety patents applicable to those seeds. *Id.* Saving Roundup Ready soybean after the patent expires, Monsanto's website warns, requires farmers "to ensure that they have applicable licenses to do so under any variety patents that cover that seed, and they will need to observe the rules about *how* that seed can be saved (e.g., only from their own farm back onto their own farm)." The company's website also claims that "any seed of Monsanto varieties that is to be saved has to be harvested from the farmer's own fields, and replanting of that seed is allowed only on that farmer's fields. It would be illegal to provide saved seed to others for replanting or to obtain saved seed from others and plant it on [one's] own farm." *Id.* (emphasis added). Thus, even the choice to save seed containing non-patented traits is not a simple one.

35. *See infra* note 50.

surprisingly, Monsanto became the target of the farmers who banded together and attempted to fight back in the Organic Seed Growers case discussed in Part II.B. Accordingly, a brief introduction to the company follows in Part I.B.

B. *The Monsanto Corporation: The Seed Wars' Most Prominent Figure*

The Monsanto Corporation is without a doubt the most significant player in the U.S. seed wars today. Although others in the Big Six occasionally play a supporting role,³⁶ Monsanto—also known as a lobbying powerhouse for biotech crop interests³⁷—is the sole entity to have landed critical cases in both the Federal Circuit and the Supreme Court in support of the seed giants' shared goal of ensuring the continuing vitality of transgenic crops in the United States.³⁸ This circumstance is no doubt due, in part, to Monsanto's size and the sheer breadth of its holdings. Starting in the mid-1990s, when transgenic seed was first planted in the United States, Monsanto began acquiring many of the independent seed businesses that were customers for its genetically engineered traits, spending over \$1 billion a year on average over the course of the next decade to buy dozens of seed companies,³⁹ a practice that attracted the scrutiny

36. See, e.g., *Syngenta Seeds, Inc. v. Delta Cotton Co-op, Inc.*, 457 F.3d 1269 (Fed. Cir. 2006). As illustrated by *Syngenta Seeds*, the other members' suits tend to be filed against smaller agricultural chemical or seed companies, though in some cases, they are filed against other members of the Big Six themselves. See, e.g., *Syngenta Seeds, Inc. v. Monsanto Co.*, 231 F. App'x 954 (Fed. Cir. 2007).

37. See Bagley, *supra* note 8, at 687 n.19 (illustrating Monsanto's lobbying effectiveness by reference to the controversial, so-called "Monsanto Protection Act," a rider attached to stopgap spending legislation that, *inter alia*, prevents courts "from interceding in the GM crop regulatory review process").

38. See, e.g., *Bowman v. Monsanto Co.*, 133 S. Ct. 1761 (2013); *Monsanto Co. v. Scruggs*, 459 F.3d 1328 (Fed. Cir. 2006); *Monsanto Co. v. McFarling*, 363 F.3d 1336 (Fed. Cir. 2004). According to the American Antitrust Institute, Monsanto was involved in approximately three-quarters of all biotechnology litigation from 2002-2009. See DIANA L. MOSS, *TRANSGENIC SEED PLATFORMS: COMPETITION BETWEEN A ROCK AND A HARD PLACE?*, AM. ANTITRUST INST. 25 (Oct. 23, 2009), http://www.antitrustinstitute.org/sites/default/files/AAI_Platforms%20and%20Transgenic%20Seed_102320091053.pdf.

39. This process, and the antitrust scrutiny it engendered, is discussed in Lina Khan, *How Monsanto Outfoxed the Obama Administration*, SALON (Mar. 15, 2013, 8:37 AM), http://www.salon.com/2013/3/15/how_did_monsanto_outfox_the_obama_administration/. For an informative listing of Monsanto's mergers and acquisitions, see *A Timeline of Acquisitions, Spin-offs, Mergers*, ST. LOUIS POST-DISPATCH (Mar. 15, 2011 4:16 PM), http://www.stltoday.com/online/article_cfe555c0-4f49-11e0-9f0b-00127992bc8b.html. See also Philip H. Howard, *Visualizing Consolidation in the Global Seed Industry: 1996-2008*, 1 SUSTAINABILITY 1266, 1274, 1275 fig. 3 (2009) (noting Monsanto's rapid takeover of the seed industry between 1996 and 2008—during which it acquired more than fifty seed companies in order to increase its access to valuable germplasm—and providing a helpful visual map of the company's ownership ties); MOSS, *supra* note 38, at 15 & n.36 (describing how Monsanto acquired almost forty companies between the late 1990s and the 2000s, accounting for about one third of mergers and acquisitions in the industry between 1995 and

of antitrust officials.⁴⁰ As a result, Monsanto is now the world's largest seed firm,⁴¹ owning a near monopoly⁴² in the genetically engineered traits that are found in close to ninety percent of the genetically modified seeds sold in the United States.⁴³

Monsanto is also likely the most controversial of the Big Six. Infamous for its role in the production of cancer-causing polychlorinated biphenyls ("PCBs")⁴⁴ and the deadly carcinogen Agent Orange,⁴⁵ it has also amassed an

1998). An updated map of consolidations in the seed industry is maintained by Professor Howard and may be accessed at <https://www.msu.edu/~howardp/seedindustry.html>.

40. See CTR. FOR FOOD SAFETY & SAVE OUR SEEDS, *Seed Giants v. U.S. Farmers*, 17 (2013), http://www.centerforfoodsafety.org/files/seed-giants_final_04424.pdf [hereinafter, CFS, *Seed Giants*]; Lim, *supra* note 27, at 134-36 (discussing antitrust investigations of Monsanto from 2007-2012); MOSS, *supra* note 38, at 25 & nn.67, & 69-70 (noting antitrust scrutiny spanning from 1998 to 2009); cf. *Lack of Transparency in the Closing of DoJ's Investigation into Monsanto's Transgenic Seed Practices Disappoints Antitrust Advocates*, AM. ANTITRUST INST. (Nov. 21, 2012), <http://www.antitrustinstitute.org/content/lack-transparency-closing-doj's-investigation-monsanto's-transgenic-seed-practices-disappoin> (describing the decision of the Antitrust Division of the Department of Justice to close a lengthy and high-profile investigation of Monsanto without any public statement).

41. CFS, *Seed Giants*, *supra* note 40, at 17; Howard, *supra* note 39, at 1274.

42. Howard, *supra* note 39, at 1274.

43. See CFS, *Seed Giants*, *supra* note 40, at 17. According to Howard, *supra* note 39, at 1279, these ownership figures may actually underestimate the amount of consolidation that Monsanto has engendered within the seed industry, as they do not take into consideration the cross-licensing agreements between the various chemical and pharmaceutical companies for transgenic seed traits. As indicated by Professor Howard's illustrated map of the network of these cross-licensing agreements, Monsanto maintains "a central position in this network, as it the only firm to have agreements with each of the other 5 firms"). *Id.*, *supra* note 39, at 1279 & fig. 6.

The consolidation has likely contributed to the growth of the problem of "superweeds," discussed *infra* at Part II.A, which have resulted from the repeated and liberal application of a single herbicide, once proprietary to Monsanto, to a majority of several crop varieties in the United States since its transgenic seeds went on the market in the mid 1990s. See Rebecca M. Bratspies, *Is Anyone Regulating? The Curious State of GMO Governance in the United States*, 37 VT. L. REV. 923, 941-43 (2013); Lee-Muramoto, *supra* note 8, at 325-27 (2012).

44. See, e.g., *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 735 (3d. Cir. 1994) (identifying Monsanto as the nation's leading manufacturer of PCBs). Monsanto has been embroiled in significant litigation over PCB contamination, see Valerie J. Watnick, *PCBs in Schools and Corporate Responsibility for Remediation: Yorktown Central School District v. Monsanto Company*, 33 ENVIRONS ENVT'L L. & POL'Y J. 231, 244 n.95 (2010) (noting PCB-related cases and settlements prior to the eponymous *Yorktown* case), spanning multiple decades, see, e.g., *Clair v. Monsanto Co.*, 412 S.W.3d 295, 313 (Mo. Ct. App. 2013) (reversing trial court's grant of summary judgment on behalf of Monsanto); *700 Million Settlement in Alabama PCB Lawsuit*, N.Y. TIMES, Aug. 21, 2003, <http://nytimes.com/2003/08/21/business/700-million-settlement-in-alabama-pcb-lawsuit.html>. The dangers of PCBs are well known, see Watnick, *supra* note 44, at 239-41; U.S. ENVIRONMENTAL PROTECTION AGENCY, HEALTH EFFECTS OF PCBs, available at <http://www.epa.gov/osw/hazard/tsd/pcbs/pubs/effects.htm>, with Congress having banned most PCB use in 1977 as part of the Toxic Substances Control Act, 15 U.S.C. § 2605(e) (2012).

enormous agricultural patent portfolio,⁴⁶ which it aggressively enforces in disputes with farmers.⁴⁷ This aggressiveness is illustrated not only by Monsanto's predilection for pursuing intimidating litigation tactics—such as seeking reimbursement of its own (often rather substantial) attorneys' fees and treble damages in suits against individual farmers⁴⁸—but also by the sheer number of farmer infringement suits it has filed since it began to enforce its transgenic seed patents in 1997—long before the Supreme Court had even upheld the validity of granting utility patents on plants in *J.E.M. Ag. Supply, Inc.*⁴⁹ As mentioned previously, by 2013, Monsanto had pursued close to 150 lawsuits against farmers and garnered many hundreds of settlements in its

45. See, e.g., *Spaulding v. Monsanto Co.*, No. 09-Civ-9470, 2011 WL 4482917, at *1 (S.D.N.Y. Sept. 28, 2011) (noting the undisputed evidence that Monsanto was in fact a producer of Agent Orange); Brian Tokar, *Monsanto: A Checkered History*, 28 *ECOLOGIST*, No. 5, at 254 (1998) (providing details of Monsanto's involvement with Agent Orange). For a recent overview of the linkage between the toxins in Agent Orange and cancer, see AM. CANCER SOC'Y, *AGENT ORANGE AND CANCER* (2014), available at www.cancer.org/cancer/cancercauses/othercarcinogens/intheworkplace/agent-orange-and-cancer.

46. Bagley, *supra* note 8, at 687; David Costa, In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers, 3 *KY. J. EQUINE, AGRIC. & NAT. RESOURCES* L. 179, 183 & n.32 (2011) (counting over 500 patents as of 2010).

47. See *Monsanto v. McFarling*, No. 4:00CV84 CDP, 2005 WL 1490051, at *5 (E.D. Mo. 2005) (recognizing Monsanto's "aggressive enforcement of its patent rights against infringing farmers," which "has had very good results for Monsanto"), *aff'd*, 488 F.3d 973 (Fed. Cir. 2007); Rita S. Heimes, *Post-Sale Restrictions on Patented Seeds: Which Law Governs?*, 10 *WAKE FOREST INTELL. PROP. L.J.* 98, 118 (2010) (noting Monsanto's aggressive pursuit of farmers and the resultant state-level legislation passed in several jurisdictions in an attempt to protect local farmers' private property interests).

48. These efforts are often rejected by courts. See, e.g., *Monsanto Co. v. Scruggs*, 890 F. Supp. 2d 729, 737-39, 742-43 (N.D. Miss. 2012) (denying Monsanto's request for attorney's fees and treble damages in a case where the farmer's infringement, which resulted from a "serious mistake" he made "by continuing to farm and sell seeds in the manner in which he had done his whole life," had occurred even before the Supreme Court in *J.E.M. Ag Supply, Inc.* had upheld the validity of the PTO's practice of granting utility patents on plant material); *Monsanto Co. v. Strickland*, 604 F. Supp. 2d 805, 820-21 (D.S.C. 2009) (finding that Monsanto had requested attorneys' fees in an amount almost ten times what was reasonably deserved and awarding enhanced damages in the amount of one times the reasonable royalty, noting that willful infringement did not mandate enhanced damages, much less treble damages); *McFarling*, 2005 WL 1490051, at *2-5 (denying both treble damages and attorneys' fees where farmer willfully infringed Monsanto's patent by "simply farm[ing] the way he had always farmed," recognizing that "the ability to harvest and replant seeds is, of course, the essence of farming, and it is a time-honored practice even in modern agriculture," and that it was "not in the least surprising that a farmer such as McFarling would legitimately and in good faith question the right of any seed company to change the way farmers have done business for centuries"). But see *Monsanto Co. v. Hargrove*, No. 4:09-CV-1628, 2011 WL 5330674 at *1, *4 (E.D. Mo. Nov. 7, 2011) (awarding both treble damages and attorneys' fees to Monsanto in a default judgment awarded against a farmer who was proceeding *pro se*).

49. See 534 U.S. 124 (2001), *supra* note 32.

efforts to protect its patents on transgenic seed traits,⁵⁰ causing a number of prominent judges to outwardly decry its litigiousness and relentless litigation strategies.⁵¹ Yet it wasn't until the latter portion of the last decade that farmers emerged from behind the line of fire, turning the tables on the seed giants and using the courts to their own advantage.⁵²

II. WEEDS, SEEDS, & DEEDS REDUX: NATURE AND FARMERS FIGHT BACK

The first case in which farmers took to the offense, *Monsanto Co. v. Geertson Seed Farms*,⁵³ was also the first case involving transgenic seed to make it all the way to the U.S. Supreme Court. There, farmers achieved their first small victory in the battle against the onslaught of the seed giants when the

50. *Organic Seed Growers II*, 718 F.3d 1350, 1355 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014) (acknowledging Monsanto's "evident history of aggressive assertion of its transgenic seed patents," numbering some "144 suits and 700 settlements" over the course of a thirteen-year period). Monsanto's website indicates that it has "only filed suit against farmers 145 times" since its transgenic seed was first grown in the United States in the mid-1990s, which it considers "really a small number" given its ownership in the seed market. *Saved Seed and Farmer Lawsuits*, MONSANTO CO., <http://www.monsanto.com/newsviews/pages/saved-seed-farmer-lawsuits.aspx> (last visited Aug. 24, 2014).

51. *See, e.g.*, Oral Argument at 13:50-14:45, *Organic Seed Growers II*, 718 F.3d 1350 (No. 2012-1298), *available at* <http://www.cafc.uscourts.gov/oral-argument-recordings/2012-1298/all> (revealing the opinion of Circuit Judge (and George W. Bush appointee) Kimberly Moore of the Federal Circuit that Monsanto was "incredibly litigious with regard to these patents," expressed as she questioned Monsanto's oralist, former U.S. Solicitor General (and Clinton appointee) Seth Waxman, about the astonishing rate of enforcement of Monsanto's seed patents compared to patents generally). *But see* *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 851 F. Supp. 2d 544, 552 (S.D.N.Y. 2012) (finding this rate of enforcement "hardly significant when compared to the number of farms in the United States," though declining to explain why the relevant data point for such a comparison was all U.S. farms), *aff'd*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

As to the doggedness with which Monsanto pursues individual cases, Chief Judge Michael Mills of the U.S. District Court for the Northern District of Mississippi recently described Monsanto's approach as follows:

... Monsanto's litigation strategy in enforcing its patent rights in this case can only be described as relentless. If this case were a boxing match, then Mr. Scruggs would presently find himself unconscious on the floor of the ring, with Monsanto standing victorious above him. Scruggs has already paid an enormous financial and personal toll for the mistakes which he has made, and the court finds the argument that he has not already been "taught a lesson" to be highly suspect.

Monsanto Co. v. Scruggs, 890 F. Supp. 2d 729, 739-40 (N.D. Miss. 2012).

52. *See* *Geertson Farms Inc. v. Johanns*, No. C-06-01075-CRB, 2007 WL 776146, at *1-3 (N.D. Cal. March 12, 2007) (awarding a preliminary injunction preventing the planting of Monsanto's transgenic alfalfa for the failure to prepare an environmental impact statement prior to deregulation of the crop). This case led to the one that which was later adjudicated by the Supreme Court in *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010), discussed *infra* at text accompanying notes 53-54.

53. *Geertson*, 561 U.S. 139 (2010).

Court recognized the risk of gene flow from transgenic to conventional crops and found that the farmer plaintiffs had standing to challenge the deregulation of some of Monsanto's transgenic seed.⁵⁴ Following on *Geertson*, independent farmers and like-minded organizations combined once again to take the offensive in *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, boldly challenging both Monsanto's patents as well as its aggressive litigation tactics.⁵⁵

Part II of this Article discusses this most recent of the farmer-led battles in the seed wars, examining the gaps, contradictions, and ambiguities left in the wake of the Federal Circuit's opinion. Not surprisingly, the farmers' argument in *Organic Seed Growers*—like that of the farmers in *Geertson*⁵⁶—relied in part upon the emergence of what are now commonly known as “superweeds,” the newest weapons in the arsenal that nature itself is utilizing in the fight against the burgeoning encroachment of the seed giants,⁵⁷ thereby investing new meaning into the debate over weeds, seeds, and deeds. Accordingly, Part II.A. examines the development of superweeds before turning to the details of the latest farmer-driven battle that is the primary subject of this chapter in the continuing drama of the seed wars, the *Organic Seed Growers* case.

A. *Superweeds: Nature's Own Weapon in the Seed Wars*

The eponymous “weeds” of the earlier *Weeds, Seeds, & Deeds* were not the weeds at the heart of the transgenic seed debate today. Rather, the weeds to which Professor Aoki referred were actually wild or long-cultivated species of plants that had been domesticated by different cultures that selected and saved seed over many generations.⁵⁸ Professor Aoki's concern with respect to these “weeds,” and more importantly, their offspring, was with who could assert control over them and how they ought to be characterized.⁵⁹ Thus, the “weeds”

54. *See id.* at 154-56. The *Geertson* case has been discussed in well over 100 law review articles, including one written by Professor Aoki himself, *see* Aoki, *Food Forethought*, *supra* note 3, at 467-69, and thus is not discussed in detail here. For a recent critique of the harms of the decision, *see* Sarah Axtell, Note, *Reframing the Judicial Approach to Injunctive Relief for Environmental Plaintiffs in Monsanto Co. v. Geertson Seed Farms*, 38 *ECOLOGY L.Q.* 317, 318 (2011) (arguing that the decision reflects the trends of a conservative Supreme Court, cutting away “at the longstanding judicial approach of granting near automatic injunctions for environmental harms”).

55. The Supreme Court denied certiorari in *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 134 S. Ct. 901 (2014), which accordingly received final resolution in the Federal Circuit, *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350 (Fed. Cir. 2013). *See* Part II.B.2, *infra*.

56. *See Geertson*, 561 U.S. at 147, 168, 170 (discussing the acknowledged risks of the transmission of transgenes and their impact on the development of pesticide-resistant weeds).

57. *See infra* notes 119-122 and accompanying text.

58. *See* Aoki, *Weeds, Seeds & Deeds*, *supra* note 3, at 249.

59. *See id.* at 249-50.

primarily served as a preface to the actual seeds of the Article's principal focus, and the "deeds"—i.e., the patents—by which their germplasm could be exclusively owned once genetically modified.⁶⁰ Of course, the "weeds" also provided the Article with a catchy title. Yet the title could not have been more prescient, as some of the more recent skirmishes in the seed wars have stemmed in part from concerns over the rise of genuine weeds, now known as "superweeds,"⁶¹ which result from the extended use of herbicides engineered to work in conjunction with particular transgenic crops' traits that have been genetically modified to withstand their application.⁶²

1. *The Emergence of Superweeds*

At the time of the earlier *Weeds, Seeds & Deeds*, which was published just over a decade ago,⁶³ superweeds were viewed in the United States as more of a theoretical concern than a crisis, spoken about in terms of risks rather than realities,⁶⁴ despite the fact that they had been documented in peer-reviewed

60. *See id.* at 249. Professor Aoki's discussion of "weeds" did, however, allow him to assess alternative models for structuring rights in germplasm developed when traditional communities could demonstrate that they had cultivated, and thus turned "weeds" into, seeds. *See id.* at 318-22. This assessment relied substantially on the works of Professors Shubha Ghosh and Rosemary Coombe, whose writings provide an excellent introduction to the debate over food sovereignty and the protection of traditional knowledge. *See* Rosemary J. Coombe, *Intellectual Property, Human Rights & Sovereignty: New Dilemmas in International Law Posed by the Recognition of Indigenous Knowledge and the Conservation of Biodiversity*, 6 *IND. J. GLOBAL LEGAL STUD.* 59 (1998); Shubha Ghosh, *The Traditional Terms of the Traditional Knowledge Debate*, 11 *CARDOZO J. INT'L & COMP. L.* 497 (2001).

61. *See Geertson*, 561 U.S. at 147, 168, 170 (discussing the failure of federal agencies to consider the risk of pesticide-resistant weeds before deregulating transgenic alfalfa that was engineered to be resistant to glyphosate, a broad-spectrum pesticide); First Amended Complaint at 4, 41, *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 851 F. Supp. 2d 544 (S.D.N.Y. 2012) (No. 11-cv-2163-NRB), 2011 WL 11819331 (arguing that Monsanto's transgenic seeds patents should be held invalid for, *inter alia*, lack of utility, due in part to the resultant rise of superweeds and their consequences: the increased use of more toxic herbicides and more labor-intensive farming methods, leading to "higher food prices, lower crop yields, rising farm costs and more pollution of land and water" (quoting William Neuman & Andrew Pollack, *Farmers Cope with Roundup-Resistant Weeds*, *N.Y. TIMES*, May 3, 2010, at B1)), *aff'd*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

62. *See* Maxwell Keith, *Transgenic Plants and Substantial Success*, 26 *J. ENV'T'L L. & LITIG.* 435, 455 (2011).

63. Aoki, *Weeds, Seeds & Deeds*, *supra* note 3.

64. *See, e.g.*, RICHARD POSNER, *CATASTROPHE: RISK AND RESPONSE* 253 (2004) (deeming the possibility of "voracious" superweeds "highly unlikely"); Alex Kozinski, *Gore Wars*, 100 *MICH. L. REV.* 1742, 1758 & n.50 (2002) (reviewing BJORN LOMBORG, *THE SKEPTICAL ENVIRONMENTALIST: MEASURING THE STATE OF THE REAL WORLD* (2001)) (calling the risk of superweeds "somewhat speculative" and opining that the risk of a pesticide-resistant superweed "may prove to be a needless worry," speculating that these risks were "not necessarily any greater than those presented by traditional crop breeding"); Ania Wiczorek, *Use of Biotechnology in Agriculture—Benefits and Risks*, *BIOTECHNOLOGY*

scientific literature as early as the mid-1990s, once the first known superweed had evolved in Australia.⁶⁵ Although apprehensions regarding the potential rise of superweeds had been voiced nearly since the introduction of transgenic crops to the market⁶⁶—even in legal academic realms⁶⁷—the possibility of the weeds’ future ubiquity was not taken seriously from a regulatory perspective.⁶⁸ When concerns about superweeds began to rise within the scientific community, the producers of transgenic traits for seeds responded by publishing papers downplaying the risk⁶⁹ and by thwarting independent

(Univ. of Haw. at Manoa Coop. Extension Serv./Coll. of Tropical Agric. & Human Res.) May 2003, at 4, available at <http://scholarspace.manoa.hawaii.edu/handle/10125/3349> (calling the chance of pollen transfer from crops resistant to glyphosate—an herbicide produced by Monsanto, see *infra* text accompanying notes 72-73—to related weeds “extremely small” though “not inconceivable,” and assuming that “affected weeds could still be controlled with other products”).

Notwithstanding the failure of these two elite judges and other scholars to catch on, the actual existence of superweeds resistant to glyphosate had already been recognized, see Stephen B. Powles et al., *Evolved Resistance to Glyphosate in Rigid Ryegrass (Lolium Rigidum) in Australia*, 46 WEED SCI. 604, 604-07 (1998), even in the legal academic literature, see Holly Saigo, Note, *Agricultural Biotechnology and the Negotiation of the Biosafety Protocol*, 12 GEO. INT’L ENVTL. L. REV. 779, 789-90 & n.75 (2000) (discussing herbicide-resistant genes that had migrated from transgenic rapeseed and sugar beets into wild relatives, as well as transgenic superweeds that had been cultivated in laboratory studies).

65. Powles, *supra* note 64, at 604-07 (documenting, in a 1998 peer-reviewed journal, evolved glyphosate resistance and mentioning preliminary studies from as early as 1996); see also Ian Heap, *Global Perspective of Herbicide-Resistant Weeds*, PEST MANAGEMENT SCI. ¶4.6 (2014) (mentioning glyphosate-resistant weeds discovered in 1996 and 1997).

66. See, e.g., P.J. Regal, *Scientific Principles for Ecologically Based Risk Assessment of Transgenic Organisms*, 3 MOLECULAR ECOLOGY 5, 6, 10 (1994); see generally, Thomas R. Mikkelsen et al., *The Risk of Crop Transgene Spread*, 380 NATURE 31 (1996).

67. See, e.g., Mary Jane Angelo, *Genetically Engineered Plant Pesticides: Recent Developments in the EPA’s Regulation of Biotechnology*, 7 U. FLA. J.L. & PUB. POL’Y 257, 287 (1996); John Charles Kunich, *Mother Frankenstein, Doctor Nature, and the Environmental Law of Genetic Engineering*, 74 S. CAL. L. REV. 807, 817-18 (2001); Sean D. Murphy, *Biotechnology and International Law*, 42 HARV. INT’L L.J. 47, 59 (2001).

68. See James Kling, *Could Transgenic Supercrops One Day Breed Superweeds?*, 274 SCIENCE, Oct. 11, 1996 at 180-81 (quoting federal officials as saying it is “the company’s responsibility to protect their investments by making sure that transgenic crops don’t lend their genetic strength to weeds”); Stephen McCaffrey, *Biotechnology: Some Issues of General International Law*, 14 TRANSNAT’L L. 91, 93, 98 (2002) (discussing the threat of superweed development and noting that the U.S. regulatory agencies that had been given the authority to review transgenic crops were not yet coordinated, with the USDA itself admitting that its system for evaluating applications for genetically engineered plants was “still evolving” and the National Academy of Sciences having found that the USDA did not have an adequate scientific basis for some of its approvals). This was particularly so in the United States. Europe, on the other hand, took at least some early measures to address superweed concerns. See, e.g., Kunich, *supra* note 67, at 817-18 (discussing the British government’s destruction of an experimental field of herbicide-resistant oilseed rape plants, which had successfully pollinated nearby “natural” plants).

69. See Laura D. Bradshaw et al., *Perspectives on Glyphosate Resistance*, 11 WEED TECH. 189, 189 (1997) (opining, in an article co-authored by several Monsanto Company

research on patented transgenes suspected of contributing to the threat of superweed development, leaving regulators with little independent evidence upon which to judge the weeds' potential impact and take prophylactic action.⁷⁰ As a result, the superweed "threat" was left to grow into a reality.

And grow it did. As Monsanto's market power and stronghold on transgenic seed traits intensified through the rampant acquisition of independent seed firms as discussed in Part I.B,⁷¹ farmers concomitantly began to adopt, at historic rates, Monsanto's "Roundup Ready" crop seeds.⁷² Because these seeds are genetically modified to be resistant to glyphosate, a tie-in herbicide marketed by Monsanto under the trademarked name "Roundup," farmers could douse their entire Roundup Ready crops—rather than just the weeds—with Roundup, leaving the crops intact while killing unwanted weed growth.⁷³ Application of Roundup to U.S. crops quickly became ubiquitous, and as it did, nature found a way to fight back by spawning the growth of numerous varieties of glyphosate-resistant superweeds.⁷⁴

employees, that "the complex manipulations that were required for the development of glyphosate-resistant crops are unlikely to be duplicated in nature to evolve glyphosate-resistant weeds").

70. See Rex Dalton, *Superweed Study Falts as Seed Firms Deny Access to Transgene*, 419 NATURE 465, 465 (2002) (relating how Pioneer Hi-Bred and Dow AgroSciences, two of the "Big Six" transgenic seed giants, *supra* note 6, blocked a follow-up study by a plant ecologist by withdrawing access to their patented transgenes after the scientist's research revealed a superweed threat, frustrating what was described as "one of the first really good experiments" to examine transgene flow to the wild).

For a discussion of how agribusinesses have restricted independent research on transgenes and the failure of regulatory agencies to act as a check on industry's control over such research data, see Emily Waltz, *Under Wraps*, 27 NATURE BIOTECHNOLOGY 880, 882 (2009). See also *A Seedy Practice*, SCI. AM., Aug. 2009, at 28 (noting that Monsanto, Pioneer, and Syngenta prohibit the use of seeds for independent research through their user agreements and that "only studies that the seed companies have approved ever see the light of a peer-reviewed journal," calling on biotech companies to remove research restrictions from end-user agreements and on the U.S. Environmental Protection Agency to require independent research access to new seed as a condition of approving them for sale); cf. Zhen Lei et al., *Patents Versus Patenting: Implications of Intellectual Property Protection for Biological Research*, 27 NATURE BIOTECHNOLOGY 36-40 (2009) (finding that even though research exemptions exist to allow academic investigation of patented materials, researchers still feel thwarted in their work due to the increased complexities involved with patent protection, such as poorly administered material transfer agreements).

On the failure of the current regulatory scheme in the United States to adequately address the threat of superweeds in particular, see Bratspies, *supra* note 43, at 926; Margaret Sova McCabe, *Superweeds and Suspect Seeds: Does the Genetically-Engineered Crop Deregulation Process Put American Agriculture at Risk?*, 1 U. BALT. J. LAND & DEV. 109, 115-17 (2012); Lee-Muramoto, *supra* note 8, at 315-16.

71. See *supra* notes 39-43, 46, and accompanying text.

72. See Mortensen et al., *Navigating a Critical Juncture for Sustainable Weed Management*, 62 BIOSCIENCE 75 (2012).

73. See *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1764 (2013).

74. FOOD AND WATER WATCH, SUPERWEEDS: HOW BIOTECH CROPS BOLSTER THE PESTICIDE INDUSTRY 42 (2013), <http://www.foodandwaterwatch.org/reports/superweeds>.

Weed scientists began to notice the new superweeds in the United States as early as 2000,⁷⁵ by which point about forty-five million acres of U.S. cropland were devoted to the cultivation of herbicide-tolerant corn and soy.⁷⁶ By 2005, eight different weed species worldwide had developed such resistance.⁷⁷ Five years later, that number had more than doubled,⁷⁸ putting nature at what at first appeared to be center stage in its own battle against the seed giants' increasing dominion over plant life in the United States.

2. *Superweeds Today*

Today, almost all corn, soy, and cotton fields in the United States are sprayed with glyphosate,⁷⁹ with the planting of herbicide-tolerant corn and soy nearly tripling since 2000.⁸⁰ With the attendant rise of glyphosate-resistant superweeds (of which the United States now harbors fourteen different species⁸¹ spanning across some seventy million acres of cropland⁸²), many farmers in the United States have found themselves in the position of having to spend twice as much on weed control than they had in prior years.⁸³ This is because the superweeds—some of which can reach heights of eight feet⁸⁴ or twelve feet,⁸⁵ span four inches in stem width,⁸⁶ and grow at an astonishing rate

75. See Mark J. VanGessel, *Glyphosate-Resistant Horseweed from Delaware*, 49 WEED SCI. 703, 703 (2001).

76. FOOD AND WATER WATCH, *supra* note 74, at 4 (citing an analysis of USDA and National Agricultural Statistics Service data).

77. Vijay K. Nandula et al., *Glyphosate-Resistant Weeds: Current Status and Future Outlook*, OUTLOOKS ON PEST MGMT. 183, 183 (2005).

78. See Jerry M. Green & Micheal D. K. Owen, *Herbicide-Resistant Crops: Utilities and Limitations for Herbicide-Resistant Weed Management*, J. AGRIC. & FOOD CHEMISTRY 5819, 5819 (2010) (identifying nineteen glyphosate-resistant superweeds).

79. FOOD AND WATER WATCH, *supra* note 74, at 4 & fig. 2.

80. Donnelle Eller, *'Superweeds' Choke Farms*, DES MOINES REG., June 23, 2014, <http://www.desmoinesregister.com/story/money/agriculture/2014/06/22/superweeds-choke-farms/11231231> (citing a USDA report identifying 160 million transgenic corn and soybean acres planted in 2013). *But see* FOOD AND WATER WATCH, *supra* note 74, at 4 (indicating that this figure is actually closer to having quadrupled, rising from 45 million acres in 2000 to 160 million in 2013).

81. Heap, *supra* note 65, at 1309 ¶4.6.

82. Eller, *supra* note 80.

83. Scott Kilman, *Superweeds Hit Farm Belt, Triggering New Arms Race*, WALL ST. J., June 4, 2010, at A16.

84. UNION OF CONCERNED SCIENTISTS, THE RISE OF SUPERWEEDS—AND WHAT TO DO ABOUT IT 3 (2013), available at http://www.ucsusa.org/assets/documents/food_and_agriculture/rise-of-superweeds.pdf; see also Eller, *supra* note 80 (describing Palmer amaranth reaching seven feet in height and creating millions of highly-spreadable seeds with each plant); Kilman, *supra* note 83, at A16 (describing pigweed growing “six feet high on a stalk like a baseball bat,” which has proven strong enough to damage some harvesting machinery).

85. FOOD AND WATER WATCH, *supra* note 74, at 8 (describing waterhemp, the seeds of which can persist in soil for up to four years, and the pollen of which can travel more than

of two⁸⁷ to three inches per day⁸⁸—require farmers to resort to more expensive methods of weed control such as hand-weeding and plowing, and to the application of older, more toxic herbicides in order to deal with the problems they pose.⁸⁹ Thus, nature’s fight in the seed wars knows no bounds, posing challenges not just for the seed giants themselves, but for its allies against the giants as well.

As a result, some farmers have even been driven out of business.⁹⁰ Some agrochemical companies, on the other hand, are experiencing a renewed heyday in the sales of alternative herbicides⁹¹ as the reach of the superweeds continues to spread. Executives at DuPont, one of the Big Six agrochemical corporations, hoping to take advantage of what they deemed a “very significant opportunity” posed by the development of Roundup-resistant superweeds, estimate that by the middle of this decade, “[s]ome 40% of U.S. land planted to corn and

half a mile, as well as Palmer amaranth, the seeds of which can travel 1,000 feet and which reduces corn yields by as much as ninety-one percent).

86. Georgina Gustin, *Resistant Weeds Leave Farmers Desperate: As Effectiveness of Herbicides Wanes, Some Try Mixtures of Older, More Toxic Chemicals, Others Pay Itinerant Workers to Weed by Hand*, ST. LOUIS POST-DISPATCH, July 17, 2011, http://www.stltoday.com/business/local/article_f01139be-ace0-502b-944a-0c534b70511c.html (describing superweeds spread by airborne pollen growing so vigorously they were “choking fields and clogging irrigation ditches so badly water [couldn’t] pass thorough”).

87. Eller, *supra* note 80.

88. Neuman & Pollack, *supra* note 61, at B1.

89. *See* Gustin, *supra* note 86 (noting costs of \$30 per acre for hand weeding and quoting an environmental analyst who pointed out the irony of the fact that farmers “were sold glyphosate as an alternative to these older pesticides, and now farmers are using them again”); Kilman, *supra* note 83, at A16 (noting one Arkansas farmer’s need to resort to the use of an “older, highly poisonous weedkiller,” and to “hire a crew of 20 laborers to attack the weeds with hoes”); Neuman & Pollack, *supra* note 61, at B1 (describing farmers in the East, Midwest, and South having to use more toxic herbicides and return to labor-intensive management techniques like plowing, even where some had been decades-long proponents of no-till agriculture); *cf.* Eller, *supra* note 80 (quoting one local Arkansas farmer as saying, in reference to the necessity of returning to traditional hand-weeding methods, “We’re farming like we did 35 to 40 years ago,” which he likened to “using a rotary-dial phone”).

90. Eller, *supra* note 80 (citing “[t]he cost of using more herbicide, buying tillage equipment, even hiring workers to hand-weed fields” as the reasons farmers are being forced out of the market).

91. Kilman, *supra* note 83, at A16 (quoting Dan Dyer, a Syngenta executive, as saying that the herbicide business, which “used to be good before Roundup nearly wiped it out,” is now “getting fun again”). Not surprisingly, the more prominent agrochemical-producing members of the Big Six are the biggest beneficiaries from the proliferation of superweeds. *See* FOOD AND WATER WATCH, *supra* note 74, at 3. As reported in a recent survey of USDA and U.S. Environmental Protection Agency (EPA) herbicide usage data, the global “crop protection” market has tripled from \$26 billion in 2001 to \$64 billion in 2012, with herbicides alone accounting for half of these sales. *Id.* During roughly the same time, Monsanto’s transgenic seed sales increased sixfold, from \$1.6 billion in 2000 to \$9.8 billion in 2012. *Id.*

soybeans is likely to harbor at least some [glyphosate]-resistant weeds.”⁹² Other estimates suggest the figure will be significantly higher. In the southeastern United States, a reported 92% of cotton and soybean fields are already infested with superweeds as a result of Roundup Ready crop technology.⁹³ These developments lead inevitably to the question of whether our current superweed crisis is just the result of just poor genetic engineering, or whether calculated obsolescence engineering⁹⁴ also had a part to play.

Either way, as nature takes the reins in the fight against the corporate appropriation of its germplasm, the resulting losses continue to mount on multiple levels. This is because the problems caused by the emergence of superweeds compound themselves as the Big Six try to respond to nature’s force. As glyphosate resistance spreads among weed populations, not only are the economic advantages that were promised to accompany the adoption of transgenic, herbicide-resistant crops offset, but so are the environmental advantages, as farmers have responded by raising application rates⁹⁵ and turning to stronger herbicides in addition to glyphosate.⁹⁶ These more powerful alternatives include Monsanto’s recommended 2,4-D, a component of Agent Orange⁹⁷ that has been banned in some countries because of its health and environmental effects.⁹⁸ Monsanto and its competitors have also responded to

92. *Id.*

93. UNION OF CONCERNED SCIENTISTS, *supra* note 84, at 3.

94. Engineered obsolescence, sometimes referred to as planned obsolescence, has been described as “a business strategy in which the obsolescence . . . of a product is planned and built into it from its conception . . . [s]o that in the future the consumer feels a need to purchase new products and services that the manufacturer brings out as replacements for the old ones.” *Planned Obsolescence*, THE ECONOMIST (Mar. 23, 2009), <http://www.economist.com/node/13354332>.

95. FOOD AND WATER WATCH, *supra* note 74, at 6 & fig. 5 (noting a 26% increase in herbicide use between 2001 and 2010, as farmers applied more herbicide to combat glyphosate resistance).

96. See JORGE FERNANDEZ-CORNEJO ET AL., U.S. DEP’T OF AGRIC., ECON. RESEARCH REPORT NO. 162, GENETICALLY ENGINEERED CROPS IN THE UNITED STATES 25 (2014); Andrew Pollack, *Study Says Overuse Threatens Gains from Modified Crops*, N.Y. TIMES, Apr. 13, 2010, available at <http://www.nytimes.com/2010/04/14/business/energy-environment/14crop.html> (citing a National Research Council report concluding that overuse of genetically engineered crop technology “is threatening to erode the gains,” warning that the return to more environmentally damaging practices is a problem that “require[s] national attention”); cf. Neuman & Pollack, *supra* note 61, at B1 (noting analyst sentiments that “[t]he biotech industry is taking us into a more pesticide-dependent agriculture when they’ve always promised, and we need to be going in, the opposite direction”).

97. *Agent Orange: Background on Monsanto’s Involvement*, MONSANTO CO., <http://www.monsanto.com/newsviews/pages/agent-orange-background-monsanto-involvement.aspx> (last visited Nov. 6, 2014).

98. See Keith, *supra* note 62, at 455-56 (noting Monsanto’s recommendation that 2,4-D be mixed with Roundup “when glyphosate resistance to glyphosate is suspected”). But see Andrew Pollack, *Dow Corn, Resistant to a Weed Killer, Runs into Opposition Battle Over an Engineered Crop*, N.Y. TIMES, Apr. 25, 2012, available at <http://www.nytimes.com/2012/04/26/business/energy-environment/dow-weed-killer-runs->

the superweed crisis by developing new genetically modified crops resistant to 2,4-D and similar herbicides, developments that scientists fear will result in the increased use of more dangerous chemicals, leading in turn to even greater superweed growth.⁹⁹ If these new crops are widely grown, weed scientists project a doubling of the use of these more toxic herbicides over the next decade.¹⁰⁰ Perhaps even more significantly, some superweed species are already developing resistance to the alternative herbicides that are being used to combat their growth,¹⁰¹ leaving farmers with what the president of the Arkansas Association of Conservation Districts told reporters from the *New York Times* is “the single largest threat to production agriculture that we have ever seen.”¹⁰²

Even farmers who don’t rely on transgenic seed and herbicides are being affected by the problem, as herbicides can easily spread to both organic and conventional crops, some of which can be severely damaged by even small amounts of these more toxic herbicides.¹⁰³ These difficulties are only expected

into-opposition.html (“Most experts agree that the harm from Agent Orange was caused primarily by its other ingredient . . .”). Efforts to ban 2, 4-D in the United States, most prominently by the National Resources Defense Council, have failed at the hands of the EPA. *See* 2, 4-D; Order Denying NRDC’s Petition to Revoke Tolerances, 77 Fed. Reg. 23,135 (Apr. 18, 2012) (to be codified at 40 C.F.R. pt. 180). Nevertheless, public health advocates maintain, on the basis of “compelling evidence from peer-reviewed studies around the world,” that 2,4-D poses serious human health impacts. Anna Lappé, *Agent Orange from Farm to Table*, AL JAZEERA AMERICA (Mar. 12, 2014, 8:00 AM), <http://america.aljazeera.com/opinions/2014/3/agent-orange-farmtotableherbicidemonstodowchemicalagriculture.html> (citing, *inter alia*, a National Cancer Institute Study, which found increased risk of developing non-Hodgkin’s lymphoma in farmers exposed to 2,4-D, as well as the EPA’s own fact sheet, which “notes that the chemical has shown toxic effects on the thyroid and gonads”).

99. *See* UNION OF CONCERNED SCIENTISTS, *supra* note 84, at 4, 6 (anticipating a “nightmare scenario” of multiple-herbicide-resistant weeds); Brandon Keim, *New GM Crops Could Make Superweeds Even Stronger*, WIRED (May 1, 2012, 6:30 AM), <http://www.wired.com/2012/05/new-superweed-evolution/all>; Neuman & Pollack, *supra* note 61, at B1; UNION OF CONCERNED SCIENTISTS, *supra* note 84, at 4, 6 (anticipating a “nightmare scenario” of multiple-herbicide-resistant weeds.)

100. UNION OF CONCERNED SCIENTISTS, *supra* note 84, at 4.

101. Heap, *supra* note 65, at 1309 ¶ 4.6 (noting that two weed varieties in the southern and mid-western United States “have the greatest economic impact of all glyphosate-resistant weeds because they are widespread in Roundup Ready® crops and they have already evolved resistance to other herbicides”); Lappé, *supra* note 98 (noting that the trade journal *Weed Science* had just reported on “new, previously undocumented 2,4-D-resistant weeds,” which will expand as the newly engineered crops encourage more spraying of 2,4-D); Pollack, *supra* note 98, at B1 (noting that Nebraska scientists have already discovered a weed that is resistant to 2,4-D: a type of waterhemp, which is “perhaps the most troublesome weed in the Corn Belt”).

102. Neuman & Pollack, *supra* note 61, at B1.

103. *See* Doug Doohan & Dave Scurlock, *Herbicide Drift Plagues Ohio Vineyards in 2013*, MIDWEST WINE PRESS (July 30, 2013), <http://midwestwinepress.com/2013/07/30/herbicide-drift-plagues-ohio-vineyards-in-2013> (describing the destruction of entire crops of grapes from the drift of 2, 4-D from soybean

to increase as the more dangerous herbicides are applied with increasing frequency, as these herbicides are highly prone to drifting on wind and volatilize in the air after application, allowing them to settle quite far from where they are sprayed.¹⁰⁴ Because such herbicides are highly toxic to broadleaf plants (which include many of the most common fruit and vegetable crops), these high-value traditional crops may become jeopardized as the volatilized herbicides spread beyond the resistant cotton and soybean crops engineered to withstand their application.¹⁰⁵

Given the developing state of affairs and scientists' projections for future harm, it was only a matter of time before the farmers who bore some of the financial risks of these developments and were increasingly being targeted in infringement actions took their concerns to the courts, first in *Monsanto Co. v. Geertson Seed Farms*¹⁰⁶ and later in the *Organic Seed Growers* case, discussed in Part II.B *infra*. Yet in neither case did the courts sufficiently respond to the seriousness of the harm brought on by the emergence and rapid development of superweeds, a weapon in nature's arsenal that will thus doubtless continue to wield great strength in the continuing battle against the power of the seed giants to take hold of nature's creations.

B. *Farmers Take the Offense: Organic Seed Growers & Trade Ass'n v. Monsanto Co.*

The *Organic Seed Growers & Trade Association* (OSGATA) case is emblematic of a pattern of marginal social advancement and substantial judicial retrenchment happening in the seed wars today. It is also emblematic of the courts' tendencies in transgenic seed cases to leave open fundamental questions of substance raised by the parties, while creating gaps, conflicts, and ambiguities ripe for exploitation by future courts and litigants. As the remainder of this Article demonstrates, despite a few key advances made by the plaintiffs in the suit, ultimately, the OSGATA farmers were left with numerous open questions that the Federal Circuit failed to resolve, particularly with regard to the plaintiffs' substantive concerns. In addition, the Federal Circuit perpetuated rules for standing in the case that make it difficult for future litigants to pick up the fight where the OSGATA plaintiffs left off. In order to understand the Federal Circuit's ultimate approach, it is helpful first to examine the arguments and authority initially relied upon by the parties and the district court in some detail. Thus, Part II.B.1 begins with a discussion of the case as it was presented and resolved in the lower court before moving on in Part II.B.2

fields and noting that “[t]he days of escaping the impact of occasional herbicide drift are likely to be over soon,” as 2, 4-D and diacamba “concentrations of as little as 1/1000th of a field rate can cause symptom development”).

104. See UNION OF CONCERNED SCIENTISTS, *supra* note 84, at 4.

105. See *id.*

106. 561 U.S. 139 (2010).

to examine the opinion of the Federal Circuit that put an end to the OSGATA plaintiffs' claims.

1. *In the District Court*

In 2011, plaintiffs representing a “broad array” of both conventional and organic agriculture communities brought suit against Monsanto to challenge the patents on its transgenic seed, in large part so as to avoid being sued as inadvertent infringers.¹⁰⁷ The plaintiffs represented “thirty-six agriculture and food safety membership organizations, fourteen seed businesses and thirty-three farms and farmers,”¹⁰⁸ all of whom did “not want to use or sell transgenic seed” but who nevertheless feared inevitably doing so “despite using their best efforts to avoid it,” due to the rising threat of contamination from the “proliferation of transgenic seed.”¹⁰⁹ As a result of this threat, the plaintiffs alleged that they were forced to take costly precautions to avoid infringement, which included forgoing the opportunity to grow on their land a large number of crops that are particularly subject to contamination,¹¹⁰ adopting expensive testing to detect contamination,¹¹¹ and relinquishing the productive use of certain portions of their farms so as to create “buffer zones” around their crops.¹¹²

The plaintiffs framed their complaint as an action for a declaratory judgment, seeking a determination that they were “not infringing various of [Monsanto’s] patents, that those patents [were] invalid and unenforceable, and that, regardless, [Monsanto] would be entitled to no remedies” against them.¹¹³ The principal legal basis for the requested relief, according to the plaintiffs, was that Monsanto’s patents on transgenic seed traits failed to satisfy the requirement of both the Constitution¹¹⁴ and the U.S. Patent Act¹¹⁵ “that only technology with a beneficial societal use may be patented.”¹¹⁶ This was so, they argued, primarily because “Monsanto’s transgenic seed is ‘injurious to the well-being, good policy, or sound morals of society’ and threatens to ‘poison

107. Complaint at 3-5, *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544 (S.D.N.Y. 2012) (No. 11 Civ. 2163(NRB)), 2011 WL 1126563 [hereinafter, *OSGATA Complaint*].

108. First Amended Complaint at 4, *Organic Seed Growers*, 851 F. Supp. 2d at 544 [hereinafter, *OSGATA First Amended Complaint*].

109. *Id.* at 1.

110. *Id.* at 33-34.

111. *Id.* at 36-37.

112. *Id.* at 37.

113. *Organic Seed Growers*, 851 F. Supp. 2d at 547.

114. U.S. CONST. art. I, § 8, cl. 8 (promoting “the Progress of Science and useful Arts”).

115. 35 U.S.C. § 101 (2013) (providing for patents for the invention or discovery of “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof”).

116. *OSGATA First Amended Complaint*, *supra* note 108, at 2.

people.”¹¹⁷

As evidence for their assertion that Monsanto’s patents lacked the requisite utility to be valid under the Patent Act, the plaintiffs identified a multitude of reasons why Monsanto’s transgenic seed causes harm, both to those farmers whose crops suffer contamination from the seed as well as to those farmers whose crops escape it.¹¹⁸ Among these reasons was the fact that “the increased use of glyphosate caused by Monsanto’s transgenic seed has in turn caused weeds to become resistant to the herbicide.”¹¹⁹ Plaintiffs explained how the rise of glyphosate-resistant superweeds forced farmers “to spray fields with more toxic herbicides, pull weeds by hand and return to more labor-intensive methods like regular plowing,”¹²⁰ describing how this “increases costs, reduces production, and exacerbates environmental harms.”¹²¹ Thus, the issue of harm associated with superweeds, glyphosate, and glyphosate-resistant seed was placed squarely before the district court by the allegations in the plaintiffs’ complaint.¹²²

However, on the day on which the plaintiffs filed suit, Monsanto republished on its blog its “commitment not to exercise their [sic] patent rights over inadvertently acquired trace amounts of patented seeds or traits.”¹²³ The plaintiffs responded by requesting that Monsanto make an express waiver of future infringement claims against them “by providing a written covenant not to sue.”¹²⁴ Framed with the correct breadth, this would have been sufficient to moot the controversy and save the courts tremendous judicial resources.¹²⁵

117. *Id.* (quoting Justice Story’s opinion in *Lowell v. Lewis*, 15 F. Cas. 1018 (C.C.D. Mass. 1817)).

118. *Id.* at 36-43.

119. *Id.* at 41.

120. *Id.* (quoting Neuman & Pollack, *supra* note 61, at B1).

121. *Id.* at 41.

122. In addition to their superweed-based evidence, the plaintiffs argued other grounds for invalidity of Monsanto’s patents in transgenic seed traits, including some of the health risks associated with the application of Roundup: endocrine disruption and the increased risk of certain cancers and immune problems in humans and increased miscarriages in livestock. *See id.* at 38-39. Likewise, the plaintiffs cited the health risks associated with transgenic seed consumption and the risk of expenses resulting from crop contamination as other factors contributing to the invalidity of Monsanto’s patented seed traits. *See id.* at 36-38, 40. All of these allegations, as well as the plaintiffs’ superweed-based allegations, appeared in both the original as well as the First Amended complaints. Compare OSGATA Complaint, *supra* note 107, at 25-34, with OSGATA First Amended Complaint, *supra* note 108, at 36-43.

123. *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544, 549 (S.D.N.Y. 2012), *aff’d*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

124. OSGATA First Amended Complaint, *supra* note 108, at 50-51 (quoting Plaintiff’s request to Monsanto).

125. *See* *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 726-29 (2013) (finding controversy over trademark infringement suit and invalidity counterclaim mooted by trademark holder’s grant of a very broad, irrevocable covenant not to sue, which covered present, past, and future allegedly infringing activities of the accused infringer). For a more detailed discussion, *see infra* Part II.B.2.d.ii.

However, Monsanto declined, pointing the plaintiffs back to the ambiguous “commitment” that it maintained on its website.¹²⁶ This prompted the plaintiffs to argue, in their First Amended Complaint, that Monsanto’s decision not to provide the plaintiffs with the requested assurances regarding the possibility of inadvertent infringement claims only increased the plaintiffs’ concerns that they were likely to be sued by Monsanto in the future.¹²⁷ The amended complaint also conceded, “[i]f Monsanto would never sue Plaintiffs for patent infringement, the validity of Monsanto’s patents [would be] an irrelevant issue.”¹²⁸ In response to this development, Monsanto moved to dismiss the suit for lack of subject matter jurisdiction.¹²⁹

The district court saw these developments in a different light. Rather than interpret the plaintiffs’ attempt to secure a binding covenant not to sue as a way to moot the controversy and dispose of the case,¹³⁰ the district court averred that the plaintiffs’ letter to Monsanto was “nothing more than an attempt to *create* a controversy where none exists.”¹³¹ The court accused the plaintiffs of trying “to convert a statement that defendants have no intention of bringing suit into grounds for maintaining a case,”¹³² rather than into a binding assurance that would in fact have put an end to the case. Citing the plaintiffs’ argument as “baseless” and “their tactics not to be tolerated,”¹³³ the district court granted Monsanto’s motion to dismiss.¹³⁴ In support of its determination, despite admitting that “some unlicensed—and unintended—use of transgenic seed [by the plaintiffs] is *inevitable*,” the court found that the circumstances alleged by the plaintiffs did not amount to a substantial controversy of sufficient immediacy and reality as required by Article III of the Constitution to justify a declaratory judgment in the plaintiffs’ favor, and that there had been no injury to the plaintiffs that was traceable to Monsanto.¹³⁵

126. OSGATA First Amended Complaint, *supra* note 108, at 48 & Ex. 4.

127. *See id.* at 52-53.

128. *Id.* at 49.

129. *Organic Seed Growers*, 851 F. Supp. 2d at 550.

130. *See* *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 726-29 (2013) (discussing the Supreme Court’s support for this approach).

131. *Organic Seed Growers*, 851 F. Supp. 2d at 554 (emphasis added).

132. *Id.*

133. *Id.*

134. *Id.* at 556.

135. *See id.* at 550, 555-56 (emphasis added). A declaratory judgment plaintiff bears the burden of demonstrating that “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.” *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 127 (2007) (quoting *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941)). The Federal Circuit has modified this test to require “an injury in fact traceable to the patentee,” requiring an “affirmative act” by the patentee related to the enforcement of its patent rights,” *Ass’n for Molecular Pathology v. U.S. Patent & Trademark Office*, 653 F.3d 1329, 1343 (Fed. Cir. 2011) (citing *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1380-81 (Fed. Cir. 2007)), *vacated sub nom.* *Ass’n*

For a number of reasons, however, the district court's analysis was flawed. Because the Federal Circuit on appeal both adopted some of this flawed reasoning, and also created new contradictions and ambiguities of its own in an attempt to distance itself from some of the district court's reasoning, Subparts II.B.1.a and II.B.1.b examine the district court's errors in detail.

a. *Error 1: Not Identifying Plaintiffs as Similarly Situated to Former Monsanto Infringement Targets*

The first reason given by the district court to dismiss the plaintiffs' complaint was its determination that the plaintiffs were not similarly situated to other Monsanto infringement targets. The district court was unimpressed by the hundreds of farmer infringement complaints already filed or otherwise settled by Monsanto,¹³⁶ and it all but ignored the plaintiffs' allegations that they were having to take costly remedial measures to help thwart such suits against themselves.¹³⁷ The district court determined that because Monsanto had not in fact "commenced litigation against anyone standing in similar stead to [the] plaintiffs,"¹³⁸ they did not face the "reality of the threat of injury" that Federal Circuit precedent required in order for suits against other similarly situated parties to suffice to establish a case or controversy.¹³⁹

As evidence that Monsanto did in fact sue farmers, who, like the plaintiffs, "did not want to be contaminated by transgenic seed,"¹⁴⁰ the plaintiffs had cited well-known infringement suits filed against farmers such as Percy Schmeiser¹⁴¹

for *Molecular Pathology v. Myriad Genetics, Inc.*, 132 S. Ct. 1794 (2012), as well as "meaningful preparation" to conduct potentially infringing activity, 653 F.3d 1343 (citing *Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 880 (Fed. Cir. 2008)). For a discussion of how the Federal Circuit's modifications contradict the Supreme Court's standard, see *infra* Part II.B.1.b.

136. *See Organic Seed Growers*, 851 F. Supp. 2d at 552 (calling the 144 lawsuits and 700 settlements pursued by Monsanto in its efforts to protect its transgenic seed patent portfolio "hardly significant when compared to the numbers of farms in the United States"). *But see* Oral Argument at 13:50-14:45, *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350 (Fed. Cir. 2013) (No. 2012-1298) (Moore, J.), available at <http://www.cafc.uscourts.gov/oralargument-recordings/2012-1298/all> (questioning Monsanto on this point and positing instead that this rate of enforcement is "incredibly litigious" as compared to the rate of patent enforcements generally), *cert. denied*, 134 S. Ct. 901 (2014).

137. The court disposed of the plaintiffs' assertion that they were suffering a present injury in fact in a footnote, calling that injury one "of plaintiffs' own making." *Organic Seed Growers*, 851 F. Supp. 2d at 555 n.8.

138. *Id.* at 553.

139. *Id.* at 552 (alteration in original) (citing *Prasco, LLC v. Medicis Pharm. Corp.*, 537 F.3d 1329, 1338-39 (Fed. Cir. 2008)).

140. OSGATA First Amended Complaint, *supra* note 108, at 47.

141. *Monsanto Canada, Inc. v. Schmeiser*, [2004] 1 S.C.R. 902 (Can.). Mr. Schmeiser's traditional canola crops, which he had grown since the 1950s, were contaminated in the 1990s when an adjacent farmer began to grow Roundup Ready canola. Reply Brief of

and Roger, Rodney, and Greg Nelson.¹⁴² The court, however, distinguished these defendants as “dissimilar” to the OSGATA plaintiffs, whom the court characterized as “actively attempting to avoid the use of transgenic seed.”¹⁴³ By contrast, the court presumed, the prior farmer infringement suits relied upon by the plaintiffs had been filed against intentional infringers.¹⁴⁴ Accordingly, the court refused to recognize Monsanto’s pattern of infringement suits against these “dissimilar” defendants as affirmative acts by Monsanto sufficient to cause an injury in fact to the OSGATA plaintiffs that would create a justiciable case or controversy under the Federal Circuit’s test for standing.¹⁴⁵ Consequently, the court forwent the opportunity to reach the merits of the plaintiffs’ allegations regarding superweeds and the numerous other harms alleged to invalidate Monsanto’s patents.

The court’s analysis in attempting to separate the OSGATA plaintiffs from the prior defendants sued by Monsanto, however, was weak. As an initial matter, the court’s presumption—that the farmers mentioned by plaintiffs as examples of similarly situated individuals were all actually confirmed intentional infringers—was hardly impenetrable. The court distinguished the case filed against the Nelsons, for instance, merely on grounds that “*Monsanto alleged* that defendants had intentionally saved and replanted” its seed,¹⁴⁶ yet the court made no mention of the fact that the Nelsons put an end to their case after incurring \$200,000 in legal fees by engaging in a confidential settlement with Monsanto.¹⁴⁷ This left Monsanto’s allegations as just that—allegations, disputed by the Nelsons and not adopted as fact by any court of law. In fact, the North Dakota State Seed Arbitration Board, which had reviewed the claims against the Nelsons before Monsanto successfully enjoined them from seeking

Appellants at 12, *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 718 F.3d 1350 (Fed. Cir. 2013) (No. 2012-1298), *cert. denied*, 134 S. Ct. 901 (2014). The contamination by Monsanto’s seed “ruined several years of work that Mr. Schmeiser had dedicated to developing his own strain of canola.” Stephanie M. Bernhardt, *High Plains Drifting: Wind-Blown Seeds and the Intellectual Property Implications of the GMO Revolution*, 4 NW. J. TECH. & INTELL. PROP. 1, 11 (2005) (citing *Monsanto Can., Inc. v. Schmeiser*, [2001] F.C.J. No. 436, para. 29-30 (Can.) (QL)).

142. *Monsanto Co. v. Nelson*, No. 4:00-CV-1636, 2001 WL 34079479 (E.D. Mo. Sept. 10, 2001).

143. *Organic Seed Growers*, 851 F. Supp. 2d at 553.

144. *See id.* at 552-53 (distinguishing the cases filed against the individuals referenced in the plaintiffs’ complaint as intentional or knowing).

145. *Id.* at 553; *supra* note 135 (detailing the Federal Circuit’s modification of the Supreme Court’s test in *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 127 (2007), to require an “affirmative act” by the patentee relating to the enforcement of its patent rights in order for in “injury in fact” to exist sufficient to support jurisdiction).

146. *Organic Seed Growers*, 851 F. Supp. 2d at 553 (emphasis added).

147. *Monsanto v. U.S. Farmers*, CTR. FOR FOOD SAFETY, 41 (2005), <http://www.centerforfoodsafety.org/files/cfsmontantovsfarmerreport11305.pdf> [hereinafter, CFS, *Monsanto*].

resolution through arbitration,¹⁴⁸ had found “no support for Monsanto’s claims,”¹⁴⁹ calling into question the validity of the district court’s presumption. Likewise, the court distinguished a case against former Monsanto defendant Troy Roush, a case also relied upon by the plaintiffs as representative of an infringement suit filed against a similarly situated farmer who did not wish to use Monsanto’s seed,¹⁵⁰ on grounds that an Associated Press report “describ[ed] Monsanto’s lawsuit against Troy Roush as one involving saved seeds in violation of licensing agreements.”¹⁵¹ As with the Nelsons, Mr. Roush was only able to end the litigation with Monsanto by signing a confidential settlement agreement.¹⁵² As a result, the district court once again relied solely on disputed allegations to distinguish one of Monsanto’s prior defendants from the OSGATA plaintiffs, and not on findings of fact or conclusions of law made by any judicial tribunal. Moreover, the court did not even allege that Mr. Roush was an intentional infringer—only that his case involved “saving seeds in violation of licensing agreements,”¹⁵³ an allegation that would apply equally to *inadvertent* infringers such as the OSGATA plaintiffs themselves will be when their crops are contaminated beyond trace amounts.

The district court’s attempt to distinguish the prior suits relied upon by the plaintiffs was likewise strained in the sense that it ignored the reality that the plaintiffs’ concern was not simply that they might ultimately be found to have inadvertently infringed Monsanto’s patents (which they certainly could, despite Monsanto’s “commitment” not to sue over inadvertently acquired, trace amounts of patented seed or traits,¹⁵⁴ should their crop protection efforts fail to keep contamination levels below one percent).¹⁵⁵ Rather, the plaintiffs could also find themselves, as did the Nelsons, haled into an expensive court battle or forced into a settlement simply because “*Monsanto alleged* that [they] had intentionally saved and replanted”¹⁵⁶ its seed. Plaintiffs, in other words, arguably stand in the same shoes worn by other farmers just prior to being sued by Monsanto, not simply for undisputed, inadvertent infringement, but for what *Monsanto alleged* was knowing or intentional infringement, thereby

148. See *Nelson*, 2001 WL 34079479, at *6 (granting Monsanto’s motion to enjoin defendants from pursuing arbitration).

149. CFS, *Monsanto*, *supra* note 147, at 41.

150. OSGATA First Amended Complaint, *supra* note 108, at 47

151. *Organic Seed Growers*, 851 F. Supp. 2d at 553.

152. *Seed Saving and Legal Activities*, MONSANTO CO., <http://www.monsanto.com/food-inc/pages/seed-saving-and-legal-activities.aspx> (last visited Aug. 24, 2014) (noting that Roush also agreed not to discuss the litigation as part of the settlement).

153. *Organic Seed Growers*, 851 F. Supp. 2d at 553.

154. *Id.* at 549.

155. One percent is the upper limit on the amount of contamination that can be considered a permissible “trace amount.” *Organic Seed Growers II*, 718 F.3d 1350, 1358 (Fed. Cir. 2013) *cert. denied*, 134 S. Ct. 901 (2014).

156. *Organic Seed Growers*, 851 F. Supp. 2d at 553.

circumventing the confines of its commitment not to sue.

Finally, the cases upon which the district court relied in ruling against the plaintiffs' assertion that the prior farmer infringement suits created the reality of a threat of injury did not strengthen the court's analysis. For example, relying upon the Federal Circuit's decision in *Prasco, LLC v. Medicis Pharm. Corp.*,¹⁵⁷ the district court conceded that prior litigious conduct is relevant to the existence of an actual controversy between the parties.¹⁵⁸ "However," it noted, "one prior suit concerning different products covered by unrelated patents is not the type of pattern of prior conduct that makes reasonable an assumption that [the defendant] will also take action against [the plaintiff]."¹⁵⁹ This is an assertion that, even if true, bears such little resemblance to the circumstances facing the court that its quotation from the case is almost laughable. The OSGATA plaintiffs did not offer evidence of "one prior suit"; they offered evidence of hundreds.¹⁶⁰ Likewise, the hundreds of suits did not "concern[] different products covered by unrelated patents"; they all concerned Monsanto's transgenic seed patents. Finally, left with little else to rely on, the district court made one last attempt to undermine the plaintiffs' evidence by reframing it mathematically, claiming that the plaintiffs had "overstate[d] the magnitude of defendants' patent enforcement" with their reference to "144 patent-infringement lawsuits" rather than the court's preferred "average of roughly thirteen lawsuits per year,"¹⁶¹ a distinction that failed to impress even the Federal Circuit on appeal.¹⁶²

The district court's analytical weaknesses did not end with this aspect of its decision, however. In addition to its questionable interpretation of facts, its opinion relied in large part upon a questionable interpretation of authority. Subpart II.B.1.b below deals with these aspects of the lower court's opinion, which set the stage for the position the Federal Circuit would ultimately take on appeal.

b. *Error 2: Misapplication of the Federal Circuit's "Preparatory Conduct" Requirement*

In addition to concluding that Monsanto's prior farmer infringement suits were different than those anticipated by the OSGATA plaintiffs and thus did not satisfy the district court's requirement for affirmative acts sufficient to

157. 537 F.3d 1329, 1341 (Fed. Cir. 2008).

158. *Organic Seed Growers*, 851 F. Supp. 2d at 552.

159. *Id.* (alteration in original) (quoting *Prasco, LLC v. Medicis Pharm. Corp.*, 537 F.3d 1329, 1341 (Fed. Cir. 2008)).

160. *See id.*

161. *Id.*

162. *See supra* notes 51, 136 (discussing Judge Kimberly Moore's opinion at oral argument that these numbers evidenced an incredible litigiousness on Monsanto's part).

prove an actual injury to plaintiffs,¹⁶³ the district court also found that the plaintiffs had not undertaken any meaningful preparatory conduct that would show that their potential for infringing Monsanto's patents was a matter of immediate concern.¹⁶⁴ In fact, the court reasoned, because the plaintiffs' intent was to *avoid* infringement,¹⁶⁵ their concern about infringement accusations due to future contamination was "the same sort of intangible worry, unanchored in time, that the Federal Circuit has found 'insufficient to support an "actual or imminent" injury for standing without any specification of *when* the some day will be.'"¹⁶⁶ Here too, however, the district court's reasoning was flawed, suffering primarily from its reliance on a questionable reading of authority to support treating "preparatory conduct" on the part of the plaintiffs as *requisite* for proving that the controversy was one of sufficient immediacy,¹⁶⁷ rather than simply as *relevant* to that inquiry¹⁶⁸ under the totality of circumstances.

Although the Federal Circuit for many years applied a two-prong test for determining declaratory judgment authority that included a preparatory conduct element,¹⁶⁹ the Supreme Court in *MedImmune, Inc. v. Genetech, Inc.*¹⁷⁰ found that its own precedent contradicted the Federal Circuit's element-based¹⁷¹ approach,¹⁷² indicating in no uncertain terms that the test for determining the existence of declaratory judgment authority is, as it has been for many years, a

163. *See Organic Seed Growers*, 851 F. Supp. 2d. at 550-53.

164. *See id.* at 555 (analyzing whether the OSGATA plaintiffs had engaged in "meaningful preparation" to conduct potentially infringing activity sufficient to satisfy the "injury in fact" requirement of the Federal Circuit's modification of the Supreme Court's test for declaratory judgment jurisdiction, discussed *supra* at note 135).

165. *Id.*

166. *Id.* (quoting *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 653 F.3d 1329, 1343 (Fed. Cir. 2011) *vacated sub nom*, *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 132 S. Ct. 1794 (2012)).

167. *See id.* at 550 (noting that the Federal Circuit had "refined" the Supreme Court's test for determining declaratory judgment authority "to *require* an injury in fact traceable to the patentee, *which only exists* if plaintiffs have alleged . . . meaningful preparation to conduct potentially infringing activity" (emphasis added) (internal citations and quotation marks omitted)).

168. *See id.* at 554-55 (analyzing the plaintiffs' lack of preparatory conduct).

169. *See Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 879 (Fed. Cir. 2008).

170. 549 U.S. 118, 127 (2007).

171. *See Teva Pharms. USA, Inc. v. Pfizer, Inc.*, 395 F.3d 1324, 1335-36 (Fed. Cir. 2005) (rejecting the proposition that satisfaction of the Federal Circuit's two-part test was a prudential consideration in evaluating declaratory judgment complaints, rather than a prerequisite), *abrogated by MedImmune, Inc. v. Genetech, Inc.*, 549 U.S. 118, 127 (2007) (rejecting "the Federal Circuit's 'reasonable apprehension of suit' test (or, in its evolved form, the 'reasonable apprehension of *imminent* suit' test, [as articulated by] *Teva*") (citation omitted)).

172. *MedImmune*, 549 U.S. at 132 n.11 (citing *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941); *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 239 (1937); and *Cardinal Chem. Co. v. Morton Int'l, Inc.*, 508 U.S. 83, 89 (1993)).

flexible investigation based on the totality of circumstances.¹⁷³ As the Federal Circuit recognized in *Cat Tech LLC v. Tubemaster, Inc.*,¹⁷⁴ a case the district court itself relied upon,¹⁷⁵ the analysis for determining when a declaratory judgment action meets the case or controversy requirement has to be “calibrated to the particular facts of each case, with the fundamental inquiry being whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.”¹⁷⁶

In *Cat Tech*, however, the Federal Circuit suggested that its requirement of meaningful preparation to conduct potentially infringing activity survived abrogation by *MedImmune*, reasoning that the Supreme Court only disapproved of the first prong of its two-prong test, known as the “reasonable apprehension of suit” element, leaving the preparatory conduct element intact.¹⁷⁷ Although admitting that the Court “articulated a more lenient legal standard” than the Federal Circuit’s test,¹⁷⁸ and despite paying lip service to the notion that the preparatory conduct inquiry is just one “element in the totality of the circumstances which must be *considered*,”¹⁷⁹ the Federal Circuit in *Cat Tech* maintained, relying on its own pre-*MedImmune* precedent, that “[i]f a declaratory judgment plaintiff has not taken significant, concrete steps to conduct infringing activity, the dispute is neither ‘immediate’ nor ‘real’ and the requirements for justiciability have not been met,”¹⁸⁰ thus improperly reading preparatory conduct as a bright-line, outcome-determinative *requirement* back into what *MedImmune* indicated was a case-by-case assessment based upon the totality of the circumstances revealing a sufficient controversy between the parties.¹⁸¹

173. *See id.* at 127.

174. 528 F.3d 871 (Fed. Cir. 2008).

175. *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544, 550-51, 555 (S.D.N.Y. 2012), *aff’d*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

176. *Cat Tech*, 528 F.3d at 879 (internal quotation marks omitted) (quoting *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 127 (2007)).

177. *See id.* at 879. *But cf.* *Benitec Austl., Ltd. v. Nucleonics, Inc.*, 495 F.3d 1340, 1343-44 (Fed. Cir. 2007) (making a determination about whether a dispute was sufficiently immediate, post-*MedImmune*, by relying on the jurisdictional standard for declaratory judgment as set forth by *MedImmune*, without utilizing, or even addressing the continued viability of, the Federal Circuit’s preparatory conduct element); *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1380 n.2 (Fed. Cir. 2007) (leaving for another day the effect of *MedImmune*, if any, on the preparatory conduct element).

178. 528 F.3d at 880 (internal quotation marks omitted) (citing *Micron Tech, Inc. v. Mosaid Techs., Inc.*, 518 F.3d 897 (Fed. Cir. 2008)).

179. *Id.* (emphasis added).

180. *Id.* (citing *Lang v. Pac. Marine & Supply Co.*, 895 F.2d 761 (Fed. Cir. 1990)).

181. *See MedImmune*, 549 U.S. at 127 (noting that its declaratory judgment standing precedents, dating back to the 1930s and 40s and reiterated in *MedImmune* itself as indicating the proper standard for analysis, “do not draw the brightest of lines between those

The Supreme Court's opinion in *MedImmune*, however, belies the Federal Circuit's approach, as well as that of the district court in relying upon that approach. *MedImmune* indicated that the Court's disapproval of the Federal Circuit's test for declaratory judgment jurisdiction went beyond just its "reasonable apprehension" prong, noting that its opinion in *Altvater v. Freeman*¹⁸² contradicts not only "the Federal Circuit's 'reasonable apprehension of suit' test" but also "its evolved form, the 'reasonable apprehension of imminent suit' test."¹⁸³ This suggests that the Federal Circuit's approach to imminence—which is precisely what the preparatory conduct prong of the Federal Circuit's test is meant to address¹⁸⁴—was also out of line after *Altvater* and prior to *MedImmune*, which meant to correct the Federal Circuit's bright-line, element-based approach by reiterating the flexible, circumstances-based standard that had been the Court's rule for many years.¹⁸⁵ In *Altvater*, the Court had held that a licensee's failure to cease payment of royalties did not render a dispute over the validity of a patent nonjusticiable (rejecting the notion that no real controversy existed between the parties as long as the payments continued to be made), because stopping the payments would have had the counterproductive consequence of risking "actual [and] treble damages in infringement suits" by the patentees.¹⁸⁶

This is precisely the same risk that the "preparatory conduct" rule would require that the OSGATA plaintiffs take in order to create a justiciable controversy if it is taken to be an elemental requirement.¹⁸⁷ However, the Supreme Court in *Altvater* indicated that such a choice was *not* a requirement

declaratory-judgment actions that satisfy the case-or-controversy requirement and those that do not" and consider "the facts alleged, under all the circumstances" (internal citations omitted)).

182. 319 U.S. 359 (1943).

183. 549 U.S. at 132 n.11 (internal citation omitted).

184. See *Organic Seed Growers*, 851 F. Supp. 2d at 555 (noting that the purpose of considering the plaintiffs' conduct is to determine the immediacy and reality of the dispute).

185. See *MedImmune*, 549 U.S. at 127 (citing *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 240-41 (1937) and *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941); *supra* note 181 (noting *MedImmune*'s determination that these cases do not reveal bright-line analytical rules for determining declaratory judgment jurisdiction).

Curiously, not only did the district court's declaratory judgment jurisdiction analysis in *Organic Seed Growers* fail to supplant the Federal Court's two-part test with the decades-old analytical framework reiterated in *MedImmune*, but it instead adopted a tripartite structure premised on its own post-*MedImmune*, refined two-part test serving as "all the circumstances" to be considered under *MedImmune*. See 851 F. Supp. 2d at 550-51, 554-56 (considering, in part A, "Defendants' Affirmative Acts"; in part B, "Plaintiffs' Preparatory Conduct"; and in part C, "All the Circumstances," treating "all the circumstances" as those "outlined above" in parts A and B).

186. 319 U.S. at 364-66.

187. See *Organic Seed Growers*, 851 F. Supp. 2d at 555 (reasoning that the plaintiffs' efforts to avoid infringement—which the court recognized was "inevitable," *id.* at 548—rendered their anticipation of infringement suits "insufficient to support an actual or imminent injury for standing" (internal quotation marks and citation omitted)).

for a sufficiently immediate case or controversy.¹⁸⁸ Thus, when the Court in *MedImmune* relied on *Altwater* to hold that declaratory judgment jurisdiction was not eliminated where the plaintiffs' own acts, taken under compulsion, eliminated the imminence of the threat of harm,¹⁸⁹ and simultaneously disapproved what it distinguished as the Federal Court's "reasonable apprehension of *imminent* suit" test,¹⁹⁰ it stands to reason that it was disapproving of the element-oriented imminence analysis contemplated by the preparatory conduct element of the Federal Circuit's test for the availability of declaratory judgment jurisdiction.¹⁹¹ Thus, contrary to the district court's presumption that a dispute cannot be real or immediate if concrete steps to conduct infringing activity have not been taken,¹⁹² the OSGATA plaintiffs' position was supported by the Supreme Court in *MedImmune*, which indicated that "[t]he rule that a plaintiff must . . . bet the farm, or (as here) risk treble damages . . . before seeking a declaration of its actively contested legal rights finds no support in Article III."¹⁹³ Likewise, the OSGATA plaintiffs should not have had to cease taking measures to mitigate—or even to stave off completely—what the district court noted would be some "inevitable" unlicensed and unintended use of Monsanto's transgenic seed¹⁹⁴ and thereby "risk actual [and] treble damages in infringement suits by the patentee[]"¹⁹⁵ in order to seek a declaration of their legal rights.

188. See 319 U.S. at 364-66.

189. See 549 U.S. at 130-32 & n.11.

190. *Id.* at n.11.

191. This interpretation is supported by a later case from the Federal Circuit itself that was not relied upon by the district court. In *Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*, 556 F.3d 1294 (Fed. Cir. 2009), the Federal Circuit acknowledged *MedImmune*'s intent to broaden the Federal Circuit's narrow approach:

The Court [in *MedImmune*] explained that the Federal Circuit's requirements, specific to patent cases, that there be both a threat or other action by the patentee sufficient to create a reasonable apprehension of infringement suit, and present activity that could constitute infringement or concrete steps taken with the intention to conduct such activity, were more rigorous than warranted by the principle and purpose of declaratory actions. The Court held that all of the circumstances must be considered for each particular case.

. . . [T]he Court did change the Federal Circuit's rule that there must be either actual infringement or active preparation to infringe accompanied by a reasonable apprehension of imminent suit, for those circumstances were not present on the facts of *MedImmune*. Instead, the Court imposed a totality-of-the-circumstances test for deciding whether there is indeed an actual controversy, on the particular facts and relationships involved.

Id. at 1297 (citing *MedImmune*, 549 U.S. 118, 127 (2007)).

192. 851 F. Supp. 2d at 551 (quoting *Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 880 (2008)).

193. 549 U.S. at 134.

194. *Organic Seed Growers*, 851 F. Supp. 2d at 548.

195. *MedImmune*, 549 U.S. at 132 (first alteration in original) (internal quotation marks omitted) (quoting *Altwater v. Freeman*, 319 U.S. 359, 365 (1943)).

As the Supreme Court recognized in *MedImmune*, where declaratory judgment plaintiffs under circumstances such as these have

eliminated the imminent threat of harm by simply not doing what [they] claimed the right to do . . . [their forbearance] did not preclude subject-matter jurisdiction because the threat-eliminating behavior was effectively coerced. The dilemma posed by that coercion—putting the challenger to the choice between abandoning his rights or risking prosecution—is a dilemma that it was the very purpose of the Declaratory Judgment Act to ameliorate.¹⁹⁶

Thus, instead of putting the OSGATA plaintiffs to this choice (which is precisely what the district court did by applying the Federal Circuit’s “refine[ment]” of *MedImmune*¹⁹⁷), the court should have evaluated their jurisdictional status under the standard set forth by the longstanding decisions of the Supreme Court that *MedImmune* reiterated were applicable in the patent context:

Our decisions have required that the dispute be definite and concrete, touching the legal relations of parties having adverse legal interests, and that it be real and substantial and admi[t] of specific relief through a decree of conclusive character, as distinguished from an opinion advising what the law would be upon a hypothetical set of facts.¹⁹⁸

As the Court further clarified, under circumstances that mirrored those faced by the OSGATA plaintiffs in terms of the dilemma they faced by having to choose between abandoning their rights or facing the risk of treble damages for infringement,

[t]he 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 (whether plaintiff is threatened with “imminent” injury in fact “fairly . . . traceable to the challenged action of the defendant”) or in terms of ripeness (whether there is sufficient “hardship to the parties [in] withholding court consideration” until there is enforcement action).¹⁹⁹

196. *Id.* at 129 (citations omitted) (quoting *Abbott Labs. v. Gardner*, 387 U.S. 136, 152 (1967)) (internal quotation marks omitted) (citing *Terrace v. Thompson*, 263 U.S. 197 (1923)); see also *id.* at 134 n.12 (noting that this coercion principle had applied to private litigation since *Altvater*, 319 U.S. 359, so extended it in 1943).

197. *Organic Seed Growers*, 851 F. Supp. 2d at 550.

198. 549 U.S. at 127 (alteration in original) (quoting *Aetna*, 300 U.S. at 240-41) (internal quotation marks omitted); see also *id.* (quoting *Md. Cas. Co.*, 312 U.S. at 273) (“[W]e summarized as follows: ‘Basically, 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 issue of a declaratory judgment.’”).

199. 549 U.S. at 128 n.8 (second and third alterations in original) (citations omitted) (quoting, respectively, *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992), and *Abbott Labs.*, 387 U.S. at 149) (noting that “standing and ripeness boil down to the same question in this case”). See also *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 149 (2010) (quoting *Horne v. Flores*, 557 U.S. 433 (2009)) (“Standing under Article III of the Constitution requires that an injury be concrete, particularized, and actual or imminent; fairly

This is precisely the justiciability problem that the OSGATA plaintiffs' situation presented, according to "the facts alleged" and considering "all the circumstances."²⁰⁰ Compelled by the fact that "some unlicensed—and unintended—use of transgenic seeds is inevitable,"²⁰¹ coupled with Monsanto's aggressive pattern of investigating and threatening farmers, coercing settlements, and filing farmer infringement suits,²⁰² the OSGATA plaintiffs "eliminated the imminent threat" of being sued by Monsanto by "not doing what [they] claimed the right to do."²⁰³ Specifically, as they alleged in their complaint, the plaintiffs were forced to forego their rights to use their property fully and as they saw fit²⁰⁴: They had to abstain from planting "corn, cotton, canola, sugar beets, soybeans, and alfalfa," crops that are "currently under severe threat of transgenic seed contamination";²⁰⁵ to devote portions of their land to create a buffer between their crops and transgenic contaminants;²⁰⁶ and to adopt expensive testing procedures to detect contamination.²⁰⁷

As the Supreme Court indicated, this forbearance does "not preclude subject-matter jurisdiction because the threat-eliminating behavior was effectively coerced."²⁰⁸ On the contrary, this invasion of the plaintiffs' legally protected interests in their farming properties caused them to suffer a present "injury in fact"²⁰⁹ that was "fairly traceable to the challenged action of the defendant"²¹⁰ in pursuing innumerable infringement suits and settlements to enforce patents that the plaintiffs allege are void for lack of utility,²¹¹ satisfying the standing inquiry identified in *MedImmune* as relevant to the justiciability

traceable to the challenged action; and redressable by a favorable ruling.")

200. 549 U.S. at 127 (quoting *Md. Cas. Co.*, 312 U.S. at 273).

201. 851 F. Supp. 2d at 548.

202. OSGATA First Amended Complaint, *supra* note 108, at 46-48.

203. *MedImmune*, 549 U.S. at 129.

204. The plaintiffs' First Amended Complaint stated:

Plaintiffs fully described to Monsanto the *in terrorem* choice they currently face of either abandoning conduct they believe they have the right to pursue (e.g. growing crops they wish to grow on their land) and risking being accused of patent infringement (should they become contaminated by Monsanto's transgenic seed). This harm is real, concrete, and immediate. Today Plaintiffs are clearly foregoing full enjoyment of their property and full pursuit of economic opportunities because of the chilling effect of Monsanto's aggressive campaign of patent assertion against others who, like Plaintiffs, do not wish to possess or use Monsanto's transgenic seed.

OSGATA First Amended Complaint, *supra* note 108, at 51.

205. *Id.* at 33-34.

206. *Id.* at 37.

207. *Id.* at 36-37.

208. *MedImmune*, 549 U.S. at 129 (citing *Terrace v. Thompson*, 263 U.S. 197 (1923)).

209. 549 U.S. at 128 n.8 (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992), which defined "injury in fact" as "an invasion of a legally protected interest").

210. 549 U.S. at 128 n.8.

211. OSGATA First Amended Complaint, *supra* note 108, at 53-54.

problem posed when the parties seeking declaratory relief themselves have eliminated the additional threat of suit.²¹² Moreover, the district court's decision to "withhold[] court consideration until there is enforcement action"²¹³ subjected the plaintiffs to a Hobson's choice—that of abandoning their rights or risking suit and treble damages for infringement—that constitutes a hardship to the plaintiffs that satisfies the ripeness inquiry recognized in *MedImmune* as an alternative way to conceive of the justiciability problem posed by a declaratory judgment plaintiff's coerced elimination of the threat of suit.²¹⁴

Thus, it ought not have been necessary that the plaintiffs "bet the farm, or . . . risk treble damages . . . before seeking a declaration of [their] actively contested legal rights,"²¹⁵ as the district court required that they do. Instead, because the plaintiffs' dispute was "real and substantial and admitt[ed] of specific relief through a decree of conclusive character,"²¹⁶ the district court should have evaluated it as such under the standards set forth in *MedImmune*. It seems probable, however, that the district court was well aware that this case was headed to the Federal Circuit regardless of its ruling, and thus elected to rely almost solely on Federal Circuit precedent in a likely move to secure its affirmance. Not surprisingly, the Federal Circuit adopted some of the district court's weak reasoning, and engaged in some of its own. In doing so, it created conflicts and ambiguities in the law that will remain until the Supreme Court

212. See 549 U.S. at 128 & n.8 (citing *Lujan*, 504 U.S. at 560). The district court's opinion is silent on this point, only acknowledging the plaintiffs' contention that they faced immediate injury due to their forbearance in a footnote. See *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 851 F. Supp. 2d 544, 555 n.8 (S.D.N.Y. 2012), *aff'd*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014). In response, the court labeled the plaintiffs' injury "of plaintiffs' own making," *id.*, but as *MedImmune* indicated, 549 U.S. at 129, and the foregoing discussion demonstrates, see *supra* and *infra* text accompanying notes 193-216, this does not preclude subject matter jurisdiction where the plaintiffs' actions are coerced.

The court also relied on inapposite authority in trying to gloss over this major point of plaintiffs' by relying on its vacated ruling in what would later become the Supreme Court's famed *Myriad Genetics* opinion. See *id.* (quoting *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 653 F.3d 1329, 1343 (Fed. Cir. 2011) (*AMP*), *vacated sub nom*, *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 132 S. Ct. 1794 (2012)). The court argued: "The plaintiffs without standing in *AMP* were in no danger of invading the space occupied by the defendant's patents because it was not certain that they would resume the infringing activity. Here, even if plaintiffs resumed farming their crops, contamination—and thus potential infringement—is not certain." To the contrary, the district court itself found that contamination—and thus infringement (which is not limited by a *de minimis* exception, *Organic Seed Growers and Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350, 1352 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014))—was "inevitable." 851 F. Supp. 2d at 548.

213. 549 U.S. at 128 n.8 (quoting *Abbott Labs. v. Gardner*, 387 U.S. 136, 149 (1967)) (internal quotation marks omitted).

214. See *id.*

215. *Id.* at 134.

216. *Id.* at 127 (quoting *Aetna*, 300 U.S. at 240-41) (internal quotation marks omitted).

finds an appropriate case in which to reiterate to the Federal Circuit, yet again, the broad, circumstances-based standard it intends for determining jurisdiction in all declaratory judgment cases, including those involving patents.

2. *In the Federal Circuit*

On appeal, the Federal Circuit affirmed the district court's opinion.²¹⁷ The structure of the Federal Circuit's analysis suggests that it was aware of some of the weaknesses in the district court's approach as discussed in Part II.B.1. It also suggests that the court assembled its opinion in a way that would neither invite a grant of certiorari by the Supreme Court nor force the Federal Circuit to completely abandon the narrowed rules that it had crafted especially for declaratory judgment jurisdiction in patent cases. The result: an opinion that afforded the plaintiffs little relief, highlighted rather than resolved ambiguities, created more open questions than it closed, and perpetuated the conflicts between Federal Circuit and Supreme Court precedent in the context of declaratory judgments involving patents.

a. *The Stated Standard*

The Federal Circuit began its analysis by quoting *MedImmune*'s general "under all the circumstances" test for declaratory judgment jurisdiction²¹⁸ and, unlike the district court, recognized that "Article III jurisdiction may be met where the patentee takes a position that puts the declaratory judgment plaintiff in the position of either pursuing arguably illegal behavior or abandoning that which he claims a right to do."²¹⁹ It then initially announced that "the question in this case is . . . whether [the plaintiffs] have demonstrated a 'substantial risk' that the harm [of suit] will occur, which may prompt [them] to reasonably incur costs to mitigate or avoid that harm,"²²⁰ citing the Supreme Court's recent opinion in *Clapper v. Amnesty Int'l USA*.²²¹

Clapper had acknowledged the "substantial risk" test as an alternative standard for assessing the requirement that an injury be "actual or imminent" in order for Article III standing to attach.²²² There, the Court recognized that

217. *Organic Seed Growers II*, 718 F.3d 1350, 1352 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

218. *Id.* at 1355. The test is quoted *supra* at notes 135 & 193.

219. *Id.* (quoting *SanDisk Corp. v. STMicroelectronics, Inc.*, 480 F.3d 1372, 1380-81 (Fed. Cir. 2007)).

220. *Id.* (last alteration in original) (quoting *Clapper v. Amnesty Int'l USA*, 133 S. Ct. 1138, 1150 n.5 (2013)).

221. 133 S. Ct. 1138 (2013).

222. *See id.* at 1147, 1150 n.5. (quoting *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 153-54 (2010)).

“imminence is concededly a somewhat elastic concept,”²²³ concluding, “Our cases do not uniformly require plaintiffs to demonstrate that it is literally certain that the harms they identify will come about. In some instances, we have found standing based on a ‘substantial risk’ that the harm will occur.”²²⁴ Thus, by initially citing *MedImmune* and *Clapper* and suggesting that it was adopting *Clapper*’s option for a less stringent test for standing, the Federal Circuit gave the appearance of distancing itself from the imminence analysis that was rejected in *MedImmune* but nevertheless had been applied by the district court when analyzing the plaintiffs’ “preparatory conduct.”²²⁵ As Subparts II.B.2.b and II.B.2.d discuss, despite structuring its opinion to appear deferential to the Supreme Court, ultimately the Federal Circuit returned to its own preparatory conduct authority in order to resolve the case as it did.²²⁶

b. *The Application*

After setting forth this Supreme Court compliant justiciability standard, the Federal Circuit made what appeared to be several positive findings on the OSGATA plaintiffs’ behalf. First, it pointed out that Monsanto—which claimed, in support of its argument that the plaintiffs were not similarly situated to its prior farmer infringement targets, that it had not sued “inadvertent infringers”—had a “quite narrow” view of what constitutes an “inadvertent infringer.”²²⁷ Monsanto’s definition would exclude, the court conceded, “those growers whose crops become accidentally contaminated, and who do not treat

223. *Id.* at 1147 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992)).

224. *Id.* at 1150 n.5. (quoting *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 153-54 (2010)).

225. *See supra* notes 177-195 and accompanying text. Monsanto’s counsel appear to have been well aware of the weaknesses posed by the district court’s reliance on the questionable justiciability-narrowing Federal Circuit principles attempting to avoid *MedImmune*, *see supra* Part II.B.1.b, as well as of the Federal Circuit’s calculated machinations to appear deferential to the Supreme Court’s authority and avoid calling the Federal Circuit’s “refinements” to *MedImmune* into question, *see supra* Part II.B.2, and likewise sought to distance itself from the lower courts’ reliance on these principles (even though they had theretofore served Monsanto well) once the case was before the Supreme Court on the OSGATA plaintiffs’ petition for writ of certiorari. In Monsanto’s response to the OSGATA plaintiffs’ cert petition, Monsanto carefully framed both lower courts’ determinations as having stemmed from a direct application of Supreme Court precedent (and Supreme Court precedent alone). *See* Brief in Opposition at 7, 10, *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 134 S. Ct. 901 (2014) (No. 13-303) (describing the district court’s decision as having been rendered under *MedImmune*’s test considering “all the circumstances” and the Federal Circuit’s decision as resting on “*MedImmune* and other recent decisions of this Court concerning Article III jurisdiction, including *Clapper* . . . and *Geertson*,” referring to none of the questionable authorities or principles upon which the district and circuit courts had relied).

226. *Organic Seed Growers II*, 718 F.3d 1350, 1359-60 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

227. *Id.* at 718 F.3d at 1356.

their fields with Roundup, but who, knowing of the contamination, harvest and replant or sell the seeds.”²²⁸

Then, returning to its “substantial risk” language, the court concluded, “There is . . . a substantial risk that at least some of the appellants could be liable for infringement if they harvested and replanted or sold contaminated seed.”²²⁹ While acknowledging that “the Supreme Court’s recent decision in *Bowman v. Monsanto Co.* leaves open the possibility that merely permitting transgenic seeds inadvertently introduced into one’s land to grow would not be an infringing use,”²³⁰ the court nevertheless assumed for purposes of the appeal “that using or selling windblown seeds would infringe any patents covering those seeds, regardless of whether the alleged infringer intended to benefit from the patented technologies.”²³¹ The court also recognized the district court’s finding that due to contamination (which an amicus study cited as occurring in a “large majority” of conventional seed samples, “despite stringent precautionary measures”),²³² “some unlicensed—and unintended—use of transgenic seeds is inevitable.”²³³

Each of the foregoing concessions gave the appearance that the Federal Circuit was ready to admit that under the controlling Supreme Court precedent it had cited, the OSGATA plaintiffs had presented the court with a justiciable controversy. However, after making these concessions, “the question” in the case changed. Setting aside any concern with whether the plaintiffs had

228. *Id.*

229. *Id.*

230. *Id.* (citing *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 769 (2013)).

231. *Organic Seed Growers II*, 718 F.3d at 1356. This statement may have been an important signal that the Federal Circuit is not likely to interpret the Supreme Court’s acknowledgement in *Bowman* of the possibility of inadvertent infringement as an indication that it should adopt the Court’s hypothetical approach. Indeed, the Federal Circuit was careful to note that “our cases suggest that one who, within the meaning of the Patent Act, uses (replants) or sells even very small quantities of patented transgenic seeds without authorization may infringe any patents covering those seeds.” *Id.* Quoting its own authority, the Federal Circuit stated,

[W]e rejected the proposition that patent claims should be construed to avoid reading on trace amounts of a patented compound, even though that compound’s self-replicating properties might place potential infringers in the untenable position of never knowing whether their product infringes because even a single undetectable [molecule] would infringe. [T]his court has not tolerated the notion that a little infringement—de minimis infringement—is acceptable infringement or not infringement at all.

Id. (second and third alterations in original) (citations omitted) (quoting *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1336, 1339-40 (Fed. Cir. 2005), and *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1352-53 (Fed. Cir. 2000)) (internal quotation marks omitted).

232. *Id.* at 1357.

233. *Id.* (quoting *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544, 548 (S.D.N.Y. 2012), *aff’d*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014)).

demonstrated a substantial risk of the harm they were trying to avoid by taking their costly precautions and foregoing full use of their land,²³⁴ the court averred, “the question is whether Monsanto is correct that its representations [not to sue inadvertent infringers] moot any potential controversy.”²³⁵ Not at all surprisingly, the Federal Circuit answered this question with a hearty “yes.” It declared, “Monsanto’s representations unequivocally disclaim any intent to sue appellant growers, seed sellers, or organizations for inadvertently using or selling ‘trace amounts’”—which the court defined as one percent²³⁶—“of genetically modified seeds.”²³⁷ Although recognizing that Monsanto’s representations were not an actual covenant not to sue (which the plaintiffs had sought from Monsanto but were refused²³⁸), the court determined that “they have a similar effect,” finding them “binding as a matter of judicial estoppel,” and thus sufficient to moot any potential controversy between the parties.²³⁹

However, this “unequivocal” solution, far from being as clean and simple as it appeared, created a whole host of legal gaps, conflicts, and ambiguities, most of which the Federal Circuit left unresolved. Some of these problems were recognized by the court and simply ignored. Others were perpetuations of problems recognized in the discussion of the district court’s analysis. And others still were new problems created by the court’s opinion itself. Subparts II.B.2.c through II.B.2.e below unpack the logic of the opinion to examine these gaps, conflicts, and ambiguities in greater detail.

c. *Problems Recognized (and Subsequently Ignored) by the Court*

Some of the unresolved issues that were recognized but ultimately left in place by the Federal Circuit stemmed from the terminology used by Monsanto in its disclaimer. For instance, the court recognized limitations inherent in Monsanto’s “quite narrow” interpretation of the term “inadvertent.”²⁴⁰ Under Monsanto’s definition, for example, traditional farmers who were surrounded by transgenic-seed-planting neighbors but nevertheless were forced (perhaps due to cost) to cease genetic testing or the maintenance of sufficient buffer zones to protect their traditional crops, would doubtless become “accidentally

234. See *Organic Seed Growers II*, 718 F.3d at 1355 (“[T]he question in this case is . . . whether [the appellants] have demonstrated a substantial risk that the harm will occur, which may prompt [them] to reasonably incur costs to mitigate or avoid that harm.” (last alteration in original) (internal quotations omitted) (quoting *Clapper v. Amnesty Int’l USA*, 133 S. Ct. 1138, 1150 n.5 (2013))).

235. 718 F.3d at 1357.

236. *Id.* at 1358 (“Monsanto does not contest, that ‘trace amounts’ must mean approximately one percent.”)

237. *Id.* at 1359.

238. OSGATA First Amended Complaint, *supra* note 108, at 51-52.

239. *Organic Seed Growers II*, 718 F.3d at 1357-58.

240. *Id.* at 1356.

contaminated” with transgenic seed. Yet under Monsanto’s definition of inadvertence, even if such farmers continued farming as they always had—not using Roundup to kill off their traditional crops so as to be able to gain an advantage and save the transgenic seed, but rather treating the whole crop as one—such farmers would be liable for infringement if, “knowing of the contamination,” they harvested and replanted or sold their seed.²⁴¹

Though at first blush, this scienter requirement would seem to temper the problem for farmers who wished to forgo expensive precautions, there are several reasons why it does not in fact solve the problem. First, given the court’s determination that some contamination is “inevitable,” it is not at all clear that farmers who ceased testing or chose to turn a blind eye to whether their crops were becoming contaminated could avoid infringement liability on grounds that they did not “know of the contamination” when they harvested or replanted their seed. Also, if at any point another party—potential purchasers, or perhaps, Monsanto itself—were to test the farmers’ seed and inform those farmers of the detection of transgenic seed on their land, suddenly their manufactured lack of knowledge, presuming it would be accepted as a lack of knowledge in the first place, would no longer offer them any protection.

Perhaps more important, however, was another issue recognized outright by the Federal Circuit: Monsanto ensured, through the language of its “commitment” to farmers, that the scope of its obligation was very limited. As the court noted, “One problem with Monsanto’s disclaimer . . . is that it has limited scope: it applies only to growers or sellers of ‘trace’ amounts of seed.”²⁴² As a result, the Federal Circuit could not conclude (and Monsanto would not separately represent, despite being pressed by the court) that Monsanto had disclaimed any intent to sue a grower who, for example, accumulated and sold more than trace amounts of its transgenic seed, despite never buying modified seed nor making use of the Roundup Ready trait by spraying the plants with glyphosate.²⁴³

Thus, no real solution remains for the farmer who wishes to utilize his or her own land, as has been done for generations, without making use of transgenic seeds or the herbicides tied to them, but without engaging in expensive testing or relinquishing portions of the otherwise productive land to be used as buffer zones. In essence, these farmers’ rights to utilize both their real and personal property in the way it has been used for millennia and in the way that they saw fit had been usurped, trumped by the intellectual property

241. *Organic Seed Growers II*, 718 F.3d at 1356. *But cf.* *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1769 (2013) (noting that the court’s holding—that a farmer who *did* use glyphosate to selectively identify, save, and replant inadvertently acquired Roundup Ready seed did in fact infringe Monsanto’s patents—did not extend to a case in which “the [seed]’s self-replication might occur outside the purchaser’s control”).

242. *Organic Seed Growers II*, 718 F.3d at 1359.

243. *See id.* (noting that Monsanto had resisted the court’s efforts to clarify this point at oral argument).

rights Monsanto was able to embody in chattel, chattel that itself was usurped from what was formerly non-commoditized seed, freely distributed by the U.S. government for the prosperity and well-being of its citizens,²⁴⁴ and, conveniently, chattel that self-replicates and spreads its transgenic contents without any intervention whatsoever by Monsanto.²⁴⁵

Unfortunately, the Federal Circuit did not entertain such reasoning, despite calling attention to the “problem with Monsanto’s disclaimer” caused by the “trace amounts” limitation²⁴⁶ and Monsanto’s “quite narrow” definition of inadvertence.²⁴⁷ Instead, whisking away the reality of the plaintiffs’ concerns with a brisk dependent clause (“While at least some of the appellants allege that they will *necessarily* harvest and use or sell trace amounts of modified seeds”²⁴⁸), the court simply presumed that this posed no justiciable problem for the OSGATA plaintiffs. In the court’s estimation, this was because the plaintiffs had made “no allegation that the alleged contamination *already* exceeds the one percent threshold,” and because they had no “plans to use or sell greater than trace amounts of modified seed.”²⁴⁹ “To the contrary,” the court remarked, quoting the OSGATA plaintiffs’ complaint, “the appellants are ‘using their best efforts to avoid’ contamination.”²⁵⁰ It was at this point that the Federal Circuit’s analysis looped back into the flawed reasoning of the district court’s “preparatory conduct” inquiry. This had the effect of perpetuating the court’s prior doctrinal problems rather than simply acknowledging those problems created by Monsanto’s disclaimer. In addition, as discussed below, the Federal Circuit fashioned further problems by continuing the district court’s practice of misreading cited authority.

d. *Problems Perpetuated by the Court: Revisiting the Preparatory Conduct Element and Misreading Authority*

By finding that the OSGATA plaintiffs’ efforts to avoid contamination caused the plaintiffs to fall within the bounds of Monsanto’s disclaimer, the Federal Circuit had returned to the same flawed analysis that the district court

244. See *supra* note 24 and accompanying text.

245. As noted by the district court, “transgenic seeds may contaminate non-transgenic crops by a variety of means, including seed drift or scatter, crosspollination, and commingling via tainted equipment during harvest or post-harvest activities, process, transportation, and storage.” See *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544, 548 (S.D.N.Y. 2012), *aff’d*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014). This has even been acknowledged by the Supreme Court, which recognized the risk of “gene flow” from transgenic to conventional crops in *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 153-55 (2010).

246. *Organic Seed Growers II*, 718 F.3d at 1359.

247. *Id.* at 1356.

248. *Id.* at 1359 (emphasis added).

249. *Id.* at 1359 (emphasis added).

250. *Id.*

had engaged in, avoiding the mandate of *MedImmune* that where declaratory judgment plaintiffs have themselves “eliminated the imminent threat of [suit] by simply not doing what [they] claimed the right to do,” their forbearance does “not preclude subject-matter jurisdiction because the threat-eliminating behavior was effectively coerced.”²⁵¹ Disregarding this, the Federal Circuit returned to its prior analysis in *Cat Tech*,²⁵² the case the district court had relied upon for the proposition that “[i]f a declaratory judgment plaintiff has not taken significant, concrete steps to conduct infringing activity, the dispute is neither ‘immediate’ nor ‘real’ and the requirements for justiciability have not been met.”²⁵³

As mentioned in Subpart II.B.1.b, this analysis had caused the district court to read preparatory conduct as an outcome-determinative requirement back into what *MedImmune* indicated was a case-by-case assessment based upon the totality of the circumstances²⁵⁴ and which would have required the court to take notice of the Hobson’s choice that the OSGATA plaintiffs were faced with when the court considered the immediacy of the harm. Nevertheless, the Federal Circuit returned to this same language, expecting the OSGATA plaintiffs either to admit taking “significant, concrete steps to conduct infringing activity”²⁵⁵ and risk an immediate infringement counterclaim, or to forgo “a declaration of [their] actively contested legal rights,”²⁵⁶ in direct contravention of *MedImmune*’s acknowledgement that a declaratory judgment plaintiff need not “bet the farm,” literally, or “risk treble damages” before seeking such a declaration.²⁵⁷ Citing recent precedent the district court had not had at its disposal, the Federal Circuit proceeded to march out its old arguments clothed in new regalia.

i. *Arkema v. Honeywell*

Arkema, Inc. v. Honeywell Int’l, Inc.,²⁵⁸ the first new case upon which the Federal Circuit relied (and one of its own precedents), arguably offered more to support the OSGATA plaintiffs’ position than it did to support the Federal Circuit’s approach. In *Arkema*, the Federal Circuit had reversed a district court’s decision to deny a plaintiff’s request for declaratory judgment on

251. *MedImmune, Inc. v. Genetech, Inc.*, 549 U.S. 118, 129 (2007) (citing *Terrace v. Thompson*, 263 U.S. 197 (1923)).

252. *Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 880 (Fed. Cir. 2008)).

253. *Id.* (citing *Lang v. Pac. Marine & Supply Co.*, 895 F.2d 761 (Fed. Cir. 1990)).

254. *See MedImmune*, 549 U.S. at 127.

255. *Organic Seed Growers II*, 718 F.3d 1350, 1359 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

256. *MedImmune*, 549 U.S. at 134.

257. *Id.*

258. 706 F.3d 1351 (Fed. Cir. 2013).

grounds that the plaintiff's claims presented no justiciable controversy.²⁵⁹ The opinion began by noting Congress's recognition that declaratory judgments were "especially useful in avoiding the necessity . . . of having to act at one's peril or to act on one's own interpretation of his rights, or abandon one's rights because of a fear of incurring damages."²⁶⁰ Citing *MedImmune*'s "under all the circumstances" test, the Federal Circuit observed, "The Court also made clear that *this test is satisfied* when the declaratory judgment plaintiff is put 'to the choice between abandoning his rights or risking prosecution.'"²⁶¹

Applying this test, the Federal Circuit found that Arkema, a refrigerant manufacturer that both (a) "wish[ed] to sell" a refrigerant for a use that Honeywell thought would infringe its method patents and (b) had customers that "wished to purchase" the refrigerant for such uses, had a justiciable case or controversy for purposes of declaratory judgment jurisdiction despite not knowing the particular manufacturers that would purchase the product or the particular dates on which such purchases would occur.²⁶² Moreover, the court found, the fact that Honeywell had "declined to grant Arkema a covenant not to sue . . . further suggests that there is an *active and substantial controversy* between the parties regarding their legal rights."²⁶³

This is analogous to the situation that the OSGATA plaintiffs faced. Just as Honeywell had declined to grant Arkema a covenant not to sue, Monsanto declined to grant the OSGATA plaintiffs a covenant not to sue. If this fact suggested that a substantial controversy existed between Honeywell and Arkema, so too ought it have suggested the existence of a substantial controversy between Monsanto and the OSGATA plaintiffs. Like Arkema, which "wish[ed] to sell" the potentially infringing refrigerant and had a justiciable case or controversy for purposes of declaratory judgment jurisdiction despite not knowing how or when such purchases would occur, the OSGATA plaintiffs wished to utilize their land without engaging in expensive testing procedures or abandoning the profitable use of bordering portions of their land, which should have been enough to establish a justiciable case or controversy considering the "inevitable" threat of contamination from transgenic seed, despite not knowing exactly how or exactly when the contamination would exceed Monsanto's one percent threshold for triggering its right to sue outside the bounds of its disclaimer. And like Arkema, the OSGATA plaintiffs were "put to the choice between abandoning [their] rights or risking prosecution," which, as the Federal Circuit itself recognized in *Arkema*, was sufficient to satisfy *MedImmune*'s "under all the circumstances"

259. *See id.* at 1353.

260. *Id.* at 1356 (alteration in original) (quoting S. Rep. No. 73-1005, at 2-3 (1934)).

261. *Id.* (emphasis added) (quoting *MedImmune*, 549 U.S. at 129).

262. *Id.* at 1358.

263. *Id.* (emphasis added).

test.²⁶⁴

The panel of the Federal Circuit handling the OSGATA plaintiffs' appeal, however, did not focus on any of these similarities. Keenly aware that it would have to distinguish *Arkema* (which it did by citing the case as though it supported the court's own position), the Federal Circuit in the OSGATA plaintiffs' case focused only on the details that Arkema had "marketed the product, responded to supply requests, and wished to enter supply contracts with customers."²⁶⁵ Omitting any other discussion of the case, the Federal Circuit cherry-picked the content it found most persuasive in *Arkema* and completely ignored the rest. This is precisely the flawed logic that had led the district court to ignore the totality of the circumstances required by *MedImmune* and impose an outcome-determinative preparatory conduct element into the analysis, and here the Federal Circuit went down the same path, ignoring its own authority in *Arkema*. Importantly, however, while Arkema's desire to move from the planning phase into sales and enter into potentially infringing supply contracts was *relevant* to "all the circumstances" leading to the outcome in *Arkema*—just as the desire of the OSGATA plaintiffs to return to farming as they previously had was *relevant* (but, by virtue of transgenic "gene flow,"²⁶⁶ potentially infringing)—it was not the sole deciding factor in the court's analysis. To the contrary, as the *Arkema* panel itself recognized, these relevant facts, *coupled with* Honeywell's refusal to provide a covenant not to sue, were what put Arkema "to the choice between abandoning [its] rights or risking prosecution," and it was this "total" circumstance, so to speak, that the Supreme Court held satisfied the test set forth by *MedImmune* for determining when an action for declaratory judgment presents a justiciable controversy.²⁶⁷ Thus, despite the Federal Circuit's contortions, *Arkema* did not, in fact, support its approach; instead, it provided the model for analysis that the OSGATA panel should have used but did not.

ii. *Already, LLC v. Nike, Inc.*

Following *Arkema*, the Federal Circuit continued its parade of misapplied authority in the OSGATA opinion with *Already, LLC v. Nike, Inc.*²⁶⁸ As with other cases the court cited, the Federal Circuit selected the most helpful sound bite from the case, setting it apart from key pieces of legal and factual context that differentiated *Already* from the case before the court in an effort to support

264. *Id.* at 1356 (quoting *MedImmune*, 549 U.S. at 129).

265. *Organic Seed Growers II*, 718 F.3d at 1359-60.

266. *See Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 153-54 (recognizing injury resulting from the substantial risk of gene flow due to the fact that farmers would have to test seed in order to ensure that it was not contaminated with transgenic material).

267. *Arkema, Inc. v. Honeywell Int'l, Inc.*, 706 F.3d 1351, 1353 (Fed. Cir. 2013).

268. *Organic Seed Growers II*, 718 F.3d at 1360 (citing *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 728 (2013)).

requiring preparatory conduct on the part of the OSGATA plaintiffs. A comparison of the court's representation of *Already* with a more complete description of the case serves to illustrate the effects of this bit of creative judicial advocacy.

Already involved a trademark infringement action brought by the athletic shoe company Nike against a competitor, *Already*,²⁶⁹ which was marketing shoes that Nike claimed were imitations of its own shoes.²⁷⁰ *Already* responded to Nike's suit by counterclaiming, challenging the validity of Nike's trademark.²⁷¹ In reply to this threat, Nike issued a broad covenant not to sue *Already* in a calculated choice to moot the entire case, including *Already*'s declaratory judgment counterclaim questioning the validity of its mark.²⁷² At a hearing held by the district court, Nike conceded "that it would be bound by the Covenant even if [*Already*] became a competitive threat."²⁷³

On *Already*'s appeal to the Supreme Court, the Court confirmed that Nike's covenant was indeed sufficient to moot the controversy because the covenant was "unconditional and irrevocable" and because it was so broad that Nike was forced to take the position that there was no prospect of *Already* producing a shoe that would potentially infringe Nike's trademark and not fall under the covenant.²⁷⁴ The Supreme Court noted its agreement with the Second Circuit Court of Appeals that it was "hard to imagine a scenario that would potentially infringe [Nike's trademark] and yet not fall under the Covenant."²⁷⁵ "If such a shoe exists," Justice Roberts quipped, "the parties have not pointed to it, there is no evidence that *Already* has dreamt of it, and we cannot conceive of it. It sits, as far as we can tell, on a shelf between Dorothy's ruby slippers and Perseus's winged sandals."²⁷⁶ Given this absolute certainty that no infringing conduct would occur in the future, the Court held that Nike had met its "formidable burden of showing that it [was] absolutely clear the allegedly

269. *Already* filed suit doing business as "Yums." Nike, Inc. v. *Already*, LLC, No. 1:09-CV-06366, 2011 WL 310321, at *1 (S.D.N.Y. Jan. 20, 2011); *aff'd*, 663 F.3d 89 (2d Cir. 2011); *aff'd*, 133 S. Ct. 721 (2013). The district court's opinion references only "Defendant," and Justice Roberts selected the somewhat more reserved name "*Already*" to refer to the declaratory judgment plaintiff; however, the Second Circuit's opinion delightfully refers to Yums as such. As the majority of the following discussion stems from the Supreme Court's opinion, regrettably, the analysis that follows in the main text hereafter adopts the high Court's nomenclature.

270. See Nike, Inc. v. *Already*, LLC, 663 F.3d 89, 92 (2d Cir. 2011) (noting Nike's allegation that "Yums was selling 'footwear bearing a confusingly similar imitation' of" one of its trademarked shoes), *aff'd*, 133 S. Ct. 721 (2013).

271. *Already* LLC v. Nike, Inc, 133 S. Ct. 721, 725 (2013).

272. See *id.* at 725.

273. *Nike*, 663 F.3d at 92.

274. See *Already*, 133 S. Ct. at 728.

275. *Id.*

276. *Id.*

wrongful behavior could not reasonably be expected to recur.”²⁷⁷

With Nike having met its burden, which appeared to the Supreme Court to be impossible to controvert (save for perhaps in a fairy tale), *Already* was next given the opportunity to come forward with evidence that would indicate that in fact it could reasonably be expected to engage in conduct not covered by the covenant. “Given Nike’s demonstration that the covenant encompasses all of its allegedly unlawful conduct,” the Court stated, “it was incumbent on *Already* to indicate that it engages in or has sufficiently concrete plans to engage in activities not covered by the covenant. After all, information about *Already*’s business activities and plans is uniquely within its possession.”²⁷⁸ But because *Already* had no intention to market or even design any shoes that would fall outside Nike’s broad covenant not to sue,²⁷⁹ Nike’s covenant effectively mooted the controversy. In the words of the Supreme Court, “the whole point is that *Already* is free to sell its shoes *without any fear* of a trademark claim.”²⁸⁰

Compare the foregoing description of *Already* to that given by the Federal Circuit panel that decided the OSGATA case. Having suggested that determining declaratory judgment jurisdiction turned, determinatively, on an analysis of the plaintiffs’ preparatory conduct,²⁸¹ referencing *Arkema*²⁸² (which, as mentioned, supports no such reading of the concept),²⁸³ the Federal Circuit selectively quoted *Already*, saying only,

As the Supreme Court explained in *Already*, it is “incumbent on [the declaratory judgment plaintiff] to indicate that it engages in sufficiently concrete plans to engage in activities not covered” by a defendant’s covenant not to sue. When *Already* failed to make that showing, the Supreme Court held that there was no Article III case or controversy. It follows that there is no case or controversy here.²⁸⁴

Comparing the Federal Circuit’s description of the case with the preceding description, it is easy to see that just as with its treatment of *Arkema*, the Federal Circuit selected the most enticing language from *Already* to serve its judicial advocacy, rearranging *Already*’s words within its own for the greatest

277. *Id.* at 727 (quoting *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 190 (2000)).

278. *Id.* at 728-29.

279. Nike’s covenant covered “both past sales and future sales of both existing products and colorable imitation.” *Nike, Inc. v. Already, LLC*, 663 F.3d 89, 97 (2d Cir. 2011), *aff’d*, 133 S. Ct. 721 (2013).

280. *Already*, 133 S. Ct. at 729 (emphasis added).

281. *Organic Seed Growers II*, 718 F.3d 1350, 1359 (Fed. Cir. 2013) (arguing that the OSGATA plaintiffs *must* have taken “significant, concrete steps to conduct infringing activity” in order to be eligible for a declaratory judgment) (emphasis added) (quoting *Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 880 (Fed. Cir. 2008)), *cert. denied*, 134 S. Ct. 901 (2014).

282. *See Organic Seed Growers II*, 718 F.3d. at 1359.

283. *See supra* Part II.B.2.d.i.

284. *Organic Seed Growers II*, 718 F.3d. at 1360.

persuasive effect. As a piece of persuasive writing, the Federal Circuit's argument was cleverly executed. Whether this clever bit of activism was appropriate under the Supreme Court's overriding authority as expressed in *MedImmune*, however, is quite another matter. Several problems appear from a deeper analysis of the court's maneuverings in its two brief sentences regarding *Already*.

To begin, contrary to the Federal Circuit's assertion, the Supreme Court did not "explain[] in *Already*" that "it is incumbent upon [the declaratory judgment plaintiff] to indicate that it engages in activities not covered by a defendant's covenant not to sue."²⁸⁵ This description conveniently makes it sound as though the Supreme Court had created a stand-alone justiciability requirement burdening all declaratory judgment plaintiffs with the responsibility to prove that a proffered covenant not to sue is inadequate to cover all of its activities. But remember, this premise was not before the Court. *Already* did not instigate the controversy by bringing a declaratory judgment claim against Nike; Nike sued *Already* for infringement and then *Already* counterclaimed, causing Nike to drop its own suit (thereby mooting the potential infringement controversy) in order to get rid of *Already*'s threat to the validity of its trademark. When the Supreme Court's language is read in context, it is clear where the burden lies where a covenant not to sue is alleged to moot a controversy, and that is with the party that stands to benefit from the mootness determination.²⁸⁶ Creating an additional burden upon the declaratory judgment plaintiff was not the Supreme Court's intent, as the "incumbency" to come forward with any indication that it might engage in activity that escaped the breadth of Nike's covenant not to sue only fell upon *Already* after the critical prefatory clause, "Given Nike's demonstration that the covenant encompasses all of its allegedly unlawful conduct,"²⁸⁷ and because this information was "uniquely within . . . [*Already*'s] possession."²⁸⁸

Indeed, as Justice Kennedy felt it important to write a separate concurrence to indicate, "The burden was not on *Already* to show that a justiciable controversy remain[ed]," noting that "[b]oth the District Court and the Court of Appeals issued their rulings on the erroneous premise that it was for *Already* to make the relevant showing."²⁸⁹ Rather, as the opinion of the Court described it, *Already* was "given the opportunity"²⁹⁰ to *rebut* the seemingly all-encompassing nature of Nike's broad covenant and potentially keep its

285. *Id.* at 1360 (quoting *Already*, 133 S. Ct. at 725) (alteration in original) (internal quotations omitted).

286. *See Already*, 133 S. Ct. at 727.

287. *Id.* at 728.

288. *Id.* at 728-29.

289. *Id.* at 733 (Kennedy, J., concurring).

290. *Id.* at 729. Indeed, the Court noted that *Already* was not only given this "opportunity" before the district court, but before the Second Circuit and the Supreme Court as well. *See id.*

controversy alive by coming forward with evidence showing concrete steps taken toward future infringement—infringement that would occur if, and only if, Already consciously decided to take measures to cause such infringement. When Already did not provide such a rebuttal, the Court’s preliminary finding that Nike’s covenant was broad enough to moot the controversy—which was based on Nike meeting its own “formidable burden”²⁹¹—was allowed to stand.²⁹²

This is different from the Federal Circuit’s description of the process. By framing the scenario as one in which the Supreme Court held that no case or controversy existed “when Already failed to make that showing,” the Federal Circuit aimed to create the impression that Already’s failure to admit infringement alone could have triggered the outcome (rather than the totality of the circumstances, which depended heavily upon Nike having met its burden of proof that its covenant was sufficiently broad to thwart all future infringement). By setting the fact of Already’s failure to give evidence of preparatory conduct in direct apposition with the Supreme Court’s determination that no case or controversy existed, the Federal Circuit tried to suggest that all declaratory judgment plaintiffs must make such a showing in order to prove the existence of a justiciable case or controversy. But this is decidedly not the case, as the “opportunity” here arose due to the fact that Nike, the former trademark infringement plaintiff, had effectively mooted the controversy with a sufficiently broad and binding covenant not to sue.

When such a circumstance has arisen, a counterclaimant like Already is not in the same position as a declaratory judgment plaintiff (such as the one in *Arkema*) that has been put “to the choice between abandoning [its] rights or risking prosecution,” thereby satisfying the test set forth by *MedImmune* for determining when an action for declaratory judgment presents a justiciable controversy.²⁹³ Rather, when a party that was forced to defend against an infringement claim becomes “free to . . . [engage in its business] *without any fear of . . . [that] claim,*”²⁹⁴ then a consideration of all the circumstances under *MedImmune* counsels for an examination of that defendant’s potential for engaging in activities that would go outside the bounds of the covenant, so that the court can be “satisfied that it is ‘absolutely clear’ that the allegedly unlawful activity cannot reasonably be expected to recur.”²⁹⁵ Thus, it does not follow, as the Federal Circuit insisted that it did, that there was no case or controversy in the case of the OSGATA plaintiffs, who were far more aligned with the declaratory judgment plaintiffs in *Arkema* than they were with the

291. *Id.* at 727 (quoting *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 190 (2000)).

292. *See id.* at 732.

293. *Arkema, Inc. v. Honeywell Int’l, Inc.*, 706 F.3d 1351, 1356 (Fed. Cir. 2013).

294. *See Already*, 133 S. Ct. at 729 (emphasis added).

295. *Id.*

defendant/counterclaimant in *Already*.

Numerous factors support the conclusion that *Already* was inapposite authority for the Federal Circuit's position. First, in contrast to Nike, Monsanto did not give the OSGATA plaintiffs a binding covenant not to sue. Indeed, the OSGATA plaintiffs requested one and Monsanto denied their request. This looks far more similar to Honeywell's refusal to grant Arkema a covenant not to sue—which refusal suggested to the court that there was “an active and substantial controversy between the parties regarding their legal rights”²⁹⁶—than it does to Nike's unilateral decision to provide a covenant to *Already* in order to shut down *Already*'s counterclaim.

Second, Monsanto's “disclaimer” was not “unconditional and irrevocable.” Far from being so, as the Federal Circuit itself pointed out, Monsanto defined the “inadvertent infringer” whom its disclaimer claimed to protect in a way that was “quite narrow,” excluding from the protected class even those growers the Supreme Court in *Bowman v. Monsanto* had recognized might not even fall into its own definition of inadvertent infringers.²⁹⁷ Likewise, the Federal Circuit pointed out another “problem with Monsanto's disclaimer,” which was that “it has limited scope: it applies only to growers or sellers of ‘trace’ amounts of seed.”²⁹⁸ Thus, at oral argument, Monsanto “was quite careful never to represent that Monsanto would forgo suit against a grower who harvested and replanted windblown seeds—even if that farmer gained no advantage by doing so.”²⁹⁹ As a result, nothing about Monsanto's disclaimer would have allowed it to “take the position in court that there [was] *no prospect of*”³⁰⁰ the OSGATA plaintiffs engaging in behavior “that would potentially infringe [Monsanto's patent] and yet not fall under the [disclaimer],”³⁰¹ like Nike's covenant allowed it to take the position that there was no prospect of *Already* creating a shoe in the future that would not fall under its covenant. Indeed, by the very “narrow” language Monsanto chose to define inadvertence, by the “limited” scope of growers to whom Monsanto admitted its disclaimer extended, and by Monsanto's express refusal to represent that it would not sue a grower who harvested and replanted its windblown seed without gaining any advantage by doing so, Monsanto *could not* take the position that there was “no

296. *Arkema*, 706 F.3d at 1358.

297. *See Organic Seed Growers II*, 718 F.3d 1350, 1356 (Fed. Cir. 2013) (noting that *Bowman* “leaves open the possibility that merely permitting transgenic seeds inadvertently introduced into one's land to grow would not be an infringing use,” because “the Court's holding does not extend to a case in which ‘the article's self-replication might occur outside the purchaser's control’” (quoting *Bowman v. Monsanto Co*, 133 S. Ct. 1761, 1769 (2013))), *cert. denied*, 134 S. Ct. 901 (2014).

298. *Organic Seed Growers II*, 718 F.3d at 1359.

299. *Id.*

300. *Already*, 133 S. Ct. at 728. (citing *New Hampshire v. Maine*, 532 U.S. 742, 749 (2001)).

301. *Id.* (quoting the Second Circuit's opinion below in *Nike, Inc. v. Already, LLC*, 663 F.3d 89, 97 (2d. Cir. 2011)).

prospect” of the OSGATA plaintiffs infringing its patents, as this was a prospect that it had conscientiously guarded to keep open as widely as it possibly could.

This could not be more different than the situation in *Already*, where “the whole point” was that Nike’s broad covenant meant that *Already* was “free to sell its shoes without any fear of a trademark claim.”³⁰² There, “the parties ha[d] not pointed to” a means of possible infringement outside the bounds of the covenant, *Already* had not “dreamt of it,” and the Supreme Court itself could not “conceive of it.”³⁰³ By contrast, the OSGATA plaintiffs were not able to operate without any fear of infringement claims by Monsanto after it had made its disclaimer. Not only had Monsanto carefully preserved the possibility of infringement beyond the scope of its disclaimer both by its terms and in Monsanto’s representations to the court, it was the very “dreams” of the OSGATA plaintiffs to use their land as they saw fit (thereby inevitably becoming contaminated) that caused them to forbear from the full use of their property and sue in the first place. The prospect of infringement occurring that would fall outside the bounds of Monsanto’s disclaimer was therefore a very distinct possibility, with every indication suggesting that the Federal Circuit “could conceive of it,” as the court itself noted exactly the ways in which Monsanto’s disclaimer was limited. Nevertheless, in the end the Federal Circuit held that the possibility of future infringement was “too speculative,”³⁰⁴ and that accordingly, the OSGATA plaintiffs lacked standing.³⁰⁵

Given the court’s acknowledgement of the district court’s findings regarding the inevitability of contamination³⁰⁶ and the Federal Circuit’s determination that there was “a substantial risk” of infringement liability if the OSGATA plaintiffs harvested or sold contaminated seed,³⁰⁷ it is remarkable that the Federal Circuit dismissed the possibility of future suit by Monsanto out of hand without any discussion as to why it was too speculative. It appears to have simply presumed that the chances of the OSGATA plaintiffs suffering contamination levels at a rate above one percent was a speculative matter, despite the prior findings of inevitability and substantial risk and despite having in the record scientific evidence that found undesired contaminants in levels above one percent in substantial sample sizes.³⁰⁸ The decision also ignored the

302. *Id.* at 729.

303. *Id.* at 728.

304. *Organic Seed Growers II*, 718 F.3d at 1360.

305. *See id.* at 1361.

306. *See id.* at 1357.

307. *Id.* at 1356.

308. *See* L. F. Friesen et al., *Evidence of Contamination of Pedigreed Canola (Brassica napus) Seedlots in Western Canada with Genetically Engineered Herbicide Traits*, 95 AGRONOMY J. 1342-47 (2003) (finding contamination levels exceeding two percent in over one-tenth of incidents of undesired contamination) (filed as an exhibit to a brief submitted in the district court by Biodynamic Farming And Gardening Association et al., *see* Proposed

commonsense fact that even if a farmer were contaminated at a non-infringing level of something less than one percent in any given season, if the farmer replanted harvested seed by the traditional means she had always employed, that farmer's crops could quickly become contaminated at a rate above one percent. This would occur simply by virtue of the non-infringing "trace" amount of seed multiplying into infringing "non-trace" amounts over the course of a few plantings.

Yet it is the inevitability of nature's intervention into this scenario that further differentiates the OSGATA plaintiffs from those in *Already* and makes the Federal Circuit's limited reading of the case wholly inadequate to encompass the relevant totality of the circumstances at play for the OSGATA plaintiffs. In *Already*, it made sense that *Already* was "given the opportunity"³⁰⁹ to rebut the seemingly all-encompassing nature of Nike's broad covenant and potentially keep its controversy alive by coming forward with evidence of plans to infringe, because this possibility was one that was entirely within *Already*'s control. If *Already* could not "dream" of producing an infringing shoe,³¹⁰ then Nike's covenant was necessarily broad enough to moot the controversy. By contrast, the OSGATA plaintiffs' possible future infringement was not a matter entirely within their control; rather, despite their interventions, it is a matter left largely up to nature, which will inevitably cause infringement once contamination levels reach one percent. In other words, while it makes sense to say that a covenant is broad enough to encompass a plaintiff who has no plans to infringe and who is the sole entity in control of whether infringement occurs, the same logic cannot apply to a group of plaintiffs who do not wish to infringe but who are *not* the sole entity in charge of whether it occurs. As the lessons of the superweeds have taught, nature is well equipped to evolve at a rate that is never too far behind our technological advances, and is not constrained by the marketability or patentability of its novel advances. The fact that the Federal Circuit completely set these realities aside and instead applied inapt logic from a half-reading of *Already* is remarkably disappointing, particularly where the OSGATA plaintiffs were given no broad, binding covenant like that covering the whole of the plaintiff's future conduct in *Already*.

Remarkability aside, the Federal Circuit's actions in this regard were perhaps nevertheless predictable, in that they also hinged on the court's

Brief in Support of Plaintiffs' Opposition to Defendants' Motion to Dismiss at Ex. 5, *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 851 F. Supp. 2d 544 (No. 11-cv-2163-NRB), *aff'd*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014)). The Friesen report was among those documents discussed in the Joint Appendix considered by the Supreme Court in *Monsanto Co. v. Geertson Seed Farms*. See Joint App'x, Vol. III, *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010) (No. 09-475), 2010 WL 723712 at *860, *864, *872.

309. See *Already*, 133 S. Ct. at 729.

310. See *id.* at 728.

indefatigable presumption that the only possible cognizable injury that the OSGATA plaintiffs could expect to remedy with a declaratory judgment was the threat of future infringement should their precautions not prove sufficient to keep the contamination adequately at bay. It was this presumption that kept looping the court back into its preparatory-conduct-type analysis—as ill-fitting as it was for a situation where the plaintiffs themselves were not completely in control of the possibility of future infringement—and it was this presumption that permitted the court to overlook the OSGATA plaintiffs’ allegations that in fact they were suffering a *present* injury that could be remedied by a declaratory judgment. Because the court used the focus on preparatory conduct to skirt around the legal conclusion that the OSGATA plaintiffs fell into the category of those declaratory judgment plaintiffs identified by the Supreme Court in *MedImmune* that had been forced to “eliminate the imminent threat” of suit by “not doing what [they] claimed the right to do,” the Federal Circuit did not acknowledge that this caused the plaintiffs to suffer a present injury.

Yet this was precisely the position from which the OSGATA plaintiffs were compelled to pursue a declaratory judgment. Instead of farming their land as had been the right of farmers for millennia, the OSGATA plaintiffs had been compelled by the inevitability of contamination, coupled with Monsanto’s aggressive pattern not just of filing farmer infringement suits, but also of investigating and threatening farmers and coercing hundreds of settlements, to take costly precautions to keep the contamination at bay.³¹¹ These included adopting expensive testing to detect contamination,³¹² forgoing the opportunity to grow numerous crops that are particularly subject to contamination,³¹³ and relinquishing the productive use of portions of their land to the creation of protective “buffer zones.”³¹⁴ As discussed in Part II.B.1.b, *supra*, because this “threat-eliminating behavior was effectively coerced,” this invasion of the OSGATA plaintiffs’ legally protected interests in their farming properties caused them to suffer a present “injury in fact”³¹⁵ that was “fairly traceable to the challenged action of the defendant”³¹⁶ in pursuing innumerable infringement suits and settlements to enforce patents that the plaintiffs alleged were void for lack of utility,³¹⁷ satisfying the standing inquiry identified in *MedImmune* as relevant to the justiciability problem posed when the parties seeking declaratory relief themselves have eliminated the additional threat of

311. See OSGATA First Amended Complaint, *supra* note 108, at 46-48.

312. *Id.* at 36-37.

313. *Id.* at 33-34.

314. *Id.* at 37.

315. *MedImmune, Inc. v. Genetech, Inc.*, 549 U.S. 118, 128 n.8 (2007) (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992), which defined “injury in fact” as “an invasion of a legally protected interest”).

316. *Id.*

317. See OSGATA First Amended Complaint, *supra* note 108, at 53-54.

suit.³¹⁸ Although in this vein, the Federal Court recognized recent Supreme Court authority that held, in the context of finding that certain farmers had standing to challenge the administrative deregulation of Monsanto's transgenic seed, that "[u]nder some circumstances, forgoing activities or taking costly precautions may be reasonable responses to a substantial risk of future harm, and may therefore be cognizable injuries,"³¹⁹ it nevertheless avoided investing in *MedImmune*'s structured analysis on this point. Instead, the court found a way to turn the OSGATA plaintiffs' words against them here, just as it had turned their efforts to avoid infringement against them by finding that they reduced the likelihood of contamination (and thus infringement) to less than that required for standing in light of Monsanto's disclaimer.

iii. *Clapper v. Amnesty Int'l USA*

In their First Amended Complaint, the OSGATA plaintiffs mentioned that the ambiguity in Monsanto's letter to counsel had a "chilling effect," because "[a] small farmer or seed seller" in such a situation "will almost always choose to avoid the legal risk and forgo undertaking activity that they otherwise have the capability and desire to undertake," due to the fact that "such individuals and small business do not have the resources to even defend themselves from the mere accusation of violating someone else's legal right, regardless of whether that accusation has merit."³²⁰ Ignoring the substance of the plaintiffs' discussion, which supported their allegation of a present cognizable injury, the

318. See *MedImmune*, 549 U.S. at 128 & n.8 (citing *Lujan*, 504 U.S. at 560). The district court's opinion is silent on this point, only acknowledging the plaintiffs' contention that they faced immediate injury due to their forbearance in a footnote. See *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 851 F. Supp. 2d 544, 555 n.8 (S.D.N.Y. 2012), *aff'd*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014). In response, the court labeled the plaintiffs' injury "of plaintiffs' own making," *id.*, but as *MedImmune* indicated, 549 U.S. at 129, and the foregoing discussion demonstrates, see *infra* text accompanying notes 193-216, this does not preclude subject matter jurisdiction where the plaintiffs' actions are coerced.

The court also relied on inapposite authority in trying to gloss over this major point of plaintiffs' by relying on its vacated ruling in what would later become the Supreme Court's famed *Myraid Genetics* opinion. See *id.* (quoting *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 653 F.3d 1329, 1343 (Fed. Cir. 2011) (*AMP*) *vacated sub nom*, *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 132 S. Ct. 1794 (2012)). The court reasoned, "The plaintiffs without standing in *AMP* were in no danger of invading the space occupied by the defendant's patents because it was not certain that they would resume the infringing activity. Here, even if plaintiffs resumed farming their crops, contamination—and thus potential infringement—is not certain." To the contrary, the district court itself found that contamination—and thus infringement (which is not limited by a *de minimis* exception, *Organic Seed Growers II*, 718 F.3d 1350, 1352 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014))—was "inevitable." 851 F. Supp. 2d at 549.

319. *Organic Seed Growers II*, 718 F.3d at 1360 (quoting *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 153-54 (2010)).

320. OSGATA First Amended Complaint, *supra* note 108, at 52.

Federal Circuit instead latched on to the fact that the plaintiffs chose to use the words “chilling effect.” Quoting a snippet from the Supreme Court’s recent decision in *Clapper v. Amnesty Int’l USA* (upon which the Federal Circuit had relied for its “substantial risk” analysis),³²¹ the court declared that “allegations of a subjective ‘chill’ are not an adequate substitute for a claim of specific present objective harm or a threat of specific future harm,”³²² dismissing the plaintiffs’ allegations in one fell swoop. Yet as with the Federal Circuit’s utilization of inadequate sound bites from *Already* and *Arkema*, its utilization of similar sound bites from *Clapper* is not sufficient to support its conclusion.

In *Clapper*, declaratory judgment plaintiffs sought a determination that a provision of a U.S. foreign intelligence act that allowed surveillance of non-U.S. citizens outside the United States was unconstitutional.³²³ The plaintiffs argued that they were suffering ongoing injuries that were traceable to the act because the risk that they might have their communications with foreign persons intercepted required them to take costly measures to protect their confidentiality.³²⁴ Although the Second Circuit had permitted the plaintiffs to establish standing with this argument, the Supreme Court, in a 5-4 decision, found it unavailing, because the harm that they sought to avoid was not certainly impending.³²⁵ Instead, the Court found, it rested upon a “highly speculative fear” of intercepted communications that relied “on a highly attenuated chain of possibilities.”³²⁶ Thus, the allegations of the plaintiffs’ “chilled” conduct were subjective and therefore inadequate to create standing.³²⁷

The details of this attenuated chain of possibilities (which the Federal Circuit neglected to mention in its argument-supporting sound bite) are what set the declaratory judgment plaintiffs in *Clapper* apart from the OSGATA plaintiffs. First, the fear of interception that led the plaintiffs in *Clapper* to incur expenses for avoiding surveillance rested upon an unsupported speculation that “the Government [would] imminently target communications to which [the plaintiffs] were parties.”³²⁸ Because the plaintiffs themselves could not be targeted as U.S. persons, this presumption had to rest on a further presumption that “the Government will target *other individuals*—namely, their foreign contacts.”³²⁹ This required additional presumptions, because the Government’s targeting practices under the challenged act were a process about which the

321. See *supra* notes 221-225 and accompanying text.

322. *Organic Seed Growers II*, 718 F.3d at 1360 (quoting *Clapper v. Amnesty Int’l USA*, 133 S. Ct. 1138, 1152 (2013) (internal quotations omitted)).

323. *Clapper*, 133 S. Ct. at 1142.

324. *Id.* at 1150-51.

325. *Id.* at 1151.

326. *Id.* at 1148.

327. See *id.* at 1152.

328. *Id.* at 1148.

329. *Id.*

plaintiffs had no knowledge.³³⁰ On top of that, even if the plaintiffs had been able to show that the targeting of these specific contacts was imminent, they could only speculate as to whether the Government would seek to use surveillance methods that were authorized by the challenged statute rather than one of its numerous other methods.³³¹ Additionally, even if the plaintiffs had been able to show that the Government would seek authorization to use the specific surveillance permitted by the challenged statute, they could only speculate as to whether the agency in charge would in fact authorize such use.³³² Moreover, even if all of the prior conditions were met, there was no guarantee that the surveillance would succeed in acquiring the communications of the foreign targets.³³³ And finally, even if it did, the plaintiffs could “only speculate as to whether *their own communications* with their foreign targets would be incidentally acquired.”³³⁴

The expenditures by the *Clapper* plaintiffs that were made in fear of this lengthy and attenuated chain of possibilities coming to fruition bear little resemblance to the measures taken by the OSGATA plaintiffs to avoid infringing Monsanto’s patents. As an initial matter, no similar chain of events was required to make the threat a reality in the OSGATA plaintiffs’ case. Because contamination is “inevitable,” the threat of infringement is not attenuated in the same way, even if the OSGATA plaintiffs could not indicate the precise point at which their contamination would inevitably exceed the one percent threshold were they to dispense with the expensive remedial measures they had undertaken in an effort to avoid infringement. Additionally, the *Clapper* plaintiffs, unlike the OSGATA plaintiffs, did not allege that the “chilling effect” they experienced resulted from a policy that “regulate[d], constrain[ed], or compel[led] any action on their part,” a point that the Supreme Court made to distinguish the *Clapper* plaintiffs’ case from those in which other plaintiffs had been able to establish standing due to injuries incurred because of “efforts to avoid greater injuries.”³³⁵ By contrast, the OSGATA plaintiffs’ injuries that were incurred because of their efforts to avoid greater injuries (*i.e.*, the relinquishment of full use of their land made in an effort to avoid being sued for infringement) did in fact result from a policy that constrained action on their part. This policy is the Patent Act, which prohibited infringement by permitting Monsanto to sue if the OSGATA plaintiffs allowed their crops to become contaminated at rates of more than one percent, regardless of whether the plaintiffs intended to utilize the patented traits that had drifted onto their property.

330. *Id.* at 1149.

331. *Id.*

332. *Id.* at 1149-50.

333. *Id.* at 1150.

334. *Id.* (emphasis added).

335. *Id.* at 1153.

Thus, the “chill” alleged by the *Clapper* plaintiffs, which had caused them to have to speak in generalities and favor in-person conversations,³³⁶ was not analogous to that experienced by the OSGATA plaintiffs, which had caused them to give up their own real and personal property rights so as to avoid the threat of prosecution from the infringement of Monsanto’s intellectual property rights. As the Supreme Court in *MedImmune* indicated, “[t]he dilemma posed by that coercion—putting the challenger to the choice between abandoning his rights or risking prosecution—is a dilemma that it was the very purpose of the Declaratory Judgment Act to ameliorate.³³⁷ Accordingly, the Federal Circuit should have applied the “under all the circumstances test” in *MedImmune* as written and followed its own observation in *Arkema* that the Supreme “Court also made clear that this test is satisfied when the declaratory judgment plaintiff is put ‘to the choice between abandoning his rights or risking prosecution.’”³³⁸

iv. *Other Relevant Authority Ignored by the Federal Circuit: Its Own Opinions in Revolution Eyewear and Caraco*

MedImmune works, and for good reason: flexibility. By considering a potential infringer’s present intent to engage in infringing activity as a *factor* for determining justiciability where appropriate (rather than requiring it as an *element* in all cases), a court need not create an absurd rule to deal with a situation like that of the OSGATA plaintiffs, which would require such plaintiffs to expose themselves to infringement counterclaims in order to press their suits. As the Federal Circuit itself noted in *Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*,³³⁹ another *post-MedImmune* opinion involving a declaratory judgment sought in a patent case that the court conveniently failed to cite:

The court must apply the principles and purpose of the declaratory action, to determine whether there is a sufficient actual controversy to warrant judicial resolution. [The patentee]’s proposition that for a justiciable controversy to exist, [the declaratory judgment plaintiff] must [inappropriately utilize] the accused [product] before it can test the patent, and risk being held a willful infringer subject to treble damages if the test fails, raises a question for which *MedImmune* counsels thoughtful review of the entirety of the circumstances.³⁴⁰

Likewise, the fact that the Federal Circuit’s position in the OSGATA case

336. *See id.* at 1151 (internal quotations omitted).

337. *MedImmune, Inc. v. Genetech, Inc.*, 549 U.S. 118, 129 (2007) (citations omitted) (quoting *Abbott Labs. v. Gardner*, 387 U.S. 136, 152 (1967)) (internal quotation marks omitted).

338. *Arkema, Inc. v. Honeywell Int’l, Inc.*, 706 F.3d 1351, 1356 (Fed. Cir. 2013) (quoting *MedImmune*, 549 U.S. at 129).

339. 556 F.3d 1294 (Fed. Cir. 2009).

340. *Id.* at 1294.

requires that for a justiciable controversy to exist, the OSGATA plaintiffs would have to admit current contamination at levels over one percent and thus risk being held a willful infringer subject to treble damages, raises a question for which *MedImmune* counsels thoughtful review of the entirety of the circumstances, as opposed to rigid application of a preparatory conduct requirement as an element regardless of whether that sort of analysis makes sense under the circumstances.³⁴¹

Had the Federal Circuit heeded this counsel in the OSGATA case, they would have determined, as they did in *Revolution Eyewear*, that the declaratory judgment action met “the *MedImmune* requirement of ‘sufficient immediacy and reality,’ when the entirety of the circumstances [were] considered.”³⁴² This is because, as was the case in *Revolution Eyewear*, where Revolution took the position that it need not offer the declaratory judgment seeker a covenant not to sue and was “not obligated to repudiate suit for future infringement,” thereby retaining a right that “preserved [the] controversy at a level of sufficient immediacy and reality” to allow the declaratory judgment plaintiff to pursue its claims, so too did Monsanto preserve the controversy between itself and the OSGATA plaintiffs by retaining its right to sue outside the confines of its narrowly-tailored, non-binding disclaimer. Indeed, this would have been—in the words of yet another panel of the Federal Circuit writing for the court in *Caraco Pharm. Labs, Ltd., v. Forrest Labs., Inc.*—“only one of many ways [the OSGATA plaintiffs could] satisfy the Supreme Court’s more general all-the-circumstances test to establish that an action presents a justiciable Article III controversy.”³⁴³

The Federal Circuit, however, made no mention of its prior rulings in either *Caraco* or *Revolution Eyewear*, and was instead able to perpetuate its renewed preparatory conduct requirement successfully, as the Supreme Court did not take the case up on certiorari. As indicated in Subpart II.B.2.a, this decision may have been driven in part by the fact that the court structured its opinion to appear deferential to the Supreme Court’s own precedent, offering what appeared to be a clean and simple way to dispose of the case in the absence of a

341. The Federal Circuit would have done well to turn to its opinion in *Revolution Eyewear* to provide guidance in the OSGATA case. There, the Federal Circuit found, where a declaratory judgment plaintiff maintained that it had the right to make and sell the products in dispute because the patentee’s patent was invalid or unenforceable, that the planned activity was not speculative, as it appeared that the plaintiff already had “in storage a quantity of the product that it sold before and wishes to sell again.” *Id.* at 1299. Similarly, the declaratory judgment plaintiffs in the OSGATA case maintained that they had the right to use their land as they saw fit, and their planned activity—to farm as they always had before having to expend costly resources to protect themselves from contamination—was also not speculative, as they had land that they had used before and wished to use again, but could not because doing so would risk infringement above levels of one percent.

342. *Id.* at 1299.

343. *Caraco Pharm. Labs., Ltd., v. Forrest Labs., Inc.*, 527 F.3d 1278, 1291 (Fed. Cir. 2009).

true covenant not to sue by relying on an argument that Monsanto would be estopped from suing inadvertent infringers in future suits due to its representations to the plaintiffs. As the next part will show, however, this “hook” on which the court was able to hang its hat did not in reality offer the sort of conceptual water-tightness that would have created a secure opinion. To the contrary, the court’s estoppel-based ruling created an opinion besieged by even more uncertainty. It is the purpose of Subpart II.B.2.e, *infra*, to explore this uncertainty in more detail.

e. *Problems Created by the Court: Linguistic Ambiguities and the Ex Ante Estoppel Ruling*

The Federal Circuit’s choice to appear as though it were disposing of the OSGATA plaintiffs’ case simply on judicial estoppel grounds was in some senses a cunning one: functional enough both to avoid the fact that Monsanto had not given a binding covenant not to sue and to shut down these particular petitioners and their present concerns with seeming mechanical simplicity, as well as to effectively escape appellate scrutiny.³⁴⁴ However, both the language used by the Federal Circuit in justifying its estoppel invocation as well as the legal circuitousness of its opinion created gaps, contradictions, and ambiguities that exposed the OSGATA plaintiffs to additional uncertainties.

i. *Linguistic Ambiguities*

When invoking the doctrine of judicial estoppel to moot the OSGATA plaintiffs’ case (one the court had seemed otherwise ready to admit was in fact justiciable),³⁴⁵ the Federal Circuit justified its decision first by stating, “It is well-established that a party who successfully argues one position is estopped from later adopting a contrary position *in a case involving the same patent*.”³⁴⁶ This explanation of the court’s position, if it is to be construed as such, seems at odds with the breadth of preclusion conferred by the court’s reading of Monsanto’s disclaimer, which (according to the court) covered “seeds carrying Monsanto’s patented traits” rather than the particular patents-in-suit identified in the OSGATA plaintiffs’ complaint. Did the Federal Circuit intend by providing this explanation for its estoppel-predicated ruling to narrow the breadth of patents covered by the disclaimer? Or would a later court, dealing with the same plaintiffs who had been sued for infringing some of Monsanto’s

344. *See* 134 S. Ct. 901 (2014) (denying certiorari). Whether the court’s ex-ante application the concept of judicial estoppel *should have* actually been functional in this context is another matter entirely. *See infra* Subpart II.B.2.e.ii.

345. *See infra* notes 218-233 and accompanying text.

346. *Organic Seed Growers II*, 718 F.3d 1350, 1358 (Fed. Cir. 2013) (emphasis added) (citing *U.S. Philips Corp. v. Sears Roebuck & Co.*, 55 F.3d 592, 596 (Fed. Cir. 1995)), *cert. denied*, 134 S. Ct. 901 (2014).

newer patented traits,³⁴⁷ look only at the court's interpretation of Monsanto's representations, which would broadly preclude suit against "inadvertent users or sellers of seeds that are inadvertently contaminated with up to one percent of seeds carrying Monsanto's patented traits," interpreting the term "patented traits" to extend beyond those at issue in the estoppel-producing suit?

Similarly, while the court specifically stated, "We conclude that Monsanto has disclaimed any intent to sue inadvertent users or sellers of seeds that are inadvertently contaminated with up to one percent of seeds carrying Monsanto's traits," it also specifically stated, "If we rely on Monsanto's representations to defeat the [OSGATA plaintiffs'] declaratory judgment claims (as we do), those *representations* are binding as a matter of judicial estoppel." This, too, creates an ambiguity: Would Monsanto, in a future case, be estopped from suing the users described in the court's aforementioned "conclusion" about Monsanto's intent, or would Monsanto be estopped from suing the users identified by its "representations" that the court found "binding as a matter of judicial estoppel?" Monsanto's representations, which the court took to include both the "commitment" on its website as well as statements made in a letter from Monsanto's counsel to the OSGATA plaintiffs' counsel in response to the latter's request for a binding covenant not to sue, reflect different intentions, both in terms of the representations themselves being different from one another as well as in terms of being different from the court's interpretation. Monsanto's online "commitment," as related by the court, states that it will "not take legal action against *growers* whose crops might inadvertently contain traces of Monsanto biotech genes." Monsanto's letter to the OSGATA plaintiffs' counsel, on the other hand, stated that Monsanto had "no intention of asserting patent-infringement claims against *your clients*," a group that includes more than just growers and is not limited in scope by a particular threshold of infringement or any particular patent. Even taken together, both of these differ from the court's "conclusion" about Monsanto's intent, which covers users as well as sellers, but only those who are both contaminated inadvertently and inadvertently use or sell such seed.³⁴⁸

The additional attempts made by the Federal Circuit to clarify the scope of its estoppel determination only served to muddy the waters further. Quoting the Supreme Court's opinion in *Already, LLC v. Nike, Inc.*, and modifying the

347. Monsanto's Roundup Ready I soybean trait technology is set to go off-patent in 2014, and Monsanto has already begun transitioning its licensed seed producers to newer, second-generation patented traits. See Diana L. Moss, *Competition, Intellectual Property Rights, and Transgenic Seed*, 58 S.D. L. REV. 543, 557-58 (2013).

348. This would presumably exclude, for example, a purchaser of seed who later discovered that such seed was contaminated and subsequently wished to sell it, even if the purchaser did not attempt to sell it adventitiously or for a premium under representations that it contained Monsanto's patented seed. Such a reseller, becoming aware after the fact (*i.e.*, inadvertently) about the contamination, would not be an "inadvertent seller of seeds that are inadvertently contaminated," but instead would be a knowing seller of seeds that are inadvertently contaminated.

Court's language to fit the circumstances presented by the OSGATA plaintiffs, the Federal Circuit stated that "[the defendant], having taken the position in court that there is *no prospect* of [infringement by the declaratory plaintiffs], would be hard pressed to assert the contrary down the road."³⁴⁹ Is this to be taken as supporting the interpretation that full preclusive effect would be given to the broad, highly limiting representation as made by Monsanto's counsel? Or is it an even broader statement of what the court's estoppel ruling precludes? Monsanto's counsel, after all, had not stated that there was no prospect of future infringement by the OSGATA plaintiffs; he simply averred that, at that time, Monsanto had "no intention of asserting patent-infringement claims against [the OSGATA plaintiffs]." Confusingly, the court also explained how Monsanto's counsel had "wisely acknowledged" that "if the court writes an opinion that relies on the representations that I made in my letter, in response to [the plaintiffs'] letter, then I think it would be binding as a matter of judicial estoppel."³⁵⁰ Yet, taken literally, this would preclude Monsanto from virtually nothing, as all it specifically stated in its letter (which it carefully referenced in its statement to the Court), was that it had no present intent of asserting patent-infringement claims against the OSGATA plaintiffs.³⁵¹

ii. *Legal Ambiguities: The Ex Ante Estoppel Ruling*

Even assuming that the Federal Circuit had been clear about the precise contours it intended for its estoppel-based ruling, the decision still would have left the OSGATA plaintiffs in an uncertain position with respect to its application. This is because the doctrine of judicial estoppel is not binding in the way that the court suggested that it was, as the doctrine is not in fact designed to protect litigants³⁵² (unlike an actual covenant not to sue, and unlike the doctrine of equitable estoppel,³⁵³ which was pled by the OSGATA plaintiffs³⁵⁴ but ignored by the court). Instead, judicial estoppel is an equitable doctrine designed to protect the integrity of the courts,³⁵⁵ and it is within a court's discretion whether it ought to be invoked.³⁵⁶ The doctrine generally

349. *Organic Seed Growers II*, 718 F.3d at 1359 (bracketed alteration in original) (emphasis added) (citing *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 728 (2013)).

350. *Id.*

351. *See id.* at 1358.

352. *In re Coastal Plains, Inc.*, 179 F.3d 197, 205 (5th Cir. 1999) (noting that "the doctrine is intended to protect the judicial system, *rather than the litigants*" (citing *Matter of Cassidy*, 892 F.2d 637, 641 & n.2 (7th Cir. 1990))).

353. *See infra* notes 366-367 and accompanying text.

354. OSGATA First Amended Complaint, *supra* note 108, at 57-58.

355. *See New Hampshire v. Maine*, 532 U.S. 742, 750 (2001) ("Although we have not had occasion to discuss the doctrine elaborately, other courts have uniformly recognized that its purpose is 'to protect the integrity of the judicial process' . . ." (quoting *Edwards v. Aetna Life Ins. Co.*, 690 F.2d 595, 598 (6th Cir. 1982))).

356. *See id.* at 750 (citing *Konstantinidis v. Chen*, 626 F.2d 933, 938 (D.C. Cir. 1980),

prevents a party from assuming a position in a later legal proceeding that is inconsistent with its position taken in an earlier proceeding.³⁵⁷ Thus, by its nature, the doctrine is generally applicable *in the second proceeding*, where the doctrine works its preclusive effect. The Federal Circuit, by contrast, was assuming *ex ante* that the doctrine would be applied by other courts to bar later infringement suits by Monsanto.

Regardless of the Federal Circuit's supposition, however, that Monsanto *ought* to be judicially estopped from bringing future claims inconsistent with its representations (however these may be interpreted), it would be the lower district court in a later suit that would initially be faced with Monsanto's contrary position and left to determine whether the doctrine should be applied. Thus, no presumptions can reliably be made as to the outcomes of these future tribunals' independent determinations, which effectively means that Monsanto may indeed sue the OSGATA plaintiffs in the future, whether under circumstances that involve their alleging that contamination on the plaintiffs' land has escaped the confines of its disclaimer, or otherwise.

From an academic perspective, this reality may at first seem tempered by the fact that the Federal Circuit itself would be the relevant appellate tribunal over all such suits as a result of its exclusive jurisdiction over appeals in patent cases, a fact which would theoretically encourage the lower courts to heed the *ex ante* presumption made by the Federal Circuit in response to the OSGATA plaintiffs' appeal. However, in practical terms, many farmer-infringement targets (especially as compared to Monsanto) might be financially unable to see a judicial estoppel defense³⁵⁸ through to its end in litigation. For example, an accused infringer who was in fact able to invoke the defense successfully in a second action at the district court level could thereafter find his or her case appealed by Monsanto, which, with its substantial financial resources,³⁵⁹ could assert on appeal numerous arguments for why the lower court's application of the doctrine was in error,³⁶⁰ dragging out the litigation into a hopelessly

and *Russell v. Rolfs*, 893 F.2d 1033, 1037 (9th Cir. 1990)).

357. See *New Hampshire*, 532 U.S. at 749.

358. Because the doctrine protects courts rather than litigants, courts may raise the doctrine *sua sponte*. See, e.g., *Grigson v. Creative Artists Agency L.L.C.*, 210 F.3d 524, 530 (5th Cir. 2000). However, litigants may also raise it as a defense. See *Hansen v. Harper Excavating, Inc.*, 1216, 1227 (10th Cir. 2011) (“[W]e note, as have other circuits, that judicial estoppel is an affirmative defense.” (citations omitted)).

359. Monsanto's latest Annual Report indicates net sales of \$14.86 billion in 2013. Monsanto Co., *Financial Highlights*, MONSANTO COMPANY 2013 ANNUAL REPORT, available at <http://www.monsanto.com/investors/documents/annual%20report/2013/monsanto-2013-annual-report.pdf>.

360. For example, Monsanto could quite conceivably challenge a lower court's application of the doctrine to bar later-filed infringement suits on grounds that the position the company took in the later suit was not “clearly inconsistent with its earlier position.” See *New Hampshire*, 532 U.S. at 750-51 (listing several factors that “typically inform the decision whether to apply the doctrine in a particular case” and thus supply bases for

expensive battle and ultimately possibly even prevailing—hardly the sort of finality that is logically a necessary predicate to an *ex ante* estoppel ruling such as that made by the court. Alternatively, an accused infringer who was unable to invoke the doctrine successfully in the lower court might be unable to afford to pursue an appeal. Even if he or she had the finances to do so, overturning a court’s decision not to apply the doctrine would be difficult; because the doctrine of judicial estoppel is a discretionary doctrine, it is reviewed only for abuse of discretion,³⁶¹ a notoriously difficult standard to overcome.³⁶² Knowing these facts (both that appeals are expensive for individual litigants, and that their rulings would be reviewed on a very deferential standard), lower courts might quite readily refuse to apply the doctrine in an accused infringer’s favor, even if they are aware of the possibility that such a defendant might in fact have the resources with which to file an appeal.

Additionally, only a minority of the individuals against whom Monsanto asserts its patent rights end up before the courts each year. As the Federal Circuit itself observed, “Between 1997 and 2010, Monsanto brought some 144 infringement suits for unauthorized use of its seed. Approximately 700 other cases were settled without litigation.”³⁶³ An accused infringer attempting to settle with Monsanto, armed only with a potential affirmative defense that is simply *presumed* to apply, by a court *other than* the one before which the parties would initially appear (which itself is a questionable presumption, given that any later application of the doctrine is discretionary), is not in anywhere near the same position to refuse to accede to settlement pressures as one who had received a binding covenant not to sue, much less a declaration of non-infringement. Thus, contrary to the Federal Circuit’s suggestion that its ruling had an effect similar to a covenant not to sue,³⁶⁴ the OSGATA plaintiffs were in fact left with little more than a potential future affirmative defense,³⁶⁵ the application of which lay precariously within the discretion of whatever court in which Monsanto might decide to sue in the future. Because such uncertainty as to future courts’ interpretations of Monsanto’s disclaimer exist, the doctrine of

challenging the doctrine’s application).

361. *See, e.g.*, *Grochocinski v. Mayer Brown Rowe & Maw, LLP*, 719 F.3d 785, 795 (7th Cir. 2013) (citing *In re Knight-Celotex, LLC*, 695 F.3d 714, 722 (7th Cir. 2012)); *Montrose Med. Grp. Participating Sav. Plan v. Bulger*, 243 F.3d 773, 784 (3d Cir. 2001); *In re Coastal Plains, Inc.*, 179 F.3d 197, 205 (5th Cir. 1999).

362. *See, e.g.*, *Troxell v. Fedders of N. Am., Inc.*, 160 F.3d 381, 383 (7th Cir. 1998) (noting that the abuse of discretion standard “is a hard standard to overcome”); *Modine Mfg. Co. v. Allen Grp., Inc.*, 917 F.2d 538, 543 (Fed. Cir. 1990) (referring to the standard as “the difficult abuse of discretion standard”); Thomas A. Mauet, *The New World of Experts in Federal and State Courts*, 25 AM. J. TRIAL ADVOC. 223, 228 (2001) (“The abuse of discretion standard is a difficult standard to overcome on appeal.”).

363. *See Organic Seed Growers II*, 718 F.3d 1350, 1353 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

364. *Id.* at 1358.

365. *See supra* note 358.

future judicial estoppel should not have been invoked to moot the present controversy between the parties.

In addition to the ambiguities created for the OSGATA plaintiffs by the Federal Circuit's conflicting remarks, the court's opinion also created uncertainties, both for other potential farmer-infringement targets as well as for Monsanto itself. This is in part due to the court's imprecise language, and in part because the doctrine of judicial estoppel (unlike the more common doctrine of equitable estoppel) does not require that the party seeking to invoke the estoppel have been an adverse party in the prior proceeding.³⁶⁶ As several circuit courts have recognized, "This distinction reflects the difference in the policies served by the two rules. Equitable estoppel protects litigants from less than scrupulous opponents. Judicial estoppel, however, is intended to protect the integrity of the judicial process."³⁶⁷ Thus, by choosing to proceed on judicial estoppel grounds and ignoring the OSGATA plaintiffs' equitable estoppel argument, the Federal Circuit explicitly chose a doctrine that, in theory, is open to future infringement targets other than the OSGATA plaintiffs themselves.

That being the case, the question of which disclaimer or representation of Monsanto's is to be given preclusive effect—be it the words in Monsanto's letter to counsel, the words in Monsanto's online representations, Monsanto's "disclaimer" as the Federal Circuit read it, or some combination thereof—is of more than just academic concern. This is because each of these representations, as discussed previously,³⁶⁸ describes different groups of potential future infringement defendants. Monsanto's representation in its letter to counsel (which is the only representation Monsanto agreed explicitly would subject it in the future to judicial estoppel),³⁶⁹ if taken to estop Monsanto in future actions, would only preclude claims against the OSGATA plaintiffs themselves.³⁷⁰ However, if a later court were to invoke the doctrine of judicial estoppel based upon the meaning of Monsanto's online commitment to farmers as Monsanto represented it to the district court, it would be able to block claims by

366. See, e.g., *Burnes v. Pemco Aeroplex, Inc.*, 291 F.3d 1282, 1286 (11th Cir. 2002) (rejecting an argument that a nonparty to a prior proceeding could not invoke the doctrine, noting that "[w]hile privity and/or detrimental reliance are often present in judicial estoppel cases, they are not required" (alteration in original) (quoting *Ryan Operations G.P. v. Santiam-Midwest Lumber Co.*, 81 F.3d 355, 362 (3d Cir. 1996))); *Edwards v. Aetna Life Ins. Co.*, 690 F.2d 595, 598 (6th Cir. 1982) ("Unlike equitable estoppel, judicial estoppel may be applied even if detrimental reliance or privity does not exist" (citing *Konstantinidis v. Chen*, 626 F.2d 933, 937 (D.C. Cir. 1980))).

367. 690 F.2d at 598 (citing *Allen v. Zurich Ins. Co.*, 667 F.2d 1162, 1166 (4th Cir. 1982), and *Konstantinidis*, 626 F.2d at 939)).

368. See Part II.B.2.e.i.

369. *Organic Seed Growers II*, 718 F.3d at 1359.

370. See *id.* at 1358 (noting Monsanto's written assertion to opposing counsel that it "does not assert and has no intention of asserting patent-infringement claims against your clients.")

Monsanto against a broader swath of inadvertently infringing “growers” of its seed.³⁷¹ Likewise, the Federal Circuit’s “conclusion” about Monsanto’s intent, if applied by a later court, would preclude claims against other inadvertent “users or sellers” of its transgenic seed.³⁷² Arguably, regardless of what the Federal Circuit’s intent was, and of what Monsanto agreed would have later preclusive effect, a later court could rely upon any of these representations as positions taken by Monsanto in the OSGATA litigation, and thereby preclude claims against the entities in any of these groups. Not only does this create an unpredictable situation for potential future defendants, it creates an unpredictable situation for Monsanto as well.

Finally, the foregoing discussion about the uncertain future preclusive effect of the Federal Circuit’s estoppel-based ruling begs the question of whether it was proper for the court to make the determination that it did in the first place. In other words, was it correct for the court to hold that Monsanto’s representations necessarily “moot[ed] any potential controversy” simply on the basis of an *ex ante* presumption that future tribunals would find that Monsanto’s representations barred it as a matter of judicial estoppel, given that the court could not be certain that a later court would apply that doctrine to the benefit of future accused infringers? The doctrine, after all, is a discretionary one, and is not intended for the benefit of the parties themselves.³⁷³ Thus, in order to find that the OSGATA plaintiffs’ concerns about the inevitability of future infringement actions (coupled with the present injury the plaintiffs were suffering by virtue of having to engage in expensive testing measures and forgo full use of their land) were presently mooted, the Federal Circuit was relying on a *future discretionary possibility*, rather than a binding present and future certainty.

This is an important distinction, as exemplified by *Already, LLC v. Nike, Inc.*,³⁷⁴ one of the main authorities on which the Federal Circuit based its decision. As illustrated in Part II.B.2.d’s discussion of *Already*, it is only a sufficiently unconditional and irrevocable covenant not to sue (such as that given by Nike to Already) that may moot a controversy, where it is “absolutely clear the alleged wrongful behavior could not reasonably be expected to

371. *See id.* at 1357-58 (noting that Monsanto represented to the district court that the statement on its website was “meant to assure growers that Monsanto will not pursue a patent infringement suit where Monsanto’s patent traits appear inadvertently . . . in minimal quantities” (quoting Defendant’s Memorandum of Law in Support of Motion to Dismiss at 5, *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544 (S.D.N.Y. 2012) (No 11-CV-2163), *aff’d*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014))).

372. *Id.* (“We conclude that Monsanto has disclaimed any intent to sue inadvertent users or sellers of seeds that are inadvertently contaminated with up to one percent of seeds carrying Monsanto’s patented traits.”)

373. *See supra* notes 352-353, 358.

374. 133 S. Ct. 721, 732 (2013).

recur.”³⁷⁵ Yet Monsanto’s disclaimers, as discussed, offer no such certainty. Not only did Monsanto expressly refuse to give the OSGATA plaintiffs a binding covenant not to sue,³⁷⁶ the representations that it did make were far from “unconditional.” As the Federal Circuit recognized, Monsanto’s disclaimer was limited not only by its view of what constitutes an inadvertent infringer, but also by the fact that once an inadvertent infringer becomes contaminated by more than one percent of Monsanto’s seed, that inadvertent infringer no longer falls within the protection of Monsanto’s disclaimer, regardless of whether the inadvertent infringer used glyphosate or otherwise attempted to make use of the Roundup Ready trait.³⁷⁷ Thus, unlike Nike, which was forced to take the position that there was no prospect that Already could produce a shoe not under the protection of Nike’s covenant,³⁷⁸ Monsanto could not be forced to—and indeed, would not wish to—take anywhere close to a similar position with respect to the OSGATA plaintiffs. This is because all the plaintiffs had to “do” in order to fall outside of Monsanto’s representations was either (a) to become aware of the presence of its transgenic seed on their land and save, replant, or sell their crops as they always had, knowing of the presence of any percentage of Monsanto’s transgenic seed, or (b) to have the distinct misfortune of having their land become contaminated by Monsanto’s seed beyond the one percent threshold, regardless of whether they were aware of it.

The OSGATA plaintiffs, then, were in quite a distinct position with respect to Monsanto as Already was with respect to Nike. Yet the Federal Circuit suggested that their position was the same, relying on *Already* to support its argument.³⁷⁹ *Already*, however, was not even a case that relied upon the potential future preclusive effect of a later court’s invocation of judicial estoppel. In fact, the term “judicial estoppel” appears nowhere within the Supreme Court’s opinion in *Already*. Rather, the present preclusive effects of Nike’s binding covenant not to sue justified the lower court in *Already* in mooting a case that was presently before it.³⁸⁰ By contrast, recognizing that it

375. *Id.* at 727, 733 (quoting *Friends of the Earth, Inc. v. Laidlaw Env’tl. Servs. (TOC), Inc.*, 528 U.S. 167, 190 (2000)).

376. *Organic Seed Growers II*, 718 F.3d at 1354, 1358.

377. *Id.* at 1359.

378. *Already*, 133 S. Ct. at 728.

379. 718 F.3d at 1358-59.

380. Should Nike have later sued Already in contravention of its covenant, the court certainly could have found it estopped from doing so on the basis of its prior representations. However, it would not have *had* to do so in order to dispose of the case, because it could do that based on the covenant itself. Moreover, this possibility wasn’t necessary in order for the lower court in *Already* to make its mootness finding. The controversy in *Already*, which admittedly was about whether Nike would sue in the future, was directly mooted by Nike’s promise not to do so in order to end the suit. In other words, the court did not have to rely on an argument that a later court would find Nike estopped from suing because it would contradict its present representation; it found directly that the representation mooted the

did not have before it a binding present and future certainty such as that provided by Nike's broad and unconditional covenant with which to moot the OSGATA plaintiffs' controversy, the Federal Circuit turned to the principal of judicial estoppel instead, arguing that because Monsanto *should* be judicially estopped from suing the OSGATA plaintiffs in the future (at least under circumstances covered by Monsanto's disclaimer), the present controversy between the parties was likewise moot.

Nothing in the Supreme Court's opinion in *Already* supports this determination, however, and nothing about Monsanto's representations would bind a future court to find that Monsanto was judicially estopped from bringing similar future claims, as the doctrine is one that is within a court's discretion to impose.³⁸¹ Thus, even if it had been accurate, under all the circumstances, for the Federal Circuit to conclude that the OSGATA plaintiffs had "not made allegations that they [fell] outside Monsanto's representations (which, as the foregoing discussion also demonstrated, could not be further from the case), it is questionable whether the Federal Circuit should have relied upon such a future discretionary possibility to hold that Monsanto would be certainly estopped in the future and thus presently lacking a justiciable controversy. In the end, however, neither the OSGATA plaintiffs nor Monsanto raised the question of the propriety of relying on a presumption about the future application of a discretionary doctrine on appeal, and the Supreme Court chose not to take on the case. Thus, the question of whether the Federal Circuit's estoppel analysis is appropriate under *Already* remains to be determined.

CONCLUSION: QUESTIONS LEFT TO NATURE AND TO FUTURE LITIGANTS

As the Supreme Court declined to grant certiorari to the Organic Seed Growers and Trade Association plaintiffs³⁸² and thus did not rule on the Federal Circuit's opinion, several open questions remain as a result of the gaps, conflicts, and ambiguities exploited by and raised in the OSGATA opinions. Some open questions were left to nature; others may be resolved in future litigation, either by future litigants in declaratory judgment suits involving patents or by the OSGATA plaintiffs themselves. The Federal Circuit insisted that its ruling was based on *MedImmune* and ostensibly disposed of the case on simple estoppel grounds rather than relying on a determination directly inconsistent with *MedImmune*'s rejection of the circuit court's "reasonable apprehension of imminent suit" test. Therefore, the Supreme Court may not have recognized the case as the best vehicle by which to curb the Federal

controversy. The Federal Circuit in the OSGATA plaintiffs' situation, by contrast, could not make such a finding, not only because the representation was not equally binding, but because a future court would not necessarily have to invoke the doctrine of judicial estoppel as the Federal Circuit presumed that it would.

381. *See supra* note 356 and accompanying text.

382. *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 134 S. Ct. 901 (2014).

Circuit's attempts to perpetuate its preparatory conduct standard. From a Supreme Court perspective, a denial of certiorari in the OSGATA case (where neither party challenged the authority of the circuit court to base its dismissal on an uncertain *ex ante* determination about the position another court might assume) left the OSGATA plaintiffs with at least some of the relief they sought, while leaving the determination of whether the Federal Circuit's narrowing of *MedImmune* should be tolerated for another day, perhaps for a case involving clearer-cut facts than those that turn in part upon the vagaries of nature. Obviously, this also left to nature the determination of whether the one percent contamination threshold would necessarily be breached, along with the question of what effect the rise of superweeds would ultimately have on the presumed utility of the seed giants' patented germplasm.

Thus, it remains to be seen how or when superweeds and the associated herbicides and pesticides that ultimately fuel their growth will have their day in court. Although superweeds played a role in the Supreme Court's determination of the *Geertson* case,³⁸³ ultimately that opinion, like the one issued as a result of the OSGATA appeal, was one about standing. As things currently stand, there are no regulatory mechanisms in place to review the cumulative environmental impacts of glyphosate use before glyphosate-resistant crops enter the U.S. marketplace.³⁸⁴ As a result, superweeds will likely continue to multiply, and the harms caused by both the unruly weeds themselves and the associated increased use of herbicides that are necessary to kill them will most likely be resolved, if at all, in tort suits between farmers,³⁸⁵ which will challenge only the collateral damage caused by farmers' responses to superweeds, rather than the weeds' costly origins.

It also remains to be seen whether the Federal Circuit's attempt to rely on the future discretionary application of the principle of judicial estoppel will be upheld by the Supreme Court as a substitute for a binding covenant not to sue in terms of the ability of the former to moot a present case or controversy. Likewise, one can only speculate as to whether the Supreme Court will accept the Federal Circuit's narrowed rule for determining declaratory judgment jurisdiction in the patent context, requiring preparatory conduct on the part of the plaintiff as an elemental matter, or whether it will choose to reiterate in an

383. *See Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 163, 170 (2010) (discussing the adequacy of a regulatory body's consideration of the risk of gene flow and harmful resistant weed development).

384. *See Bratspies*, *supra* note 43, at 946.

385. *See, e.g., Johnson v. Paynesville Farmers Union Co-Op Oil Co.*, 817 N.W.2d 693, 712-13 (Minn. 2012) (involving, *inter alia*, negligence and nuisance claims associated with unwanted pesticide drift onto farmers' fields, which resulted in the farmers having to take extra measures to control weeds and in negative consequences to the farmers' health); *cf. Amanda Smith, Note, Sowing Wild Oats: Bystander Strict Liability in Tort Applied to Organic Farm Contamination by Genetically Modified Seed*, 51 U. LOUISVILLE L. REV. 629, 632-43 (2013) (discussing the difficulty with various tort methods of recovery for transgenic seed contamination).

appropriate future case that the standard for justiciability laid out in *MedImmune*—itself a patent case—is one that applies in all declaratory judgment contexts. The determination of these questions will necessarily impact the ability of future litigants to make challenges similar to the ones brought by the OSGATA plaintiffs but not heard due to the Federal Circuit’s jurisdictional determinations.

From the perspective of the OSGATA plaintiffs and similarly situated farmers, an even larger universe of open questions has been left by the gaps, conflicts, and ambiguities in the law that the Federal Circuit’s OSGATA opinion exploited, instigated, and perpetuated. Will Monsanto truly adhere to its nonbinding commitment not to sue, now that the Federal Circuit has attempted to make it binding by virtue of its estoppel-based ruling? Will future courts actually hold it estopped from suing if it does not so adhere? To which of the representations discussed by the Federal Circuit will Monsanto hold itself, or be held? Can farmers other than the OSGATA plaintiffs themselves expect to be protected by Monsanto’s representations? Will Monsanto sue for unquestionably inadvertent infringement when a farmer’s contamination levels exceed one percent? Will Monsanto sue for less than this amount of contamination when the patented traits involved are other than those named in the OSGATA plaintiffs’ complaint (and are thus excluded from the Federal Circuit’s ruling)? Might future farmer infringement plaintiffs have a reasonable equitable estoppel claim? Could future declaratory judgment plaintiffs find a way to sue for any of the other allegations that the district court never touched, such as whether Monsanto’s patents are unenforceable due to lack of utility or misuse, or whether Monsanto commits trespass when its seeds contaminate another? These and a multitude of other questions persist as a result of the ambiguity of the Federal Circuit’s opinion and its apparent conflicts with longstanding Supreme Court authority.

Despite leaving the OSGATA plaintiffs with numerous open questions, the case in some ways was a success, given the bleak state of affairs farmers have faced in recent years as more and more feel the pressure of Monsanto’s litigation-fueled stronghold. As Professor Joseph Singer has argued, “Property concerns legal relations among people regarding control and disposition of valued resources.”³⁸⁶ In recent years, farmers have seen their real and personal property—the land they own and the seed they plant—impinged upon in the seed wars by the heavy weight and unrelenting advancement of the intellectual property owned by the seed giants. The control and disposition of these farmers’ own valuable resources have, from an imbalance of power, been slipping inevitably into the hands of corporations like Monsanto, which have taken control of what was once a free and shared American germplasm by

386. JOSEPH WILLIAM SINGER, PROPERTY 2 (3d ed. 2010) (admonishing the reader to “[n]ote well: Property concerns relations among people, not relations between people and things”).

injecting it with patented traits. While farmers were once free to save and replant seed without conducting expensive testing to ensure that they had not inadvertently allowed the progeny of transgenic contaminants to replicate and survive, today this right to collect and use personal property as has been done for millennia has been muted by the threat of potentially bankrupting infringement suits. Likewise, while farmers were once free to use the whole of their real property as they saw fit for maximizing profit and utility, today this right is curtailed by the need to create buffer zones to avoid the collection of trespassing transgenic seed and to plant so as to avoid crops that are susceptible to contamination by cross-pollination or other means. Unarmed by this imbalance of power and losing their traditional rights, the picture has been bleak for farmers wishing to farm in traditional ways.

Yet by banding together and taking the offensive as the OSGATA plaintiffs did, some of the power was put back into the hands of these farmers, even if only temporarily. Providing the plaintiffs with a true covenant not to sue, even limited to non-users of glyphosate, would have been a simple and cost-effective solution for all parties, presuming that Monsanto truly had no intent to sue farmers in the position that the OSGATA plaintiffs occupy. Yet Monsanto elected not to do this, hiring instead none other than the former Solicitor General himself to defend its case. Certainly, then, Monsanto felt some pressure as a result of the claims brought by the OSGATA plaintiffs, not a small victory considering the disparity of resources between the two parties. Moreover, the OSGATA plaintiffs were able to accrue some helpful judicial findings along the way. First, the district court recognized that the economic problems posed by transgenic seed are not limited to organic farmers, but affect conventional farmers as well.³⁸⁷ And even more importantly, the district court found, and the Federal Circuit acknowledged, “some unlicensed—and unintended—use of transgenic seeds is *inevitable*.”³⁸⁸ Armed with these findings, future litigants may indeed have some hope to advance further than the OSGATA plaintiffs were able to do, should they decide to remain on the forefront of the battle against the weeds, seeds, and deeds that define the seed wars as they are fought in the United States today.

387. *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, 851 F. Supp. 2d 544, 549 (S.D.N.Y. 2012) (“Contamination can theoretically affect non-transgenic farmers by lowering the price for which their crops may be sold and potentially resulting in rejected shipments.”), *aff’d*, 718 F.3d 1350 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 901 (2014).

388. *Id.* at 548 (emphasis added).

SPECIALIZED STANDARDS OF REVIEW

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ABSTRACT

The applicable standard of review on appeal is governed by a simple rule: appellate courts review questions of law de novo, questions of fact for “clear error,” and questions of discretion for “abuse of discretion.” Despite the apparent simplicity of the rule, its application has been uneven, to state it mildly. Scholars have written extensively about the application of the rule, but have yet to consider whether the traditional rule of “deference” should be altered when the appellate court is a specialized court.

Despite the dearth of legal scholarship on specialized deference, the Supreme Court is keenly interested in the topic. Recently, the Court held in two cases (both of which arose from the U.S. Court of Appeals for the Federal Circuit, a specialized court of appeals that hears all patent appeals) that specialized courts do not enjoy specialized standards of review. This Article supports those decisions.

Furthermore, this Article marshalls additional support for the Courts decisions in three ways. First, this Article argues the Federal Circuit’s use of de novo review has had a deleterious effect on the patent system. The use of de novo by the Federal Circuit has increased litigation, demoralized judges, and led to inferior decisions. Second, it offers an alternative to de novo review that is based in traditional principles of appellate practice. The Article concludes by arguing for a reduced role for stare decisis in standard of review cases.

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INTRODUCTION

Despite frequent complications in application,¹ the formal amount of deference that appellate courts apply to district court civil decisions is well-established: appellate courts give deference to factual determinations, reversing only when there is “clear and convincing evidence” of a mistake; whereas with legal determinations, appellate courts grant no deference to district court decisions, instead reviewing those decisions “*de novo*.”² There are sound, institutional reasons for the fact/law dichotomy of standard of review law.³ For example, federal district courts and federal circuit courts of appeal have complimentary, yet distinct areas of expertise: district courts are considered superior at “fact-finding,” while appellate courts are thought to be primarily responsible for maintaining coherent legal interpretations.⁴ Thus, factual decisions are reviewed with some level of deference on appeal, while legal

1. See, e.g., Kelly Kunsch, *Standard of Review (State and Federal): A Primer*, 18 SEATTLE U. L. REV. 11, 12 (1994) (“It would be difficult to name a significant legal precept that has been treated more cavalierly than standard of review.”).

2. *Bose Corp. v. Consumers Union of U.S., Inc.*, 466 U.S. 485, 514 (1984). For discretionary decisions, courts reverse only when an “abuse of discretion” has been committed. For discussion of discretionary decisions and the review of those decisions, see *infra* Subpart I.A.4. Other common standards of review are “arbitrary or capricious” review, which is generally applied to review of agency decisions, see 5 U.S.C. § 706(2)(A) (2014), and “substantial evidence” review, which is applied to factual determinations made by juries, see *Glasser v. United States*, 315 U.S. 60, 80 (1913). Those standards are beyond the scope of this Article, which instead focuses on appellate review of district court bench decisions.

3. Of course, the very basis of the fact/law distinction has been questioned on practical and philosophical grounds. See generally, Ronald J. Allen & Michael S. Pardo, *The Myth of the Law-Fact Distinction*, 97 NW. U. L. REV. 1769, 1775–83 (2003) (questioning the ontological distinction between law and fact).

4. See, e.g., Arti K. Rai, *Engaging Facts and Policy: A Multi-Institutional Approach to Patent System Reform*, 103 COLUM. L. REV. 1035, 1086–88 (2003) (discussing institutional competence arguments for district courts as “fact find[ers]” and appellate courts shepherds of “legal doctrine”); Charles Alan Wright, *The Doubtful Omniscience of Appellate Courts*, 41 MINN. L. REV. 751, 778 (1957) (discussing the institutional benefits of deference).

decisions are not.

But the relative strengths and weaknesses of appellate and trial courts differ when the appellate court is not a generalist court (one that hears a broad array of cases from diverse legal areas), but is instead a specialized court (one that acts as a centralized repository for all appeals of a particular legal area). While most appeals from trial court decisions are sent to generalist appellate courts—such as the numbered federal appellate circuits and the D.C. Circuit—certain types of cases are sent to specialized courts of appeals.⁵ For instance, the U.S. Court of Appeals for the Federal Circuit (Federal Circuit) reviews all appeals arising under the U.S. patent laws.⁶

Numerous legal scholars have contributed to the robust theoretical literature on deference's place in the federal court system.⁷ Another group of legal and political science scholars has created a large and growing body of literature analyzing the role of specialized courts in the federal court hierarchy.⁸ But scholars have paid little attention to the link between deference and specialized courts.⁹ Despite the oversight of legal academics, the Supreme Court is currently very interested in the topic. Recently, the Court heard two

5. For instance, all court-martials from the armed forces' four Court of Criminal Appeals are heard before the U.S. Court of Appeals for the Armed Forces. 28 U.S.C. § 1651 (2014).

6. 28 U.S.C. § 1295(a)(1) (2014).

7. See e.g., Robert Anderson IV, *Law, Fact, and Discretion in the Federal Courts: An Empirical Study*, 2012 UTAH L. REV. 1, 50 (2012) (empirically finding that standards of review "actually matter."); Henry J. Friendly, *Indiscretion About Discretion*, 31 EMORY L.J. 747, 763 (1982) (analyzing the application of the abuse of discretion standard); Pauline T. Kim, *Lower Court Discretion*, 82 N.Y.U. L. REV. 383, 417 (2007) (discussing the discretionary decisions of lower courts); John F. Nangle, *The Ever Widening Scope of Fact Review in Federal Appellate Courts—Is the "Clearly Erroneous Rule" Being Avoided?*, 59 WASH. U. L. Q. 409, 426–29 (1981); Paul R. Verkuil, *An Outcome Analysis of Scope of Review Standards*, 44 WM. & MARY L. REV. 679, 682–83 (2002) (reviewing the impact of standards of review on appellate outcome); Wright, *supra* note 4.

8. See e.g., LAWRENCE BAUM, *SPECIALIZING THE COURTS* 39–40 (2011) (describing the tendency of specialized courts to enhance their policymaking power); RICHARD A. POSNER, *THE FEDERAL COURTS: CHALLENGE AND REFORM* 254 (rev. ed. 1999) (describing the executive and legislative branch's enhanced control over policies set by specialized courts through the power of appointment); J. Jonas Anderson, *Congress as a Catalyst of Patent Reform at the Federal Circuit*, 63 AM. U. L. REV. 961, 974–77 (2014) (discussing the Congress' creation of the Federal Circuit); Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 2–4 (1989) (same); Rai, *supra* note 4.

9. Some scholars, most notably Arti Rai, have written about the Federal Circuit's tendency to review facts *de novo*. See Rai, *supra* note 4 at 1042–60 (describing the Federal Circuit "as Fact Finder"); Arti K. Rai, *Specialized Trial Courts: Concentrating Expertise on Fact*, 17 BERKELEY TECH. L.J. 877, 883–87 (2002) (arguing that the Federal Circuit has "[i]gnor[ed] conventional allocation-or-power principles" in "asserting power over fact."). Numerous scholars have discussed the Federal Circuit's lack of deference to agency decisions. See e.g., Craig Allen Nard, *Deference, Defiance, and the Useful Arts*, 56 OHIO ST. L.J. 1415 (1995). However, scholars have not analyzed whether deference principles apply with less force in specialized legal areas than in generalized ones, which is the focus of this Article.

cases that dealt with the proper amount of deference owed by specialized courts.¹⁰ Those cases correctly held that appellate courts owe some deference to their trial-level colleagues.

Previously, the Federal Circuit, and to a lesser extent the Supreme Court, indicated that specialized courts should apply reduced amounts of deference to district court decisions.¹¹ The courts' earlier decisions have an understandable appeal. The case for rigorous oversight is stronger, at least superficially, for the Federal Circuit and other specialized courts than it is for non-specialized circuit courts of appeal.¹² Congress created the Federal Circuit in order to unify patent law, and the court should therefore be given broad leeway in reviewing patent cases, cases which are heard before non-specialist judges, or so the theory goes.¹³

In fact, it is more than a theory. The Federal Circuit has held in numerous instances that its unique Congressional mandate to unify patent law compels it to grant less deference to lower court decisions than traditional appellate practice would suggest.¹⁴ The court achieves this extra-thorough review via two principal mechanisms: first, the court narrowly defines the category of "fact," thus limiting the import of Rule 52(a) of the Federal Rules for Civil Procedure (FRCP), which requires deference on factual questions;¹⁵ second, the court applies *de novo* review to claim construction decisions.¹⁶ Because claim construction is fundamental to determinations of patent validity and infringement, the Federal Circuit is able to review issues in virtually every patent appeal *de novo*.¹⁷

This Article argues that the Supreme Court was wise to align the Federal Circuit's standard of review jurisprudence with traditional principles of appellate practice. It also provides a more robust theoretical justification for the decision. The Federal Circuit lacks any sort of specialized expertise in fact-finding and therefore is required to defer to district court decisions of fact.¹⁸ Although the court is a specialized center of patent jurisprudence, the expertise that the court has developed on legal patent matters does not alter the common law's carefully-crafted balance between searching review and deferential

10. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 687 F.3d 1300 (Fed. Cir. 2012), *cert. granted*, 134 S.Ct. 48 (U.S. Oct. 1, 2013) (No. 12-1163); *Teva Pharms. USA, Inc., v. Sandoz Inc.*, 723 F.3d 1363 (Fed. Cir. 2013), *cert. granted*, 134 S.Ct. 1761 (U.S. Mar. 31, 2014) (No. 13-854).

11. *See infra* Part II.

12. *See infra* Part II.

13. *Id.*

14. *Id.* *See also*, Rai, *supra* note 4 at 1044–60 (describing the Federal Circuit's tendency to review facts).

15. FED. R. CIV. P. 52(a); *see* Part II.B.1, *infra*.

16. *Lighting Ballast Control LLC v. Philips Elecs. N.A. Corp.*, 744 F.3d 1272, 1276–77 (Fed. Cir. 2014); Part II.B.2, *infra*.

17. *See* Rai, *supra* note 9 at 883–87 (describing the "domino effect" of reviewing claim construction *de novo*).

18. FED. R. CIV. P. 52(a).

review, a balance which is based on the strengths and weaknesses of appellate review.¹⁹ Specialized appellate courts such as the Federal Circuit should review cases through well-understood principles of deference, without creating a parallel system of specialized review.

The Federal Circuit has also held—in a separate case—that *stare decisis* requires an appellate court to maintain a previously adopted standard of review. That position should be rejected by the Supreme Court. Although the doctrine of *stare decisis* ebbs and flows, it has been consistently applied with a light touch in cases concerning standards of review.²⁰ The theoretical rationales for *stare decisis*—fairness, predictability, and separation of powers—are of little import when determining the scope of appellate review.²¹ Furthermore, no decisions outside of the litigation context are based on the appellate standard of review; therefore, no expectancy interest is in need of protection via *stare decisis*.²²

Relative institutional competency provides a better framework from which to determine the proper standard of review for specialized courts. Insulating factual decisions from plenary appellate review reinforces and leverages the strengths of both trial courts (fact-gathering) and appellate courts (legal interpretation). Overbroad use of *de novo* review undermines the role of the trial judge and increases litigation uncertainty and cost.²³ Indeed, the Federal Circuit's own experience with *de novo* review provides compelling evidence of the problems that plenary review of fact-intensive issues can cause.²⁴ The Federal Circuit's non-deferential review of district court findings has led to judicial confusion and increased litigation costs in patent law.²⁵

The Federal Circuit (and other specialized courts) could apply less-than-complete review to mixed question decisions without sacrificing national legal uniformity. Specialized questions of mixed fact and law (like patent claim construction) should be reviewed in much the same way that generalist appellate courts review contract interpretation cases: by reviewing the ultimate interpretation *de novo*, while deferring to underlying factual decisions unless clearly erroneous.²⁶ Such a hybrid review has proven workable for every appellate circuit in contract law for well over a century.²⁷

This Article proceeds in three Parts. Part I describes the basic contours of the standards of review applied by appellate courts to judicial findings of (1) fact, (2) decisions of law, (3) mixed questions of fact and law, and (4) discretionary decisions. It then compares those standards to the more

19. Wright, *supra* note 4 at 755–58.

20. *Payne v. Tennessee*, 501 U.S. 808, 828 (1991).

21. See Part III.C, *infra*.

22. *Id.*

23. See Part III.A, *infra*.

24. *Id.*

25. *Id.*

26. Part III.B, *infra*.

27. *Id.*

intensive review employed by the Federal Circuit. Part II examines mixed questions of law and fact in more depth and analyzes whether such questions should be reviewed less deferentially by specialized appellate courts than by generalist ones. Part III critiques the Federal Circuit's misapplication of standard of review principles. As a case study, it empirically and theoretically examines the court's claim construction jurisprudence.

I. STANDARDS OF REVIEW

In federal appeals, the scales of justice are often tipped in favor of the party that prevailed at trial. This is so because appellate courts are, at times, required to uphold trial court decisions even when the appellate court disagrees with that decision.²⁸ Courts of appeal are said to “defer” to district court decisions when those decisions are reviewed not for correctness, but rather for some larger, more fundamental error.²⁹ The amount of deference that an appeals court applies in any given case may vary from no deference (as is the case when a court reviews a Constitutional question)³⁰ to complete deference (as is the case when the court receives an appeal of an issue that is unreviewable on appeal).³¹ The formal level of deference with which an appellate court treats lower court rulings is called the “standard of review.” Sometimes the applicable standard of review is mandated by statute. For example, agency decisions are statutorily required to meet an “arbitrary and capricious” standard.³² More frequently, however, standards of review are not set by statute and instead are determined by reference to history, traditional appellate practice, and the common law.³³

The traditional rule for determining standard of review is easily stated, if difficult to put into practice: “questions of law” are reviewed *de novo* (or “anew”), “questions of fact” are reviewed for clear error, and “matters of discretion” are reviewed for abuse of discretion.³⁴ The distinction between decisions of law, fact, and discretion, is often quite difficult to decipher and has

28. See *Cleo Syrup Corp. v. Coca-Cola Co.*, 139 F.2d 416, 417 (8th Cir. 1943) (“The power of a trial court to decide doubtful issues of fact is not limited to deciding them correctly.”).

29. See, e.g., Michael M. O’Hear, *Appellate Review of Sentences: Reconsidering Deference*, 51 WM. & MARY L. REV. 2123, 2130–35 (2010) (describing appellate deference in the area criminal sentencing).

30. See *Hanan v. Mukasey*, 519 F.3d 760, 763 (8th Cir. 2008).

31. See generally Ronald M. Levin, *Understanding Unreviewability in Administrative Law*, 74 MINN. L. REV. 690 (1989) (discussing unreviewable administrative decisions).

32. 5 U.S.C. § 706(2)(A) (2014). Courts have employed a judicial gloss on the “arbitrary and capricious” standard. The so-called “hard look” review of agency decisions developed by the D.C. Circuit may be more searching than originally intended by Congress. See generally Matthew Warren, *Active Judging: Judicial Philosophy and the Development of the Hard Look Doctrine in the D.C. Circuit*, 90 GEO. L.J. 2599 (2002).

33. See Kunsch, *supra* note 1, at 16–18 (describing the development of review standards).

34. *Pierce v. Underwood*, 487 U.S. 552, 558 (1988); *Highmark Inc. v. Allcare Health Mgmt. Sys. Inc.*, 134 S. Ct. 1744 (2014).

troubled judges, academics, and attorneys (not to mention law students),³⁵ for generations.³⁶

Deferential review of factual and discretionary decisions existence is based on sound principles of legal institutional policy. Trial courts are thought to be particularly adept at deciphering and making findings of fact.³⁷ Federal district courts have expertise in evaluating witnesses and weighing conflicting evidentiary sources.³⁸ They possess powers that permit broad discovery of factual information,³⁹ such as the subpoena power,⁴⁰ the power to compel discovery (and sanction parties who fail to comply),⁴¹ and ability to hear expert testimony.⁴² These powers and expertise make district courts uniquely well-positioned to analyze evidence and make factual judgments.⁴³ Appellate courts defer to that expertise unless they have a “definite and firm conviction that a mistake has been committed,”⁴⁴ because the appellate court typically functions without testimony, reviewing only a cold record of the proceeding below.

Conversely, appellate courts are charged with maintaining uniformity in the law and “are able to devote their primary attention to legal issues.”⁴⁵ They are given time to consider the ramifications of particular decisions on the larger legal landscape.⁴⁶ Additionally, they typically sit in three-judge panels, allowing discussion and debate amongst peers that furthers the goal of achieving optimal and uniform laws. Thus, they need not defer on questions of law to trial courts, which do not enjoy the temporal and collaborative benefits of appellate courts with regards to questions of legal interpretation.⁴⁷

35. Clarence Morris, *Law and Fact*, 55 HARV. L. REV. 1303, 1303 (1942) (“Beginning law students are asked to brief cases by separating the facts from the law—their teachers act as though the distinction were obvious even to the inexperienced.”).

36. Compare Allen & Pardo, *supra* note 3 (challenging the distinction between law and fact) with Nathan Isaacs, *The Law and the Facts*, 22, COLUM. L. REV. 1 (1922) (discussing the difference between fact and law).

37. See Wright, *supra* note 4, at 778; Rai, *supra* note 4, at 1086–88.

38. See *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 395 (1948) (“The practice in equity . . . was that the findings of the trial court, when dependent on oral testimony where the candor and credibility of the witnesses would best be judged, had great weight with the appellate court.”).

39. FED. R. CIV. P. 26(b)(2)(A).

40. FED. R. CIV. P. 45.

41. FED. R. CIV. P. 26(b)(2)(B) & 42.

42. FED. R. EVID. 702.

43. The federal appellate courts share these same powers of fact discovery, but almost never make use of those powers. See generally, John C. Godbold, *Fact Finding by Appellate Courts—An Available and Appropriate Power*, 12 CUMB. L. REV. 365 (1981).

44. *Id.* at 395.

45. *Salve Regina College v. Russell*, 499 U.S. 225, 231–32 (1991).

46. Evan T. Lee, *Principled Decision Making and the Proper Role of Federal Appellate Courts: The Mixed Questions Conflict*, 64 S. CAL. L. REV. 235, 251 (1991) (noting that appellate judges enjoy the “advantage of group deliberations and group voting” as well as “the luxury of distanced reflection.”).

47. See *Mucha v. King*, 792 F.2d 602, 605–06 (7th Cir. 1986) (The appellate court’s “main responsibility is to maintain the uniformity and coherence of the law . . .”).

Distinguishing law from fact and then applying the correct standard of review has proven to be quite troublesome for appellate courts. Although the landscape of standard of review practices is uneven, in general it can be said that appellate courts have established four types of civil judicial decisions that merit unique standards of review: findings of fact, findings of law, discretionary rulings, and mixed questions of law and fact.⁴⁸ This section will provide a brief overview of the approach that appellate courts take in reviewing each of the four decisional categories.

A. *Standards of Review Among Generalist Courts*

1. *Findings of Fact*

Controversy and debate over the scope of appellate review of U.S. district court findings is long-running, predating the U.S. Constitution.⁴⁹ In 1937, Congress and the federal courts attempted to resolve the controversy of appellate standard of review within the broader adoption of the FRCP. Rule 52(a) requires district courts to specifically state conclusions of law and conclusions of fact separately.⁵⁰ The rule further restricts appellate tribunals from setting aside the district court's fact-findings "unless clearly erroneous."⁵¹ Thus, appellate courts are required to defer to district court findings of fact in the absence of clear error.

In defining "clearly erroneous," the Supreme Court has provided little more than broad platitudes:

A finding is 'clearly erroneous' when although there is evidence to support it, the reviewing court on the entire evidence is left with the firm conviction that a mistake has been committed.⁵²

While application of such a pliable standard is bound to be fraught with controversy, courts have, for the most part, managed to navigate the contours of clearly erroneous review over the years.⁵³

Numerous justifications have been given for the requirement of appellate

48. There are also separate standards of review used for appeals of administrative decisions and jury decisions.

49. STEVEN A. CHILDRESS & MARTHA S. DAVIS, 1 FEDERAL STANDARDS OF REVIEW § 2.01 at 2–3 (4th ed. 2010) (stating that the controversy was "reflected in power tugs-of-war between not only trial and appellate authority but also between law and equity jurisdiction").

50. FED. R. CIV. P. 52(a).

51. *Id.* at 52(a)(6).

52. *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 395 (1948) (rejecting, on direct appeal, the trial court's factual findings).

53. See Paul D. Carrington, *The Power of District Judges and the Responsibility of Courts of Appeals*, 3 GA. L. REV. 507 (1969) (finding that Rule 52 has been flexibly applied, but with generally positive results); Edward H. Cooper, *Civil Rule 52(a): Rationing and Rationalizing the Resources of Appellate Review*, 63 NOTRE DAME L. REV. 645 (1988) (same). *But see* Nagle, *supra* note 7, at 779–81 (arguing that appellate courts have improperly broadened their review of facts).

deference on factual issues. First, there is the matter of relative institutional competence. District court judges are generally recognized as having a superior position from which to judge facts.⁵⁴ A case is often on a district court's docket for years, whereas the average appellate judge spends around a month on a particular case. Furthermore, district court judges personally hear witness testimony and are therefore seen as more reliable in resolving conflicting testimony than appellate judges who must base credibility determinations off of a "cold record."⁵⁵ Indeed, the Supreme Court has emphasized the inherent advantages that district courts enjoy in weighing certain types of evidence. The Court has instructed appellate courts that "even greater deference" than clear error should apply when reviewing demeanor testimony.⁵⁶ Furthermore, review of credibility determinations of internally consistent witness testimony "can virtually never be clear error."⁵⁷

There is some dispute among the circuits as to the amount of deference that should be applied with so-called "non-demeanor" findings. While most circuits continue (with occasional detours) to strictly apply the clearly erroneous rule to issues of fact, regardless of the type of evidence,⁵⁸ following the Supreme Court's "greater deference" admonition for demeanor testimony, some circuits began to more readily find clear error with regard to non-demeanor findings (documentary evidence, undisputed testimony, depositions, etc.). The Second Circuit, for instance, has refused to apply the clearly erroneous rule to cases involving documentary evidence.⁵⁹ The Fifth Circuit appears to do the same.⁶⁰ Those courts that refuse to apply Rule 52 to non-demeanor evidence (or that apply something less than "clear error" review) do so under the theory that the appellate court has the same vantage point as the district court in reviewing such evidence.⁶¹ In the view of those courts, appellate courts owe no deference on non-demeanor evidence because the court is in the same position to review the evidence as the trial court.

There are reasons beyond institutional expertise that help explain the deference that appellate courts apply on factual questions. A second reason is premised upon maximizing judicial efficiency. A general division of labor

54. *Anderson v. Bessemer City*, 470 U.S. 564, 574–75 (1985) (discussing the "superiority of the trial judge's position" to determine facts).

55. See e.g., *Rodriguez v. Jones*, 473 F.2d 599, 604 (5th Cir. 1973) ("[C]redibility choices and the resolution of conflicting testimony are within the province of the court sitting without the jury, subject only to the clearly erroneous rule.").

56. *Anderson*, 470 U.S. at 574–75.

57. *Id.* at 575.

58. See *Childress & Davis*, *supra* note 49, at § 2.09 at 2-52–2-56.

59. See *United State ex rel. Lasky v. LaVallee*, 472 F.2d 960, 963 (2d Cir. 1973) (holding that when "the credibility of witnesses is not in issue, we make our own independent factual determinations. . .").

60. See *Onaway Transp. Co. v. Offshore Tugs, Inc.*, 695 F.2d 197, 200 (5th Cir. 1983) (holding that the burden of proving a finding to be clearly erroneous "is to some extent ameliorated" when credibility determinations are not involved).

61. *Id.*

among the federal courts allocates fact-finding responsibility to district courts and law-pronouncing responsibility to the appellate courts.⁶² If district courts were unbounded by principles of stare decisis and were required to reevaluate the law upon each new case, the judicial system would collapse under the increased workload.⁶³ Similarly, if appellate courts were unbounded by Rule 52 and were required to reexamine each factual dispute in every appellate case, the appellate courts would quickly become overburdened.⁶⁴ In this way, stare decisis and appellate deference work hand in hand, allocating the major law-creation function of the judicial system to the appellate courts and the fact-finding function to the district courts.

A further reason to defer to district court judges is out of respect for the role of the trial court. In 1985, the Supreme Court in *Anderson v. Bessemer City* emphasized that:

The reviewing court oversteps the bounds of its duty under Rule 52 if it undertakes to duplicate the role of the lower court If the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently.⁶⁵

Clearly delineated roles for trial and appellate tribunals are thought to produce efficiency gains: district courts are incentivized to thoroughly examine all of the evidence, without fear of their decisions being completely discarded on appeal; meanwhile the appellate court can focus on harmonizing and stabilizing the law.

2. *Conclusions of Law*

As opposed to questions of fact, the FRCP are silent regarding the standard of review to be applied when reviewing questions of law. Despite the lack of guidance within the FRCP, plenary review of questions of law is now applied in all federal circuit courts.⁶⁶ The ubiquity of *de novo* review likely results from the appellate court's views of their roles within the federal judiciary. Appellate courts are, at their heart, courts of law.⁶⁷ Their twin functions of correcting

62. See generally Steven M. Shavell, *The Appeals Process as a Means of Error Correction*, 24 J. LEG. STUDIES 1 (1995) (discussing the division of labor between first-order tribunals and appeals courts).

63. See Benjamin N. Cardozo, *THE NATURE OF THE JUDICIAL PROCESS* 149 (1921) ("The labor of judges would be increased almost to the breaking point if every past decision could be reopened in every case.").

64. See Rai, *supra* note 4, at 1087 ("If the appellate court attempted to acquire the district court's knowledge of any given factual setting, that acquisition would come at great expense.").

65. *Anderson v. Bessemer City*, 470 U.S. 564, 573-74 (1985).

66. See Childress & Davis, *supra* note 49, at § 2.13 at 2-82 & n.2 (listing cases from each circuit).

67. *Id.* at 2-82.

errors and maintaining uniformity in the law are both present when reviewing a district court's ruling regarding what the law is.

While the black-letter law that decisions of law are reviewed *de novo* while findings of fact are reviewed for clear error is universally stated,⁶⁸ courts are far from consistent in their application on the margins. Rule 52 does not draw the line between fact and law, a line upon which the rule itself hinges. Similarly, the Supreme Court has offered little guidance in distinguishing law from fact, beyond the particulars of the individual cases it has decided.

The Court has, however, begun to sketch the outlines of the fact/law distinction in recent years. In *Miller v. Fenton* the Court had to decide whether the voluntariness of a confession under the Fifth Amendment was a finding of fact.⁶⁹ In holding that voluntariness is a legal conclusion, the Court provided an institution-based rationale for determining law from fact:

At least those instances in which Congress has not spoken and in which the issue falls somewhere between a pristine legal standard and a simple historical fact, the fact/law distinction at times has turned on a determination that, as a matter of the sound administration of justice, one judicial actor is better positioned than another to decide the issue in question.⁷⁰

The Court noted that instances in which repeated applications of law would give meaning to a general legal principle are better handled through *de novo* review, in order to ensure uniformity.⁷¹ Similarly, the Court noted that the particular advantages and disadvantages of the district court in a particular dispute may help characterize an issue as law or fact.⁷² For instance, the Court said that “demeanor factors” suggested a factual issue that ought to receive “clear error” review, while the Court found that the presence of “possible biases” on the part of the fact finder would tend to suggest *de novo* review.⁷³

3. *Mixed Questions of Fact and Law*

Mixed questions of law and fact—questions which require decisionmakers to apply the law to the facts of the case⁷⁴—have posed innumerable challenges for trial judges and juries.⁷⁵ The Supreme Court has defined mixed questions as those which require a decision about “whether the rule of law as applied to the established facts is or is not violated.”⁷⁶ Thus, mixed questions represent the classic example of legal reasoning; ascertaining the legal significance of a

68. *Pullman-Standard v. Swint*, 456 U.S. 273, 289 n.19 (1982).

69. 474 U.S. 104 (1985).

70. *Id.* at 115.

71. *Id.* at 115–19.

72. *Id.* (listing the presence of demeanor factors as suggesting a factual issue while possible biases of the fact finder might suggest an issue be treated as a legal one).

73. *Id.*

74. *See, e.g., Lee, supra* note 46, at 236.

75. *Id.* at 238.

76. *Pullman-Standard v. Swint*, 456 U.S. 273, 289 n.19 (1982).

given set of facts.⁷⁷

Mixed questions muddy the already murky distinction of law/fact. District courts are thought to be better positioned to judge testimony and evidence than appellate courts, so one might conclude that deference to a district court's decision on a mixed question of law is in order. On the other hand, appellate courts supervise the development of the law and thus might require *de novo* review of mixed question decisions in order to maintain legal uniformity. The courts remain conflicted on which of these views is the best one.⁷⁸ While the standards of review for questions of law and questions of fact are well established, the proper standard of review to be employed for mixed questions has proven to be maddeningly elusive.⁷⁹ Some circuit courts employ *de novo* review for nearly all mixed questions;⁸⁰ others employ the "clearly erroneous" standard;⁸¹ others vary the standard of review from case to case, dependent upon the particular mixed question at issue;⁸² while yet others follow no discernible pattern whatsoever.⁸³

The First and Seventh Circuits are the only circuits that consistently employ the "clearly erroneous" standard to all mixed questions of law and fact.⁸⁴ In articulating the Seventh Circuit's reasoning for adopting the clearly erroneous standard in *Mucha v. King*, Judge Posner pointed to the different roles of district and appellate courts—rather than the relative access to evidence—as the fundamental theory supporting deference on mixed questions:

Once Rule 52(a) is understood to rest on notions of the proper division of responsibilities between trial and appellate courts, rather than just on considerations of comparative accessibility to the evidence, [the argument for *de novo* review of mixed questions] subsides. Review is deferential precisely because it is so unlikely that there will be two identical cases; the appellate court's responsibility for maintaining uniformity of legal doctrine is not triggered.⁸⁵

77. See J. L. Clark, *A Mixed Question of Law and Fact*, 18 YALE L.J. 404, 405 (1909) ("And it may be said as a general rule, that all ultimate facts are [mixed questions], which argues that the mixed question never had an excuse for an existence.").

78. See generally, Lee, *supra* note 74 (theorizing that there are four manners in which federal appellate courts treat mixed questions: *de novo* review, clear error review, varying standards depending on the question, and no clear standard).

79. *Id.*

80. *Id.* at 241–43 (identifying the Second, Third, Eighth, and D.C. Circuits as circuit courts that employ *de novo* review to "mixed questions of law and fact, usually without regard to the particular area of the law involved").

81. *Id.* at 239–41 (identifying the First and Seventh Circuits as those which consistently employ clear error review to mixed questions).

82. *Id.* at 244–45 (Identifying the Ninth and Tenth Circuits as using "a standard that varies from case to case, no matter the substantive area").

83. *Id.* at 245–47 (placing the Fourth, Fifth, Sixth, and Eleventh Circuits in this category).

84. Lee, *supra* note 46, at 239; accord Childress & Davis, *supra* note 49, at § 2.18 at 2-108–2-109.

85. *Mucha v. King*, 792 F.2d 602, 602 (7th Cir. 1986).

A second group of circuits (consisting of the Second, Third, Eighth, and D.C. Circuits) apply *de novo* review to decisions of mixed questions.⁸⁶ Those circuits view the legal elements of mixed questions as predominant. The remaining circuits have review standards that shift based on the particulars of each case.⁸⁷

4. *Discretionary Decisions*

The final category of reviewable decisions involves the district judge's supervision of the litigation process. These decisions are generally reviewed for "abuse of discretion."⁸⁸ The Supreme Court has written that abuse of discretion review is implied statutorily in some cases, while "for most others, the answer is provided by long history of appellate practice."⁸⁹ Thus, it appears that precedential characterizations of specific issues as "discretionary" should weigh heavily in determining standard of review.

Because district courts supervise trials, they are in a better position than appellate courts to make discretionary decisions.⁹⁰ Thus, some amount of deference is clearly called for in discretionary decisions. An appellate court cannot overturn a discretionary decision merely because the court disagrees with the district judge.⁹¹ Defining the precise contours of abuse of discretion review has proven quite difficult to negotiate.⁹² The courts have been highly variable in the manner in which they apply the standard.⁹³

B. *Standards of Review at a Specialized Court: The Federal Circuit*

The Federal Circuit has, in general, adopted the basic principles for determining standards of review that have been established by the other circuit courts of appeal. Like other circuit courts, the Federal Circuit reviews questions of fact for clear error as required by FRCP 52(a).⁹⁴ Like other circuit courts, the Federal Circuit reviews questions of discretion for abuse of that discretion.⁹⁵ Like other circuit courts, the Federal Circuit reviews questions of law *de*

86. Lee, *supra* note 46, at 241.

87. *Id.* at 244–47.

88. *Nat'l Hockey League v. Metro. Hockey Club*, 427 U.S. 639, 642 (1976) (citing abuse of discretion standard in a case dismissed for discovery violations).

89. *Pierce v. Underwood*, 487 U.S. 552, 558 (1988).

90. *See Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S.Ct. 1744 (2014) (discretionary determinations "are for the district court").

91. *Nat'l Hockey League*, 427 U.S. at 642 (stating that the question is not whether the appellate court "would as an original matter have" acted as the trial court did").

92. *Childress & Davis*, *supra* note 49, at § 4.21, at 4-160–4-162 (describing the "variability" of the standard between courts and contexts).

93. *Id.*

94. *Heisig v. United States*, 719 F.2d 1153, 1158 (Fed. Cir. 1983).

95. *Celsis In Vitro, Inc. v. DellzDirect, Inc.*, 664 F.3d 922, 925 (Fed. Cir. 2012) (reviewing grant of a preliminary injunction for abuse of discretion).

novo.⁹⁶ Like the Second, Third, Eighth and D.C. Circuits, the Federal Circuit reviews many mixed fact-law questions for clear error, while reviewing the ultimate legal conclusion *de novo*.⁹⁷

For an example of the court's approach to mixed questions of law and fact, consider the doctrine of obviousness. The patent statute mandates that a patent may not issue if, at the time of invention, the claimed invention "would have been obvious" to a person of ordinary skill.⁹⁸ Decisions on obviousness often turn on factual questions, such as what the state of the art was at the time of invention, the level of ordinary skill in the art, commercial success of the invention, and whether the claimed inventor uncovered "unexpected results" in the process of invention.⁹⁹ Prior to the creation of the Federal Circuit in 1982, the geographic circuits had held that obviousness was a question of law based on factual underpinnings.¹⁰⁰ Thus, the ultimate conclusion of obviousness was a legal one subject to *de novo* review, while the facts underlying that conclusion received deference as long as they were not clearly erroneous.¹⁰¹ Once created, the Federal Circuit adopted the general view of the regional circuits.¹⁰²

The Federal Circuit maintained its mixed review of obviousness decisions even after the court's standard was questioned by the Supreme Court. In *Dennison Manufacturing Co. v. Panduit Corp.*, the Court, in a per curiam opinion, summarily vacated and remanded the Federal Circuit's decision overturning a trial judge's finding of invalidity for obviousness.¹⁰³ On remand, the Court instructed the Federal Circuit to more explicitly analyze "the complex issue of the degree to which the obviousness determination is one of fact."¹⁰⁴ Because the Federal Circuit's opinion in *Dennison* "did not explicitly apply the clearly-erroneous standard" or explain why it was inapplicable, the Supreme Court determined that it was unable to review the decision absent such clarification.¹⁰⁵ The Court's apparent skepticism about the Federal Circuit's

96. *Herman v. Dep't of Justice*, 193 F.3d 1375, 1378 (Fed. Cir. 1999) (reviewing a decision about the Merit Systems Protection Board's jurisdiction—a question of law—*de novo*).

97. *See, e.g., Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1444 (Fed. Cir. 1984) (stating that obviousness is "a legal conclusion" based on factual underpinnings that receive clearly erroneous review).

98. 35 U.S.C. § 103 (2014).

99. *See generally KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007); *Graham v. John Deere*, 383 U.S. 1, 17 (1966).

100. *See, e.g., Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976) (finding that obviousness is a rule of law based on factual underpinnings); *TWM Mfg. Co. v. Dura Corp.*, 722 F.2d 1261, 1265 (6th Cir. 1983). *But see Plastic Container Corp. v. Continental Plastics*, 708 F.2d 1554 (10th Cir. 1983) (holding that obviousness is a question of fact subject to Rule 52(a) deference).

101. *Id.*

102. *Gardner v. TEC Sys., Inc.*, 725 F.2d 1338, 1344 (Fed. Cir. 1984) (en banc).

103. 475 U.S. 809 (1986).

104. *Id.* at 811.

105. *Id.*

review of obviousness determinations appeared to signal a shift away from *de novo* review of obviousness determinations.¹⁰⁶

Despite the Supreme Court's doubts about the "degree to which the obviousness determination is one of fact," on remand the Federal Circuit reaffirmed its *de novo* standard for obviousness conclusions.¹⁰⁷ Based on its reading of other circuit's precedents and the functional considerations inherent in determinations of obviousness, the Federal Circuit held that obviousness is "a conclusion of law based on fact."¹⁰⁸ The legal nature of the obviousness determination, according to the Federal Circuit, was grounded in the question of whether a conclusion "is supportable by" established facts.¹⁰⁹ The court's holding that *de novo* review applies to the ultimate determination of obviousness despite deference to the factual underpinnings of that decision is now well-settled law of the circuit.¹¹⁰

Thus, the Federal Circuit has, at least formally, adopted standards of review similar to other circuit courts. That similarity, however, masks the court's tendency to review fact-intensive issues with much more rigor than other federal appellate courts. The court achieves this intensive review of district court determinations in two primary ways: first, the court has adopted a much narrower view of what constitutes a "factual question" than other courts; second, by applying *de novo* review to claim construction decisions.

1. *The Federal Circuit's View of "Fact"*

The first way in which the Federal Circuit is able to more closely examine fact-intensive inquiries than other circuits is by narrowly defining the category of "questions of fact." By characterizing more issues as "legal" in nature, the court can exercise *de novo* review more broadly. A good example of this practice comes from the court's trademark jurisprudence. In trademark litigation, a plaintiff must demonstrate, among other things, that the defendant's use of her mark is likely to cause confusion among consumers of the mark.¹¹¹ Most geographic circuits regard likelihood of confusion findings as questions of fact and therefore apply the clearly erroneous rule.¹¹² The Federal Circuit,

106. See, e.g., Childress & Davis, *supra* note 49, at 2-201.

107. Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561 (Fed. Cir. 1987).

108. *Id.* at 1568.

109. *Id.* at 1566.

110. See, e.g., Eolas Techs. Inc. v. Microsoft Corp., 399 F.3d 1325, 1332 (Fed. Cir. 2005) ("Obviousness is a question of law premised on underlying findings of fact.").

111. 15 U.S.C. § 1125(a) (2014). Aside from being one of the most litigated issues in trademark litigation, it is also one of the most controversial. See, e.g., Mark A. Lemley & Mark McKenna, *Irrelevant Confusion*, 62 STAN. L. REV. 413, 414 (2010) ("[T]rademark law has taken the concept of confusion too far.").

112. See, e.g., Checkpoint Sys., Inc. v. Check Point Software Tech., Inc., 269 F.3d 270, 279 (3d Cir. 2001); Int'l Kennel Club v. Mighty Star, Inc., 846 F.2d 1079, 1087 (7th Cir. 1988); J.M. Huber Corp. v. Lowery Wellheads, Inc. 778 F.2d 1467, 1471 (10th Cir. 1985); Safeway Stores, Inc. v. Safeway Disc. Drugs, Inc., 675 F.2d 1160 (11th Cir. 1982); Keebler

however, treats likelihood of confusion as a rule of law that is not subject to the “clearly erroneous rule.”¹¹³ This allows the Federal Circuit to perform a more searching examination of a determination of likelihood of confusion than that performed by most other courts.¹¹⁴

While the Federal Circuit is not the only court that performs *de novo* review in the area of likelihood of confusion of a trademark, the court is clearly an outlier in its review standard; the Second and the Sixth Circuits are the only other circuits that review likelihood of confusion *de novo*.¹¹⁵ Various other circuits have refused to follow the Federal Circuit’s *de novo* standard, despite recognizing the Federal Circuit’s expertise in intellectual property law.¹¹⁶ The Supreme Court has never resolved this circuit split, despite Justice White twice dissenting from the Court’s refusal to settle the issue.¹¹⁷

Taking a minority position on the formal standard of review to be applied is not the only way that the Federal Circuit increases its oversight over factual issues. Scholars have also criticized the Federal Circuit for adopting the correct standard of review, yet still applying a form of *de novo* review to factual issues.¹¹⁸ Arti Rai, for example, has stated that the Federal Circuit has asserted its power to review factual matters by “[i]gnoring conventional allocation-of-power principles that give trial courts primary authority over factual questions.”¹¹⁹ As an example of the Federal Circuit’s assertion of power over facts, she points to the court’s review of the enablement and non-obvious requirements in patent law.¹²⁰ While the Federal Circuit applies the clearly

Co. v. Rovira Biscuit Corp., 624 F.2d 366, 377 (1st Cir. 1980); Amstar Corp. v. Domino’s Pizza, Inc., 615 F.2d 252, 257–58 (5th Cir. 1980).

113. Giant Food Inc. v. Nation’s Foodservice, Inc., 710 F.2d 1565, 1569 (Fed. Cir. 1983) (reversing a finding from the Trademark Trial and Appeal Board of likelihood of confusion).

114. It should be noted that the Federal Circuit is reviewing agency decisions from the TTAB, while the geographic circuits are reviewing district court decisions. While there are differing review standards for agency actions and court actions, in the area of likelihood of confusion, all circuit courts adopt the same group of review standards.

115. Nabisco, Inc. v. Warner-Lambert Co., 220 F.3d 43, 46 (2d. Cir. 2000); Firsch’s Rests., Inc. v. Eby’s Big Boy of Steubenville, Inc., 670 F.2d 642, 651 (6th Cir. 1982). See also Richard L. Kirkpatrick, *Likelihood of Confusion Issues: The Federal Circuit’s Standard of Review*, 40 AM. U. L. REV. 1221, 1224 (1990) (“The Second, Sixth, and Federal Circuits treat likelihood of confusion as a mixed question of law and fact . . . subject to *de novo* review.”).

116. See, e.g., Scandia Down Corp. v. Euroquilt, Inc., 772 F.2d 1423, 1428 (7th Cir. 1985) (“Although we should think carefully before disagreeing with the views of the Federal Circuit, a specialist court on questions of intellectual property, we will not change [our clearly erroneous] standard.”).

117. Euroquilt, Inc. v. Scandia Down Corp., 475 U.S. 1147 (1986) (White, J., dissenting from denial of certiorari); Elby’s Big Boy v. Firsch’s Rests., Inc., 459 U.S. 916 (1982) (White, J., dissenting from denial of certiorari).

118. See e.g. Rai, *supra* note 9, at 883–87 (asserting that the Federal Circuit has “[i]gnor[ed] conventional allocation-or-power principles” in “asserting power over fact.”).

119. *Id.* at 883.

120. *Id.* at 885–86.

erroneous standard to the factual components of those doctrines, its *de novo* review of the ultimate legal conclusion allows the court to delve into the factual elements of each case.¹²¹ Thus, while formally applying deferential review on factual issues, the court often overturns decisions that are almost entirely unique to a particular case. Rai has also noted the importance of another mixed question that is reviewed *de novo*: claim construction.

2. De Novo Review of Claim Construction Decisions

The other way in which the Federal Circuit thoroughly reviews factual decisions of district courts is through claim construction. Claim construction is the judicial process of interpreting the boundaries of a patent right.¹²² Claim construction is central to the operation of the patent system because it defines the limits of a patent holder's right to exclude¹²³ and guides infringement and validity analysis.¹²⁴ Because claim construction defines the rights of a patent holder, claim construction is the most important aspect of virtually all patent litigation. Not surprisingly given the doctrine's importance, litigants frequently appeal unfavorable claim construction rulings to the Federal Circuit.¹²⁵

The Federal Circuit has traditionally reviewed claim construction decisions *de novo*. That tradition was called into question, however, after the Supreme Court's 1996 ruling in *Markman v. Westview Instruments* that while claim

121. *Id.*

122. See David L. Schwartz, *Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases*, 107 MICH. L. REV. 223, 225 (2008) ("Claim construction is the process of interpreting the specific terms or phrases used by the patentee to define the technology covered by the patent.")

123. The late Judge Giles S. Rich, an architect of 1952 Patent Act and long-serving member of the Federal Circuit and its predecessor court the Court of Customs and Patent Appeals, famously noted that "the name of the game is the claim." Giles S. Rich, *The Extent of the Protection and Interpretation of Claims—American Perspectives*, 21 INT'L REV. INDUS. PROP. & COPYRIGHT L., 497, 499 (1990). See also Kimberly A. Moore, *Are District Judges Equipped To Resolve Patent Cases?*, 15 HARV. J.L. & TECH. 1, 8 (2001) (observing that "[d]etermining the scope of the patent claims is the most important issue in a patent infringement suit"); R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1119 (2004) ("[I]t is clear that claim construction plays a major—and perhaps the major—role in patent infringement litigation."); William Redin Woodward, *Particularity and Definiteness in Patent Claims*, 46 MICH. L. REV. 755, 757 (1948) (characterizing claims as "all important on the measure of the grant"). See generally Kristen Osenga, *Linguistics and Patent Claim Construction*, 38 RUTGERS L.J. 61, 68–73 (2006) (explaining the Federal Circuit's claim construction jurisprudence).

124. See Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 U. PA. L. REV. 1743, 1749 (2009) (describing the claim construction process and its relation to validity and infringement); Peter S. Menell et al., *Patent Claim Construction: A Modern Synthesis and Structured Framework*, 25 BERKELEY TECH. L.J. 713, 716 (2010) (discussing best practices in managing claim construction).

125. See, e.g., *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351 (Fed. Cir. 2008); see also Schwartz, *supra* note 122, at 243–44 (observing that the relatively low cost of appeals compared to the overall stakes in patent cases lead to high appeal rates).

construction was the province of the judge, not the jury, it was a “mongrel practice,” somewhere between a pure legal question and a question of fact.¹²⁶ Following *Markman*, the Federal Circuit was split, with some judges advocating for *de novo* review while others urged a more deferential standard,¹²⁷ resulting in the court eventually granting en banc review in *Cybor Corp. v. FAS Technologies, Inc.*¹²⁸

In a sharply divided decision, the Federal Circuit reaffirmed that claim construction is purely a legal issue, subject to *de novo* review. The majority read the Supreme Court’s *Markman* decision to classify claim construction as “a legal question to be decided by the judge.”¹²⁹ The opinion emphasized the Supreme Court’s concern for certainty and national uniformity¹³⁰ and bolstered its conclusion by negative implication: “Nothing in the Supreme Court’s opinion supports the view that the Court endorsed a silent, third option—that claim construction may involve subsidiary or underlying questions of fact.”¹³¹ The opinion downplayed the Supreme Court’s characterization of claim construction as a “mongrel practice”¹³² “fall[ing] somewhere between a pristine legal standard and a simple historical fact,”¹³³ as merely “prefatory comments.”¹³⁴ Instead, it picked up on the Supreme Court’s ambiguous observation that

while credibility determinations theoretically could play a role in claim construction, the chance of such an occurrence is “doubtful” and that “any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document, required by the standard

126. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 378 (1996).

127. *Compare* *Metallics Sys. Co. v. Cooper*, 100 F.3d 938, 939 (Fed. Cir. 1996) (characterizing claim construction as a “mixed question of law and fact”), *abrogated by* *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448 (Fed. Cir. 1998) (en banc), *with* *Cybor Corp.*, 138 F.3d at 940 (Lourie, J., concurring) (noting that the Supreme Court did not overrule the *de novo* review standard). *See also* *J.T. Eaton & Co. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1577 (Fed. Cir. 1997) (Rader, J., dissenting) (“This court’s role in reviewing claim meanings discerned by the district courts calls for modesty and restraint—born not of timidity, but of recognition of the limits inherent in appellate review.”); *Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1555–56 (Fed. Cir. 1997) (holding that the district court correctly consulted extrinsic evidence and that the trial court is in the best position to evaluate this extrinsic evidence), *abrogated by* *Cybor*, 138 F.3d 1448; *Eastman Kodak*, 114 F.3d at 1563 (Lourie, J., dissenting) (arguing that extrinsic evidence should not be used to contradict the specification and that the “appellate court is equally well suited to read the specification” as the district court).

128. 138 F.3d 1448; Donald R. Dunner & Howard A. Kwon, *Cybor Corp v. FAS Technologies: The Final Say on Appellate Review of Claim Construction?*, 80 J. PAT. & TRADEMARK OFF. SOC’Y 481, 489–90 (1998) (noting the “extraordinary” sua sponte order to hear the *Cybor* case en banc before a panel decision issued).

129. *Cybor*, 138 F.3d at 1455.

130. *See id.* (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996)).

131. *Id.*

132. *Markman*, 517 U.S. at 378.

133. *Id.* at 388 (quoting *Miller v. Fenton*, 474 U.S. 104, 114 (1985)).

134. *See Cybor*, 138 F.3d at 1455.

construction rule that a term can be defined only in a way that comports with the instrument as a whole.”¹³⁵

The *Cybor* decision and the continued practice of *de novo* review met fierce criticism from academics, practitioners, and judges.¹³⁶ Indeed, the decision has since been criticized by numerous Federal Circuit judges.¹³⁷ Much of the criticism stems from the comprehensive nature of claim construction. The scope of a patent claim impacts virtually all areas of patent litigation in fundamental ways: validity, infringement, and enforcement are all intimately tied to the outcome of claim construction. Thus, when the Federal Circuit reviews claim construction *de novo*, it has the ability to review all aspects of a decision, even those aspects that are explicitly factual in nature.¹³⁸

Rai calls this the “domino effect” of *de novo* claim construction review.¹³⁹ That domino effect occurs when the Federal Circuit reverses on claim construction, a decision that requires a new determination on infringement—an issue of fact. However, Rai notes that while the Federal Circuit has the option to simply remand for a new determination of infringement given the revised claim construction, the Federal Circuit “is often reluctant to remand for a new trial on infringement” and instead simply declares that no factual dispute could exist with respect to infringement in light of the new claim construction.¹⁴⁰ Despite all of the criticism surrounding the court’s *de novo* review of claim construction, the en banc court recently reaffirmed that standard.¹⁴¹

In summary, the Federal Circuit’s proclivity to review facts on a *de novo* basis arises in two contexts. First, the court has taken a narrow view of what constitutes a factual issue, at times reviewing heavily issues (such as likelihood of confusion) as legal ones, and at other times, reviewing mixed questions as though they were factual issues. Second, the court reviews claim construction *de novo*, which allows the court to review the underpinnings of nearly every

135. *Id.* at 1455–56 (quoting *Markman*, 517 U.S. at 389). This explanation, however, overlooks a critical passage in the Supreme Court’s *Markman* decision. See Brief for Peter S. Menell, et al. as Amici Curiae in Support of Neither Party, *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831 (2015) (No. 13-854).

136. Donald R. Dunner & Howard A. Kwon, *Cybor Corp v. FAS Technologies: The Final Say on Appellate Review of Claim Construction?*, 80 J. PAT. & TRADEMARK OFF. SOC’Y 481, 489–90 (1998); Jonas Anderson & Peter S. Menell, *Informal Deference: A Historical, Empirical, and Normative Analysis of Patent Claim Construction*, 108 NW. U. L. REV. 1 (2014) (arguing that the Federal Circuit’s *de novo* standard for claim construction serves to decrease district court influence).

137. See *Phillips v. AWH Corp.*, 415 F.3d, 1303, 1330 (Fed. Cir. 2004) (en banc) (Lourie, J., joined by Newman, J., concurring in part and dissenting in part) (urging the court to affirm absent the strong conviction of error); *id.* (Mayer, J., dissenting).

138. See Rai, *supra* note 4 at 884 (“[T]he Federal Circuit’s plenary review of claim construction can have something of a domino effect, leading the court to arrogate power over issues even it admits are factual, like infringement.”).

139. *Id.*

140. *Id.* at 885.

141. *Lighting Ballast*, 744 F.3d at 1276–77.

judgment without deference. Thus, the court enjoys unprecedented power to review factual decisions of district courts. As Judge Mayer of the Federal Circuit has written, the court's "increasing infatuation with *de novo* review of factual determinations . . . [is] an enormous waste of litigants' resources and vitiates the critically important fact-finding role of the district courts."¹⁴²

II. DEFERENCE AND SPECIALIZATION

Most decisions of the various U.S. federal district courts are reviewed by the geographic appellate circuits. As described in Part I, appellate courts scrutinize those decisions more closely when the district courts decide an issue of law than when they review a decided issue of fact. Patent litigation, however, carves a unique path through the federal judiciary. Initially patent cases are tried before federal district court judges, just like all other federal causes of action. But appeals of those cases are heard not before one of the geographic federal appellate courts, but rather before the Federal Circuit.¹⁴³ The uniqueness of a patent case's path through the federal court system has led to confusion about the deference that the specialized Federal Circuit should afford to decisions of generalist district courts.

This Part examines the arguments in favor of reduced deference from specialized courts. In particular, the Federal Circuit has recently upheld more stringent review of patent cases than traditional appellate practice would suggest. The Supreme Court has pushed back against the Federal Circuit's expansion of its own review powers, but with some trepidation. This Part examines specialization's impact on deference by looking at two recent debates over deference at the Federal Circuit.

A. *Discretionary Decisions: Review of Attorney Fee Awards*

Whether the Federal Circuit's expertise and specialization in patent law allows the court to be less deferential is an issue that has caught the Supreme Court's interest. Last term, the Court decided two companion cases regarding (1) the basis for awarding attorney fees in patent cases and (2) the standard of review to be applied in reviewing such awards. In *Highmark v. Allcare*, a patent-assertion company obtained a patent for a computerized "health management system" and subsequently sued Highmark, a health insurance provider, for infringement.¹⁴⁴ After securing summary judgment of non-infringement, Highmark moved for fees under Section 285 of the Patent Act.¹⁴⁵ Section 285 provides that "a court in exceptional cases may award reasonable

142. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 687 F.3d 1300, 1320 (Fed. Cir. 2012) (Meyer, J., dissenting-in-part).

143. 28 U.S.C. § 1295(a)(1) (2014).

144. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S.Ct. 1744, 1747 (2014).

145. *Id.*

attorney fees to the prevailing party.”¹⁴⁶ The district court found that had Allcare properly investigated its infringement claim before filing, it would have discovered that there was no case for infringement and therefore found the case to be “objectively baseless.”¹⁴⁷ In a fifty-five page fee-shifting opinion, the district court declared that “Allcare had not done its homework when it began trolling for dollars and threatening litigation.”¹⁴⁸ The court awarded Highmark \$4,694,727.40 in attorney fees, as well as over \$500,000 in expenses and expert fees.¹⁴⁹

On appeal, the Federal Circuit reversed the district court’s fee award in part.¹⁵⁰ In doing so, the Federal Circuit considered the objectively baseless decision to be “a question of law based on underlying mixed questions of law and fact” which was “subject to *de novo* review.”¹⁵¹ Highmark asked the Federal Circuit to reconsider its reversal en banc, a request that was denied over a five judge dissent.¹⁵²

The Supreme Court subsequently granted certiorari.¹⁵³ In *Highmark*, the court addressed a single question: “Whether a district court’s exceptional-case finding under 35 U.S.C. § 285, based on its judgment that a suit is objectively baseless, is entitled to deference.”¹⁵⁴ The Court also granted certiorari in a companion case, *Octane Fitness v. ICON*, in which the Court reviewed (and ultimately reversed) the Federal Circuit’s rule for determining exceptional cases.¹⁵⁵

Both cases were argued on the same day at the Supreme Court, with overlapping questions about rules and standards of review percolating between both cases. During oral argument in the *Octane* case, Justice Alito suggested that the Federal Circuit is uniquely positioned to analyze exceptionality in patent cases.

[O]ne part wins, the other party loses and the party that wins says, “This was an exceptional case and you should award fees in my favor under [Section] 285.”

And the district judge says, “How can I tell if this is exceptional? If I had twenty-five patent cases, I could make some comparisons. But I don’t have a

146. 35 U.S.C. § 285 (2014).

147. *Highmark*, 134 S.Ct. at 1743.

148. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 706 F. Supp. 2d 713, 727 (N.D. Tex 2010).

149. *Id.*

150. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 687 F.3d 1300, 1319 (Fed. Cir. 2012) *vacated and remanded sub nom.* *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1755 (2014).

151. *Id.* at 1320–21.

152. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 701 F.3d 1351 (Fed. Cir. 2012) (en banc).

153. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S.Ct. 48 (2013) (granting certiorari).

154. *Id.*

155. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749 (2014).

basis for doing that.” Now, the Federal Circuit has a basis for doing that.¹⁵⁶

Justice Alito’s position that the Federal Circuit’s expertise allows the court to apply a less deferential review standard did not go unchallenged by the other justices.¹⁵⁷ During the *Highmark* oral argument, Chief Justice Roberts suggested that the Federal Circuit’s expertise had no bearing on the standard of review the court should employ.¹⁵⁸ Roberts suggested that for standard of review purposes, “the Federal Circuit’s expertise in patent law actually isn’t the relevant expertise.”¹⁵⁹

In a brief opinion, the Supreme Court in *Highmark* reversed the Federal Circuit and held that “an appellate court should apply an abuse-of-discretion standard in reviewing all aspects of a district court’s [section] 285 determination.”¹⁶⁰ Relying on its previous opinion in *Pierce v. Underwood*, the Court emphasized that the text of section 285 “suggests” deference to the district court’s decision, the district court is better positioned to decide which cases are exceptional due to the length of time a district court hears each case, and the issue is “multifarious and novel” and therefore not susceptible to the “generalization” that *de novo* review provides.¹⁶¹ The reference to the district court being “better positioned” to make determinations of exceptionality reflects the Court’s opinion that the Federal Circuit is not uniquely positioned among the federal circuit courts to judge litigation conduct. But the oral argument suggests that the Federal Circuit’s expertise could trump traditional standard of review principles if the court’s expertise were relevant in informing its review.

B. “Mongrel” Questions of Fact and Law: Claim Construction

Less than a week before the oral argument in the *Highmark* case, the Federal Circuit issued an en banc opinion in a long-awaited case reviewing its controversial *de novo* standard of review for claim construction cases. In that case, *Lighting Ballast v. Philips*, the en banc court explicitly reconsidered its

156. Transcript of Oral Argument at 13, *Octane Fitness v. ICON Health & Fitness*, 134 S. Ct. 1749 (2014) (No. 12-1184), available at http://www.supremecourt.gov/oral_arguments/argument_transcripts/12-1184_khmp.pdf.

157. Transcript of Oral Argument at 19, *Octane Fitness v. ICON Health & Fitness*, 134 S. Ct. 1744 (2014) (No. 12-1163) (“I frankly think [the Federal Circuit’s expertise is] the strongest argument [for maintaining *de novo* review].”); *id.* (arguing that when it comes to evaluating the reasonableness of a litigation position, “the Federal Circuit’s expertise in patent law actually isn’t the relevant expertise.”); *id.* at 29 (Roberts, C.J.) (pointing out that litigation misconduct is “an issue that [district courts] see all the time, so maybe they are more expert than the Federal Circuit.”); *id.* at 31 (Ginsburg, J.) (“Two of the items you mentioned, one was venue and the other was . . . issue preclusion; the Federal Circuit is no more expert in those areas than a district court would be.”).

158. *Id.*

159. *Id.*

160. *Highmark*, 134 S. Ct. at 1747.

161. *Id.* (quoting *Pierce v. Underwood*, 487 U.S. at 559–60, 62).

fifteen-year-old holding in *Cybor* that district court claim construction decisions were to be reviewed *de novo*.¹⁶² The initial panel decision had overturned a district court ruling that a claim for a “voltage source means” is a means-plus-function term, and held the claims invalid for indefiniteness.¹⁶³ As mandated by the court’s *Cybor* decision, the panel afforded no deference to the district court’s decision.¹⁶⁴

Claim construction involves a complicated mixture of factual and legal issues. Courts must closely examine the patent document to determine the meets and bounds of the patent right, but they must do so through the eyes of one skilled in the art of the patent.¹⁶⁵ Because most district judges are not experts in the area of the particular patent at issue, judges must turn to experts and secondary materials in order to properly determine the meaning that an ordinary artisan would prescribe for the patent’s claims.¹⁶⁶ This mishmash of legal and factual questions is what the Supreme Court was referring to when it called claim construction a “mongrel practice” in the *Markman* case.¹⁶⁷

Rather than review its *de novo* standard from a historical and utilitarian standpoint, the Federal Circuit relied largely on the doctrine of *stare decisis*.¹⁶⁸ Having found that claim construction was “a purely legal question” in *Cybor*,¹⁶⁹ the court found that no intervening legislative or judicial decision had overturned that decision. Likewise, *de novo* review had not proved “unworkable” in the almost twenty years.¹⁷⁰ Therefore, the majority held that traditional *stare decisis* principles precluded the court from overturning its ruling in *Cybor*.

In addition, the court found that *de novo* review was needed in order to assure “interjurisdictional uniformity.”¹⁷¹ This uniformity argument is a traditional one in favor of *de novo* review.¹⁷² Appellate courts are tasked with maintaining uniformity in the law, because of their expertise in legal issues and the amount of time and discussion they can engage in on legal issue.¹⁷³

Lastly, the court noted that none of the various amicus briefs had

162. *Lighting Ballast Control LLC v. Philips Elecs. N.A. Corp.*, 744 F.3d 1272, 1276–77 (Fed. Cir. 2014).

163. *Lighting Ballast Control, LLC v. Philips Elecs. N.A. Corp.*, 498 Fed. Appx. 986 (Fed. Cir. 2013).

164. *Id.*

165. 35 U.S.C. § 103 (2014).

166. *See Rai*, *supra* note 4, at 1046–47 (“Because the typical judge is not likely to be a person of ordinary skill in the relevant scientific or technological art, she is not likely to be endowed with the appropriate technical knowledge.”).

167. *Markman*, 517 U.S. at 378.

168. *Lighting Ballast*, 744 F.3d at 1281–88.

169. *Cybor*, 138 F.3d at 1456.

170. *Lighting Ballast*, 744 F.3d at 1283.

171. *Id.* at 1280 (quoting *Markman*, 517 U.S. at 391).

172. *See Rai*, *supra* note 4, at 1088 (“[D]e novo review of strictly legal determinations is necessary for uniformity.”).

173. *Id.*; *see also Lee*, *supra* note 46, at 251.

demonstrated that deferential review would be “more likely to achieve the correct claim construction.”¹⁷⁴ In essence, the court was suggesting that a less-than-*de-novo* standard would introduce no uncertainties into claim construction practice. As the court put it, changing the standard would “engender peripheral litigation.”¹⁷⁵

The Supreme Court decided not to wait for a certiorari petition in *Lighting Ballast* to review the Federal Circuit’s approach to claim construction. Instead, the Court granted certiorari in another Federal Circuit claim construction decision. In that case, *Teva Pharmaceuticals v. Sandoz*, the Federal Circuit had to interpret the term “average molecular weight.”¹⁷⁶ Sandoz argued that the term was “insolubly ambiguous,” a finding which would render the patent invalid as indefinite.¹⁷⁷ The district court disagreed and construed the term to mean “peak molecular weight.”¹⁷⁸ In so finding, the district court afforded great weight to the testimony of Teva’s expert, Dr. Gregory Grant, who testified that an expert would understand average molecular weight to be synonymous with peak molecular weight.¹⁷⁹ On appeal, the Federal Circuit reversed, holding that the term was indefinite.¹⁸⁰ The panel expressly stated that Dr. Grant’s testimony would not be reviewed deferentially: “On *de novo* review of the district court’s indefiniteness holding, we conclude that Dr. Grant’s testimony does not save [the] claims from indefiniteness.”¹⁸¹

In response, the Supreme Court reversed.¹⁸² In so holding, the Court found that the Federal Circuit “must apply a ‘clear error,’ and not a *de novo*, standard of review.”¹⁸³ The Court looked at the text of Rule 52(a) for support for its ruling. Ultimately, the court held that the text of the rule did not allow for “exceptions or purport to exclude certain categories of factual findings from the obligation of the court of appeals to accept a district court’s findings unless clearly erroneous.”¹⁸⁴

The Supreme Court distinguished the holding in the *Markman* case, finding that *Markman* did not create an exception to Rule 52(a). The Court found that although it had determined that the “ultimate question of the proper construction of the patent” is a question of law, the legal nature of the inquiry did not give rise to an exception to Rule 52(a).¹⁸⁵ Lastly, the Court found that “practical considerations,” such as the expertise of trial and appellate courts,

174. *Lighting Ballast*, 744 F.3d at 1284.

175. *Id.* at 1285.

176. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 723 F.3d 1363 (Fed. Cir. 2013).

177. *Id.* at 1367.

178. *Id.*

179. *Id.*

180. *Id.* at 1369.

181. *Id.*

182. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 835-37 (2015).

183. *Id.*

184. *Id.* at 837 (quoting *Pullman-Standard v. Swint*, 456 U.S. 273, 287 (1982)).

185. *Id.* at 838.

mitigated in favor of reversal.¹⁸⁶

C. *Mixed Question Review at Specialized Courts*

The Supreme Court is clearly interested in specialization's impact on standard of review. During oral argument in *Octane* and *Highmark*, numerous justices posed questions about whether the Federal Circuit's unique position in the federal judiciary indicated a need for reduced deference to district court decisionmakers.¹⁸⁷ In *Highmark*, the Court concluded that the Federal Circuit's expertise in patent law did not compel a lower standard of review for discretionary awards of attorney fees.¹⁸⁸ But the Court did not indicate whether the Federal Circuit's expertise might carry the day in a different case with a different set of facts. Because *Highmark* involved the discretionary decision of whether to award attorney fees, it remains to be seen whether a mixed fact/law case, such as claim construction, will be treated in a similar manner.

Ultimately, the Federal Circuit's "expertise" in relation to district judges looks very similar to the expertise of other appellate courts. The court is an expert on patent *law*, not on the application of evidentiary rules, trial practice, or scientific facts. Although district court judges rarely possess specialized scientific training, this is equally true of the majority of the judges on the Federal Circuit.¹⁸⁹ Even for those Federal Circuit judges that do have scientific backgrounds, it makes little sense to prefer the scientific conclusions of those judges over district judges except for the exceedingly rare (likely non-existent) case in which the scientific background of the judge perfectly overlaps with the skill of the art in the patent at issue. Thus, there is little reason to suppose that Rule 52's requirement to defer to district courts on factual issues should bend in light of the Federal Circuit's specialization.

As for uniformity, the Federal Circuit possesses a unique mandate to clarify and monitor the progress of national patent law. The court has suggested numerous times that this mandate implies more thorough review of district court decisions.¹⁹⁰ But the desire for uniform legal rules is no less urgent for the geographic circuit courts than it is for the Federal Circuit. Just as deference improves the legal process in generalist circuits, so too can it improve the process of patent litigation. While deference does introduce the potential for similar cases to be decided differently, our legal system has collectively determined that such a price is one worth paying for the efficiency and clarity benefits that deference provides. Furthermore, mixed deferential review

186. *Id.* at 838.

187. *See supra* note 156-159 and accompanying text.

188. Part II.A, *supra*.

189. *See generally* Rochelle C. Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1 (1989); only four judges on the court have a technical background: Judges Chen, Lourie, Newman and Linn. Judges, United States Court of Appeals for the Federal Circuit, <http://www.cafc.uscourts.gov/judges>.

190. *Lighting Ballast*, 744 F.3d at 1281-88.

provides a mechanism for increasing legal uniformity.¹⁹¹

Thus, for all of the reasons that the common law imposes limits on circuit courts' ability to review district courts (efficiency, expertise, judicial respectability), the Federal Circuit should abide by the same restraints. The court's undeniable expertise with patent law suggests that the court should review legal decisions of trial courts with minimal deference—just as the geographic circuit courts review such issues *de novo*. District courts' familiarity, exposure, and expertise with trial practices and fact-finding suggest that the court should afford deference to lower courts' factual and discretionary decisions—just as such issues are reviewed by the geographic circuits for “abuse of discretion” and “clear error,” respectively.¹⁹²

As for mixed questions, no consensus standard exists among the various circuits.¹⁹³ The Federal Circuit's mandate to unify patent law suggests that the court might lean towards treating all mixed questions *de novo*. But such an approach ignores the individual competencies of district and appellate courts. A better approach—not just for the Federal Circuit, but appellate courts as a whole—would be to tease out those issues that are factual from those that are legal, reserving the ultimate legal conclusion to be reviewed *de novo*.¹⁹⁴ Such an approach maximizes the fact-finding role of the district court while maintaining uniform treatment in the ultimate application of those facts to law.¹⁹⁵ The following Part more fully explores this approach to mixed question review for specialized courts.

III. THE ULTIMATE MIXED QUESTION: CLAIM CONSTRUCTION

How and when should specialized appellate courts defer to non-specialized trial courts? In answering that question, this Part examines what is perhaps the ultimate mixed question of fact and law in the specialized field of patent law: claim construction. Claim construction requires technical knowledge of the patented technology, expertise in reading and interpreting patent documents, and knowledge of the skill in the art at the time of the invention.¹⁹⁶ Despite the undeniable factual features of claim construction, the Federal Circuit continued to review claim construction *de novo* until a few months ago. This Part offers a critique of the Federal Circuit's *de novo* review practice based on the past fifteen years of claim construction cases. First, this Part addresses the costs of *de novo* review in a fact-intensive area like claim construction. The costs of *de novo* review include high reversal rates, demoralized trial judges, and

191. See Part III.A, *infra*.

192. See Part I.A, *supra*.

193. See Part I.A.3, *supra*.

194. See Childress & Davis, *supra* note 49, at § 2.19, 2-115 (“[P]erhaps the clearest way to approach mixed law-fact questions is to allow free review of legal conclusions and legal effects while deferring to determinations of underlying facts and even factual inferences.”).

195. *Id.*

196. See Rai, *supra* note 4, at 1046–47.

disincentives to review all of the evidence during claim construction proceedings. Because the Federal Circuit court reviews every claim construction appeal without deference, district courts are reluctant to rely on extrinsic evidence, evidence that may be vital to the proper construction of a claim term.¹⁹⁷

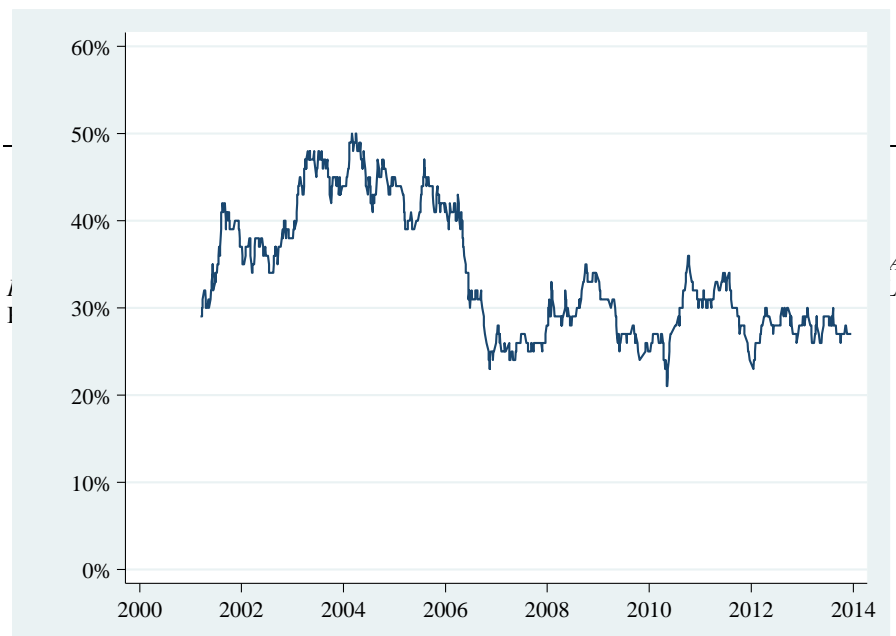
Next, this Part sketches out an improved method for the court to approach claim construction. Because the Federal Circuit's expertise is of the same type as the expertise of other circuit courts, there is no reason to think that the Federal Circuit should afford less deference than the geographic circuits. Instead, the court should adopt traditional appellate practices of mixed question review. Review of contractual interpretation provides a workable example for the Federal Circuit's review of claim construction.

Finally, this Part addresses the Federal Circuit's claim in *Lighting Ballast* that stare decisis principles require the court to maintain *de novo* review. Because the Supreme Court granted certiorari in *Teva* rather than in *Lighting Ballast*, this line of reasoning remains unrebutted. Because stare decisis is less relevant when deciding standards of review than in perhaps any other area of law, courts of appeal should not feel bound to their prior, incorrect standard of review decisions. Whether the court should maintain its own precedents is virtually irrelevant to the question of what the proper standard of review is.

A. *De Novo* Review of Claim Construction

Although the Federal Circuit's 2004 decision in *Phillips v. AWH Corp.*¹⁹⁸ afforded trial judges greater leeway to gather extrinsic evidence, district judges have long since abandoned formal evidentiary proceedings as part of the claim construction process and steered clear of explaining claim construction rulings as based on any fact-finding. They did so, of course, because formal fact-finding is not afforded any deference by the Federal Circuit.¹⁹⁹ In research examining the effect of the *Phillips* decision on reversal rates and other aspects of patent claim construction, Peter Menell and I have shown that claim construction reversals have declined quite significantly in the decade since *Phillips*.²⁰⁰ The figure below updates that research through January 1, 2014.

FIGURE 1 – CLAIM CONSTRUCTION REVERSAL RATES: 2000-2014 (100 CASE ROLLING AVERAGE)



In *Lighting Ballast*, the Federal Circuit cited our research as demonstrating that *de novo* review was working, because reversal rates had dropped since their peak in 2004.²⁰¹ Ironically, the dissent cited our research for the exact opposite conclusion: that *de novo* review had led to the high reversal rates in the first place—it was not the balm claimed by the majority.²⁰²

Our view is that the dissent in *Lighting Ballast* got it right: *de novo* review is the cause of the high reversal rates (nearly 50 percent at one point), not the solution. The fact that reversal rates have dropped to around 30 percent is an indication of changes in the Federal Circuit’s internal review processes, not of improved decisionmaking brought about by tough plenary oversight.²⁰³ We have referred to this seemingly deferential *de novo* standard as “informal deference.”²⁰⁴ To the contrary of the majority’s reading of our research, the shadow of formal *de novo* review continues to cast doubt on the predictability of patent litigation, discourage settlements following claim construction and trial, delay resolution of patent disputes, and run up the overall costs of patent litigation.²⁰⁵ Although informal deference may well be an improvement over pure *de novo* review, it falls short of the proper division of responsibility between district and appellate courts and represents, at best, an entirely discretionary and panel-dependent regime.

De novo review of claim construction deprives the patent system of the evidentiary record required for the system to function properly. Because of the standard of review, district judges lack motivation to look beyond the intrinsic record. For a district court judge, relying on extrinsic evidence in claim construction rulings could be grounds for reversal, a possibility of which judges are cognizant.²⁰⁶ Indeed, a particular district court judge has found claim construction like “throwing darts” due to *de novo* review.²⁰⁷ As a result, the skilled artisan’s perspective is rarely relied upon by trial judges.

Indeed, Menell and I have found that the Federal Circuit makes nearly all of its claim construction decisions without consulting the perspective of someone of ordinary skill.²⁰⁸ Further, the *de novo* review practiced by the Federal Circuit

201. *Lighting Ballast*, 744 F.3d at 1290; *id.* at 1295 (Lourie, J., concurring).

202. *Id.* at 1300–01, 1310, 1311 n.6 (O’Malley, J., dissenting).

203. Anderson & Menell, *supra* note 200.

204. *Id.*

205. *Id.*

206. District court judge Patti Saris claims that district judges are “demoralized” by the Federal Circuit’s penchant for reversing on claim construction. The Honorable Kathleen M. O’Malley et al., *A Panel Discussion: Claim Construction from the Perspective of the District Judge*, 54 CASE W. RES. L. REV. 671, 682 (2004).

207. See Anandashankar Mazumdar, *Federal District Courts Need Experts that Are Good ‘Teachers,’ Judges Tell Bar*, 70 PAT. TRADEMARK & COPYRIGHT J. (BNA) 536, 537 (Sept. 16, 2005) (quoting Judge Marsha J. Penchman of the U.S. District Court of Western Washington).

208. See Anderson & Menell, *supra* note 200, at 55–56 (finding that only 13 of the 778 (1.7%) claim construction appellate opinions issued from 2000 to 2010 identify the applicable skilled artisan).

weakens the appeal process. An appellate court that lacks a well-developed trial record is incapable of considering a host of viewpoints. Trial records lack the expert opinion that allows judges to make well-reasoned decisions.

Many of the social costs of *de novo* arise from the doctrine's re-review of cases. The cost of an appeal is minor when compared to the costs of litigating a case through trial. Consequently, parties are more likely to pursue an appeal when they are given a second bite at the apple. Overall, the *de novo* standard has raised the cost of patent litigation while offering less-thorough decisionmaking.

B. *Improving Claim Construction through Deference*

Given the problems associated with *de novo* review of claim construction, how should the Federal Circuit review such decisions? As discussed above in Subpart II.C, the Federal Circuit is specialized in precisely the same area as geographical courts: both are specialists with respect to questions of law. The Federal Circuit is "expert" in patent law (and other areas within its jurisdiction), while the generalist courts are "specialists" in legal determinations generally. Therefore, specialized appellate courts, like the Federal Circuit, ought to grant the same level of deference to district court factual determinations as the geographical appellate courts.

The Federal Circuit's decision to maintain *de novo* review of claim construction follows the court's previous practice of narrowly defining "fact."²⁰⁹ Despite the court's insistence that claim construction is a "pure matter of law," claim construction is a highly fact-intensive process—it involves interpreting a legal document as a skilled professional would interpret that document.²¹⁰ The Supreme Court in *Markman* described claim construction as a "mongrel" practice, somewhere between a pristine legal question and a historical one. In *Teva*, the Court clarified what it meant, stating that "sometimes courts may have to resolve subsidiary factual disputes."²¹¹

The *Teva* court recognized that it was proper to treat claim construction as a question of law in much the same way that other questions of document interpretation are treated as questions of law.²¹² In defending its decision to treat claim construction as a question of law, the Federal Circuit's *Lighting Ballast* decision cites a number of instances in which the interpretative lens a judge must apply failed to transform the issue from one of law to one of fact.²¹³ But all of those decisions involve the interpretation of statutes,²¹⁴ which are

209. See Part II.B.1, *supra*.

210. See *supra* notes 165-167 and accompanying text.

211. 135 S. Ct. at 838.

212. *Id.*

213. *Lighting Ballast*, 744 F.3d at 1284–86.

214. See *id.* (citing *Corning Glass Works v. Brennan*, 417 U.S. 188, 202 (1974) (statutory interpretation)). See generally *Sanlifer v. U.S. Steel Corp.*, 134 S. Ct. 870 (2014) (interpreting Fair Labor Standards Act); *Comm'r v. Soliman*, 506 U.S. 168 (1993) (interpreting tax code); *Chapman v. United States*, 500 U.S. 453 (1991) (interpreting drug

always reviewed *de novo*. Claim construction, however, is very different than statutory interpretation. For one thing, claims are written *ex parte* by patentees with no opposition whereas statutory language is debated and modified by legislative committees and members.²¹⁵ The *ex parte* nature of patent drafting and prosecution permits applicants to intentionally obfuscate the meaning of their terms in an effort to capture as much innovative activity as possible within the patent's scope.²¹⁶ Congressional statutes, on the other hand, are ostensibly drafted to be clear and understandable, although at times they fail to achieve this goal.

Further, patentees can modify claim language in ways that legislators cannot modify statutes.²¹⁷ The rule that "a patentee can be his own lexicographer" allows patent drafters to define claims in ways that are particular to his invention.²¹⁸ Statutes, on the other hand, generally are interpreted by the plain meaning of the words used in the statute—the point of a statute is that one need not look to extrinsic sources for interpretation.²¹⁹ Thus, the Federal Circuit's reliance on statutory interpretation to sustain *de novo* review of claim construction is misplaced.

The better analogy for patent interpretation would be interpretation of contractual language. Scholars have debated whether patent claims are better analogized to statutes, contracts, or neither.²²⁰ But that debate has focused on whether the *process* of interpretation should follow the well-established interpretation methodology associated with statutes or contracts or maintain the unique interpretive methodology the Federal Circuit currently employs.²²¹ For standard of review purposes, the contractual analogy is simply superior. This is so because of the evidentiary similarities in interpreting patents and contracts.

Contracts are generally reviewed as legal documents with no reference to outside or extrinsic evidence.²²² Similarly, patent claims consist of a legal

statute); *United States v. Stone & Downer Co.*, 274 U.S. 225 (1927) (interpreting tariff statute).

215. See generally Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. Rev. 1495 (2000).

216. Mark A. Lemley, *Software Patents and the Return of Functional Claiming*, 2013 WISC. L. REV. 905 (2013).

217. Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. Rev. 63, 71–83 (2004) (discussing the abuses of patent continuations).

218. *Phillips v. AWH Corp.*, 416 F.3d 1303 (Fed. Cir. 2005) (en banc) (“[T]he inventor’s lexicography governs.”).

219. See Arthur W. Murphy, *Old Maxims Never Die: The ‘Plain-Meaning Rule’ and Statutory Interpretation in the ‘Modern’ Federal Courts*, 75 COLUM. L. REV. 1299 (1975).

220. Kristen Osenga, *Linguistics and Patent Claim Construction*, 38 RUTGERS L.J. 61, 70 (2006) (arguing that claim construction is akin to statutory and contract interpretation); Jeffrey A. Lefstin, *Claim Construction, Appeal, and the Predictability of Interpretive Regimes*, 61 U. MIAMI L. REV. 1033, 1051 n.76 (noting that prosecution history is considered “intrinsic” evidence in patent law, but would be considered “extrinsic” in statutory or contract interpretation).

221. *Id.*

222. Although nearly all courts review contract interpretation as a legal question, there

document that can be examined by a court to determine meaning. The examination of legal documents (statutes, contracts, patents) is generally regarded as a task that is legal in nature and is subject to *de novo* review. However, when contracts are ambiguous, courts may be forced to look to extrinsic evidence (such as the intent of the contracting parties) to understand the meaning of a contractual term. Similarly, Federal Circuit law dictates that extrinsic evidence such as dictionaries and expert testimony may be needed in some cases in order to properly understand a claim term.²²³

While it is standard for a court to say that contract language is generally reviewed *de novo*,²²⁴ nearly all courts afford deference to factual issues that may arise in contract cases, such as extrinsic evidence of parties' intent.²²⁵ The Supreme Court, before implementation of Rule 52(a), stated that if a contract's meaning hinges "not merely on its construction and meaning, but also upon extrinsic facts and circumstances—the inferences to be drawn from it are inferences of fact and not of law."²²⁶ All of this is to suggest that patent documents are like contracts when it comes to interpretive sources: they are legal documents that, at times, require extrinsic sources in order to determine meaning. Like contracts, patents should be reviewed *de novo* if the meaning is unambiguous from the language of the document, and reviewed for "clear error" when extrinsic evidence is required to determine meaning.

In practice, this standard would maintain *de novo* review of the ultimate question of claim interpretation, yet require the Federal Circuit to defer to evidentiary findings of the district court that look more like fact than the overall interpretive process. These factual components might include the weighing of testimony of conflicting experts, determining the skill in the art at the time of invention, or choosing between possible definitional resources like dictionaries and scientific publications.²²⁷ Despite the Federal Circuit's claim in *Lighting*

are exceptions. *See, e.g.,* *Antilles S.S. Co. v. Members of Am. Hull Ins. Syndicate*, 733 F.2d 195, 199 (2d Cir. 1984) (holding that interpretation of a contract is a question of fact); *see also* Arthur L. Corbin, *Corbin on Contracts* § 554 (1960) (arguing that contract interpretation is a question of fact). In practice, however, these outlier courts likely review contracts with similar levels of deference, given the extrinsic-facts qualifier applied by the majority of courts. *See* Childress & Davis, *supra* note 49, at § 2.23, 2-155.

223. There are, however, varying methodologies among the Federal Circuit judges regarding when it is proper to examine extrinsic sources. *See* Greg Reilly, *Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard*, 20 MICH. TELECOMM. & TECH. L. REV. 243 (2014) (discussing differing claim construction evidentiary standards among Federal Circuit judges).

224. *Strachan Shipping Co. v. Dresser Indus., Inc.*, 701 F.2d 483, 486 (5th Cir. 1983).

225. *See* Childress & Davis, *supra* note 49, at § 2.23. *See, e.g.,* *Tri-State Petroleum Corp. v. Saber Energy, Inc.*, 845 F.2d 575, 582 (5th Cir. 1988) (holding that contract interpretation is reviewed *de novo*, but if extrinsic evidence needed to interpret, then court "required to accept facts found by the district court unless they are clearly erroneous.")

226. *West v. Smith*, 101 U.S. 263, 270 (1879).

227. For examples of this practice in the contract realm, *see e.g.,* *Backar v. Western States Prod. Co.*, 547 F.2d 876, 884 (5th Cir. 1977) (applying Rule 52 standard to court's definition of contract term "control" because factual and credibility determinations predominated).

Ballast that “no one . . . proposes a workable replacement for the” *de novo* standard,²²⁸ every other appellate circuit court has been applying a mixed-deferential review to contractual interpretation for decades.²²⁹ For example, the Ninth Circuit treats contract interpretation as a legal question, reviewed without deference,²³⁰ yet explicitly recognizes that the interpretive process is a mixed question, with facts reviewed with deference.²³¹

Such a mixed standard has not only proven workable in other circuits, has also worked well within the Federal Circuit itself. The court reviews obviousness determinations in precisely this manner.²³² Numerous other issues of patent law are reviewed under this hybrid mixed law/fact manner.²³³ This mixed standard of review would also lessen the Federal Circuit’s concern that a weakened review standard would endanger the uniformity of patent enforcement.²³⁴ Since the Federal Circuit would ultimately maintain *de novo* review of the ultimate question of claim meaning, the odds of a patent claim receiving disparate interpretations in different cases would be very remote indeed.

Ultimately, a mixed deferential standard for patent claim construction aligns the Federal Circuit’s claim construction jurisprudence with that of all of the other circuit courts’ contractual interpretation jurisprudence. By deferring to the extrinsic factual findings that undergird the ultimate legal conclusion of claim meaning, the court would leverage the fact-finding acumen of district court judges while maintaining the national uniformity of patent scope.

C. *Stare Decisis Concerns*

One last point should be made about the Federal Circuit’s decision to uphold *de novo* review. The court held in *Lighting Ballast* that it was bound by principles of *stare decisis* to maintain its review standard.²³⁵ In so concluding, the court placed too great an emphasis on *stare decisis* and its application to

228. *Lighting Ballast*, 744 F.3d at 1284.

229. Childress & Davis, *supra* note 49.

230. See *Waggoner v. Nw. Excavating, Inc.*, 642 F.2d 333, 337 (9th Cir. 1981), *vacated on other grounds*, 455 U.S. 931 (1982) (holding that contract interpretation is reviewed *de novo*); *Transp. Indem. Co. v. Liberty Mut. Ins. Co.*, 620 F.2d 1368, 1370 (9th Cir. 1980) (same).

231. See *Miller v. Safeco Title Ins. Co.*, 758 F.2d 364, 367 (9th Cir. 1985); *Martin v. United States*, 649 F.2d 701 (9th Cir. 1981); *Kittitas Reclamation Dist. v. Sunnyside Valley Irrigation Dist.*, 626 F.2d 95, 98 (9th Cir. 1980).

232. See Part I.B, *supra*.

233. For instance, the “on sale bar” to patenting is a question of law, with underlying facts that are reviewed for clear error. *Ferag AG v. Quipp Inc.*, 45 F.3d 1562, 1566 (Fed. Cir. 1995).

234. *Lighting Ballast*, 744 F.3d at 1286 (“Because differing claim constructions [resulting from deferential review] can lead to different results for infringement and validity, the possibility of disparate district court constructions unravels the uniformity in the treatment of a given patent that the Court sought to achieve in *Markman II*.”)

235. *Id.* at 1276–77.

previous standard of review decisions. While the contours of stare decisis have been fluid over time (to say the least),²³⁶ the Supreme Court's recent caselaw suggests that the doctrine carries less weight in standard of review contexts than in other areas of the law.

The doctrine of stare decisis, or precedent, is fundamental to the American legal system.²³⁷ It has many variations, but in its simplest form, stare decisis holds that a prior decision provides a reason to continue to resolve that same question in that same manner, regardless of the correctness of that decision.²³⁸ Stare decisis has always been a part of the American legal system, but its application has meandered in and out of favor.²³⁹ A vast legal and political science literature examines that history, only a small part of which can be discussed here.

Stare decisis takes many forms, but can generally be separated into two types: vertical and horizontal.²⁴⁰ The principle of vertical stare decisis holds that courts must follow decisions of courts above them.²⁴¹ For example, all district courts must adhere to the decisions of the court of appeal of the circuit in which the district sits as well as to decisions of the U.S. Supreme Court. Vertical stare decisis is rarely challenged or questioned.²⁴²

Horizontal stare decisis, on the other hand, is much more complex.²⁴³ Three-judge appellate panels in all of the courts of appeals generally treat prior panel decisions as binding.²⁴⁴ Thus, when a prior panel interprets a statute, that interpretation is binding on judges of the same court sitting in later cases. If a court wants to reverse panel precedent, it generally must sit en banc to do so.²⁴⁵

But even en banc courts are limited in what they can do. Stare decisis principles often limit what decisions en banc courts can overrule.²⁴⁶ The Supreme Court and courts of appeals will only overrule established precedent if there is "special justification" to do so.²⁴⁷ "Special justification" must be more

236. Charles J. Cooper, *Stare decisis: Precedent and Principle in Constitutional Adjudication*, 73 CORNELL L. REV. 401, 402 (1988) (referring to stare decisis as a matter of "convenience, to both conservatives and liberals.").

237. See William O. Douglas, *Stare Decisis*, 49 COLUM. L. REV. 735 (1949).

238. *Id.*

239. See Cooper, *supra* note 236.

240. Lawrence C. Marshall, *'Let Congress Do It': The Case for an Absolute Rule of Statutory Stare decisis*, 88 MICH. L. REV. 177, 177 n.1 (1989).

241. *Id.*

242. See David C. Bratz, *Stare decisis in Lower Courts: Predicting the Demise of Supreme Court Precedent*, 60 WASH. U. L. REV. 87, 87 (1984) (arguing that stare decisis "impose[s] a seemingly exceptionless rule of deference to the Supreme Court.").

243. Marshall, *supra* note 240.

244. See Amy Coney Barrett, *Stare decisis and Due Process*, 74 U. COLO. L. REV. 1011, 1018–19 (2003).

245. *Id.*

246. *Id.*

247. *Payne v. Tennessee*, 501 U.S. 808, 849 (1991) ("[T]his Court has never departed from precedent absent 'special justification.'").

than a mere error in judgment—the rule to be overturned must also be “unworkable.”²⁴⁸ When overturning prior precedent, *stare decisis* demands that the new rule should not tarnish the public’s opinion of the judiciary or upset established reliance interests.²⁴⁹ In a sense, vertical *stare decisis* acts as a form of deference to one’s own previous decisions.

The Supreme Court has discussed in some depth the purpose of *stare decisis* and provided lower courts with a host of considerations that should be taken into account in deciding whether to overrule prior precedent. Ultimately, however, the decision is a pragmatic one, weighing the benefit of altering the law with the cost of doing so. In *Planned Parenthood v. Casey*, the Court outlined what it looks for when it reexamines one of its holdings:

Rather, when this Court reexamines a prior holding, its judgment is customarily informed by a series of prudential and pragmatic considerations designed to test the consistency of overruling a prior decision with the ideal of the rule of law, and to gauge the respective costs of reaffirming and overruling a prior case.²⁵⁰

Among the “prudential and pragmatic considerations” that the Court enumerated are whether the rule has defied “practical workability,” whether the old rule is relied upon to such an extent as to “add inequity” to overruling it, whether intervening legal changes have eliminated the rule’s usefulness, or whether other changes have “robbed the rule of significant . . . justification.”²⁵¹ In *Casey*, the Court held that these considerations required the Court to maintain its central holding in *Roe v. Wade* that a woman has a constitutional right to choose to have an abortion prior to fetal viability.²⁵²

While *stare decisis* is a fundamental principle of American jurisprudence, its value is at its nadir in cases involving procedural rules. The Supreme Court has said that “[c]onsiderations of *stare decisis* are at their acme in cases involving property and contract rights, where reliance interests are involved . . .; *the opposite is true in cases . . . involving procedural and evidentiary rules.*”²⁵³ Although *stare decisis* applies to procedural decisions, the policies underlying the doctrine have much less import when addressing prior procedural rulings, such as standard of review rulings.

Scholars and courts have suggested a number of policies that undergird *stare decisis*. First, *stare decisis* has its roots in constitutional separation of

248. See *Planned Parenthood of Se. Penn. v. Casey*, 508 U.S. 833, 854–55 (1992) (considering whether a prior ruling was “unworkable”).

249. *Id.* at 855–57.

250. *Id.* at 854.

251. *Id.*

252. *Id.*

253. *Payne v. Tennessee*, 501 U.S. 808, 828 (1991) (citing *Swift & Co. v. Wickham*, 382 U.S. 111, 116 (1965)) (emphasis added). See also *Hohn v. United States*, 524 U.S. 236, 251–52 (1998); *Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363 (1977); *United States v. Title Ins. & Trust Co.*, 265 U.S. 472 (1924); *The Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 458 (1852); *Smith v. Turner*, 48 U.S. (7 How.) 283, 470 (1849). For more on *stare decisis* and its application, see Barrett, *supra* note 244 at 1075.

powers doctrine, at least when it comes to interpreting statutes.²⁵⁴ The Supreme Court and scholars who have examined the Court's rulings find that stare decisis honors the legislature's supremacy in crafting laws in two ways.²⁵⁵ First, silence from Congress following a statutory interpretation by the Court infers that Congress has acquiesced to that decision.²⁵⁶ Thus, by refusing to revisit the previously decided issue of statutory interpretation, the Court acknowledges Congress' acceptance of the Court's prior ruling. Second, and relatedly, by refusing to revisit a prior precedent on statutory interpretation, the Court allows the legislature to alter the interpretation through the lawmaking process.²⁵⁷

But concerns about separation of powers hold virtually no explanatory power when considering reexamination of a standard of review. Standards of review are rarely legislatively mandated.²⁵⁸ Instead, appellate courts are forced to adopt a standard of review with little or no guidance from the legislature.²⁵⁹ Given the dearth of statutorily mandated standards of review, courts can hardly hope that Congress will change the standard in response to an incorrect decision by the Supreme Court or an appellate court. Standards of review are largely court-created doctrines and thus are rightly seen by many legislators as the province of the court. It is not an infringement of the principles of separation of powers to suggest that courts should not wait for the legislature to instruct courts on how to perform their duties.

Furthermore, many of the separation of powers explanations for stare decisis are directed at interpretation of statutes, precisely because statute creation is the province of the legislature. Neither scholars nor courts have suggested that separation of powers militates against altering prior rulings on standard of review decisions.

A second line of reasoning proposes that stare decisis is a form of judicial restraint. Some scholars have proposed that stare decisis was developed as a means of legitimating the judicial role in a democracy.²⁶⁰ This theory suggests that by voluntarily limiting its own review powers, the Supreme Court signals its intention to be a mediator rather than a lawmaker. Indeed, the Court in *Casey* makes much of the potential negative public reaction to the Court's overturning its own prior decisions. In *Casey*, the Court notes that to reverse its prior holding in the incredibly controversial *Roe* case would harm the Court's

254. See Amy C. Barrett, *Statutory Stare decisis in the Courts of Appeals*, 73 GEO. WASH. L. REV. 317 (2005).

255. *Id.*

256. *Id.* See also Marshall, *supra* note 240.

257. *Id.*

258. *Supra* notes 32-33 and accompanying text.

259. *Id.*

260. Timothy Johnson et al., *NEW DIRECTIONS IN JUDICIAL POLITICS* 167-169 (edited by Kevin T. McGuire); Caleb Nelson, *Stare decisis and Demonstrably Erroneous Precedents*, 87 VA. L. REV. 1, 8 (2001) (arguing that stare decisis developed as a means of restraining the discretion "that legal indeterminacy would otherwise give judges").

“legitimacy” with the public.²⁶¹ It is the perception that if a court overturns its own controversial ruling after a few years the public will not be able to trust in the stability of the court’s future decisions.²⁶²

While the concern of judicial legitimacy may hold sway in nationally controversial constitutional cases, it is much less salient in the esoteric world of appellate standards of review, debates about which are usually confined to the dusty pages of law reviews.²⁶³ It can hardly be said that the judiciary’s legitimacy would be called into question if the court were to limit its own powers by reversing its prior holding. Indeed, numerous courts have overturned previously held standards with little comment.²⁶⁴

Lastly, and most commonly, scholars and courts have noted that stare decisis is a means of protecting reliance interests.²⁶⁵ By refusing, or at the very least hesitating to overturn prior decisions, courts permit the public to trust that their rulings will retain the force of law unless legislatively overturned. If this were not the case, the public would have little reason to heed court decisions. Thus, stare decisis allows citizens and businesses to have confidence that the law will remain relatively static, permitting future planning and investment.

The reliance basis of stare decisis best highlights the doctrine’s uneasy application in standard of review cases, because the only people who can be said to “rely” on a standard of review are the appellate judges themselves. The only expectation interest that would have been upset by a reversal of the Federal Circuit’s *de novo* standard would have been that of the Federal Circuit judges themselves. No corporation or individual makes decisions based on what standard an appellate court might apply to some future case. Indeed, even litigants in a case pay little attention to the standard until the time for appeal arises.²⁶⁶ Standards of review are not relied upon by any non-judicial actors, thus the reliance protection function of stare decisis is inapplicable.

Appellate courts are not constrained by the doctrine of stare decisis in determining the proper standard of review for specific cases. Standard of review cases do not implicate the traditional concerns protected by stare decisis, namely, reliance, separation of powers, and judicial legitimacy. The

261. . *Casey*, 505 U.S. at 866–67.

262. . *See, e.g.*, *Vasquez v. Hillery*, 474 U.S. 254, 265–66 (1986); *Moragne v. States Marine Lines, Inc.*, 398 U.S. 375, 403 (1970); Deborah Hellman, *The Importance of Appearing Principled*, 37 ARIZ. L. REV. 1107, 1118–20 (1995) (claiming that the Court’s concern about how stare decisis will affect its image is a twentieth-century trend that *Casey* fully developed); John Paul Stevens, *The Life Span of a Judge-Made Rule*, 58 N.Y.U. L. REV. 1, 2 (1983).

263. *See Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1474 (Fed. Cir. 1998) (en banc) (Rader, J., dissenting) (“The question of the proper standard of review seems an esoteric legal topic of interest only to law professors and appellate judges.”).

264. *See, e.g.*, *U.S. v McConney* (728 F.2d 1195) (9th) (en banc); *Levi Strauss v. Blue Bell*, 778 F.2d 1352, 1355 (9th Cir. 1985) (en banc).

265. *See e.g.*, *Payne v. Tennessee*, 501 U.S. 808 (1991) (“Considerations in favor of stare decisis are at their acme in cases . . . where reliance interests are involved.”).

266. *See supra* note 263.

Federal Circuit's claim that stare decisis "operate[s] with full force" when reviewing standard of review holdings simply misunderstands the nature of stare decisis.²⁶⁷ In nearly all standard of review contexts, the advantages of adopting the correct standard of review will always outweigh the cost, if any, of reversing course.

CONCLUSION

The Supreme Court's interest in the Federal Circuit shows no signs of abating. The federal court system's uneasy experiment with a specialized appellate court has entered its third decade, but fundamental questions of procedure and practice remain. Over the past year, the Supreme Court has issued rulings with the potential to fundamentally alter the Federal Circuit's power. The question the Supreme Court has grappled with is: "are specialized courts special when it comes to standards of review?"

This Article argues that the answer to that question is "no." Fundamental principles of appellate practice demonstrate that the amount of deference owed to district court decisions turns on practical and pragmatic concerns. Essentially, appellate courts should defer on questions of fact and on mixed questions of fact and law in which factual questions predominate or substantially dictate a legal outcome. Conversely, appellate courts should review legal issues and mixed questions that are primarily legal in nature *de novo*. The Federal Circuit's expertise does not alter this framework, despite the court's own decisions to the contrary.

Lastly, when it comes to the ultimate mixed question in patent law—claim construction—the Supreme Court has granted district courts the deference owed to them under the FRCP. Claim construction cases now will be reviewed by the Federal Circuit with the same standard applied by circuit courts in contract interpretation cases. By retaining *de novo* review of the ultimate question of interpretation, while deferring to findings based on extrinsic evidence unless "clearly erroneous," the Supreme Court has aligned the Federal Circuit's standard of review jurisprudence with general appellate practice norms. Most importantly, requiring the Federal Circuit to grant deference to district court claim construction decisions will have salutary effects for the entire patent system.

267. *Lighting Ballast*, 744 F.3d at 1282 ("The principles and policies of stare decisis operate with full force where, as here, the en banc court is considering overturning its own en banc precedent.").

