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An Objective View of Fault in Patent Infringement

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An Objective View of Fault in Patent Infringement

ARTICLES

AN OBJECTIVE VIEW OF FAULT IN PATENT INFRINGEMENT

JASON A. RANTANEN*

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INTRODUCTION

The most common form of patent infringement is direct infringement, a strict liability claim. One directly infringes a patent simply by making, using, or selling a product, or practicing a method that meets all the limitations of a patent claim. No fault is necessary. There are other infringement doctrines, however, that require some form of fault.¹ Principal among these are indirect infringement, which occurs when one engages in behavior that aids or encourages another to infringe a patent, and willful infringement, which requires culpability above and beyond merely engaging in the infringing acts.² In both cases simply carrying out the relevant acts is insufficient to establish liability.³ Rather, the accused

1. By “fault,” I simply mean the component of the legal claim that makes it something other than a strict liability claim. As this Article will explain, fault may be a particular mental state requirement, such as intent or knowledge, or it may be an objective analysis, such as negligence or civil recklessness. See discussion *infra* Part I.

2. 35 U.S.C. § 271(b) (2006).

3. See *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 851, 93 U.S.P.Q.2d (BNA) 1943, 1958 (Fed. Cir. 2010) (quoting *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1378, 76 U.S.P.Q.2d (BNA) 1276, 1282 (Fed. Cir. 2005))

party must possess some type of fault with respect to the infringement.⁴

The traditional approach to the fault elements of indirect infringement generally includes a mens rea, or mental state, inquiry.⁵ Inducement of

(requiring proof of intent to induce infringement of the patent), *aff'd on other grounds*, 131 S. Ct. 2238 (2011).

4. *Id.*

5. Virtually all commentators addressing the subject of indirect infringement, both with respect to inducement and contributory infringement, treat the subject of fault in mental state terms. *See, e.g.*, Mark Lemley, *Inducing Patent Infringement*, 39 U.C. DAVIS L. REV. 225, 241–46 (2005) (grappling with elements of inducement of infringement while proposing that infringement be determined based on a sliding scale that weighs the degree of mental culpability together with the degree of participation in the act to determine whether a given set of circumstances constitutes inducement). While Professor Lemley's work provides valuable insights (and the mechanism he proposes could work in conjunction with the revised view of fault), a key pillar of his analysis is the treatment of the fault requirement in mental state terms. Other commentators also consistently describe the fault element in mental state terms. *See, e.g.*, Charles W. Adams, *Indirect Infringement from a Tort Law Perspective*, 42 U. RICH. L. REV. 635, 661–62 (2008) (defining the mental state required for inducing infringement as a specific intent to induce the direct infringer's acts that constitute infringement and that the infringer knew or should have known the direct infringer's acts would be infringing); Mark Bartholomew, *Cops, Robbers, and Search Engines: The Questionable Role of Criminal Law in Contributory Infringement Doctrine*, 2009 BYU L. REV. 783, 785–86 (2009) (discussing the mental state element of contributory and inducement infringement in light of criminal law notions of accomplice liability); Timothy R. Holbrook, *The Intent Element of Induced Infringement*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 399, 405–06 (2006) (explaining mental state of infringer as willful infringement, where there is actual notice of the patent but the infringer nonetheless chooses to infringe). An alternative view is that inducement should be a strict liability claim, at least with respect to the fault associated with the question of infringement. *See* Lynda J. Oswald, *The Intent Element of "Inducement to Infringe" Under Patent Law: Reflections on Grokster*, 13 MICH. TELECOMM. & TECH. L. REV. 225, 245 (2006) (arguing that any standard less than strict liability will cast doubt on a patent holder's ability to protect its rights); Michael N. Rader, *Toward a Coherent Law of Inducement to Infringe: Why the Federal Circuit Should Adopt the Hewlett-Packard Standard for Intent Under § 271(b)*, 10 FED. CIR. B.J. 299 (2001) (arguing in favor of strict liability with respect to the question of infringement); Ted Sichelman, *Minding Patent Infringement 25–28* (San Diego Legal Studies, Paper No. 11–051, 2011) available at http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=592341 (essentially arguing the same standard). Rather than advocating for an objective approach to fault with respect to infringement, however, these commentators effectively propose the elimination of the fault requirement entirely. To be clear, I do not suggest that this strict liability approach should be adopted; to the contrary, I argue that fault for indirect infringement should be preserved, but as an objective recklessness analysis as opposed to an inquiry into whether the accused possessed the subjective mental state of purpose or knowledge.

Traditional approaches to willful infringement also viewed its fault element as a mental state inquiry. *See, e.g.*, *Norfin, Inc. v. Int'l Bus. Mach. Corp.*, 625 F.2d 357, 366 (10th Cir. 1980) (focusing on whether infringement was "willful" and "deliberate"). Yet, as this Article will discuss, this is no longer the case. Willfulness is now widely understood as involving a purely objective analysis. *See* Justin P. Huddleson, Note, *Objectively Reckless: A Semi-Empirical Evaluation of In re Seagate*, 15 B.U. J. SCI. & TECH. L. 102, 120–21 (2009) (discussing post-*Seagate* trends in the law); Justin McCarthy, Note, *In re Seagate: One Step Closer to a Rational Doctrine*, 10 MINN. J. L. SCI. & TECH. 355, 370 (2009) (explaining that the test is now one of "objective recklessness"); Christopher C. Bolten, Note, *In re Seagate Tech., L.L.C.: Is the Objective Recklessness Standard a Practical Change?*, 49 JURIMETRICS J. 73, 73–90 (2008); Christopher Ryan Lanks, Note, *In re Seagate: Effects and Future Development of Willful Patent Infringement*, 111 W. VA. L. REV. 607, 620 (2009) (outlining the new objective recklessness standard).

infringement, one form of indirect infringement, illustrates this approach. In its simplest terms, inducement of patent infringement occurs when one engages in an act that causes another to infringe a patent.⁶ For example, a pharmaceutical company that sells birth control pills with instructions on how customers can use those pills to treat acne and advertises those pills for treating acne may be subject to a claim that it is inducing infringement of a patent covering the use of birth control pills to treat acne. Although the company itself is not directly infringing the patent, it is engaging in conduct that results in the direct infringement of the patent by another.

Beyond just the relevant acts, however, inducement also requires the patent holder to establish fault on the part of the accused. Fault for inducement is virtually always described in mens rea terms.⁷ For example, the Federal Circuit, citing en banc, recently articulated the fault element for inducement as requiring that “the patentee must show . . . that the alleged infringer *knowingly* induced infringement and possessed *specific intent* to encourage another’s infringement.”⁸ Such an inquiry is thus a question about the subjective state of mind of the accused party.

Even the Supreme Court assumes that fault in inducement must require a mental state inquiry. In the Supreme Court’s grant of certiorari in *Global-Tech v. SEB S.A.*,⁹ the Court posed the question “[w]hether the legal standard for the ‘state of mind’ element of a claim for actively inducing infringement under 35 U.S.C. § 271(b) is ‘deliberate indifference of a known risk’ that an infringement may occur or instead ‘purposeful, culpable expression and conduct’ to encourage an infringement.”¹⁰ The Court’s question presupposed that the fault element of inducement must be described in mental state terms, asking whether the accused infringer must

6. See *infra* Part II.A.2.

7. See *supra* note 5.

8. *i4i Ltd. P’ship*, 598 F.3d at 851, 93 U.S.P.Q.2d (BNA) at 1958 (quoting *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d at 1378, 76 U.S.P.Q.2d (BNA) at 1282) (emphasis added), *aff’d on other grounds*, 131 S. Ct. 2238 (2011). There are a multitude of similar articulations of the fault element by the Federal Circuit, all involving questions of mental state. For example, another version of the fault element is that “[i]nducement requires a showing that the alleged inducer *knew* of the patent, *knowingly* induced the infringing acts, and possessed a *specific intent to encourage another’s infringement of the patent.*” *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1328, 92 U.S.P.Q. (BNA) 1340, 1348 (Fed. Cir. 2009) (emphasis added) (citations omitted). The common theme of these standards is that they all involve an investigation into whether the accused party either intended to infringe the patent or subjectively knew that the conduct infringed.

9. *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010), *cert. granted sub nom.*, *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 458 (Oct. 12, 2010) (No. 10-6).

10. See *id.* (granting certiorari to determine whether the legal standard for inducement is deliberate indifference of a known risk that infringement may occur or purposeful, culpable expression and conduct to encourage an infringement), question presented available at <http://www.supremecourt.gov/qp/10-00006qp.pdf>.

possess a certain “state of mind,” be it one of deliberate indifference or purposeful conduct. Given this preconception, it is unsurprising that the Court’s opinion in *Global-Tech* concluded that inducement requires knowledge of infringement, a holding that it necessarily tempered with the invocation of the problematic concept of “willful blindness.”¹¹

Given the prevalence of this view, one might suppose that it is the correct approach. Indeed, in the historical context in which inducement was developed, the late 1800’s, articulating fault in terms of intent made perfect sense.¹² Inducement was, after all, an expansion of the tort doctrine of aiding and abetting, an intentional tort.¹³ Nor was the concept of intent necessarily difficult to apply to patent infringers in the late nineteenth and early twentieth century.¹⁴ It is even conceivable that questions of infringement and validity were less obfuscated than they have become over the past thirty years.¹⁵

Yet despite the consensus understanding that fault for indirect infringement involves a mental state inquiry, it has proven highly troublesome to courts and scholars.¹⁶ Even after the Federal Circuit theoretically settled the mental state requirement of inducement once and for all in *DSU Medical v. JMS*,¹⁷ subsequent panels and scholars continued to disagree on its interpretation.¹⁸ Indeed, one commentator has suggested

11. *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068 (2011) (likening such knowledge to that required for a finding of contributory infringement in *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476 (1964)).

12. *See Thomson-Houston Elec. Co. v. Ohio Brass Works*, 80 F. 712, 721 (6th Cir. 1897) (providing a summary of relevant caselaw).

13. *Id.*

14. *E.g., id.* at 714, 723 (reciting that the individual defendant admitted to selling a patented object and inferring intent merely from the sale of patented items).

15. *See generally* R. Polk Wagner & Lee Petherbridge, *Did Phillips Change Anything?: Empirical Analysis of the Federal Circuit’s Claim Construction Jurisprudence*, THE CLAIM CONSTRUCTION PROJECT 1, 33 (2009) (suggesting that *Phillips* effectively held that patent claims will not always be interpreted to mean what they say).

16. *See supra* note 5 (providing varied examples of scholars’ attempts to define the fault element of inducement in mental state terms).

17. *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1305–06, 81 U.S.P.Q.2d (BNA) 1238, 1247 (Fed. Cir. 2006) (en banc).

18. The Federal Circuit’s discomfort with treating the fault element of inducement in mental state terms can be seen in the variety of articulations in post-*DSU* opinions. *Compare* *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 851, 93 U.S.P.Q.2d (BNA) 1943, 1958 (Fed. Cir. 2010) (quoting *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1378, 76 U.S.P.Q. (BNA) 1276, 1282 (Fed. Cir. 2005)) (“The patentee must show . . . that the alleged infringer knowingly induced infringement and possessed *specific intent to encourage another’s infringement*”) with *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1328, 92 U.S.P.Q.2d (BNA) 1340, 1348 (Fed. Cir. 2009) (internal citation omitted) (emphasis added) (stating that “[i]nducement requires a showing that the alleged inducer *knew of the patent*, knowingly induced the infringing acts, and possessed a specific intent to encourage another’s infringement of the patent,” and that such “[i]ntent can be shown by circumstantial evidence, but the mere knowledge of possible infringement will not suffice). *See generally* *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1376, 93 U.S.P.Q.2d (BNA) 1617, 1628 (Fed. Cir. 2010) (internal citations

that the Supreme Court's decision to grant certiorari in *Global-Tech v. SEB S.A.*¹⁹ was driven in part by an argument from the academy that the Federal Circuit has been unable to solve the puzzle of the mental state required for inducement.²⁰

In this Article, I seek to explain why viewing fault as a mental state inquiry is so problematic, and propose a new way to deal with the issue. In my view, the fundamental mistake of previous analyses has been to assume that tort law—especially as it existed in the late 1800's—is directly analogous to patent law. This assumption flies in the face of the fact that the modern world in which patent infringement is assessed is vastly different than it was a hundred years ago and the fact that the context of patent infringement is significantly different from the world of tort law. Accused inducers of infringement are not individuals and small companies but giant, multi-national corporations.²¹ Determining whether given conduct infringes a patent is now a vastly more complicated, uncertain process.²²

Perhaps the strongest reason why treating the fault element of indirect infringement in mens rea terms is flawed is the fundamental difference between intentional torts versus patent infringement. In the context of intentional torts, the mental state inquiry is predominantly concerned with whether the actor desires or appreciates the predictable factual consequences of a given act. For instance, A can be liable for the intentional tort of battery as long as A intends to strike B, regardless of

omitted) (“[I]nducement requires a showing of ‘specific intent to encourage another’s infringement’ . . . [and] ‘specific intent’ in the civil context is not so narrow as to allow an accused wrongdoer to actively disregard a known risk that an element of the offense exists.”), *aff’d sub nom.*, *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011). True indecision as to the correct standard, however, is demonstrated by *Broadcom Corp. v. Qualcom Inc.*, in which the court stated that “intent may be established where an alleged infringer who ‘knew or should have known his actions would induce actual infringements,’ is shown to have induced infringing acts through his actions.” *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 699, 88 U.S.P.Q.2d (BNA) 1641, 1654 (Fed. Cir. 2008).

19. *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010), *cert. granted sub nom.*, *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 458 (Oct. 12, 2010) (No. 10-6).

20. See Dennis Crouch & Jason Rantanen, *Supreme Court to Hear Case on Inducing Patent Infringement*, PATENTLY-O (Oct. 12, 2010, 1:47 PM), <http://www.patentlyo.com/patent/2010/10/supreme-court-to-hear-case-on-inducing-patent-infringement.html> (explaining that the petition for certiorari was aided by a brief arguing that the Federal Circuit has been unable to clarify the law on the state of mind requirement for inducement liability); Brief for 41 Law, Economics, and Business Professors as Amici Curiae Supporting Petitioner, *Global Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 458 (2010) (No. 10-6), 2010 WL 5069528, at *8.

21. There are, of course, still inducement claims made against individuals, primarily in the context of attempts to pierce the corporate veil. *E.g.*, *Wordtech Sys., Inc. v. Integrated Networks Solutions, Inc.*, 609 F.3d 1308, 1315–16, 95 U.S.P.Q.2d (BNA) 1619, 1626 (Fed. Cir. 2010). But there are numerous instances where corporations are accused of inducement, as in *Global-Tech*.

22. See generally Wagner & Petherbridge, *supra* note 15, at 33.

whether or not A knows that striking B constitutes battery.

Indirect infringement, on the other hand, focuses on an appreciation of the *legal* consequences of a given act. Moreover, the current approach to fault in the context of indirect infringement examines the actor's state of mind with respect to violating a law—not simply whether the actor intended to cause the underlying acts that violated the law.²³ The problem is that no one *intends* to infringe a patent. A person may intend to make or sell a particular product or may even intend to copy another person's technology. But except in a few extreme (and largely absurd) situations, no one's purpose is to infringe a patent. Yet this is precisely how the fault element in indirect infringement is largely articulated.²⁴

Nor is the alternate mental state construct of “knowledge” viable, despite the Supreme Court's recent ruling to the contrary.²⁵ Knowledge is typically established when one is substantially certain of particular consequences. However, given the uncertainties associated with patent law, one can virtually never be certain that conduct infringes a patent short of a final judgment.²⁶

This Article thus suggests that the conventional approach is the wrong view of the fault element of indirect infringement, both in its contributory infringement and inducement forms. Rather than attempting to see these doctrines as requiring a culpable state of mind vis-à-vis infringement of a patent, I propose that an analysis more relevant to the present context of patent infringement is necessary. The lynchpin of the revised view of fault is the recognition that infringement is a probabilistic assessment that is virtually never certain. Essentially, this Article proposes that the fault element of indirect infringement should be articulated as an objective, risk-based inquiry, asking whether a high risk that the relevant conduct infringed a patent would have been obvious to a person in the accused party's place. This approach is similar to the modern tort concept of objective recklessness, but is more closely linked to the patent context.

Among the benefits of applying an objective risk-based approach is the

23. See *supra* note 5 (discussing fault in terms of mental state).

24. See, e.g., *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 851, 93 U.S.P.Q.2d (BNA) 1943, 1958 (Fed. Cir. 2010) (quoting *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1378, 76 U.S.P.Q.2d (BNA) 1276, 1282 (Fed. Cir. 2005)), *aff'd on other grounds*, 131 S. Ct. 2238 (2011).

25. *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068, (2011) (failing to differentiate between knowledge of a patent's existence and knowledge that induced acts constitute infringement).

26. *Global-Tech* illustrates this point neatly. In its opinion, the Court likened the fault element of inducement of infringement to that of a salesman's inducement of a customer to buy a damaged car, posing the question of whether the salesman *knew* that the car was damaged. *Id.* at 2065 (emphasis added). But as discussed in Part III.C.2, while it is reasonable to ask whether one knew that a car is damaged, knowledge is a much more elusive concept when it comes to questions of patent infringement.

ability to engage in fine-tuning of the deterrence effects of the inducement doctrine. Treating fault as requiring either purpose or knowledge offers, at best, a crude mechanism for obtaining the optimal level of deterrence because it is bound by the subjective mind of the accused infringer and requires a near certain probability of infringement.²⁷ By employing an objective standard of fault that can be adjusted to account for high and low-risk activities, the inducement doctrine can be more precisely set to achieve optimal deterrence of activities that lead to patent infringement.

Benefits aside, not only does this Article suggest that an objective view of fault is the correct approach, it argues that it is the normative standard actually being applied in practice—irrespective of the courts’ formal articulation of the legal standard.

Formally shifting from a subjective mental state-based view of fault for patent infringement is not an outlandish suggestion. In fact, it has already been done in the context of willful infringement. Although fault for willful infringement was traditionally seen as involving a mens rea inquiry, recent articulations of the doctrine have shifted toward an objective risk-based analysis similar to the one I propose here.²⁸ A comparable approach would be beneficial in the indirect infringement context.

The first part of this Article sets out the foundational concepts that I will use when discussing fault and mental state issues. Part II provides a description of the fault elements in indirect infringement and willful infringement, and explains how their historical context shaped the view of these elements as involving an inquiry into the accused party’s state of mind. Part III offers several reasons why this traditional view of fault is unworkable and is premised on the assumption that mental state concepts in tort are easily transferrable to patent law. In Part IV, I present an alternative approach to fault in patent infringement akin to objective recklessness. Part V explains how this objective inquiry would work, including its benefits with respect to deterrence, and offers some suggestions as to factors that should be considered in its application.

I. FOUNDATIONAL CONCEPTS OF FAULT

A. *Elements of a Legal Claim*

Before venturing into a discussion of the fault elements of indirect

27. Or it requires the court to engage in fuzzy logic and use ambiguous standards, which fail to provide any clear rules on which firms can base their behavior. *See infra* Part III.D.

28. Before proceeding too far along the path of the willful infringement recklessness inquiry, however, it is important to point out that the post-*In re Seagate* application of that analysis suffers from a significant identity crisis. *See infra* Part V.C.

infringement, it is useful to establish some basic points to ensure a common understanding of fault. At the highest level, the elements of a legal claim can be divided into two types: physical elements and fault elements.²⁹ The latter can be further split into mental fault (also referred to as “mens rea”),³⁰ which covers the subjective mental culpability required for the claim,³¹ and objective forms of fault such as negligence or recklessness.³²

The basic concept of mental fault is readily illustrated in the criminal context:³³ if A shoots and kills B, A has met the physical element of intent-to-kill murder; if A’s purpose in shooting B was to kill him, he has met the mental state element as well.³⁴ Objective fault, on the other hand, does not

29. See WAYNE R. LAFAVE, *SUBSTANTIVE CRIMINAL LAW*, 333–35 (2d ed. 2003) (outlining the general elements of a crime).

30. *Id.* at 332–35 (discussing the basics of mens rea); CHARLES E. TORCIA, *WHARTON’S CRIMINAL LAW*, 164–72 (15th ed. 1993) (describing “mental state”); see also Paul H. Robinson & Jane A. Grall, *Element Analysis in Defining Criminal Liability: the Model Penal Code and Beyond*, 35 *STAN. L. REV.* 681, 685–87 (1983) (explaining the development of mens rea). Although “mens rea” evokes an image of criminal law, its usage appears in civil law as well. See, e.g., *Jerman v. Carlisle, McNellie, Rini, Kramer & Ulrich LPA*, 130 S. Ct. 1605, 1630 (2010) (discussing the appropriate mens rea standard in the Fair Debt Collection Practices Act, a statute providing for civil liability for certain prohibited debt collection practices); Derek W. Black, *A Framework for the Next Civil Rights Act: What Tort Concepts Reveal About Goals, Results, and Standards*, 60 *RUTGERS L. REV.* 259, 271–79 (2008) (discussing the notion of mens rea standards in tort law); V.S. Khana, *Is the Notion of Corporate Fault a Faulty Notion?: The Case of Corporate Mens Rea*, 79 *B.U. L. REV.* 355, 366–69 (1999) (discussing the idea of corporate mens rea in the context of both civil and criminal liability). Even patent law commentators and courts occasionally adopt it. See, e.g., Bartholomew, *supra* note 5, at 800; Eric L. Lane, *The Federal Circuit’s Inducement Conflict Resolution: The Flawed Foundation and Ignored Implications of DSU Medical*, 6 *J. MARSHALL REV. INTELL. PROP. L.* 198, 213 (2007); Ben Morgan, *Joint Infringement and the Impact of BMC Resources, Inc. v. Paymentech, L.P.*, 12 *SMU SCI. & TECH. L. REV.* 173, 174 (2009); Andrew M. Newton, *Encouraging Willful Infringement? Knorr-Bremse Leaves Due Care in Patent Litigation in a State of Flux*, 15 *TEX. INTELL. PROP. L.J.* 91, 96 (2007); see also *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1381, 84 U.S.P.Q.2d (BNA) 1545, 1550 (Fed. Cir. 2007) (noting that contributory infringement “requires a mens rea (knowledge)”). For purposes of this Article, I treat “mental state” and “mens rea” interchangeably.

31. LAFAVE, *supra* note 29, at 332.

32. *Id.* at 332, 365.

33. Periodically, I will use examples from the criminal law context to make a point or illustrate how mens rea works. These examples are useful because many people have a clearer understanding of mental culpability when viewed in the criminal context as opposed to the civil context, in part because mental culpability in the criminal context has been subject to substantially more scholarly examination and discussion, and perhaps also due to the popular culture’s treatment of the subject. Regardless of whether the example is civil or criminal, however, the underlying principles in my examples are largely the same, except where noted.

34. LAFAVE, *supra* note 29, at 340–41. This is an overly simplistic example; in reality, the mens rea element can be satisfied in a variety of ways. For example, Mr. Red may satisfy the mental state requirement if he merely sought to cause grievous harm to Mr. Grey but knew that his actions were nearly certain to result in Mr. Grey’s death, or if he intended to kill Ms. Blue, who moved at the last moment causing him to hit Mr. Grey. *Id.* The core point, however, is that mental culpability involves an inquiry into the state of mind of the accused party and, when the outcome itself is not desired, typically involves a probability of a given outcome that is near certainty.

depend on the subjective state of mind of the accused party and typically involves a probability of a given consequence that is less than near certainty.³⁵

Just as crimes can be divided into physical and fault elements, so too can tort and patent law claims be separated into similar components. For example, contributory infringement (another form of indirect infringement) includes both physical and fault elements.³⁶ Contributory infringement involves the selling of a component of a patented machine or process (physical element), constituting a material part of the invention (physical element), but not including staple articles of commerce (physical element).³⁷ In addition, the defendant must know that the component is especially made or adapted for use in infringing a patent (fault element).³⁸ Both the physical and fault elements of the claim must be met for the patent holder to prevail.³⁹

In the tort context, claims can be conceived of as falling into one of three categories based on the type of fault required. In one category are the intentional torts, such as assault, battery, aiding and abetting the commission of a tort, and intentional interference with contract.⁴⁰ A second category includes torts that require objective fault: negligence, and in a handful of cases, recklessness.⁴¹ And in the third category are strict liability torts: torts that lack any fault element.⁴² The strict liability standard applies in cases such as the keeping of wild animals: any harm caused by those animals is actionable, regardless of the subjective state of mind of the defendant or the degree of care that was exercised,⁴³ and is perhaps best described as the absence of a fault requirement.

B. Mental Culpability in the Tort Context: Intent, Purpose and Knowledge

Given this Article's assertion that the fault component of indirect patent infringement is viewed in mental state terms, largely due to its origins as an

35. *Id.* at 333–34.

36. *Id.* at 332.

37. 35 U.S.C. § 271(c) (2006).

38. *Id.*

39. *Id.*

40. See JOHN L. DIAMOND ET AL., UNDERSTANDING TORTS 3–4, 338–39 (4th ed. 2010) (providing a basic overview of intentional torts).

41. *Id.* at 59. Intentional infliction of emotional distress straddles the line between objective torts and intentional torts, in that its fault component can be satisfied by recklessness. See *id.* at 26 (explaining intent or recklessness to cause severe mental distress).

42. *Id.*

43. *Id.* at 251. Note that this rule is not universal, as some jurisdictions follow a negligence approach to the keeping of wild animals. See *id.* (discussing an action where strict liability was chosen over negligence for policy reasons).

adaption of the intentional tort of aiding and abetting, the next question concerns what those tort mental state principles actually are. In other words, when scholars and attorneys speak of mental culpability in the tort context, what are they actually referring to?

In the late 1800's, the period in which indirect infringement doctrines came into being, mental culpability in the intentional tort context revolved around the notion of "intent."⁴⁴ For example, the tort of battery involved "the unpermitted application of force by one man to another."⁴⁵ Negligent conduct was insufficient; "[t]here is no battery . . . unless the blow itself was intentional."⁴⁶ Thus, in *Talmage v. Smith*,⁴⁷ a case of transferred intent, the defendant threw a stick at two of the plaintiff's companions, but instead struck the plaintiff in the eye.⁴⁸ Despite the defendant's claim that he did not see the plaintiff, much less intend to hurt him, the court held that all that was required was "an intention on the part of the defendant to hit somebody, and to inflict an unwarranted injury upon some one."⁴⁹ In this context, the word "intent" seems relatively clear: intent to cause the undesired contact, or perhaps even intent to cause harm to another.

Subsequent articulations of the concept further refined the meaning of intent. The modern understanding sees intent as composed of two types: purpose and knowledge.⁵⁰ "Purpose" means that "the actor desires to cause

44. See, e.g., MELVIN MADISON BIGELOW, *ELEMENTS OF THE LAW OF TORTS FOR THE USE OF STUDENTS* 155 (6th ed. 1894) (explaining the tort of battery in terms of intent).

45. *Id.* at 152.

46. *Id.* at 155.

47. 59 N.W. 656 (Mich. 1894).

48. *Id.* at 657.

49. *Id.*

50. RESTATEMENT (THIRD) OF TORTS: LIAB. OF PHYSICAL & EMOTIONAL HARM § 1, at 3–4 (2005). An alternative approach to intent, applied by both commentators and courts, employs the concepts of "specific intent" and "general intent." See, e.g., *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 851, 93 U.S.P.Q.2d (BNA) 1943, 1958 (Fed. Cir. 2010) ("[T]he patentee must show . . . that the alleged infringer knowingly induced infringement and possessed *specific intent to encourage another's infringement.*") (emphasis added), *aff'd on other grounds*, 131 S. Ct. 2238 (2011); Sichelman, *supra* note 5, at 5–6 (arguing that inducement should require only specific intent to cause the acts, not knowledge of the patent). I find the courts' use of "specific intent" to be so imprecise, however, as to be useless in any rigorous analysis of fault in the patent infringement context. One criminal treatise, for example, notes the diverse meanings of the terms. LaFave notes that "general intent" can be used generically to mean "criminal intent," or to encompass all types of intent, or to mean intent to act on an undetermined occasion. LAFAVE, *supra* note 29, at 353–54. Similarly, "specific intent" can be used to mean the "mental state required for a particular crime," or to refer to one type of intent, or to refer to "denote an intent to do that thing at a particular time," or "to designate a special mental element which is required above and beyond any mental state required with respect to the actus reus of the crime." *Id.* None of this is particularly helpful in understanding the fault requirement of patent infringement. Indeed, outside of patent law, although it persists in both the law and commentary, the use of "specific intent" has been condemned as antiquated and confusing. See, e.g., Baruch Weiss, *What Were They Thinking?: The Mental States of the Aider and Abettor and the Causar Under Federal Law*, 70 *FORDHAM L. REV.* 1341, 1376–96, 1411–14, 1465 (criticizing the notion of "specific intent" in detail, and concluding that "phrases like

the consequences of his act,” while “knowledge” means that “the actor . . . believes that the consequences are substantially certain to result from [the act].”⁵¹ When purposeful conduct is involved, the actor does not care that there is a risk of failure; in other words, A, desiring to kill B, might shoot B from a thousand feet away. A’s purpose is to kill B, something that is unchanged despite the high likelihood that A’s shot will fail to do so. For conduct to be knowledgeable, the actor’s desire is irrelevant—she must instead appreciate that a particular outcome is “substantially certain.”⁵² For example, consider a company that runs a smelting machine. As part of the smelting process, the machine emits a harmful chemical. While the company may not desire the emission of the harmful chemical, it nevertheless possesses substantial certainty, and hence knowledge, that

“specific intent” and “willfully” are quite ambiguous and, at times, have misled those courts trying to ascertain the mental states of the aider and abettor and the causer).

Thus, although “specific intent” persists in legal articulations of the mental state elements in patent law, its usage is often nothing more than an empty incantation of a half meaningless phrase that, in the end, requires the court to apply the concepts of purpose, knowledge, and recklessness. *See also id.* at 1489–90 (emphasis added) (focusing directly on those concepts, which have much more widely agreed upon meanings and allow the discussion to be about *degree* of fault as opposed to one about definitions).

51. *See* RESTATEMENT (THIRD) OF TORTS: LIAB. OF PHYSICAL & EMOTIONAL HARM § 1 (2005) (“A person acts with the intent to produce a consequence if: (a) the person acts with the purpose of producing that consequence; or (b) the person acts knowing that the consequence is substantially certain to result.”). The accompanying commentary indicates the authors’ desire to differentiate between “purpose” and “knowledge.” This bifurcation constitutes a more modern approach to the concept of intentional conduct in tort. *See* Kenneth W. Simons, *A Restatement (Third) of Intentional Torts?*, 48 ARIZ. L. REV. 1061, 1063 (2006) (explaining that “‘intent’ to produce a consequence means *either* the purpose to produce that consequence or the knowledge that the consequence is substantially certain to result.”); *see also* James A. Henderson, Jr. & Aaron D. Twerski, *Intent and Recklessness in Tort: The Practical Craft of Restating Law*, 54 VAND. L. REV. 1133, 1150–51 (2001) (referring to the bifurcation as “desires” and “believes”). The definitions in the Model Penal Code formulation of criminal law context are similar; one acts “purposely” or “intentionally” when “it is his conscious object to cause such a result.” MODEL PENAL CODE § 2.02(2)(a)(i) (Proposed Official Draft 1962). One acts “knowingly” if “he is aware that it is practically certain that his conduct will cause a result.” *Id.* § 2.02(2)(b)(ii).

A note on the use of the Restatement (Third) of Torts: Although at least one commentator uses earlier versions of the Restatements, such as the Restatement (First) of Torts, when analyzing the intent requirement for inducement because it was the version of the Restatement in effect at the time of the relevant statute, *see* Sichelman, *supra* note 5, at 10, I suggest that the refinements of subsequent Restatements provide insights that are overwhelmingly useful when analyzing questions of fault and intent.

52. As the Supreme Court held in *Global-Tech*, “knowledge” can also be established through “willful blindness,” a concept discussed further in Part II.A. As Justice Kennedy noted in the *Global-Tech* dissent, however, “willful blindness” is an elusive notion, and one whose use is not nearly so widespread as the opinion for the Court suggests. *See* *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2072–73 (2011) (Kennedy, J., dissenting) (citing Deborah Hellman, *Willfully Blind for Good Reason*, 3 CRIM. L. & PHILOSOPHY 301, 305–08 (2009); David Luban, *Contrived Ignorance*, 87 GEO. L.J. 957 (1999); LARRY ALEXANDER & KIMBERLY KESSLER FERZAN, *CRIME AND CULPABILITY: A THEORY OF CRIMINAL LAW* 34–35 (2009); GLANVILLE WILLIAMS, *CRIMINAL LAW: THE GENERAL PART* § 57 at 157 (2d ed. 1961).

running the machine will cause it to emit the harmful chemical.⁵³ But substantial certainty is different from a high likelihood.⁵⁴ For example, a police officer chasing a speeding car that is actively attempting to escape may be aware of a significant likelihood that someone will suffer physical harm during the chase, but is not substantially certain that harm will occur.⁵⁵ Substantially certain means quite certain—in other words, virtually or practically certain, not merely highly probable.⁵⁶

C. *Alternate Approaches to Fault*

Thus far, I have discussed only subjective forms of fault, and have assumed that fault is determined on a per claim basis. Yet, not all fault is subjective, and not all claims involve a single fault element.⁵⁷

1. *Objective forms of fault*

The most common type of objective fault is the concept of negligence, which involves the question of whether the defendant acted like a reasonable person would under the same or similar conditions.⁵⁸ The analysis is objective in the sense that it is based on the conduct of a reasonable person as opposed to the defendant herself, and typically involves a moderate risk—an *unreasonable* risk.⁵⁹ Thus, for example, a driver traveling carelessly down the street is liable if he collides with another car, even if his purpose was not to strike the other car and he did not even see the other car.⁶⁰

An alternate form of objective fault is recklessness.⁶¹ Recklessness is loosely defined as involving a higher risk than negligence that is even more apparent to a reasonable person than the negligent risk would be.⁶² Civil recklessness asks whether a reasonable person would recognize a high probability that certain consequences will follow from the conduct. In the tort context, it has been defined as “an unreasonable risk” of harm to

53. Cf. RESTATEMENT (THIRD) OF TORTS: LIAB. OF PHYSICAL & EMOTIONAL HARM § 1, illus. 3 (2005) (knowingly causing harm, even when the result is undesired or regretted, is still intentional).

54. *Id.*, illus. 4.

55. *Id.*

56. See *id.* § 1, cmt. a (noting that “practically certain” or “virtually certain” may be used interchangeably with “substantially certain”).

57. See *infra* Part III.C.1, C.2.

58. DIAMOND, *supra* note 40, at 46–47 (summarizing the development of the negligence standard of care).

59. *Id.* at 62.

60. RESTATEMENT (SECOND) OF TORTS § 281, illus. 2 (1965).

61. See RESTATEMENT (THIRD) OF TORTS: LIAB. OF PHYSICAL & EMOTIONAL HARM § 2, cmt. a (2005) (showing the possibility of “gross negligence” which in some cases is equated to recklessness). But recklessness is better understood to mean “negligence that is especially bad,” a meaning that is less than recklessness. *Id.*

62. *Id.*

another that is “substantially greater than that which is necessary to make [the] conduct negligent.”⁶³ A more recent articulation states that a person acts recklessly in engaging in conduct if:

- (a) the person knows of the risk of harm created by the conduct or knows facts that make the risk obvious to another in the person’s situation, and
- (b) the precaution that would eliminate or reduce the risk involves burdens that are so slight relative to the magnitude of the risk as to render the person’s failure to adopt the precaution a demonstration of the person’s indifference to the risk.⁶⁴

Thus, in the tort context, recklessness is an objective inquiry, but actor-centric, in that it is based on the facts that were available to the actor at the time, and differs from negligence in that it involves an obvious high risk.⁶⁵

Examples of recklessness are necessarily context dependent. For instance, it may be reckless to drive at a high speed through a residential neighborhood, but that same conduct may not be reckless if the driver is in an ambulance with blaring sirens carrying a patient in critical condition.⁶⁶ Likewise, it may be reckless to swing a heavy wooden club in an arc around oneself, but perhaps not if the swinger is standing in a batter’s box attempting to hit a pitch. In each assessment, however, the crux of the inquiry focuses on the degree of risk and the likelihood that a person in the actor’s position would recognize that risk.

2. *Multiple physical elements, multiple fault elements*

In addition to the relatively recent formal articulation of recklessness, modern conceptions of fault do not require that claims be limited to a single fault element. Rather, just as claims can possess multiple physical elements, so too can they possess multiple fault elements. Dividing the elements of a claim into discrete physical and fault components is called “element analysis,” a concept that originated in criminal law.⁶⁷ It is a particularly useful approach, as it allows one to easily discern the relationship between the mental and physical elements of a legal claim.⁶⁸ Although its roots lie in criminal law, it is a tool that is readily applicable to the civil context, and is the most logical mechanism for approaching mens

63. RESTATEMENT (SECOND) OF TORTS § 500 (1965). Criminal recklessness is somewhat similar, but incorporates a subjective component—the defendant must be aware of the risk. In criminal recklessness, that notion is defined as “consciously disregard[ing] a substantial and unjustifiable risk that the material element . . . will result from the conduct.” MODEL PENAL CODE § 2.02(2)(c) (Proposed Official Draft 1962).

64. RESTATEMENT (THIRD) OF TORTS: LIAB. OF PHYSICAL & EMOTIONAL HARM § 2 (2005).

65. *See id.* (defining recklessness in terms of the person committing the act).

66. RESTATEMENT (SECOND) OF TORTS § 500, cmt. a (1965).

67. *See* Robinson & Grall, *supra* note 30, at 703–04.

68. *Id.*

rea issues.⁶⁹

The concept of element analysis recognizes that a single offense may require multiple forms of fault.⁷⁰ For example, under the Model Penal Code definition of indecent exposure, “[a] person commits a misdemeanor if, for the *purpose* of arousing or gratifying sexual desire . . . he exposes his genitals under circumstances in which he *knows* his conduct is likely to cause affront or alarm.”⁷¹ Different elements require different degrees of fault, including purpose and knowledge.

Element analysis can be contrasted with offense analysis, the traditional approach to mental state requirements (including in patent law), in which each offense has one state of mind requirement.⁷² Yet although offense analysis has remained the dominant view of mens rea, it is sometimes not a viable approach, especially where multiple mental state elements can exist within a single claim.⁷³ Although I do not argue that all aspects of criminal law theory are applicable to patent law, the concept of element analysis is especially useful when attempting to address the fault components of indirect infringement, and inducement in particular.

II. THE CONVENTIONAL VIEW OF FAULT IN PATENT INFRINGEMENT

In this Part, I describe the traditional view of the fault elements of three infringement doctrines: contributory infringement, inducement of infringement, and willful infringement. I posit that this approach views fault as a mens rea inquiry, requiring the patentee to prove that the accused party possessed the purpose to infringe or knowledge that the relevant conduct infringes a patent.⁷⁴ This history reveals, however, that although the fault elements of contributory infringement and inducement of infringement continue to be viewed in mens rea terms, recent changes in the willfulness doctrine (which contains a fault element strikingly similar to

69. See Michael L. Seigel, *Bringing Coherence to Mens Rea Analysis for Securities-Related Offenses*, 2006 WIS. L. REV. 1563, 1575 (2006) (commenting that “[a]fter recognizing the logic of ‘element analysis,’ one is forced to conclude that all talk about the mens rea requirement for a criminal offense—or ‘offense analysis’—is literally incoherent”).

70. Robinson & Grall, *supra* note 30, at 704.

71. *Id.* at 699 (quoting MODEL PENAL CODE § 213.5 (1980)).

72. *Id.* at 688.

73. *Id.* at 689.

74. To the extent the reader is familiar with these doctrines and agrees that their fault elements are conventionally viewed in terms of knowledge or purpose (or simply is more interested in the discussion as to why this approach is problematic), it may be preferable to skip to Part III. In doing so, keep in mind that, for the purposes of inducement, this Article draws a distinction between intent to cause the third party’s act to occur and fault with respect to whether those acts infringe. It is the latter with which I am concerned.

that of indirect infringement) have shifted it toward an objective inquiry.⁷⁵

A. *Indirect Infringement and Fault: Requiring a Culpable Mind*

When most lawyers and scholars think of patent infringement, they think of direct infringement. Direct infringement is a strict liability cause of action: simply making, using, or selling a product, or practicing a method, that meets all the limitations of a claim constitutes direct infringement, irrespective of any fault on the part of the infringer.⁷⁶ Thus, if A owns a patent on a water pump, and B sells pumps meeting all the elements of a claim of A's patent, B is said to be directly infringing A's patent. This is because direct infringement requires no culpable state of mind or objectively improper behavior, and B will be liable for directly infringing A's patent regardless of whether she knows that her pump infringes (or is even aware of the patent at all), and regardless of any precautions she might take.⁷⁷

Other forms of infringement, however, require fault by the accused party; principal among these is indirect infringement.⁷⁸ Indirect infringement encompasses behavior that, while not actually infringing itself, nevertheless encourages, aids, or permits another to directly infringe

75. As there are several sources providing a complete description of the history of these doctrines, I will not go into all the details of their development. See Dawson Chem. Co. v. Rohm & Hass Co., 448 U.S. 176, 179 (1979) (analyzing whether the statute codified aspects of contributory infringement and patent misuse that previously only existed in case law); Adams, *supra* note 5, at 636–38 (explaining the development of the two doctrines); Charles W. Adams, *A Brief History of Indirect Liability for Patent Infringement*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 369, 371–76 (2006) (giving a summary of indirect liability for patent infringement); Matthew D. Powers & Steven C. Carlson, *The Evolution of Willful Patent Infringement*, 51 SYRACUSE L. REV. 53, 55–77 (2000) (presenting a detailed account of the development of willful infringement).

76. I am simplifying direct infringement somewhat. See 35 U.S.C. § 271(a) (2006) (stating that “[e]xcept as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent therefore, infringes the patent”).

77. See *id.* (under which direct infringement is a strict liability crime).

78. See 5 DONALD S. CHISUM, CHISUM ON PATENTS, § 17.01 (1978) (summarizing the requirement of knowledge and intent for indirect infringement). I am not suggesting, however, that direct and indirect infringements are the only types of infringement. A patent can also be infringed by submitting an application to the Federal Drug Administration for various pharmaceuticals, 35 U.S.C. § 271(e)(2), as well as by importing, offering to sell, selling or using within the United States a product made abroad by a process that is patented in the United States, § 271(g). Both essentially involve “artificial” infringement—there is no actual sale, etc. of a product under § 271(e)(2), and in the case of 271(g), the foreign manufacture does not itself infringe a patent. See § 271(g) (implying that the foreign manufacturer has to direct the suspect activity towards the United States before he can be held as an infringer). In addition, § 271(f) provides for causes of action that are similar to §§ 271(b) and 271(c) when the actual practice of the patent will take place abroad. See § 271(f) (establishing liable as infringers those whose activity abroad would constitute infringement had it occurred within the United States). However, both are essentially expansions of the core doctrine of indirect infringement.

a patent.⁷⁹ There are two principal types of indirect infringement: (1) contributory infringement, which prohibits the provision of a critical component of a patented invention that lacks substantial noninfringing uses, and (2) inducement of infringement, which is directed generally to acts that are intended to cause others to infringe a patent.⁸⁰

The purpose of indirect infringement is to provide a remedy for patent holders when it is impossible or inefficient for them to sue direct infringers, and to deter parties from engaging in behavior that may result in the infringement of a patent.⁸¹ As a general matter, society would prefer to have patentees sue direct infringers. After all, direct infringers are the ones engaging in the infringing conduct, and any harm ultimately flows from their direct infringement.⁸² However, in some instances it may be impractical to sue the infringing party, or the direct infringer may not be the truly responsible party.⁸³ The doctrine of indirect infringement imposes liability in these cases.⁸⁴ Indirect infringement also serves a deterrence function, as it incentivizes parties to avoid or minimize conduct that results in third-party infringement.⁸⁵ However, indirect infringement's ability to deter must be balanced against the possibility of over-imposing liability on those who participate in commerce.⁸⁶

The element of fault distinguishes contributory and inducement infringement from direct infringement.⁸⁷ This fault element has

79. See § 271(b)–(c) (holding liable for infringement those who induce infringement, or knowingly sell “material parts” of a patented products that have no other use but for infringement).

80. *Id.*

81. See Lemley, *supra* note 5, at 228 (describing the purpose of secondary liability and providing several examples to illustrate its application).

82. Cf. *Glenayre Elecs., Inc. v. Jackson*, 443 F.3d 851, 858–59, 78 U.S.P.Q.2d (BNA) 1641, 1644–47 (Fed. Cir. 2006) (stating that to find indirect infringement, plaintiff must ultimately demonstrate defendant's customers were liable for direct infringement).

83. See Lemley, *supra* note 5, at 228 (providing examples of when it would be impractical or futile to sue the party liable for direct infringement).

84. Cf. *Ricoh Co., Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325, 1338, 89 U.S.P.Q.2d (BNA) 1577, 1586 (Fed. Cir. 2008) (quoting *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913, 929–30 (2005)) (analogizing to patent law the proposition that, in the context of copyright infringement, enforcement against direct infringers may be impractical or impossible).

85. See *id.*, 89 U.S.P.Q.2d (BNA) at 1586 (arguing that it is more practical to allow indirect infringement, as it is often hard to locate and to enforce rights against direct infringers).

86. See Lemley, *supra* note 5, at 228 (commenting that “the law must take equal care to avoid imposing liability on those who participate in the stream of lawful commerce merely because their products can be misused”).

87. The primary purpose of this Article is to argue that subjective fault, in the context of indirect infringement, should be replaced with an objective view that is narrowly tailored to subject of patent infringement. While I will largely not address the viewpoint that indirect infringement should require no fault at all with respect to whether the relevant conduct infringes a patent, see *supra* note 5, no discussion of the fault element of inducement would be complete without at least acknowledging this viewpoint. However, this is a minority position, and the predominant view is that indirect infringement requires some form of fault.

conventionally been expressed in mens rea terms of whether the accused knew or intended that the relevant conduct infringe a patent.⁸⁸ The following sections will describe the origins and treatments of the element of fault in these doctrines, and their respective inquiry into the mind of the accused party.

1. *Contributory infringement and the knowledge requirement*

The doctrine of contributory infringement imposes liability for the sale or importation of a key component of a patented product or process, provided that the component lacks a “substantial noninfringing use. . . .”⁸⁹ Elaborating on the previous hypothetical, if A’s patented water pump requires a particular valve that has no other purpose other than to be a part of the claimed water pump, and C sells those valves to B for B to use to make infringing water pumps, C may be liable as a contributory infringer.

However, liability for contributory infringement is not established by simply selling components with a substantial noninfringing use. The law requires that there be some form of fault on the part of the accused party above and beyond just selling the component. This element has conventionally been expressed as asking whether the accused party “knew” that the component is “especially made or especially adapted for use in an infringement of such patent.”⁹⁰

The doctrine of contributory infringement has its origins in the late nineteenth century, and is a judicial expansion of direct infringement via application of traditional tort principles punishing individuals for aiding

Indeed, requiring fault for inducement serves an important purpose with regard to the selection of defendants by a patent holder. While in some circumstances, it may be impossible to sue the direct infringers of a patent, where companies are neutral as to whether to sue the direct infringer or another potentially inducing party, the law would prefer them to sue the direct infringer. *See Glenayre Elecs., Inc.*, 443 F.3d at 858–59, 78 U.S.P.Q.2d (BNA) at 1644–47 (highlighting that if one is going to sue for indirect infringement they must ultimately prove direct infringement). A heightened intent requirement accomplishes this goal by pushing patent holders toward the direct infringer who is an easier target. *See also supra* note 18 and accompanying text (providing further information on the subject of strict liability for inducement).

88. *See* ROBERT L. HARMON, PATENTS AND THE FEDERAL CIRCUIT 488 (9th ed. 2009) (internal citation omitted) (“Thus, in order to prove vicarious liability for indirect infringement, a plaintiff who demonstrates direct infringement must also establish that the defendant possessed the requisite knowledge or intent to be held vicariously liable.”).

89. *See* 35 U.S.C. § 271(c) (2006) (codifying the doctrine of contributory infringement); *see also* CHISUM, *supra* note 78, § 17.03[3] (stating that prior to statutory reform, courts did extend contributory infringement to all cases where a patent may have been infringed). Again, I am simplifying a bit in order to focus primarily on the fault element of this doctrine. *See infra* note 103 and accompanying text.

90. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 527 (1964); *cf.* *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068 (2011) (“we proceed on the premise that §271(c) requires knowledge of the existence of the patent that is infringed”).

and abetting a tort.⁹¹ The earliest articulation of contributory infringement is *Wallace v. Holmes*,⁹² an 1871 district court decision involving a patent covering an improved lamp that used a novel burner in combination with a chimney.⁹³ In *Wallace*, the patent holder sued a manufacturer of lamp burners for infringement of its patent.⁹⁴ Selling the burners alone was not an act of infringement, as the court acknowledged a well-settled rule that a patent for a combination “is not infringed by one who uses one or more of its parts, but not all, to produce the same results”⁹⁵ Nevertheless, the court reasoned that this rule offered no protection against co-infringers, who, acting in concert, each made and sold a part of the infringing product.⁹⁶ Hence, the court concluded that the defendant was liable for aiding and abetting infringement because the defendant knew that the burner could not be used without the chimney (a widely obtainable component), and displayed assembled lamps in his window.⁹⁷

Subsequent cases seized on this new doctrine of contributory infringement, holding that it required some form of “intent” on the part of the accused party—although the precise contours of that intent element remained vague. The question that remained was what “intent” actually meant. Did it mean intent that the component be used in a particular manner, or intent that it be used to infringe a patent?⁹⁸

This lack of clarity was likely due to the doctrine’s roots as an adaption

91. See *Bullock Elec. & Mfg. Co. v. Westinghouse Elec. & Mfg. Co.*, 129 F. 105, 111 (6th Cir. 1904) (internal citation omitted) (likening contributory infringement to aiding and abetting a trespass); see also *Thomson-Houston Elec. Co. v. Ohio Brass Co.*, 80 F. 712, 721 (6th Cir. 1897) (noting that an infringement of a patent is a tort, and drawing upon tort principles of aiding and abetting). See generally Adams, *supra* note 5, at 650–51 (summarizing the legal origin of indirect infringement); Lemley, *supra* note 5, at 227 (providing further information on the tort foundations of patent law principles of infringement).

92. 29 F. Cas. 74 (C.C.D. Conn. 1871).

93. See *Snyder v. Bunnell*, 29 F. 47, 48 (C.C.S.D.N.Y. 1886) (“The complainants invoke the doctrine of contributory infringement, the clearest illustration of which is, perhaps, found in *Wallace v. Holmes*, 9 Blatchf. 65.”).

94. See *Wallace*, 29 F. Cas. at 75 (explaining that “the distinguishing feature of the invention claimed was the burner”). However, the burner was not separately claimed, *id.* at 79, and the court suggested that the chimney was not novel, as it could be obtained from “all the glass manufacturers in the world.” *Id.* at 80.

95. *Id.* at 80.

96. See *id.* (explaining why the traditional rule would allow for joint infringers to escape liability because neither would technically be infringing a patented combination).

97. *Id.* at 79–80; see also *Snyder*, 29 F. at 48 (noting that the defendants in *Wallace* knew that the burner could not be used without a chimney, and thus could not be used without infringing the patent).

98. See 3 WILLIAM C. ROBINSON, *THE LAW OF PATENTS FOR USEFUL INVENTIONS* 101 (1890), available at http://www.ipmall.info/hosted_resources/ip_antique_library/patent.asp (“To make or sell a single element with the intent that it shall be united to the other elements, and so complete the [infringing] combination, is infringement.”); see also ALBERT H. WALKER, *TEXT-BOOK OF THE PATENT LAWS OF THE UNITED STATES OF AMERICA*, 344–45 (4th ed. 1904) (describing the doctrine of contributory infringement). See generally *infra* Part II.B (elaborating on the doctrine of willful infringement).

of the tort principle of aiding and abetting. Liability for aiding and abetting can be imposed when one gives substantial assistance or encouragement to another person, knowing that the person's conduct constitutes a breach of a legal duty.⁹⁹ For example, if a police officer advised other officers to use illegal methods of torture on a particular suspect, the advising officer could be liable for batteries that followed from that advice.¹⁰⁰ Traditionally, it has not mattered whether the abettor knew or intended that the conduct he or she was assisting constituted a specific tort.¹⁰¹ Thus, when this tort principle was applied to patent infringement, it may not have been readily apparent that such an inquiry was necessary. Intent to cause the underlying conduct and intent to infringe a patent may have been largely the same thing, at least when seen as a form of aiding and abetting.

Contributory infringement thus came to be seen as a type of intentional tort. The categorization as an intentional tort reinforced the view that the fault requirement involved an inquiry into the mind of the accused party. This mens rea approach remained unchanged, despite recognition that the inquiry required some assessment of fault with respect to whether the conduct actually infringed a legal question that was not part of the original aiding and abetting schema. The most powerful manifestation of this view is the codification of the doctrine in the 1952 patent act, followed by the Supreme Court case *Aro Manufacturing Co. v. Convertible Top Replacement Co.*¹⁰²

The 1952 patent act codified numerous common law patent doctrines, including contributory infringement. Along with the four physical acts required for contributory infringement, the codification articulated the fault element as requiring knowledge of the use to which the contributing component would be put to.¹⁰³ First, there must be an offer to sell or a sale

99. For example, one could be liable for aiding and abetting a trespass, so long as one was involved in the underlying acts leading to the tort. Intent that the conduct constitute a tort, on the other hand was not required. *See* *Duane v. Goodall*, 7 F. Cas. 1132, 1134 (N.D. Cal. 1863) (describing the intent requirement of a tort); *see also* RESTATEMENT (SECOND) OF TORTS § 876 (1979) (articulating when one can be held liable for tortious conduct through acting concert with another).

100. *See* RESTATEMENT (SECOND) OF TORTS § 876 cmt. a, illus. 5 (1979) (providing further context and several useful hypotheticals).

101. *See id.* cmt. d (clarifying that knowledge of the legal wrong being committed is irrelevant, even for an intentional tort); *see also* Adams, *supra* note 5, at 640; *infra* Part III.C (explaining how knowledge that conduct constitutes a tort is not a component of the fault inquiry for intentional torts).

102. 377 U.S. 476 (1964).

103. The original statute read:

Whoever [1] sells within the United States or imports into the United States a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, [2] constituting a material part of the invention, knowing the same to be [3] especially made or especially adapted for use in an infringement of such patent, [4] and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall

of “a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process”¹⁰⁴ Second, that article must constitute a “material part of the invention”¹⁰⁵ Third, the article must be used in a direct infringement.¹⁰⁶ Finally, the article must not be a staple of “commerce suitable for substantial noninfringing use”¹⁰⁷ In addition, the conventional view of contributory infringement requires that the accused must “know” that the component or material or apparatus is “especially made or especially adapted for use in an infringement” of the relevant patent.¹⁰⁸

In *Aro*, a bare majority of the Court clarified that for infringement, knowledge of infringement was required, rather than mere knowledge of the underlying conduct that the component would be used for.¹⁰⁹ Justice Black explained that an accused contributory infringer should not be liable unless there is “knowledge that a patent covered [the infringing embodiment] or that their conduct infringed or helped to infringe that

be liable as a contributory infringer.

35 U.S.C. § 271(c) (1952). The fault element has remained unchanged since 1952, and the lone statutory modification occurred in the Uruguay Round Agreements Act. *See* Uruguay Round Agreements Act, Pub. L. No. 103-465, § 533(a), 108 Stat. 4988 (1994) (replacing “sells” with “offer to sell or sells within the United States or imports into the United States”).

104. 35 U.S.C. § 271(c).

105. *Id.*; *see also* CHISUM, *supra* note 78, § 17.03[4] (noting that this element is often inevitably met by a component that meets the other requirements).

106. CHISUM, *supra* note 78, § 17.04[1].

107. 35 U.S.C. § 271(c).

108. *See Aro Mfg. Co., Inc., v. Convertible Top Replacement Co., Inc.*, 377 U.S. 476, 488–90 (1964) (analyzing the ambiguous pre-*Aro* knowledge requirement). One could also evaluate whether the other physical elements require some degree of intent, but courts have never focused on that issue. While a court could construe these elements to involve no mens rea elements at all and thus utilize strict liability, even if it were to require that the accused “intended” to engage in the relevant acts, in most cases that would be a pointless inquiry. Although the last element could be construed to involve some mental state element—a defendant must know both that the component is especially made for use in an infringement and is not a staple article of commerce suitable for substantial noninfringing use—and that interpretation would be contrary to the legislative history. *See* S. REP. NO. 82-1979, at 8 (1952) (“The sale of a component of a patented machine, etc., must constitute a material part of the invention and must be known to be especially made or especially adapted for use in the infringement before there can be contributory infringement, and likewise the sale of staple articles of commerce suitable for noninfringing use does not constitute contributory infringement.”).

109. The structure of the Court’s decision in *Aro* is unusually complicated. The dissenters concluded that § 271(c) required knowledge of infringement. *Aro*, 377 U.S. at 524–28 (Black, J., dissenting). The plurality reasoned that it required only knowledge that the component was designed for a particular use, but found that *Aro* knew that the component would infringe the patent. *Id.* at 488–91 (plurality opinion). Justice White agreed with the dissent that § 271(c) required knowledge of infringement, but ultimately sided with the plurality that this standard was met. *Id.* at 514 (White, J., concurring). Of particular interest is the fact that the dissenters also believed that “direct infringement” should include a requirement that the defendant know the relevant conduct infringes. *Id.*

patent.”¹¹⁰ Here, “knowledge” of infringement was established by a 1954 letter from the patentee to Aro informing it of the existence of the patent and stating that it was obvious that anyone selling ready-made replacement fabrics for the Ford convertibles would be guilty of contributory infringement of the patent.¹¹¹ However, the Court, as to pre-1954 tops, remanded the case for a determination of whether Aro knew that the Ford tops were patented and infringing before receiving the letter.¹¹²

The formal articulation of the fault element of contributory infringement became frozen in time, and since *Aro* it has persisted virtually unchanged.¹¹³ Indeed, post-*Aro* courts have consistently held the legal requirement of fault as involving knowledge of infringement. For example, in *i4i Ltd. Partnership v. Microsoft Corp.*,¹¹⁴ the Federal Circuit affirmed a finding of contributory infringement, concluding that a reasonable jury could find that Microsoft “knew that the use of the editor would infringe the [patent in suit] based on circumstantial evidence presented at trial.”¹¹⁵

However, all this raises the question of whether contributory infringement requires actual knowledge that the relevant third party’s conduct will infringe. I argue that not only are courts not applying this standard, but they cannot apply this standard, an issue I will address in the second half of this paper.

2. “Intent” to infringe: inducement of infringement

Inducement of infringement is a much broader standard of indirect infringement than contributory infringement, which applies only to a narrow, precisely defined set of circumstances. In effect, inducement of infringement is a catch-all for conduct that results in infringement of patents, but does not fall into the narrow subset of contributory infringement.¹¹⁶ Compared with contributory infringement, inducement

110. *Id.* at 524 (Black, J., dissenting).

111. *Id.* at 489–90 (plurality opinion).

112. *Id.* at 491.

113. Although there are few, if any, cases in which the Supreme Court or Federal Circuit concluded that there was no contributory infringement on the basis of the knowledge element, courts continue to recognize it as part of the inquiry. *See, e.g.*, *Dawson Chem. Co. v. Rohm and Haas Co.*, 448 U.S. 176, 183 (1980) (“Petitioners did not cease manufacture and sale of propanil after that patent [sic] issued, despite knowledge that farmers purchasing their product would infringe on the patented method by applying the propanil to their crops.”); *cf. i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 851, 93 U.S.P.Q.2d (BNA) 1943, 1958 (Fed. Cir. 2010) (assessing Microsoft’s knowledge of infringement as part of the contributory infringement analysis), *aff’d on other grounds*, 131 S. Ct. 2238 (2011); *cf. Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068 (2011).

114. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010), *aff’d on other grounds*, 131 S. Ct. 2238 (2011).

115. *Id.*, 93 U.S.P.Q.2d (BNA) at 1959 (emphasis added).

116. The consensus view is that inducement of infringement began as a subset of contributory infringement. Adams, *supra* note 5, at 652–53; Lemley, *supra* note 5, at 227. However, the 1952 Act firmly constrained contributory infringement to the limited form that

broadly prohibits activities that encourage others to infringe a patent, and not just the sale of a component lacking a noninfringing use.¹¹⁷ For example, if A had a patent on a novel method of landscaping with mulch, and C were to sell mulch to B, along with instructions as to how to practice A's method, C could be liable for inducement of infringement.¹¹⁸

Inducement infringement, like contributory infringement, involved an adaption of the tort theory of aiding and abetting.¹¹⁹ Seven years after *Wallace*, a Massachusetts district court in *Bowker v. Dows*,¹²⁰ faced the problem of a defendant who sold a common component in soap making, saponine extract, to brewers and soda makers, and advertised that its customers could add it to carbonated beverages to stabilize the foam.¹²¹ Although saponine extract itself (which predated the patent)¹²² did not infringe, the act of adding it to the beverages did.¹²³ Despite recognizing that the sale of an extract containing saponine would not infringe the patent,¹²⁴ the court reasoned that a “person who makes and sells the extract for the express and avowed purpose of its use in the combination” would infringe the patent.¹²⁵ The holding in *Bowker* expanded the scope of contributory infringement to cover not just those who supplied a component whose only use was in infringing a patent, but also to those people who sold any component—even one having noninfringing uses—if they did so with the intent to produce the infringing combination.¹²⁶

Thus, “intent” in the context of inducement primarily meant intent to

is discussed in this Article. See 35 U.S.C. § 271(c) (1952) (establishing the scope of contributory infringement). Thus, I am largely elaborating on the narrower form of contributory infringement involving a provision of a component lacking substantial noninfringing uses. However, with inducement, I am largely referring to the broad post-1952 form.

117. See 35 U.S.C. § 271(b) (“Whoever actively induces infringement of a patent shall be liable as an infringer.”).

118. This hypothetical, drawn from *Graham Paper Co. v. Int'l Paper Co.*, 46 F.2d 881, 887, 8 U.S.P.Q.2d 463, 470 (8th Cir. 1931), assumes that the mulch had a noninfringing use; if it did not, C could also be liable for contributory infringement. See 35 U.S.C. § 271(c) (declaring that if there is no substantial noninfringing use then the party is liable for contributory infringement).

119. See Adams, *supra* note 5, at 651–53 (comparing early nineteenth century cases to demonstrate the development of the doctrine of inducement infringement).

120. 3 F. Cas. 1070 (C.C.D. Mass. 1878).

121. *Id.* at 1071 (discussing the issues surrounding the patent in *Bowker*).

122. Although the opinion does not explicitly state that saponine (a/k/a saponin) extract was not itself novel, it implies that it was not. *Id.* at 1072. In fact, saponin extracts have been used for millennia for washing, a fact probably known to the court at that time. See, e.g., JOSEPH E. MEYER, *THE HERBALIST*, at 278–79 (1934) (discussing “wild soapwort” (a/k/a “saponaria”), which contains the compound saponin and produces a soap-like lather).

123. See *Bowker*, 3 F. Cas. at 1071 (elaborating on why adding saponin to beverages was patented and unique).

124. *Id.*

125. *Id.*

126. See Adams, *supra* note 5, at 651–53 (detailing the significance of *Bowker* and its expansion of prior precedent).

engage in the underlying acts, as opposed to fault with respect to whether or not the conduct infringed a patent. *Walker on Patents*, a popular early 20th century treatise, describes the broad doctrine as imposing liability if the defendant “knew or intended that the property furnished by him was to be used in either of the infringing ways; he cannot defeat an action for infringement, by showing that the furnished property could have been used in some non-infringing way.”¹²⁷

The 1952 patent act did not explicitly effect any change to the fault element of inducement, and it did not explicitly mention any type of fault component at all. 35 U.S.C. § 271(b) states that “whoever actively induces infringement of a patent shall be liable as an infringer,” which is open-ended language that could be interpreted to cover a broad array of activities and fault types.¹²⁸ However, subsequent courts interpreted this language to require both physical acts and fault. The physical elements of inducement consist of: (1) an act—such as providing instructions—that assists and encourages another to engage in (2) conduct that (3) directly infringes.¹²⁹ If one of these physical elements is absent then there is not inducement infringement.¹³⁰

In addition to the acts required for inducement, courts interpreted § 271(b) to require fault on the part of the accused. However, at this point the fault element underwent a significant change. It was transformed from a general requirement that the accused party intend for the infringing acts to occur, to a requirement that the accused possess some culpability with respect to whether those acts infringed, and paralleled the Supreme Court’s approach to contributory infringement in *Aro*.¹³¹ Thus, during the era prior to the formation of the Federal Circuit, the majority of courts concluded that inducement required not just intent that the infringing acts occur, but also some form of fault (expressed in the form of mental culpability) with

127. WALKER, *supra* note 98, at 345 (emphasis added). Note that although Walker stated this point in the context of contributory infringement, the treatise deals with the broad pre-1952 category of contributory infringement, which encompasses what is now considered contributory infringement and inducement of infringement. Also note that this point is subject to some debate due to a lack of clarity in many decisions as to whether the defendant knew that the relevant conduct infringed. *Bowker*, 3 F. Cas. at 1071. I am not aware, however, of any pre-1952 cases in which lack of knowledge that the conduct infringed was the basis for a finding of no inducement.

128. 35 U.S.C. § 271(b).

129. See HARMON, *supra* note 88, at 489, 496 (providing several helpful examples of inducement infringement).

130. See CHISUM, *supra* note 78, § 17.04[1], [4]; HARMON, *supra* note 88, at 489–90, 496 (addressing the importance of demonstrating direct infringement to get liability for inducement infringement, which admittedly is difficult to prove).

131. See, e.g., *Electronized Chems. Corp. v. Rad-Mat, Inc.*, 288 F. Supp. 781, 784, 160 U.S.P.Q. (BNA) 26, 28 (D. Md. 1968) (avoiding a direct decision on the degree of knowledge and intent required by subsection (b) but citing *Aro* as an indication that the requirement would be greater than “the mere intent purposely to do an act”).

respect to whether the conduct infringed a patent.¹³²

Yet some confusion persisted over the fault required for inducement, perhaps driven by the vagueness of the term “intent,” and likely aided by the conflict between the origins of inducement as an outgrowth of intentional tort theory and the modern realities of patent infringement. Two cases highlight this disagreement. The first (and ultimately prevalent) view was provided in *Manville Sales Corp. v. Paramount Systems, Inc.*¹³³

The alleged infringer must be shown . . . to have knowingly induced infringement. It must be established that the defendant possessed specific intent to encourage another’s infringement and not merely that the defendant had knowledge of the acts alleged to constitute [inducement].¹³⁴ The plaintiff has the burden of showing that the alleged infringer’s actions induced infringing acts *and* that he knew or should have known his actions would induce actual infringements.¹³⁵

The articulation in *Manville* illustrates the court’s struggle to define the issue as a single mental state requirement, which admittedly is not an easy task. Indeed, the court seemingly punted on the question of what degree of

132. Compare *Knapp-Monarch Co. v. Casco Prods. Corp.*, 342 F.2d 622, 626–27, 145 U.S.P.Q. (BNA) 1, 4 (7th Cir. 1965) (arguing that because the representative “lacked knowledge of the alleged infringement by” the manufacturer, its solicitation of orders could not be inducement) with *Hauni Werke Koerber & Co., KG v. Molins Ltd.*, No. 73-404-R, 1974 WL 20172 at *171, 183 U.S.P.Q. (BNA) 168, 171 (E.D. Va. June 11, 1974) (“Anticipating also the argument that an act of inducement, under 35 U.S.C. §§ 281, 271(b), requires a specific intent—i.e., knowledge that the product in question infringes on the patent of another—the Court, again, does not necessarily agree.”). However, most cases and commentators prior to the formation of the Federal Circuit agreed that inducement required intent to infringe, not just intent for the infringing acts to occur. See, e.g., *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 668, 7 U.S.P.Q.2d (BNA) 1097, 1103 (Fed. Cir. 1988) (analyzing the accused party’s intent to induce infringement); *Sims v. W. Steel Co.*, 551 F.2d 811, 817, 194 U.S.P.Q. (BNA) 71, 75 (10th Cir. 1977) (holding the inducer must be an accessory before the fact to the infringement); *Electronized Chems. Corp.*, 288 F. Supp. at 784, 160 U.S.P.Q. (BNA) at 28 (internal citation omitted) (stating that “intent to infringe continues to be an essential element.”); *Nordberg Mfg. Co. v. Jackson Vibrators, Inc.*, No. 63 C 2250, 1967 WL 7708, 153 U.S.P.Q. (BNA) 777, 784 (N.D. Ill Feb. 7, 1967) (finding intent once the defendant was informed of his infringement and proceeded anyway), *rev’d*, 393 F.2d 192, 157 U.S.P.Q. (BNA) 294 (7th Cir. 1968); see also CHISUM, *supra* note 78, § 17.04[2] (declaring that prior to the 1952 reforms a greater showing of knowledge and intent was needed to demonstrate induced infringement); Charles E. Miller, *Some Views on the Law of Patent Infringement by Inducement*, 53 J. PAT. OFF. SOC’Y 86, 119 (1971) (summarizing that infringement is actionable when it results proximately and intentionally from direct infringement).

133. 917 F.2d 544, 16 U.S.P.Q.2d (BNA) 1587 (Fed. Cir. 1990).

134. With respect to the mens rea associated with the acts themselves, the court states it is necessary that “the defendant had knowledge of the acts alleged to constitute inducement.” *Id.* at 553, 16 U.S.P.Q.2d (BNA) at 1594 (emphasis added). A party presumably has knowledge of its own acts, and the court presumably intended to refer to knowledge of the acts alleged to constitute infringement. See *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1304, 81 U.S.P.Q.2d (BNA) 1238, 1245 (Fed. Cir. 2006) (replacing “inducing” with “infringing” in the quotation).

135. *Manville Sales Corp.*, 917 F.2d at 553, 16 U.S.P.Q.2d (BNA) at 1594 (internal citations omitted).

fault should be required, ascribing two separate standards: that the defendant possess the “specific intent to encourage another’s infringement . . .” and that the defendant “know or should have known his actions would induce actual infringements.”¹³⁶ One is a subjective view, and the other objective.

In *Hewlett-Packard Co. v. Bausch & Lomb Inc.*,¹³⁷ however, a decision issued a few months before *Manville*, a Federal Circuit panel arguably adopted a fault standard that required only intent to cause the infringing acts.¹³⁸ In *Hewlett-Packard* the court was faced with a set of circumstances in which the accused did not intend for the direct infringer to carry out the relevant acts (making grit wheel plotters).¹³⁹ In concluding that there was no infringement, the panel stated “that proof of actual intent to cause the acts which constitute the infringement is a necessary prerequisite to finding active inducement.”¹⁴⁰ Although *Hewlett-Packard* did not address the issue of whether the accused needed to also know whether the relevant conduct infringed a patent,¹⁴¹ subsequent cases cited *Hewlett-Packard* for precisely that proposition.¹⁴²

At the heart of these contradictory articulations was the court’s failure to recognize that there is not one, but three non-physical elements in inducement, and that the key issue is the fault associated with the last of those elements, which relates to whether the conduct infringes a patent. Looking at inducement from an element analysis point of view, rather than taking an offense analysis approach (as those concepts were discussed in Part I.C.) reveals this fact.

Each of the physical elements of inducement has an associated non-physical component. First, the accused must intend to engage in the acts they commit—something that is rarely at issue because typically one

136. *Id.*, 16 U.S.P.Q.2d (BNA) at 1594 (internal citation omitted).

137. 909 F.2d 1464, 15 U.S.P.Q.2d (BNA) 1525 (Fed. Cir. 1990).

138. *See id.* at 1469, 16 U.S.P.Q.2d (BNA) at 1528 (announcing that specific intent is necessary to inducement).

139. *Id.* at 1469–70, 15 U.S.P.Q.2d (BNA) at 1528–29.

140. *Id.* at 1469, 15 U.S.P.Q.2d (BNA) at 1528.

141. *See* *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1311, 81 U.S.P.Q.2d (BNA) 1238, 1248 (Fed. Cir. 2006) (Michel, C.J., concurring) (emphasis added) (bemoaning that *Hewlett-Packard* has been repeatedly misread to find that proof of intent *for nothing more than intent to do the act*).

142. *See, e.g.,* *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1364, 78 U.S.P.Q.2d (BNA) 1004, 1011 (Fed. Cir. 2006) (citing *Moba, B.V. v. Diamond Automation*, 325 F.3d 1306, 1318, 66 U.S.P.Q.2d (BNA) 1429, 1436 (Fed. Cir. 2003) (“In both *Moba* and *Hewlett-Packard*, we explained that ‘the only intent required of [the defendant] is the intent to cause the acts that constitute infringement.’”); *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1365, 71 U.S.P.Q.2d (BNA) 1081, 1089 (Fed. Cir. 2004) (affirming inducement based on the defendant’s intent to cause the relevant acts); *Moba*, 325 F.3d at 1318, 66 U.S.P.Q.2d (BNA) at 1436 (citing *Hewlett-Packard*, 909 F.2d at 1469, 15 U.S.P.Q.2d (BNA) at 1529) (“In this case, the only intent required of FPS is the intent to cause the acts that constitute infringement . . .”).

intends to engage in one's own physical acts.¹⁴³ Second, the accused must intend for the direct infringer to engage in the relevant acts.¹⁴⁴ And third, the accused must possess sufficient fault with respect to whether those acts infringe.¹⁴⁵

The Federal Circuit's en banc resolution of the conflict between the *Hewlett-Packard* and *Manville* lines in *DSU*¹⁴⁶ can be seen as recognition of this multi-element approach.¹⁴⁷ In *DSU*, the Federal Circuit concluded that inducement requires both intent to cause the infringing acts and some degree of knowledge that those acts infringe.¹⁴⁸ While the court acknowledged that "intent to cause the acts which constitute the infringement" is required,¹⁴⁹ it explicitly adopted the requirement that the accused intend that his "actions induced infringing acts and that he knew or

143. *But see* Kevin Emerson Collins, *Constructive Nonvolition in Patent Law and the Problem of Insufficient Thought Control*, 2007 WIS. L. REV. 759, 824 (2007) (proposing a theory of constructive non-volition under which the accused infringer would only be liable for voluntary acts). Although Professor Collins focuses on direct infringement, his proposal could apply equally to the indirect infringement context.

144. HARMON, *supra* note 88, at 496; *see also* Adams, *supra* note 5, at 661 (summarizing that the mens rea required to demonstrate liability for inducing infringement is specific intent to cause direct infringement coupled with knowledge that the acts would constitute infringement).

145. HARMON, *supra* note 88, at 497 (clarifying that "inducement requires evidence of culpable conduct").

146. *See* 471 F.3d at 1305–06, 81 U.S.P.Q.2d (BNA) at 1247–48 (holding that the district court was correct in instructing the jury that culpable conduct was required to prove inducement infringement, and that mere knowledge was not sufficient).

147. *See* Adams, *supra* note 5, at 661–62 (providing useful summary of the implications of *DSU* for inducement infringement). Similarly, although the Supreme Court did not directly address this point in *Global-Tech*, it did distinguish between knowledge of the intended acts and knowledge that those acts infringe, although it commented that the "inducer obviously knows the action that he or she wishes to bring about." *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2065 (2011); *cf. id.* at 1270 (concluding that the accused inducer was also "indisputably aware that its customers were selling its product in this country.>").

148. *See DSU*, 471 F.3d at 1306, 81 U.S.P.Q.2d (BNA) at 1247 (quoting *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553, 16 U.S.P.Q.2d (BNA) 1587, 1594 (Fed. Cir. 1990)) (describing the mens rea requirement of inducing infringement). One additional benefit of this articulation is that it helps provide some context for the oft-repeated statement that mere knowledge of infringing activities is insufficient. *See Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1363, 65 U.S.P.Q.2d (BNA) 1481, 1490 (Fed. Cir. 2003) (quoting *Manville*, 917 F.2d at 553, 16 U.S.P.Q.2d (BNA) at 1594)) ("[T]hat defendants have 'knowledge of the acts alleged to constitute infringement' is not enough."). To be liable for inducement of infringement, the accused must also meet the element that it intended to cause the acts themselves. *See id.*, 65 U.S.P.Q.2d (BNA) at 1490 (quoting *Hewlett-Packard*, 909 F.2d at 1469, 15 U.S.P.Q.2d (BNA) at 1529)) ("[P]roof of actual intent to cause the acts which constitute the infringement is a necessary prerequisite to finding active inducement.>").

149. *DSU*, 471 F.3d at 1306, 81 U.S.P.Q.2d (BNA) at 1247 (quoting *Hewlett-Packard*, 909 F.2d at 1469, 15 U.S.P.Q.2d (BNA) at 1529); *see also id.* at 1306, 81 U.S.P.Q.2d (BNA) at 1247 (citing *Metro-Goldwyn-Mayer Studio, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 936 (2005)) (affirming a jury instruction that required a demonstration of two separate mens rea elements).

should have known his actions would induce actual infringements.”¹⁵⁰

However, *DSU* was still far from clear on how fault with respect to infringement could be established. While the court appeared on the one hand to adopt a “known or should have known” standard (an objective approach), it elsewhere stated that “‘knowledge of the acts alleged to constitute infringement’ is not enough.”¹⁵¹ The court held instead that “specific intent and action to induce infringement must be proven.”¹⁵² In addition, while the court further added that the “knew or should have known” element of infringement “necessarily includes the requirement that he or she knew of the patent,” the concurrence, at least, pointed out that the opinion did not decide the scope of what constituted “knowledge of the patent.”¹⁵³ And while most subsequent cases continued to use the “intent to infringe” language, at least two honed in on the “should have known” language, thus further casting doubt on the correct standard for the fault element.¹⁵⁴

This was the background in which the Supreme Court decided *Global-Tech v. SEB*.¹⁵⁵ Relying exclusively on the Court’s earlier ruling in *Aro* that contributory infringement required knowledge of infringement, the Court adopted a parallel requirement for inducement.¹⁵⁶ Recognizing the impossibility of a pure knowledge standard, the Court then invoked the doctrine of “willful blindness,” a type of fault developed in the criminal law context based on the idea that that “defendants cannot escape the reach of these statutes by deliberately shielding themselves from clear evidence

150. *DSU*, 471 F.3d at 1304, 81 U.S.P.Q.2d (BNA) at 1246 (quoting *Manville*, 917 F.2d at 553, 16 U.S.P.Q.2d (BNA) at 1594).

151. *Id.* at 1305, 81 U.S.P.Q.2d (BNA) at 1247 (quoting *Warner-Lambert*, 316 F.3d at 1363, 65 U.S.P.Q.2d (BNA) at 1491).

152. *Id.*, 81 U.S.P.Q.2d (BNA) at 1247 (quoting *Warner-Lambert*, 316 F.3d at 1364, 65 U.S.P.Q.2d (BNA) at 1491). The only reading of this language that is consistent with the remainder of the opinion is that the “specific intent” and “action to induce infringement” language refers to the twin mens rea requirements of intent to cause the acts and knowledge that those acts infringe. However, post-*DSU* opinions have continued to use this vague specific-intent language, as opposed to the clearer standard. *See, e.g.*, *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 851, 93 U.S.P.Q.2d (BNA) 1943, 1959 (Fed. Cir. 2010) (quoting *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1378, 76 U.S.P.Q.2d (BNA) 1276, 1283 (Fed. Cir. 2005) (stating that inducement requires that the accused “knowingly induced infringement and possessed specific intent to encourage another’s infringement.”), *aff’d on other grounds*, 131 S. Ct. 2238 (2011)).

153. *DSU*, 471 F.3d at 1305, 81 U.S.P.Q.2d (BNA) at 1246.

154. *See supra* note 18 and accompanying text (comparing and contrasting the cases utilizing “intent to infringe” and “should have known” in describing the infringement element).

155. 131 S. Ct. 2060 (2011).

156. *See id.* at 2068 (stating that “[b]ased on this premise, it follows that the same knowledge is needed for induced infringement under §271(b) Accordingly, we now hold that induced infringement under §271(b) requires knowledge that the induce acts constitute patent infringement”).

of critical facts that are strongly suggested by the circumstances.”¹⁵⁷ Willful blindness requires that “(1) the defendant must subjectively believe that there is a high probability that a fact exists and (2) the defendant must take deliberate actions to avoid learning of that fact.”¹⁵⁸ Applying this doctrine, the Court concluded that the accused inducer satisfied the knowledge of infringement element of inducement.

The Court’s opinion in *Global-Tech* is questionable on several grounds. As discussed above, both contributory infringement and inducement of infringement require fault with respect to whether the relevant conduct infringes a patent.¹⁵⁹ Yet despite this common fault requirement, the doctrines are analytically and functionally distinct. Contributory infringement is limited to a narrow set of precisely defined circumstances, such as offering to sell, selling, or importing a component lacking substantial noninfringing uses.¹⁶⁰ Inducement of infringement encompasses a far broader array of possible conduct.¹⁶¹ In return for the narrower scope, however, a patent holder attempting to establish contributory infringement does not need to prove that the accused party intended for the underlying acts that constitute the infringement to occur—that requirement is presumed because the conduct falls within the scope of the narrowly defined circumstances. Inducement, on the other hand, *does* require the patent holder to prove that the accused party’s conduct was intended to cause the infringing acts—a trade off for encompassing a broader range of conduct, including the sale of components that have noninfringing uses. Thus, the blind application of the fault standard for contributory infringement to that of inducement is itself problematic.

This is not to say that, at least with respect to fault as to whether the relevant acts infringe, contributory infringement and inducement should not apply the same standard, only that one automatically should not apply to the other. Ultimately, both contributory infringement and inducement require that the accused possess *some* degree of fault with respect to whether the third party’s conduct infringes a patent.¹⁶² As I argue in Part

157. *Id.* at 2068–69.

158. *Id.* at 2070.

159. *See supra* note 87 and accompanying text (identifying a policy preference for suing direct infringers over indirect infringers and justifying the need for some intent before liability attaches).

160. 35 U.S.C. § 271(c) (2006) (providing specific situations in which one can be liable for contributory infringement).

161. *See* 35 U.S.C. § 271(b) (“Whoever actively induces infringement of a patent shall be liable as an infringer.”).

162. As Professor Holbrook points out, with respect to future infringement, arguably neither contributory infringement nor inducement requires the demonstration of fault. *See* Holbrook, *supra* note 5, at 406 (explaining that “a good faith belief of non-infringement” may be enough to avoid liability). For example, if A sues B for inducing C’s past infringement, A must demonstrate that B knew that C’s conduct infringed a patent (or in the

III, however, this determination of fault should not be seen as a question of knowledge or purpose, but rather as involving an objective risk-based inquiry.¹⁶³

B. Cracks in the Conventional View of Fault: Willful Infringement

Like the indirect infringement doctrines, the concept of willful infringement also incorporates a fault element relating to whether the underlying acts infringe a patent.¹⁶⁴ Although the fault element of willful infringement was traditionally expressed in mens rea terms, recent shifts have moved it toward an objective standard.

The basic concept of willful infringement is fairly straightforward. Patentees are entitled to two possible remedies: damages for past infringement¹⁶⁵ and an injunction against future infringement.¹⁶⁶ In addition, a patentee may seek enhancement of damages of up to three times its actual damages.¹⁶⁷ The basis for this enhancement is not stated in the

alternate formulation proposed here, a high risk of infringement would have been obvious to another in B's position). But if A is suing B for inducing any future infringement C might engage in (say, for example to obtain an injunction against B), then A will necessarily obtain a judgment that C's conduct infringes A's patent—thus, necessarily providing B with actual knowledge that C's conduct infringes the patent. In short, when litigating over future infringement, it should not be necessary to establish fault with respect to whether or not the third party conduct infringes. Merely establishing that the conduct actually infringes should be sufficient.

163. One might be tempted to look at *Metro Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005), in which the Court articulated a copyright inducement theory premised on patent law. *Id.* at 935–36. However, despite the Federal Circuit's reliance on *Grokster* in *DSU* to support its conclusion that inducement requires more than just intent to cause the infringing acts, *DSU Medical Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1305–06, 81 U.S.P.Q.2d (BNA) 1238, 1246–47 (Fed. Cir. 2006), it adds little in the way of clarification of the degree of knowledge of infringement required for inducement, *see Grokster*, 545 U.S. at 936–37 (failing to address the level of knowledge required that would be enough meet the requirement for infringement); *see also Oswald, supra* note 5, at 239 (“Given that *Grokster* itself is such an opaque decision, we should be concerned that if the new standards set in the copyright arena are now applied back to patent law, we will end up with less clarity in both areas of the law.”). Another difficulty in applying *Grokster* is that it involves copyright law, not patent law. In copyright law, the question of fault with respect to whether the conduct infringes is unnecessary because copyright infringement is premised on the requirement that the work actually be copied—which necessarily constitutes copyright infringement. In other words, intent to cause copying of a protected work is the same as intent to cause copyright infringement. In contrast, patent infringement does not require copying, nor does copying another's technology necessarily result in infringement (furthermore, the validity of the patent is substantially less certain than the validity of a copyright, thus making the inquiry even less predictable in patent law). In short, although the distinction between intent to cause the relevant acts and intent to cause the relevant acts to infringe is important in the patent context, it is seemingly irrelevant in the copyright context.

164. This similarity has not gone unnoticed by commentators. *See Holbrook, supra* note 5, at 410 (pointing out that both willfulness and inducement “are trying to answer the same question: is this party one who is morally culpable in some way?”).

165. 35 U.S.C. § 283 (2006).

166. 35 U.S.C. § 284.

167. *See id.* (“[T]he court may increase the damages up to three times the amount found or assessed.”).

authorizing statute, but courts have long trebled damages when an infringer “willfully” infringes a patent.¹⁶⁸ The aim of this doctrine is to deter and punish those who knowingly infringe a patent, and thus at its core it requires fault above and beyond mere infringement.¹⁶⁹ Consequently, willful infringement can be succinctly stated as “infringement plus fault,” with the majority of the discussion revolving around what constitutes fault for infringement.

1. *Pre-Federal Circuit willfulness: intentional and deliberate infringement*

In its early incarnations, patent infringement did not require any culpable state of mind for multiplying actual damages—it simply mandated damages up to three times the patentee’s actual damages for all infringements.¹⁷⁰ The 1836 Patent Act eliminated this mandatory triple damages provision, instead granting courts the discretion to increase damages up to three times.¹⁷¹ Subsequent amendments to statutory patent law, including the 1952 Patent Act, maintained this system: judges were granted discretion to increase damages without any explicit guidance.¹⁷²

Although ultimate discretion as to whether to treble the damages award rested in the district court,¹⁷³ which was rarely if ever overturned,¹⁷⁴ by the

168. See HARMON, *supra* note 88, at 1082–83 (noting that willful infringement is a necessary condition for enhanced infringement damages). Although § 284 does not restrict increased damages to only situations in which the infringer acted willfully, that is currently the only basis for enhancement of damages. *Beatrice Foods Co. v. New England Printing & Lithographing Co.*, 923 F.2d 1576, 1579, 17 U.S.P.Q.2d 1553, 1555 (Fed. Cir. 1991). There are, however, some dissenting voices on the court. See *In re Seagate Tech., LLC*, 497 F.3d 1360, 1376–77, 83 U.S.P.Q.2d (BNA) 1865, 1874 (Fed. Cir. 2007) (en banc) (Gajaras, J., concurring) (“I write separately to express my belief that the court should take the opportunity to eliminate the grafting of willfulness onto section 284.”).

169. Although the precise definition of “willfully” is debatable, its general effect is clear enough in the patent context for present purposes. No other mental state word has caused so much controversy—indeed, the authors of the Model Penal Code expressly declined to include it as part of its framework. See MODEL PENAL CODE AND COMMENTARIES § 2.02 cmt. 10 (Official Draft and Revised Comments 1985) (“The term ‘wil[l]fully’ was not used in the drafting of offenses prescribed by the Code . . .”). Further, Judge Learned Hand once described it as “dreadful,” “awful,” and “one of the most troublesome words in a statute that I know.” *Id.* at n. 47. In the context of patent law, however, it has come to represent the concept of infringement with some level of fault, and so the more fruitful discussion is over the degree of fault required, as opposed to the abstract meaning of the term.

170. Powers & Carlson, *supra* note 75, at 62.

171. *Id.* at 66.

172. *Id.*; see generally *id.* at 67–68 (summarizing the statutory history of treble damages in patent law).

173. *Wallace & Tiernan Co. v. City of Syracuse*, 45 F.2d 693, 695, 8 U.S.P.Q. (BNA) 80, 82 (2d Cir. 1930).

174. See *Overman Cushion Tire Co. v. Goodyear Tire & Rubber Co.*, 66 F.2d 361, 362, 18 U.S.P.Q. (BNA) 254, 255 (2d Cir. 1933) (noting that the discretion of the lower court with respect to increased damages will not be reversed on appeal unless the facts clearly demonstrate that there was no warrant for the increased damages).

1960's an articulated doctrine of willful infringement emerged.¹⁷⁵ This doctrine focused on the concept of the willful infringer as one who infringed or continued to infringe despite knowing that the conduct infringed a patent. For example, in *General Electric Co. v. Sciaky Bros., Inc.*,¹⁷⁶ the welding department of the defendant, General Electric, was tasked with developing a system superior to the patentee's invention.¹⁷⁷ When it failed to do so, it copied the patentee's system outright, despite having information that it was patented.¹⁷⁸ Even General Electric's patent department was aware of the infringement, yet the company proceeded nonetheless.¹⁷⁹ In these circumstances, an opinion of counsel concluding that the patents were invalid was insufficient to defeat the court's conclusion that General Electric willfully infringed the patents.¹⁸⁰

At the heart of willful infringement was the concept of a defendant who engaged in infringing conduct despite knowing that in doing so it was infringing a valid patent.¹⁸¹ If a defendant did not know that its conduct infringed, or had a good faith belief that the patent was invalid, it lacked the requisite mens rea and could not willfully infringe.¹⁸² The most common way to establish this knowledge was by showing that the defendant copied the patentee's product. In the pre-Federal Circuit case *Milgo Electronic Corp. v. United Business Communications, Inc.*,¹⁸³ for example, the Tenth Circuit concluded that UBC's copying of the patent holder's product evidenced that its infringement was willful and "belie[d] its contention that it proceeded to manufacture and sell modems with a good-faith belief that there was no infringement."¹⁸⁴ This copying,

175. See, e.g., *Union Carbide Corp. v. Graver Tank & Mfg. Co.*, 282 F.2d 653, 673, 127 U.S.P.Q. (BNA) 3, 19 (7th Cir. 1960) (noting the well-established rule that exemplary damages may be awarded for a conscious and willful infringement); *Russell Box Co. v. Grant Paper Box Co.*, 203 F.2d 177, 183, 97 U.S.P.Q. (BNA) 19, 23 (1st Cir. 1953) (holding that the infringer's carelessness in ascertaining the facts constituted adequate justification for increasing damages).

176. 415 F.2d 1068, 163 U.S.P.Q. (BNA) 257 (6th Cir. 1969).

177. *Id.* at 1071, 163 U.S.P.Q. (BNA) at 259.

178. *Id.* at 1071-72, 163 U.S.P.Q. (BNA) at 259-60.

179. *Id.*, 163 U.S.P.Q. (BNA) at 259-60.

180. *Id.* at 1072-73, 163 U.S.P.Q. (BNA) at 260-61.

181. *General Electric* provides a clear example of this type of infringer. *Id.* at 1071-74, 163 U.S.P.Q. (BNA) at 259-61; see also Mark A. Lemley & Ragesh K. Tangri, *Ending Patent Law's Willfulness Game*, 18 BERKELEY TECH. L.J. 1085, 1090-91 ("To be willful, an accused infringer must understand that the patent is valid and that what it is doing infringes the patent.").

182. See *Cont'l Can Co. v. Anchor Hocking Glass Corp.*, 362 F.2d 123, 129, 150 U.S.P.Q. (BNA) 1, 6 (7th Cir. 1966) (quoting *Artmoore Co. v. Dayless Mfg. Co.*, 208 F.2d 1, 5, 99 U.S.P.Q. (BNA) 306, 309 (7th Cir. 1953)) ("It has been held that a bona fide and reasonable belief that a patent was invalid removes the infringement from the class designated as wanton and wilful.").

183. 623 F.2d 645, 206 U.S.P.Q. (BNA) 481 (10th Cir. 1980).

184. *Id.* at 666, 206 U.S.P.Q. (BNA) at 497. The court further stated that "[m]any courts have held that faithful copying of a patented product shows an intentional disregard for the

combined with knowledge of the patent holder's rights, provided the necessary state of mind for willful infringement.¹⁸⁵

2. *The Federal Circuit transforms willful infringement into an objective inquiry*

At some point the Federal Circuit changed willful infringement from a subjective mens rea-driven inquiry into an objective inquiry. This transition may have occurred in or shortly after 1983, with *Underwater Devices, Inc. v. Morrison-Knudsen Co.*¹⁸⁶ Alternatively, as discussed below, the relevant caselaw supports the reading that even after *Underwater Devices*, the court continued to use a mens rea-like inquiry that only changed to an objective standard much more recently. The significant point, however, is that regardless of which reading is correct, both require the conclusion that willful infringement is no longer a mens rea inquiry.

There is a widespread view that shortly after the creation of the Federal Circuit, the court adopted a negligence standard for willful infringement. Typical willful infringement cases involved a company manufacturing or continuing to manufacture a product after being notified by a patent holder of the infringement.¹⁸⁷ In many cases, defendants obtained an opinion of counsel to determine if their actions were in fact infringing a patent, a precaution courts have commended as the prudent thing to do.¹⁸⁸ In *Milgo*, for instance, the court stated that “[o]nce [an accused infringer] had actual notice of [the patent holder’s] patent rights, [the accused infringer] was under an affirmative duty to exercise due care to determine whether or not it was infringing [the] patents.”¹⁸⁹

The Federal Circuit adopted this formulation shortly after its creation. In *Underwater Devices*, the patents covered a method and apparatus for laying pipes underwater.¹⁹⁰ When companies bid on undersea pipeline projects, Underwater Devices would write to the company to notify it that Underwater Devices owned the patents and would license the use of the patented method and apparatus.¹⁹¹ M-K, the successful bidder on an underwater sewer project, received the license letter but declined to seek a

patent owner's rights and supports an award of increased damages under 35 U.S.C. § 284.” *Id.*, 206 U.S.P.Q. (BNA) at 498.

185. *Id.*, 206 U.S.P.Q. (BNA) at 498.

186. 717 F.2d 1380, 219 U.S.P.Q. (BNA) 569 (Fed. Cir. 1983).

187. In one extreme (for the time) example, the defendant copied the patentee's modem before a patent issued, then continued to produce the copied product after it learned that a patent had issued. *Milgo*, 623 F.2d at 666, 206 U.S.P.Q. (BNA) at 497–98.

188. See, e.g., *Union Carbide Corp. v. Graver Tank & Mfg. Co.*, 282 F.2d 653, 660, 127 U.S.P.Q. (BNA) 3, 8 (7th Cir. 1960) (noting that the opinion of counsel can be evidence of good faith).

189. *Milgo*, 623 F.2d at 666, 206 U.S.P.Q. (BNA) at 497.

190. *Underwater Devices Inc.*, 717 F.2d at 1382, 219 U.S.P.Q. (BNA) at 570.

191. *Id.* at 1384, 219 U.S.P.Q. (BNA) at 572.

license.¹⁹² In connection with that decision, its in-house attorney prepared a brief memorandum that the court described as “inadequate,” and which M-K knew or should have known was not competent legal advice.¹⁹³

The court concluded that these circumstances supported a finding of willful infringement, incorporating the Tenth Circuit’s articulation in *Milgo*:

Where, as here, a potential infringer has actual notice of another’s patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing . . . [s]uch an affirmative duty includes, *inter alia*, the duty to seek and obtain competent legal advice from counsel *before* the initiation of any possible infringing activity.¹⁹⁴

Subsequent decisions focused heavily on whether the duty of care was satisfied under various circumstances, such as when a party failed to obtain (or refused to disclose) an opinion of counsel after learning about the relevant patent.¹⁹⁵

Given the Federal Circuit’s numerous opinions dealing with the duty of care, it is perhaps unsurprising that the common view of *Underwater Devices* and its progeny is to perceive them as constituting an overall shift to a negligence standard—or even greater, an affirmative duty requirement that imposed automatic liability for failure to comply—for establishing willful infringement.¹⁹⁶ But this view ignores the fundamental requirement in the court’s willfulness doctrine: whether the accused infringer possessed actual knowledge that its conduct infringed a patent. Only once the accused possessed this mental state did the requirement to exercise due care apply. In other words, the threshold question—before even getting to the “duty to investigate” analysis—remained a *mens rea* inquiry.

Thus, although the Federal Circuit’s recent en banc decision in *In re Seagate Technology, LLC*,¹⁹⁷ which redefined willful patent infringement, is widely seen as a shift upwards from negligence to recklessness (thus raising the fault requirement for willful infringement), I suggest that it is, in

192. *Id.* at 1385, 219 U.S.P.Q. (BNA) at 572.

193. *Id.* at 1390, 219 U.S.P.Q. (BNA) at 576–77.

194. *Id.* at 1389–90, 219 U.S.P.Q. (BNA) at 576.

195. *See, e.g.,* *Voda v. Cordis Corp.*, 536 F.3d 1311, 1327–28 (stating that “[w]hen a person becomes aware that a patent may have relevance to his or her activities, that person has a duty to exercise due care and to investigate whether or not his or her activities or proposed activities infringe any valid, enforceable claim of the patent.”)

196. This shift was especially problematic when combined with the “negative inference rule,” which allowed finders of fact to infer that the alleged infringer either did not obtain an opinion of counsel or obtained an unfavorable opinion when it asserted the attorney-client privilege and declined to state whether it had obtained the advice of counsel. *See* *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1344–45, 72 U.S.P.Q.2d (BNA) 1560, 1565–66 (Fed. Cir. 2004) (en banc) (noting that the attorney-client relationship could be distorted if the court infers that withheld opinions of counsel relating to patents are adverse in nature).

197. 497 F.3d 1360, 83 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2007) (en banc).

fact, a shift downwards from a subjective view of fault toward an objective view, and thus implicates a lower threshold of fault than previously existed. In *Seagate*, the Federal Circuit repudiated the argument that willful infringement could be found under a negligence standard and instead concluded that the appropriate standard was one of recklessness.¹⁹⁸ Although it recognized the ambiguity in the term “reckless”, the court relied on civil law in reasoning that establishing willful infringement requires a showing that the infringer acted despite knowing of an “objectively high likelihood that its actions constituted infringement of a valid patent.”¹⁹⁹ In eliminating the “duty of care” requirement, however, the court also eliminated the “knowledge” requirement, thus transforming the overall inquiry into a wholly objective analysis.²⁰⁰

The critical point, however, is that although on the surface willfulness appears to be the quintessential mens rea inquiry, it has become anything but. As I suggest in the next two sections, the use of an objective inquiry in determining fault makes perfect sense in the context of willful infringement and is an approach that should be applied to indirect infringement as well.

III. THE PROBLEMS WITH VIEWING FAULT AS A MENS REA INQUIRY IN THE CONTEXT OF PATENT INFRINGEMENT

To this point, I have described the conventional view of the fault elements of inducement and contributory infringement as involving a state of mind inquiry into whether the accused party knew that the relevant conduct infringed a patent or intended for such an infringement. I have also suggested that although willful infringement was originally treated as involving a similar subjective inquiry, it has since evolved into a doctrine utilizing an objective approach to fault.

With this background, I next suggest that this shift from subjective to

198. *Id.* at 1371, 83 U.S.P.Q.2d (BNA) at 1870.

199. *Id.*, 83 U.S.P.Q.2d (BNA) at 1870.

200. One counterargument to this interpretation of the *Underwater Devices-Seagate* shift is the point that post-*Seagate* district courts have been less willing to find willful infringement. See Christopher B. Seaman, *Willful Patent Infringement and Enhanced Damages After In re Seagate: An Empirical Study* 26 (Conference Paper, Samsung-Stanford Conference on Patent Remedies) (Feb. 18, 2011), available at http://www.law.stanford.edu/display/images/dynamic/events_media/Christopher%20B.%20Seaman%20-%20Willful%20Patent%20Infringement%20and%20Enhanced%20Damages%20After%20In%20re%20Seagate.pdf (finding that, prior to *Seagate*, district court judges found willfulness in approximately 53% of bench trials versus 18% after *Seagate*). If *Seagate* represented a shift downwards, one would expect the opposite. However, there are two primary weaknesses in this counterargument. First, the application of the Federal Circuit’s “objective recklessness” test by subsequent panels has resulted in an extremely high standard that is nearly impossible to overcome and which is divorced from traditional concepts of recklessness. See *infra* Part V.C. Second, this information may in part reflect the widespread (and arguably erroneous) perception (evident in *Seagate* itself) that it represented a higher fault requirement than previously existed.

objective is the correct move, as the conventional view of fault for patent infringement suffers from a series of serious problems that are in large part related to the doctrine's origins as an adaptation of the tort theory of aiding and abetting. At the same time, simply converting the analysis to an objective one is not the answer. Rather, because of the differences between general tort theories and patent law, a more narrowly tailored articulation of fault is necessary.

A. *Mens Rea Does Not Work When Applied to Corporations*

The first problem with attempting to use mental state concepts in the context of patent infringement is the difficulty—and perhaps impossibility—associated with ascertaining the mental state of a corporation. Commentators have long recognized the challenges involved in determining a corporation's subjective state of mind.²⁰¹ Indeed, the notion of corporate mens rea is the subject of its own line of scholarly debate and controversies.²⁰² Given the difficulty in assessing the “mind” of a corporation, it is unsurprising that civil law has been reluctant to tread this path.²⁰³

The same is true in patent law—one could tie oneself in knots attempting to determine whether a company subjectively desired to infringe a patent, or knew to a certainty that its conduct did so. Assessing the corporate mind is particularly problematic when dealing with the interface between highly technical questions and complex (often unsettled) legal problems. For example, consider a company that manufactures telecommunications equipment. The company likely employs an engineer who knows every nuanced detail of a particular component of a piece of cell phone RS-52, such as the fact that the transmission signal encoding software uses a five-bit random sequence at the start of each message. The company also likely employs a product manager who generally knows how cell phone RS-52 works, but does not know the details of each individual component. There is also a set of senior management, as well as a legal department that knows

201. See Bartholomew, *supra* note 5, at 822–23 (noting the difficulty of determining the mental state of an organization compared to an individual because organizations generally have several individuals with different thoughts, perceptions, and levels of responsibility); see also V.S. Khanna, *Is the Notion of Corporate Fault a Faulty Notion?: The Case of Corporate Mens Rea*, 79 B.U. L. REV. 355, 359 (1999) (concluding that corporate mens rea standards are generally undesirable and should be replaced with either strict liability or negligence).

202. Khanna, *supra* note 201, at 356 n.1.

203. See DAN B. DOBBS ET AL., PROSSER AND KEETON ON THE LAW OF TORTS 213 (W. Page Keeton ed., 5th ed. 1984) (“Since, however, [mental culpability] is almost never admitted, and can be proven only by the conduct and the circumstances, an objective standard must of necessity in practice be applied.”). Although Dobbs refers to individuals, the point is even more applicable to corporations, whose nature is such that it is even more difficult to look beyond their conduct and the circumstances.

vaguely how the company's products work, and possesses legal knowledge about patent law including the ability to interpret a given claim term, but has no idea that there is a random sequence at the start of each message, let alone that it consists of five bits. Wherein lies the "mind" of the company for purposes of ascertaining infringement? Is it in the engineer, who knows how the relevant product works, but lacks the legal ability to interpret the claims of a patent or the substantive knowledge of patent law? Or is it in the legal department, which can interpret the claims of a patent, but lacks even an inkling that the company's product uses a five-bit random sequence at the start of messages? Or is it the senior management, which lacks information about either? Yet, this is just one of the inquiries associated with determining whether given conduct infringes a patent—the patent must also be valid and enforceable.²⁰⁴ To apply a subjective inquiry to this question involves probing the mind of an amorphous, fictional creation to ascertain whether it knows the answer to complicated techno-legal questions.

B. A Subjective Standard Fails to Deter Undesirable Conduct

Another problem with the subjective view of fault in indirect infringement is the inability to arrive at an optimal level of deterrence under such a standard.

Indirect infringement doctrines exist because, in some cases, suing the direct infringer is essentially impossible, and is economically inefficient.²⁰⁵ Under such circumstances, therefore, the law prefers that patent holders sue an alternate party associated with the infringement, one that is in a better position to prevent or avoid infringement. Indirect infringement, therefore, provides a deterrence mechanism for patent infringement: the existence of the doctrine encourages companies to avoid engaging in conduct that aids others in infringing a patent.

One way to visualize the effects of a deterrence rationale is to consider what level of precautions against patent infringement the law should encourage parties to take.²⁰⁶ Some commentators suggest that the best way to accomplish this deterrence function would be to eliminate the fault element altogether.²⁰⁷ Thus, if indirect infringement were a strict liability

204. See 35 U.S.C. § 282 (2006) (recognizing defenses of invalidity and unenforceability as defenses to infringement).

205. See *supra* Part II.

206. See Jeanne C. Fromer, *Patent Disclosure*, 94 IOWA L. REV. 539, 587–88 (2009) (noting that most companies advise their employees not to read outside patents to avoid the risk of acquiring knowledge about relevant patents).

207. See, e.g., Oswald, *supra* note 5, at 244 (arguing that the Patent Act suggests that the risk of loss should fall on the infringer); Rader, *supra* note 5, at 315–16 (criticizing a Federal Circuit decision holding that the intent prong for inducement requires the plaintiff to show that the alleged inducer knowingly induced infringement); Sichelman, *supra* note 5, at

claim, parties would be forced to take maximum precautions to avoid causing or assisting others in engaging in infringing acts. But society would generally prefer firms to invest in actual productive activities, as opposed to unnecessary precautions, especially here, where the costs of determining whether particular conduct infringes are not lower for the potential infringer than the patent holder.²⁰⁸ In short, allowing strict liability—or even negligence—for indirect infringement claims would result in inefficient over-deterrence.²⁰⁹

Yet just as a low fault threshold would result in over-deterrence, so too does too high of a threshold under-deter patent infringement. By requiring actual knowledge for indirect infringement, parties would be disinclined to take any steps to learn whether they actually infringe a patent. While burying one's head in the sand upon becoming aware of a high probability of infringement might not be an optimal strategy under *Global-Tech*, given its willful blindness language,²¹⁰ provided that one never begins inquiring into whether particular conduct infringed a patent, one might never need to take any precautions against causing infringement of a patent.²¹¹ In essence, a fault standard of knowledge or intent places all the burden of risk of injury from induced patent infringement onto the shoulders of the patentee, despite the potential for the inducer to be in a better position to analyze whether its conduct infringes a patent.²¹² Requiring purpose or

54 (concluding that requiring knowledge of the patent for a finding of inducement is contrary to law and bad policy). Although not directly contending that the fault element should be eliminated, these commentators argue that inducement should require only knowledge of or intent to produce the infringing acts, as opposed to knowledge that the acts infringed. This would effectively result in a strict liability standard for inducement of infringement, at least with respect to the requirement of fault relating to infringement. *But see* Holbrook, *supra* note 5, at 409–11 (arguing that a narrower intent standard would not significantly reduce the value of patents and that a strict liability standard fails to consider the potential anti-competitive consequences of affording to patent owners such a powerful tool).

208. *See generally* Thomas F. Cotter, *An Economic Analysis of Enhanced Damages and Attorney's Fees for Willful Patent Infringement*, 14 FED. CIRCUIT B.J. 291, 314 (2004–2005) (arguing that, with respect to punitive damages, the exclusive goal of the patent system is a utilitarian one, namely to stimulate invention, disclosure, and other related activities). Although Professor Cotter's analysis was performed in the context of the pre-*Seagate* duty to obtain an opinion of counsel, and his conclusions are directed to that issue, his discussion of under-deterrence and over-deterrence is nevertheless relevant to the fault element of inducement. *See id.* at 315–26 (analyzing the risk of over-deterrence and the scenarios in which there would be a risk of under-detection or under-enforcement).

209. One might also question whether such a standard would result in any effective deterrence at all. There is a human tendency to ignore even grave risks that are unavoidable, effectively putting on blinders to the existence of the risk.

210. *See Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2070–71 (2011).

211. This is not to say that potential infringers would always want to avoid learning of infringement. In order to avoid costs associated with future findings of infringement, parties might choose to conduct an investigation so as to avoid problems that might arise from such a finding, such as opportunity costs and loss of startup investments.

212. *See Oswald, supra* note 5, at 244–45 (describing the allocation of risk in the context of opinion letters).

virtual certainty for inducement ensures that firms will take no precautions against the possibility of causing another to infringe.

C. Mental State Concepts in Tort Law Are Not Directly Applicable to Patent Infringement

While the preceding two points suggest that a subjective approach to fault may be ill-fitting, they are likely insufficient to conclusively demonstrate that an objective approach is preferable. Towering above them, however, is the fundamental problem that viewing indirect infringement as an intentional tort, complete with mental state inquiry, just does not work.

As previously discussed, subjective mental states can be divided into two principal categories: purpose and knowledge.²¹³ But neither of these two types of mental states—nor the more general notion of “intent”—provides a logical inquiry in the context of patent infringement.

1. Nobody possesses the purpose of infringing a patent

Take the first possibility, the one suggested by the case law: that inducement requires that the accused party possess the *purpose* of infringing a patent²¹⁴ or, in the narrowest sense of the term, *intend* to infringe a patent.²¹⁵ This inquiry posits the seemingly innocuous question of whether the accused infringer consciously desired to bring about an infringement.

But such a mental state requirement is nonsensical. No one sets out with the goal of infringing a patent. A firm may purposefully encourage, desire, and assist another person in practicing a particular method. A company may even act with the purpose of copying another company’s product or method. But none of these acts constitute purpose to infringe. For example, a company that copies a competitor’s technology is not more likely to do so if that technology is protected by a patent; indeed, one would expect the converse to be closer to reality. Asking whether one possesses the purpose to infringe is tantamount to asking whether one

213. Although subjective recklessness is also a form of subjective fault, the fault elements of inducement and contributory infringement are virtually always described in terms of intent, purpose or knowledge, and not in terms of subjective recklessness. Indeed, subjective recklessness may be a viable approach to fault.

214. *See* *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 458 (2010) (granting certiorari to determine whether the legal standard for inducement is deliberate indifference of a known risk that infringement may occur or purposeful, culpable expression and conduct to encourage an infringement), question presented *available at* <http://www.supremecourt.gov/qp/10-00006qp.pdf>.

215. *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306, 81 U.S.P.Q.2d (BNA) 1238, 1247 (Fed. Cir. 2006) (“Accordingly, inducement requires evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.”).

possesses the purpose of violating the law: it is not the right question to ask.²¹⁶

Of course, there might be exceptions to the assertion that no one's purpose is to infringe a patent. An example would be that of an individual who seeks to demonstrate that patents are evil, and thus intentionally creates an infringing device in an effort to become a martyr for the cause. Such a mental state could also be akin to that of the Gingerbread Man, who derives pleasure from taunting his pursuers. Yet both these examples are fundamentally absurd, and limiting inducement to this context would essentially vitiate the doctrine.

Another exception might be in the pharmaceutical context, where the law incentivizes generics companies to copy products that are protected by patents.²¹⁷ But even in this context, the generic pharmaceutical manufacturer's purpose is not to infringe a patent; indeed, it will only reap a benefit once a court determines either that the company's product does not infringe the patent or the patent is invalid.²¹⁸ Thus it, too, lacks the purpose of infringement.

2. *Knowledge and the requirement of substantial certainty*

Despite "purpose" making little sense in the context of patent infringement, perhaps the alternate intent standard of "knowledge" is the correct one. In Restatement of Torts terms, determining whether an accused party possesses "knowledge," in the context of determining intent, asks whether the party "believes that the consequences are substantially certain to result from [the party's acts or lack thereof]."²¹⁹ Thus, a "knowing" state of mind occurs when one believes that a given outcome is substantially or virtually certain,²²⁰ not merely probable or even highly likely. Consider the following example from the Restatement (Third) of

216. In connection with this argument, it is important to keep in mind the distinction between intending that a third party engage in particular acts and intending that those acts infringe. No one, including myself, seems to dispute that the former is required. It is the latter part of the inquiry that is illogical when viewed from the standpoint of purpose.

217. If a generic pharmaceutical company copies an innovator company's drug product that is protected by a patent, the generic company can be entitled to 180 days of exclusivity against subsequent generic drug developers. *Teva Pharm. USA, Inc. v. Eisai Co., Ltd.*, 620 F.3d 1341, 1343, 96 U.S.P.Q.2d (BNA) 1808, 1810 (Fed. Cir. 2010). Thus, generic pharmaceutical manufacturers are encouraged to copy technology specifically because it is patented. Provided that the generic manufacturer prevails in the subsequent patent litigation, it will be better off against its generic competitors.

218. *See* 21 U.S.C. § 355(j)(5)(B)(iii) (2006) (delaying approval for new drug application until a finding of non-infringement or invalidity or until 30 months have passed from the date of giving notice under § 355(j)(2)(B)(i)).

219. RESTATEMENT (SECOND) OF TORTS § 8A (1965); *see* Simons, *supra* note 51, at 1063 (explaining that an intent to produce a consequence can mean either the purpose to produce that consequence or the knowledge that the consequence is substantially certain to result); *see also supra* note 51 and accompanying text.

220. These two terms are functionally interchangeable. *See supra* note 56.

Torts:

When Steve, a policeman, seeks to pull to the side of the road a car that has made an illegal turn, the car speeds away. Steve undertakes a chase, and continues the chase even though the car is making every effort to escape, driving rapidly and somewhat wildly. Steve is well aware there is a significant likelihood that someone will suffer physical harm, either personal injury or at least property damage, in the course of the chase. In fact, the escaping car strikes the car owned by Ruth, which she is driving carefully on the highway. Steve, in initiating and continuing the chase, has not intentionally harmed Ruth or her car. Steve did not harbor a purpose that Ruth (or anyone else) suffer any harm; while Steve knew there was a significant likelihood of such harm, the harm was not substantially certain to occur.²²¹

As with purpose, however, the infringer who would meet a knowledge standard short of a final judgment is rare. In patent law, the consequences of illegal conduct are that the conduct infringes a patent. When applied in the patent context, therefore, the “knowing” inquiry asks whether the accused party believes that infringement of a patent is virtually certain to result from the relevant acts.

But the only way to actually know that conduct infringes a patent is to interpret the claims and conduct in an infringement analysis. Even then, one cannot be “practically certain” that conduct infringes a patent—the only way to know for sure is to have a court make a final determination. In addition, limiting the standard to this extent would make it easy for defendants to escape liability. For instance, a potential defendant could prepare an infringement analysis that indicates it does not infringe—including erroneous conclusions, if necessary—to obtain evidence that it was not substantially certain that the conduct infringed a patent. Furthermore, because one cannot be “substantially certain” that conduct infringes a patent without conducting an infringement analysis, as long as one avoids doing so, one could not be proven to possess the requisite mental state. At best, a potential infringer can be aware of a high risk of infringement, but knowledge of a high risk is not certainty.

Global-Tech provides a clear illustration of this incongruence. In its preliminary analysis, the Court likens inducement of infringement to a used car salesman who induces a customer to purchase a damaged car.²²² The Court draws a comparison to a salesman who knows that the car is damaged from one who does not to distinguish inducement of infringement with and without fault.²²³ But it is one thing to know that a car is damaged;

221. RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 1 cmt. c, illus. 4 (Tentative Draft No. 1, 2001).

222. *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2065 (2011).

223. Of course, as discussed throughout this Article, the Court does not describe its

it is a wholly different inquiry to “know” that a patent is infringed.

Perhaps, however, *Global-Tech’s* adoption of willful blindness as a form of knowledge offers an escape route from the constraints of “knowledge” as a standard. To this I offer three responses. First, willful blindness is a doctrine whose role and boundaries have been heavily criticized by scholars in the criminal law context in which it was previously applied.²²⁴ In particular, scholars have questioned the ability of jurors to interpret this context and distinguish it from negligence.²²⁵

Setting aside concerns over the doctrine itself, it is questionable how fully it departs from the certainty required by a pure knowledge standard. As the Court noted in *Global-Tech*, a willfully blind defendant is one “who can almost be said to have actually known the critical facts.”²²⁶ Knowledge of a “high probability” may be enough, although conventionally the threshold required for knowledge is a very high probability indeed.²²⁷ Thus, to the extent “willful blindness” involves a probability akin to that traditionally required for knowledge in the civil context, viz., substantial certainty, the criticisms discussed in this Part and the next are equally applicable.

On the other hand, there is reason to at least suspect that the “high

analysis in terms of fault, but rather as a question of knowledge. *Id.*

224. Numerous scholars in the criminal law sphere have criticized the concept of willful blindness, which commentators frequently use interchangeably with “deliberate ignorance.” See Jonathan L. Marcus, Note, *Model Penal Code Section 2.02(7) and Willful Blindness*, 102 YALE L.J. 2231, 2231 n.1 (1993) (citing several phrases that commentators use interchangeably with willful blindness, including “deliberate ignorance”); see, e.g., Alan C. Michaels, “Rationales” of Criminal Law Then and Now: For a Judgmental Descriptivism, 100 COLUM. L. REV. 54, 91–92 (2000) (criticizing the proliferation of the willful blindness doctrine as promoting vague standards that “have allowed arbitrary and inappropriate judgments.”); Robin Charlow, *Willful Ignorance and Criminal Culpability*, 70 TEX. L. REV. 1351, 1354–57 (1992); see also *id.* at 1359–66 (discussing the many different interpretations of the concept of “willful blindness”). Commentators are particularly skeptical of the ability of jurors to properly apply a “willful blindness” instruction.

225. Commentators are particularly skeptical of the ability of jurors to properly apply a “willful blindness” instruction. See Marcus, *supra* note 224, at 2248 (“[A] jury may indeed interpret deliberate ignorance to mean that the defendant may be convicted because she should have known the fact—i.e., a negligence standard”); Ira P. Robbins, *The Ostrich Instruction: Deliberate Ignorance as a Criminal Mens Rea*, 81 J. CRIM. L. & CRIMINOLOGY 191, 226–31 (1990) (providing similar analysis).

226. See *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2070–71 (2011).

227. See *supra* Part I.B. Note that the Model Penal Code allows for knowledge of a particular fact to be established through an awareness of a “high probability of its existence, unless [the accused] actually believes that it does not exist.” MODEL PENAL CODE §2.02(7) (Proposed Official Draft 1962). This does not eliminate the high threshold for knowledge; rather, it creates a rebuttable presumption of knowledge upon demonstration of an awareness of the “high probability.” Furthermore, it is questionable how applicable this criminal law concept is to the civil context, as the Restatement (Second) or (Third) of Torts does not contain a “high probability” exception, and relies on the concept of substantial certainty. In any event, as discussed below, the incorporation of a probabilistic assessment into the fault inquiry essentially implicates the concept of recklessness. See RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 1 (2005); RESTATEMENT (SECOND) OF TORTS § 8A (1965).

probability” that the court had in mind is significantly lower than substantial certainty, given the facts before it,²²⁸ and its use of the “high probability” language as opposed to that of virtual or substantial certainty. If that is the case, the Court has essentially adopted a subjective recklessness standard for knowledge despite its explicit assertion to the contrary²²⁹ and many of the benefits of a risk-based approach discussed in this article will perhaps be realized.²³⁰

3. Why “purpose” and “knowledge” don’t work in the context of patent infringement

The goal of the preceding two sections was to demonstrate that neither purpose nor knowledge is a viable expression of fault in the context of inducement or contributory infringement. Yet why is this so? The reason flows from a fundamental difference between tort law and patent law: mens rea principles in tort law focus on the actor’s mental state with respect to the *factual* consequences of given conduct, while patent law focuses on the *legal* consequences of that conduct. Linked to this distinction is the predictable nature of many factual consequences—a nature that is quite unlike that of patent infringement.

As previously discussed, both the original conception of the fault elements for contributory infringement and inducement, as well as the Federal Circuit’s articulations of those elements, are based on intentional tort mental state concepts. In tort, however, the mental state inquiry largely focuses on whether the actor desired or was aware of the factual consequences flowing from his actions, not whether those actions are

228. See *infra* Part III.D.

229. See *Global-Tech* 131 S. Ct. at 2063. See *infra* Part IV for a comparison of the Supreme Court’s articulation of “willful blindness” (“First, the defendant must subjectively believe that there is a high probability that a fact exists. Second, the defendant must take deliberate actions to avoid learning of that fact.” *Id.*) with the view of objective recklessness discussed in this Article, which asks whether “a high risk of infringing a valid patent would have been obvious to a person in the accused party’s position.”

230. The “deliberate indifference” standard applied by the Federal Circuit in *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1376–77, 93 U.S.P.Q.2d (BNA) 1617, 1628 (Fed. Cir. 2010), *aff’d sub nom.*, *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011), suffers from a similar flaw. If, on the one hand, it is treated like a form of “knowledge,” as the panel suggested in *SEB, id.* at 1377, 93 U.S.P.Q.2d (BNA) at 1628, it essentially asks whether the defendant deliberately disregarded a substantial certainty that it infringed a patent, thus encountering all the problems inherent in the above discussion. If, on the other hand, it is considered a form of subjective recklessness (as the case cited by the panel, *Farmer v. Brennan*, 511 U.S. 825, 839–40 (1994), suggests), it is effectively a form of the risk-based analysis proposed in this Article. The exception is that subjective recklessness still includes a state of mind component, in the form of the defendant’s awareness of the risk, thus rendering it subject to the problem of having to discern the corporate mind. Yet, despite this flaw, it is preferable to continuing to pretend to apply a knowledge standard. Nevertheless, rather than calling the analysis “deliberate indifference,” I suggest that it be called what it is: subjective recklessness.

actually against the law.²³¹

Thus, a rough who beats up an innocent passer-by is liable for civil battery because she knows that she is engaging in undesired contact, regardless of her awareness that she can be sued for doing so.²³² Even the tort of inducement of tortious conduct, although it requires knowledge that the conduct is wrongful, does not require knowledge that the conduct constitutes a specific tort.²³³ The Restatement (Second) of Torts states that “one is subject to liability if he (a) orders or induces the conduct, if he knows or should know of circumstances that would make the conduct tortious if it were his own.”²³⁴ Although the comments are silent as to whether this means knowledge of the wrong that will result or knowledge that the wrong is a tort, only the former requirement is consistent with traditional principles of tort law. For example, the sections of the Restatement (Second) and (Third) of Torts dealing with intent discuss only knowledge of the consequences, not knowledge that the conduct is tortious.²³⁵ Likewise, a company who instructs another to repossess goods from one who has a right of ownership (the tort of conversion) can be liable for inducement of tortious conduct, regardless of whether it knows that doing so constitutes conversion.²³⁶ In short, it is a basic principle of mens rea that a person who engages in conduct constituting a tort does not escape liability by claiming that he did not believe his conduct violated a specific law or constituted a certain tort.²³⁷

231. This principle is equally true in criminal law: “Neither knowledge nor recklessness or negligence as to whether conduct constitutes an offense or as to the existence, meaning or application of the law determining the elements of an offense is an element of such offense, unless the definition of the offense or the Code so provides.” MODEL PENAL CODE AND COMMENTARIES § 2.02(9) (1995). *But see id.* cmt. 11 (discussing when there may be special circumstances where knowledge of the law defining the offense is part of the culpability requirement). Thus, a perpetrator who sets fire to a building is guilty of the crime of arson because he intended to destroy a building, not because he intended to commit the crime of arson. MODEL PENAL CODE AND COMMENTARIES § 220.1 (1995).

232. “An actor is subject to liability to another for battery if (a) he acts intending to cause a harmful or offensive contact with the person of the other or a third person, or an imminent apprehension of such a contact, and (b) a harmful contact with the person of the other directly or indirectly results.” RESTATEMENT (SECOND) OF TORTS § 13 (1965). “Intending” merely means to cause either bodily harm or apprehension of such harm, as opposed to intending to cause the tort of battery. *See id.* cmt. c (explaining that whether the actor is inspired by any personal hostility toward the other, or whether he acts as a practical joke, is immaterial to the meaning of intent).

233. *See Adams, supra* note 5, at 642–43 (“[W]hile section 877(a) [of the Restatement (Second) of Torts] requires a specific intent to induce tortious conduct, it requires only constructive knowledge that the tortfeasor’s conduct is tortious.”).

234. RESTATEMENT (SECOND) OF TORTS § 877(a) (1979).

235. RESTATEMENT (SECOND) OF TORTS § 8A (1965); RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 1 (Tentative Draft No. 1, 2001).

236. *Cf. Zimprich v. North Dakota Harvestore Sys., Inc.*, 461 N.W.2d 425, 427–28 (N.D. 1990) (discussing only the awareness of the property interest of another as opposed to knowledge that the conduct constitutes the tort of conversion).

237. This principle is particularly clear in the criminal context. *See TORCIA, supra* note

Patent law is different. Absent a patent, there is nothing unlawful, or even “bad,” about making and selling a particular product. To the contrary, under most circumstances, making and selling a product is desirable behavior.²³⁸ It is only when the additional element of a patent is introduced that the behavior becomes unlawful.

Because fault in patent infringement relates to whether particular conduct infringes a specific patent, a question that is absent from tort law, conventional tort rationales for a given standard are not necessarily applicable. To draw an analogy, it would be as though the tort of battery required not just knowledge that jumping on a person’s back will result in an undesired contact, but also a lawyer’s appreciation that doing so satisfies the elements of the tort of battery.²³⁹ As a result, traditional tort principles of mens rea do not apply to patent law because tort expressions of mens rea standards are focused on whether the accused desires or is aware of the physical consequences of her acts—physical consequences that can be highly predictable—while the consequences in patent law turn on an appreciation of a legal issue that is almost never completely predictable, namely, whether the conduct infringes a patent.

The closest parallel to inducement of infringement is perhaps the tort of intentional interference with contract. But even that tort provides little aid in fashioning a test for the patent law context. Intentional interference arises when one “[i]ntentionally and improperly interferes with the performance of a contract.”²⁴⁰ But what does it mean to “intentionally” interfere with the performance of a contract—is it necessary to intend to engage in the acts that interfere with the contract, or is it necessary to intend to interfere with the contract itself? There is a consensus that the latter requires at least negligence, but exactly how much fault is required is subject to debate.²⁴¹

For example, Richard Epstein views the concept of intentional interference with contract as a manifestation of the problem of ostensible ownership, which arises when a party who is placed in possession of

30, at 566 (“[A] person who engages in conduct constituting a crime will not be heard to claim that he did not believe his conduct was criminal. *Ignorantia legis neminem excusat*—ignorance of law excuses no one.”).

238. Of course, there are circumstances under which making and selling a product might be considered undesirable. A manufacturer and distributor of illegal fireworks, for example, might be an exception. Outside of otherwise illegal conduct, however, society tends to value labor and production.

239. Such knowledge is, of course, not required. See, e.g., *Lambertson v. United States*, 528 F.2d 441, 444 (2d Cir. 1976) (articulating that the essential element to establish battery is the intent to cause contact, not to cause injury).

240. RESTATEMENT (SECOND) OF TORTS § 766 (1979); DIAMOND, *supra* note 40, at 338.

241. See DIAMOND, *supra* note 40, at 339–40 (noting that knowledge of the valid contract is required, but may turn on whether the accused “should have known” of the contract).

another's property acts as its owner in dealing with a third party.²⁴² When the third party has notice that the ostensible owner is not the true owner, he is treated as a purchaser in bad faith.²⁴³ Likewise, a plaintiff only has an action for inducement of breach of contract against one who knows about the contract.²⁴⁴ Viewed through this lens, the basis for requiring notice is readily apparent: a negligence requirement for inducement of breach of contract is too costly and uncertain to be of much good, and an innocent third party's position is no better than that of the prior contracting party.²⁴⁵ But add in the element of notice of the contract, and the third party becomes akin to a bad faith purchaser of goods.²⁴⁶ Yet, although this view helps demonstrate that torts involving inducement of a violation of a legal construct should require a greater degree of fault than mere negligence, it does not indicate how much greater that degree should be—does recklessness suffice, for example, or is actual knowledge or purpose required? Furthermore, “knowledge” in the context of a contract, or ownership of physical property, is arguably much clearer than “knowledge” in the context of a patent. Distilled to its essence, then, attempting to draw upon ideas of intentional interference with contract would require us to import concepts that are themselves not the product of agreement and may involve consequences that are much more predictable than in the patent context. Nor do they help solve the overarching problems discussed above.

Ultimately, the fundamental problem with applying traditional tort concepts of intent, purpose or knowledge to the patent infringement context is that those concepts primarily focus on the factual consequences of a certain conduct, as opposed to the legal consequences. Furthermore, they typically involve factual consequences that are highly predictable: if A swings her fist at B, A can be substantially certain that she will strike B. But in patent law, the legal consequences of infringement are plainly undesirable, and the predictability of infringement is rarely so certain as it is in the world of intentional torts.

D. Courts' Discomfiture with State of Mind Inquiries in the Context of Patent Infringement

The preceding conceptual arguments are strengthened by the observation

242. Richard A. Epstein, *Inducement of Breach of Contract as a Problem of Ostensible Ownership*, 16 J. LEGAL STUD. 1, 2 (1987).

243. *See id.* at 24 (explaining that the third party purchaser gets priority only when she acts in good faith without notice of the prior contract).

244. *See id.* at 24–25 (noting that the good faith purchaser is protected from liability against the original owner).

245. *See id.* at 25 (arguing that society is generally better off if the innocent inducer of a breach of contract is not subject to a cause of action from the original promisee).

246. *See id.* at 24 (“[T]he subsequent taker gets priority only where he acts in good faith, that is, without notice of the prior contract.”).

that the jurisprudence reflects the courts' difficulty in directly applying the knowledge and purpose standards. These attempts have forced the Federal Circuit to develop workarounds and, ultimately, to move toward a risk-based standard.

The inducement of infringement jurisprudence reflects the difficulty of applying a true "knowledge" or "purpose" standard. For example, in *Water Technologies Corp. v. Calco*,²⁴⁷ the Federal Circuit concluded that despite a letter evidencing the accused indirect infringer's subjective belief that his composition did not infringe the patent, the objective evidence (such as the infringer's lack of an opinion of counsel supporting that belief) supported the jury's conclusion that such a belief was objectively unreasonable.²⁴⁸ Because the court articulated the fault inquiry as requiring "knowledge" of infringement, it was forced to apply the reasoning that intent could be "inferred from all of the circumstances"—despite those circumstances involving the objective validity of the accused infringer's belief, as opposed to whether he subjectively believed it was true.²⁴⁹

Global-Tech provides another example in which even the Supreme Court was unable to apply a conventional "knowledge" analysis to the facts before it.²⁵⁰ The accused infringer in the case, Pentalpha, purchased a SEB deep fryer in Hong Kong and copied "all but its cosmetic features."²⁵¹ It then hired an attorney to conduct a right-to-use study but did not tell him that it had based its product on SEB's product.²⁵² It subsequently sold its fryers to Sunbeam, which resold them (an act of direct infringement).²⁵³ The Supreme Court did not find that Global-Tech possessed knowledge of infringement; instead, it invoked a criminal law doctrine that had never before been applied to patent law.²⁵⁴

Courts' discomfort with a mental state-based view of fault is also apparent in their treatment of willful infringement, where they struggled

247. 850 F.2d 660, 7 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 1988).

248. *Id.* at 668–69, 7 U.S.P.Q.2d (BNA) at 1104.

249. *Id.* at 669, 7 U.S.P.Q.2d (BNA) at 1104. The practice of inferring from the circumstances is common when dealing with subjective questions of intent, and I do not contend that it is always a bad approach. The problem arises, however, when consequences are not easily predictable, as I argue is the case when dealing with questions of patent infringement.

250. *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2010).

251. *Id.* at 2064. It is worth noting that the SEB fryer was not marked with a U.S. patent number, a fact that the Court found did not excuse Pentalpha's behavior. *Id.* at 2071. (asserting that the company's CEO was well aware that U.S. patent markings do not typically appear on products made for sale overseas).

252. *Id.* at 2064.

253. *Id.*

254. A search of Westlaw's CTAF database, which contains the Federal Circuit's opinions, for the term "willful blindness" produced only one hit in a case involving patent law, *Aptix Corp. v. Quickturn Design Systems, Inc.*, 269 F.3d 1369 (Fed. Cir. 2001). Even that case did not directly apply the doctrine; rather, it merely mentioned the doctrine in dicta relating to a licensee's right to sue. *Id.* at 1382.

with a mens rea approach for years before the Federal Circuit decisively adopted an objective standard. Because courts couldn't quite make a mental state requirement work, they developed workarounds. For example, although many pre-Federal Circuit willful infringement opinions used "knowledge" as a basis for willful infringement, they typically limited that knowledge requirement to knowledge of the patent, as opposed to knowledge that the relevant conduct infringed.²⁵⁵ One possible explanation of this jurisprudence is that while merely being aware of a patent does not provide actual knowledge that particular conduct infringes, it nevertheless creates a high enough degree of risk that courts are comfortable to label the conduct willful infringement. Another example is that although it was commonly stated both before and after the creation of the Federal Circuit that "a bona fide and reasonable belief that a patent was invalid removes the infringement from the class designated as wanton and wil[l]ful,"²⁵⁶ the inverse is also true—an unreasonable belief does not preclude a finding of willful infringement.²⁵⁷ Yet in a pure "knowledge" world, an unreasonable belief should suffice—it is the accused party's state of mind that matters, after all, as opposed to what a reasonable person would think.

IV. AN OBJECTIVE VIEW OF FAULT SPECIFIC TO PATENT INFRINGEMENT

Thus far, I have argued that viewing fault in the traditional mens rea terms of tort law, as a question of purpose or knowledge, does not work in the context of patent infringement. But is there a better option? I suggest that there is, in the form of an objective analysis akin to civil recklessness. By applying this analysis—which can be precisely tailored to patent law—the law can move beyond the problematic paradigm of mens rea inquiries.

In my view, the correct way to understand fault in the context of indirect infringement is to see it as involving an objective inquiry, one that asks whether a high risk of infringing a valid patent would have been obvious to

255. See, e.g., *Milgo Elec. Corp. v. United Bus. Commc'ns, Inc.*, 623 F.2d 645, 666, 206 U.S.P.Q. (BNA) 481, 498 (10th Cir. 1980) (discussing the fact that UBC had copied its competitor's product but stating that it was its "subsequent knowledge of the existence of the patent" that ultimately led to the finding of willfulness); see also *Lam, Inc. v. Johns-Manville Corp.*, 668 F.2d 462, 475, 213 U.S.P.Q. (BNA) 1061, 1071 (10th Cir. 1982) (considering whether the infringer "knew or should have known of the other's patent protection").

256. *Cont'l Can Co. v. Anchor Hocking Glass Corp.*, 362 F.2d 123, 129, 150 U.S.P.Q. (BNA) 1, 6 (7th Cir. 1966) (quoting *Artmoore Co. v. Dayless Mfg. Co.*, 208 F.2d 1, 5, 99 U.S.P.Q. (BNA) 306, 309 (7th Cir. 1953)).

257. See *Novo Industri A/S v. Travenol Labs., Inc.*, 677 F.2d 1202, 1211, 215 U.S.P.Q. (BNA) 412, 419 (7th Cir. 1982) (finding that Travenol "had no bona fide belief or any reasonable basis for a bona fide belief that the Novo patent was invalid, unenforceable, or not infringed"); *Lam*, 668 F.2d at 475, 213 U.S.P.Q. (BNA) at 1071 (indicating that the court was "not impressed with the reasons counsel gave" in its "no infringement" opinion letter).

a person in the accused party's position. The greater the risk, the more likely it is that this fault element will be met; the lower the risk, the less likely. At one extreme are those who possess substantial certainty that their conduct will infringe a patent—the rare exception discussed above, such as the company that continues to engage in acts inducing a third party to engage in particular behavior despite a final judgment that the third party's behavior directly infringes a patent. At the other are those who would have no reason to suspect that a patent covering the relevant conduct exists.

Two characteristics define this analysis. First, the risk element is actor-centric, in that it is based on facts that the actor either knew of or should have known.²⁵⁸ This is consistent with the way recklessness is treated in the tort context. For example, recklessness, when applied to a claim of intentional infliction of emotional distress,²⁵⁹ includes facts such as the actor's knowledge of the victim's susceptibility to emotional distress.²⁶⁰ Furthermore, the analysis occurs at the time of the act, not at the time of the litigation.²⁶¹ For example, the Restatement (Second) of Torts defines recklessness as acting or failing to act "knowing or having reason to know of facts which would lead a reasonable man to realize, not only that his conduct creates an unreasonable risk of physical harm to another, but also that such risk is substantially greater than that which is necessary to make his conduct negligent,"²⁶² while the Restatement (Third) of Torts reaches the same result by requiring that the risk be one for which a "precaution that would eliminate or reduce the risk involves burdens that are so slight relative to the magnitude of the risk as to render the person's failure to adopt the precaution a demonstration of the person's indifference to the risk."²⁶³ In both articulations, it is the risk as perceived by a person in the actor's place that is relevant, not some abstract notion of risk held by an

258. RESTATEMENT (SECOND) OF TORTS § 500 cmt. a (1965). *See also* DOBBS ET AL., *supra* note 203, at 213–14 (recklessness looks at what "a reasonable person in the actor's place" would have been aware of); RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 2 (Proposed Final Draft 2005) (stating that a person acts recklessly if they know the risk of harm created by the conduct or know of facts that make the risk to another person obvious).

259. Despite the inclusion of "intentional" in its name, intentional infliction of emotional distress includes reckless infliction of emotional distress. *See* RESTATEMENT (SECOND) OF TORTS § 46 cmt. f (1965) (stating that knowledge of high risk can result in liability for outrageous conduct causing severe emotional distress).

260. RESTATEMENT (SECOND) OF TORTS § 46 cmt. f (1965).

261. Because patent infringement can be an ongoing tort, one would expect the degree of risk to be evaluated during the entire period of infringing conduct. Obviously, in some circumstances the risk from the accused infringer's point of view might be very low, such as when it lacks actual or constructive notice of the patent.

262. RESTATEMENT (SECOND) OF TORTS § 500 (1965).

263. RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 2 (Proposed Final Draft 2005). It bears repeating that knowledge of facts that make the risk obvious to another in the person's situation also suffices.

omniscient being.²⁶⁴ For example, consider A, who shoots a gun in the direction of B knowing that there is a live bullet in only one of the six chambers.²⁶⁵ That person would be acting in the face of an objectively high risk, regardless of the knowledge of C, the person who loaded the gun and placed the bullet in the chamber furthest away from the firing pin, or that of omniscient being G, who knows that the bullet is not in the firing chamber before A pulls the trigger. Nor would it matter that, after pulling the trigger, A learned that the bullet was not in the firing chamber.

Second, this test is tailored to patent infringement. The general tort view of recklessness is directed primarily at factual consequences and phrases the analysis in terms of “harm” and the precautions that could be taken to mitigate that harm.²⁶⁶ But the fundamental question of fault for indirect infringement relates to a single question: whether the relevant conduct infringes a patent.²⁶⁷ Furthermore, viewing the issue in terms of potential precautions is unnecessary. Taking any of the available precautions—such as changing product design or conducting an investigation into the infringement risk—will necessarily change the risk calculus.²⁶⁸ The simpler, and arguably better, approach is to just recognize that the risk involved in inducement and contributory infringement is the risk of infringement, and it must be high. This is not an abstract metric. Copying a patented product, for example, is a high-risk activity.²⁶⁹ Hiring employees who worked on a competitor’s product might similarly be a high-risk activity. In contrast, independently developing technology and verifying through infringement analyses that that technology is unrelated to any of a competitor’s patents would be a low risk activity.²⁷⁰

264. Cf. RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 1 illus. 5 (Proposed Final Draft 2005) (indicating that for intentional conduct, it is necessary that the actor herself possess the knowledge that a harm was substantially certain).

265. See, e.g., RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 2 cmt. e (Proposed Final Draft 2005) (positing that an airline without knowledge that its plane will crash may satisfy the recklessness standard but not the probability standard).

266. RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 2 (Proposed Final Draft 2005).

267. Note that although I have limited harm in this way, it is not the only way to conceive of the issue. One might instead posit that the concept of risk should not be limited to just the risk of infringement, but should also encompass the consequences that flow from that infringement. For example, the “harm” associated with infringing the patent of a non-practicing entity seems less, on some plane, than the “harm” associated with infringing the patent of a pharmaceutical company, thereby irrevocably changing the market for the relevant drug product. I leave this to future discussion, however.

268. Furthermore, part of the risk analysis involves whether or not a reasonable person would perceive the patent as valid. Although patents are entitled to a presumption of validity, this is only a presumption. In cases where there were strong factual indicia of invalidity, a reasonable person might conclude that a low risk of infringement existed because the patent was likely invalid.

269. See *infra* Part V.B (discussing the best way to determine risk).

270. One criticism of the recklessness approach to fault for inducement, raised by Professor Holbrook, is that it does not create a safe harbor for innocent inducers. Letter

V. APPLYING THE OBJECTIVE VIEW OF FAULT

Given the practical and theoretical basis for dispensing with the mental state inquiry and reframing the question of fault in terms of objective risk, the logical next step would be for the courts to explicitly adopt it in the context of indirect patent infringement.²⁷¹ In doing so, the problems associated with the poor fit of the current approach, discussed in Part III, would be reduced. Such a change would have the added benefit of allowing courts to hone in on the optimal deterrence level.

A. *Fine-Tuning Deterrence Through Risk*

As discussed earlier, indirect infringement serves a deterrence function in that it discourages parties from encouraging infringement. Several competing policy concerns drive this assessment, which is equally relevant whether dealing with contributory infringement or inducement.

The first set of concerns relates to over vs. under deterrence of infringing conduct. On one side of the equation is the concern is that too high of a fault standard (such as purpose or knowledge) will under-deter potential infringement because it encourages defendants to construct their behavior not to avoid causing infringement, but to avoid learning about it. Balanced against this is the concern that too low of a fault standard would over-deter innocent conduct. The extreme of this position—that inducement should require no fault at all with respect to whether conduct infringes a patent—

from Timothy Holbrook, Professor of Law, Emory University School of Law, to author (on file with author). Whether or not an inducer is innocent, however, is a matter of perspective. In my view, a party that engages in conduct that a reasonable person would view as involving a high risk of patent infringement—copying a competitor’s product that was marked with patent numbers, for example—should not be entitled to a “safe harbor.” Indeed, that is precisely the type of conduct that the inducement doctrine should be deterring.

271. Another criticism that could be leveled against the fault proposal discussed herein is that it results in inducement rendering the contributory infringement doctrine superfluous. See Brief for 41 Law, Economics, and Business Professors as Amici Curiae Supporting Petitioner, *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 458 (2010) (No. 10-6), 2010 WL 5069528, at *2–6 (arguing that the Federal Circuit’s decision in *SEB S.A. v. Montgomery Ward & Co.*, blurs the functions of the Patent Act). I don’t think it does. First, even if the fault elements with respect to infringement are identical, contributory infringement (where applicable) may be easier for the patent holder to establish because it does not require the patent holder to prove that the defendant intended the component to be used for the underlying acts—a not-insignificant point, given the outcome of *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469–70, 15 U.S.P.Q.2d (BNA) 1525, 1529 (Fed. Cir. 1990). Second, contributory infringement can be viewed as a subset of inducement of infringement—a narrower subset, but also a more clearly articulated one that, at the time it was enacted, was the most common form of inducement. In effect, Congress was defining circumstances that fell within the broad category of indirect infringement. In many ways, this is no different than a dependant patent claim, which is a subset of, but not rendered superfluous by, an independent patent claim. Cf. CHISUM, *supra* note 78, §17.04[3] (commenting that §§ 271(b) and (c) appear to have been written in the form of an independent and dependent claim, an unsurprising approach given the identity of the authors of the 1952 Patent Act).

has been subject to criticism on the grounds that it would “create a chilling effect on competition,” forcing the public to pay the price of reduced production and potentially higher prices.²⁷²

A second set of concerns relates to the appropriate allocation of information costs as between patent holders and potential infringers. Under a high fault requirement, virtually the entire burden for assessing whether conduct infringes a patent falls on the patent holder’s shoulders.²⁷³ Yet in many cases, a potential infringer may be in a better position to assess whether it is engaging in infringing conduct, and thus for policy reasons some of the informational burden should be placed on that entity.²⁷⁴ The other extreme, however, allocates the entire burden to the accused infringer—an undesirable approach that would impose heavy costs on even basic productive activities.²⁷⁵

Thus, the crux of the problem is that requiring knowledge or purpose under-deters infringing conduct, while a strict liability standard results in the deterrence of lawful, productive activities. The solution is to recognize that there is an intermediate option that allows for the precise calibration of the standard to achieve optimal deterrence.²⁷⁶

By applying an objective standard tied to a high risk of infringement, courts can set the deterrence effects to target activities that are highly likely to lead to infringement while avoiding penalizing conduct that is unlikely to lead to an infringement.

B. Assessing the Risk of Infringement

The crucial analysis thus becomes ascertaining the factors that go into determining whether there is a high risk of infringement relative to the precautions a potential infringer might take. I view it as a mistake to answer this question with strong pronouncements of law. While it is useful for courts—including the Federal Circuit—to recognize categories of

272. Holbrook, *supra* note 5, at 408.

273. Prior to *DSU*, Professor Oswald argued that adopting the *Manville* standard for inducement (requiring intent or knowledge of infringement) unfairly placed the burden of ascertaining infringement on the shoulders of the patentee, which she argued was contrary to the purpose of the patent law. Oswald, *supra* note 5, at 244–45.

274. For example, the copycat may be better situated to recognize a risk that it is infringing the patents marked on the copied product than the patent holder, who must invest non-trivial resources to even discover the potentially infringing product in the first place.

275. See *supra* Part III.B.

276. See also Thomas F. Cotter, *An Economic Analysis of Enhanced Damages and Attorney’s Fees for Willful Patent Infringement*, 14 FED. CIR. B.J. 291, 314 (2004) (discussing deterrence in the context of willfulness). Although Professor Cotter’s analysis was performed in the context of the pre-*Seagate* duty to obtain an opinion of counsel, and its conclusions are directed to that issue, his discussion of under-deterrence and over-deterrence is still relevant today. *Id.* at 315–26.

relevant evidence, Federal Circuit opinions tend to be quick to invoke statements of law. Such black and white assertions are inherently dangerous, as discussed below in Part V.C. I also suggest, however, that it is useful to look across doctrines when common fault issues are involved. Particularly relevant to this question posed in this Article is the common fault element shared by inducement of infringement, willful infringement, and contributory infringement. Given that the underlying question involved in all three doctrines is essentially the same, it makes sense to recognize that the same evidence is relevant to an assessment of whether an accused infringer possessed the requisite fault, regardless of the specific doctrine.

Some risk factors are readily apparent, such as copying. One clearly runs a significantly higher risk of patent infringement when copying another's product—especially if it is marked with patent numbers. Likewise, the risk may also consider the duration of misconduct, receipt of a notice letter, the content of the notice letter, and action taken by the defendant upon receiving the notice letter. Internal emails from company employees identifying the risk may also provide evidence that the risk was indeed an objectively high one.²⁷⁷ High-risk conduct may also include that of a former patent licensee who continues to engage in conduct covered by a license despite its termination.²⁷⁸ Other relevant factors may be subject to further development and discussion. Some will support a finding of high risk; others will suggest the opposite.²⁷⁹

C. *Avoiding the Trap of Omniscience*

Although I suggest that the law should look to willful infringement when attempting to identify factors that may be relevant to determining the risk of infringement, I do not advocate a wholesale adoption of the willfulness approach. This may at first seem somewhat surprising. The problem lies

277. See *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 860, 93 U.S.P.Q.2d (BNA) 1943, 1965 (Fed. Cir. 2010) (noting that the jury saw e-mails between Microsoft employees citing the '449 patent, upon which the jury could have reasonably inferred that Microsoft knew about the patent), *aff'd on other grounds*, 131 S. Ct. 2238 (2011).

278. See *Insituform Tech., Inc. v. CAT Contracting, Inc.*, 385 F.3d 1360, 1378, 72 U.S.P.Q.2d (BNA) 1870, 1885 (Fed. Cir. 2004) (stating that the district court had found that defendants had instructed their licensees in 1992 to use an infringing patent, after the defendants' use of the infringing patent had terminated in 1991).

279. One additional benefit of the approach to fault for indirect infringement discussed herein is that, because it focuses on the risk-causing activities as opposed to requiring an assessment of whether the accused party knew that the third party conduct met all the limitations of a particular patent claim, it could potentially result in a reduction of administrative costs. Because the risk-causing activities would essentially provide a proxy for the infringement assessment itself, for purposes of the fault element, courts would need to only ascertain whether the accused party's acts were those types of acts that are typically considered "high risk" with respect to infringement, as opposed to the detailed, complex, and often technology-specific inquiry required under the "knowledge" standard.

in the way the Federal Circuit has applied the objective recklessness standard to willful infringement: it has fallen into the trap of omniscience, treating the objective inquiry as if it is made with respect to a being with knowledge of everything, as opposed to a person in the accused party's position.

In the willfulness context, the Federal Circuit (despite appearing to adopt an objective recklessness standard) has shifted far from engaging in an actor-centric analysis of risk—a key component of the recklessness inquiry. *In re Seagate Technologies, LLC* is a particularly significant case in the evolution of the willful infringement doctrine over the last two decades. As discussed above in Part II.B, in *Seagate* the Federal Circuit explicitly adopted an objective recklessness standard for the knowledge-of-infringement component.²⁸⁰ With respect to the question of infringement, “a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent.”²⁸¹ Then, “the patentee must also demonstrate that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer.”²⁸² In selecting this standard, the court explicitly indicated it was seeking to adopt a civil recklessness standard.²⁸³

Notwithstanding this apparent adoption of a recklessness standard, the Federal Circuit's measure of whether there is a high risk currently turns on one question: whether the defenses presented by the accused infringer during the litigation were reasonable.²⁸⁴ Thus willfulness turns not on an

280. *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371, 83 U.S.P.Q.2d (BNA) 1865, 1870–71 (Fed. Cir. 2007).

281. *Id.*, 83 U.S.P.Q.2d (BNA) at 1870.

282. *Id.*, 83 U.S.P.Q.2d (BNA) at 1870. The Federal Circuit has characterized the first part of the recklessness test as an “objective inquiry,” *id.*, 83 U.S.P.Q.2d (BNA) at 1870, and the second part as “subjective,” *see* *i4i Ltd. P'ship v. Microsoft Corp*, 598 F.3d 831, 860, 93 U.S.P.Q.2d (BNA) 1943, 1965 (Fed. Cir. 2010) (referring to the second prong as the “subjective prong of *Seagate*”), *aff'd on other grounds*, 131 S. Ct. 2238 (2011). This characterization is inaccurate, as a “should have” standard is an objective standard. Indeed, the Federal Circuit's explicit adoption of a civil recklessness standard, *see Seagate*, 497 F.3d at 1371, 83 U.S.P.Q.2d (BNA) at 1870, cements this conclusion.

283. One deviation from the standard approach to recklessness is the Federal Circuit's characterization of the first prong as a “threshold” prong. Neither the *Safeco* case that the Federal Circuit cited, nor standard tort treatises, characterize this as a “subjective” prong. Rather, recklessness is simply a two-element test, where both elements must be proven. It seems unlikely that the Federal Circuit was attempting to articulate a new recklessness standard, at least initially. Rather, it may have been simply trying to point out to district courts that they need not address both elements in disposing of willful infringement claims. *Cf. Seagate*, 497 F.3d at 1384, 83 U.S.P.Q.2d (BNA) 1865, 1880 (Gajarasa, J., concurring) (“*Seagate's* subjective beliefs may become relevant only if *Convolve* successfully makes this showing of objective unreasonableness.”).

284. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1337, 90 U.S.P.Q.2d (BNA) 1865, 1881 (Fed. Cir. 2009) (“The jury could have reasonably found for

evaluation of the risk of infringement at the time the infringement occurred, but on a post-hoc analysis of whether or not an omniscient accused infringer would have recognized that it had a viable defense. Indeed, several of the court's opinions suggest that the risk should be evaluated based on the defenses presented during litigation—not the defenses the accused party developed prior to the litigation's commencement, cementing the apparent omniscience of accused infringers.²⁸⁵ While these cases cite and quote from *Seagate*, their approach to recklessness is divorced from traditional tort principles.²⁸⁶ For example, in *DePuy Spine, Inc. v. Medtronic Sofamore Danek, Inc.*,²⁸⁷ the Federal Circuit affirmed a district court's grant of JMOL of no willful infringement.²⁸⁸ In its appeal, DePuy argued that the jury could have found that Medtronic copied the invention directly out of its patent, and this was evidence of willfulness.²⁸⁹ The Federal Circuit disagreed that this was relevant, concluding that "knowingly copying" bears only on the second prong of the recklessness inquiry, not on the objectively defined risk.²⁹⁰ Yet, as discussed above,

either party on the question of equivalence . . . [a]ccordingly, the district court was correct to rule on JMOL that an objectively high likelihood of infringement could not have been found under *Seagate*'s first prong."); *Cohesive Tech., Inc. v. Waters Corp.*, 543 F.3d 1351, 1374, 88 U.S.P.Q.2d (BNA) 1903, 1918 (Fed. Cir. 2008) ("Because 'rigid' was susceptible to a reasonable construction under which Waters's products did not infringe, there was not an objectively high likelihood that Waters's actions constituted infringement."); *see also Black & Decker, Inc. v. Robert Bosch Tool Corp.*, 260 Fed. Appx. 284, 291 (Fed. Cir. 2008) ("Under this objective standard, both legitimate defenses to infringement claims and credible invalidity arguments demonstrate the lack of an objectively high likelihood that a party took actions constituting infringement of a valid patent."); *cf. i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 860, 93 U.S.P.Q.2d (BNA) 1943, 1965 (Fed. Cir. 2010) (holding that the jury did not err in expressly rejecting Microsoft's several defenses at trial, including noninfringement and invalidity, and in finding willfulness and infringement in the '449 patent), *aff'd on other grounds*, 131 S. Ct. 2238 (2011); *Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319, 96 U.S.P.Q.2d (BNA) 1640, 1651 (Fed. Cir. 2010) (discussing the defendant's argument that its defenses were reasonable). The court's emerging doctrine of objective baselessness in the context of attorneys' fee petitions (which the court has indicated mirrors the willfulness analysis) suggests that the court continues to view willfulness in this light. *See Old Reliable Wholesale, Inc. v. Cornell Corp.*, 635 F.3d 539, 544 (Fed. Cir. 2011) ("Unless an argument or claim asserted in the course of litigation is 'so unreasonable that no reasonable litigant could believe it would succeed,' it cannot be deemed objectively baseless for purposes of awarding attorney fees under section 285.>").

285. For example, the Federal Circuit's opinion in *DePuy* does not discuss whether the accused infringer was actually aware of the equivalence issue. *DePuy*, 567 F.3d 1314, 90 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2009).

286. *See* Ronald James Schutz & Brenda L. Joly, *Proving Willful Infringement Post-Seagate: Don't Divorce the Willfulness Analysis from its Tort Foundations as an Intent Inquiry*, 10 SEDONA CONF. J. 187, 190 (2009) (rebutting the sense that some statements in *Seagate* indicate the court's willingness to consider any reasonable defenses to preclude willfulness by referencing the traditional meaning of willfulness in tort law).

287. 567 F.3d at 1314, 90 U.S.P.Q.2d (BNA) at 1865.

288. *Id.* at 1337, 90 U.S.P.Q.2d (BNA) at 1881.

289. *Id.* at 1336, 90 U.S.P.Q.2d (BNA) at 1880 ("[T]o DePuy, knowingly copying a competitor's patented invention is objectively risky behavior of the highest order.>").

290. *Id.*, 90 U.S.P.Q.2d (BNA) at 1880 ("Accordingly, evidence of copying in a case of

copying is a behavior that, at a minimum, creates a significant risk of infringement!

Rather than pursue this approach, which bears no connection to broader notions of recklessness, or common sense, the court should instead re-ground its analysis in an actor-centric view of risk. In addition to tort principles, the court should return to requiring a risk-based analysis that depends solely on the existence, or lack thereof, of a non-frivolous defense. In doing so, the court can readily draw both on the other doctrines discussed herein as well as pre-*Seagate* cases on willful infringement, whose facts identify risky behavior. For example, whether or not an infringer copied the ideas or design of a patent has long been one of the relevant factors of the willfulness analysis.²⁹¹ Indeed, some scholars argue that it is the purpose of the willful infringement doctrine,²⁹² and as discussed in *Global-Tech*, copying *is* relevant when assessing whether there was a high risk of infringement. The goal of the recklessness analysis should be to recognize that there are an array of facts that may have bearing on whether or not there was a high degree of risk at the beginning of, and at all points during, the infringement. Likewise, practitioners and commentators both should strive to identify relevant factors to broaden the understanding of this issue. For example, it may be useful to look to the *Read* “totality of the circumstances” factors for enhancing damages to identify factors for assessing the two prongs of reckless patent infringement.²⁹³ While these factors are not controlling—the “totality of the circumstances” is largely a concept that has been used to determine whether increased damages are warranted *after* a finding of willful

direct infringement is relevant only to *Seagate*'s second prong, as it may show what the accused infringer knew or should have known about the likelihood of its infringement.”).

291. See, e.g., *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1582, 12 U.S.P.Q.2d (BNA) 1026, 1032 (Fed. Cir. 1989) (“[c]opying is evidence of willful infringement”); *Milgo Elec. Corp. v. United Bus. Commc'ns, Inc.*, 623 F.2d 645, 666, 206 U.S.P.Q. (BNA) 481, 498 (10th Cir. 1980) (holding that copying is evidence of willful infringement); *Leesona Corp. v. United States*, No. 130–70, 1978 WL 14862, at *20, 198 U.S.P.Q. (BNA) 4, 23 (Ct. Cl. May 1, 1978) (“Where the defendant has knowledge of and copies plaintiff's patented device, infringement of the patent is willful and wanton.”).

292. See Lemley & Tangri, *supra* note 181, at 1118 (“Willfulness law is designed to deter unscrupulous copyists from taking advantage of the patent disclosure in order to copy the patentee's invention and rush it to market.”); see also Mark A. Lemley, *Should Patent Infringement Require Proof of Copying?*, 105 MICH. L. REV. 1525, 1533 (2007) (arguing that willful infringement should be defined instead as copying the technology from the patent owner).

293. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826–27, 23 U.S.P.Q.2d (BNA) 1426, 1435–36 (Fed. Cir. 1992). For examples of commentators looking to *Read*, see Danny Prati, *In re Seagate Technology LLC: A Clean Slate for Willfulness*, 23 BERKELEY TECH. L.J. 47, 66–70 (looking to the *Read* totality factors to shed light on willfulness); Kenneth R. Adamo et al., *The Curse of “Copying”*, 7 J. MARSHALL REV. INTELL. PROP. L. 296, 301 (2008) (drawing upon the *Read* totality factors to argue that copying should be relevant to willful infringement).

infringement has already been made²⁹⁴—and not all of them are relevant to the question of fault,²⁹⁵ they do provide fodder for ideas and allow for a more rigorous analysis.

D. An Objective Approach Conforms With the Normative Reality

The right way to understand fault in the context of indirect and willful infringement is through an objective measure of risk, finding that fault is present when the risk is high and obvious, and absent when the risk is either low or not readily apparent. Irrespective of whether there is common agreement on this issue, however, I suspect that it reflects the normative reality of what is really going on when courts, judges, and juries are making their assessments. In addition to the discussion in Part III.D., which suggests that courts aren't really applying a purpose or knowledge standard, a few additional cases illustrate this point.

Perhaps the most significant example is *Aro Manufacturing Co. v. Convertible Top Replacement Co.*²⁹⁶ Despite the formal adoption of a “knowledge” standard, the facts of *Aro* suggest that an obvious high risk is enough to satisfy the fault requirement.²⁹⁷ In *Aro*, the defendant’s “knowledge” that the conduct infringed was based on a letter from the patent holder informing the defendant of the patent and stating that it was “obvious” that their use would infringe the patent.²⁹⁸ Receiving a letter from a competitor proclaiming the obviousness of infringement seems like thin grounds on which to base the conclusion of “substantial certainty” of infringement. Added to this was a dispute over whether the underlying

294. See *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 858–59, 93 U.S.P.Q.2d (BNA) 1943, 1963–64 (Fed. Cir. 2010) (stating that *Read* sets forth the factors for enhancing damages after a finding of willfulness is made), *aff’d on other grounds*, 131 S. Ct. 2238 (2011). The *i4i* opinion notwithstanding, numerous Federal Circuit opinions, including the en banc court’s in *Seagate*, referenced the totality of the circumstances analysis as applying to willful infringement. See, e.g., *Acco Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1311–12, 84 U.S.P.Q.2d (BNA) 1267, 1270 (Fed. Cir. 2007) (“Willful infringement must be proven by clear and convincing evidence and is determined from the totality of circumstances.”); *In re Seagate Tech., LLC*, 497 F.3d 1360, 1369, 83 U.S.P.Q.2d (BNA) 1865, 1869 (Fed. Cir. 2007) (“Over time, our cases evolved to evaluate willfulness and its duty of due care under the totality of the circumstances, and we enumerated factors informing the inquiry.”); *Imonex Servs., Inc. v. W.H. Munzprufer Dietmar Trenner GMBH*, 408 F.3d 1374, 1377, 74 U.S.P.Q.2d (BNA) 1936, 1939 (Fed. Cir. 2005) (referencing the *Read* factors in the context of a willfulness determination).

295. Indeed, some of the *Read* factors have no relevance to either the degree of risk or the accused infringer’s awareness of that risk. See Prati, *supra* note 293, at 67 (indicating that the “behavior in litigation” and “motivation for harm” factors have no relevance to either prong).

296. 377 U.S. 476, 141 U.S.P.Q. (BNA) 681 (1964).

297. See *id.* at 487–88, 141 U.S.P.Q. (BNA) at 686 (finding that *Aro*’s infringing conduct fits “perfectly” within the language of § 271(c), prohibiting the sale of patented material).

298. *Id.* at 488–90, 141 U.S.P.Q. (BNA) at 687–88.

conduct constituted direct infringement at all,²⁹⁹ casting further doubt on the existence of virtual certainty on the defendant's part. Instead, the true measure in *Aro* seems to be the existence of a high probability of infringement, not certainty of that conclusion.

Inducement determinations also reflect this normative reality. Take, for example, *i4i v. Microsoft*, in which the recited facts may suggest a high risk that the use of Microsoft's editor would infringe a specific patent but not necessarily near certainty.³⁰⁰ In *i4i*, the evidence established that the development team heard a presentation by i4i about software practicing i4i's patent, and that other Microsoft employees received a marketing e-mail from i4i containing the patent number, were "familiar" with i4i's products, and believed that Microsoft Word's custom XML editor would render i4i's product "obsolete."³⁰¹ Evidence of a risk that Microsoft's own XML editor might infringe i4i's patent? Yes. Evidence that it was virtually certain to infringe? No, at least on the facts described in the opinion.

E. Inducement and Contributory Infringement Are Necessarily Willful

One final impact of this approach that should be noted is that findings of contributory infringement and inducement of infringement necessarily lead to findings of willful infringement.³⁰² While on the surface this result may seem somewhat odd,³⁰³ deeper inspection reveals that it is not. All three doctrines are premised around the concept that the law should deter and punish those who infringe (or cause others to infringe) a patent despite some degree of fault that the conduct infringes.³⁰⁴ Furthermore, while one might suggest that willfulness should require a higher degree of mental culpability, or contributory infringement and inducement a lower degree, neither is practical for the reasons already discussed. Indeed, in many instances, although analyzing the issue separately, courts have held that

299. *Id.* at 484–85, 141 U.S.P.Q. (BNA) at 685. In addition, the Court barely agreed on whether the defendant met its knowledge standard, arriving at a 5–4 majority in favor that it did.

300. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 851–52, 93 U.S.P.Q.2d (BNA) 1943, 1958–59 (Fed. Cir. 2010), *aff'd on other grounds*, 131 S. Ct. 2238 (2011).

301. *Id.* at 851, 93 U.S.P.Q.2d (BNA) at 1958.

302. *See* Lemley, *supra* note 5, at 240 n.70 (arguing that under the *Manville* standard, inducement will always be willful); Rader, *supra* note 5, at 331 (noting that Federal Circuit precedent holds that liability for inducement does not have to rise to the level of willful infringement).

303. *See* Rader, *supra* note 5, at 331 (arguing that adoption of the *Hewlett-Packard* standard for inducement is necessary because it maintains the distinction between inducement and willful infringement).

304. *See* Holbrook, *supra* note 5, at 410 (arguing that the doctrines are aimed at determining whether a party is morally culpable and whether the party should be punished by the courts).

contributory infringement and inducement of infringement can constitute willful infringement.³⁰⁵ The more anomalous results are those where inducement is found to *not* constitute willful infringement.³⁰⁶ There is no reason why inducement—where a party causes another to engage in infringing conduct despite knowing that the conduct infringes—should not constitute willful infringement.

CONCLUSION

The purpose of this Article has been to explain why the conventional approach to inducement and contributory infringement, which sees them as a form of intentional tort complete with mental state inquiry, is inherently problematic. In essence, I suggest that rather than continue to view the fault elements of these doctrines as an individual question of subjective knowledge or intent, the better approach is to recognize the inquiry for what it is: an objective evaluation of whether a high risk of patent infringement would have been obvious to another in the accused party's position. The use of this test seems not only to capture the normative standard actually being applied by courts, but also can serve a valuable role in obtaining the optimal level of deterrence of infringement-causing behavior.

305. See, e.g., *i4i Ltd. P'ship*, 598 F.3d at 851–52, 860, 93 U.S.P.Q.2d (BNA) at 1965 (affirming findings of contributory infringement, inducement, and willfulness), *aff'd on other grounds*, 131 S. Ct. 2238 (2011).

306. See, e.g., *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1381, 93 U.S.P.Q.2d (BNA) 1617, 1631 (Fed. Cir. 2010) (declining to find willfulness as a matter of law despite finding inducement), *aff'd sub nom.*, *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011). The Court did not address this issue in *Global-Tech*. Ultimately, however, given the Supreme Court's holding in *Global-Tech* that inducement requires a finding of knowledge of infringement, the continuation of the Federal Circuit's practice of affirming inducement but not willful infringement seems on especially shaky ground. Note that having an independent doctrine of willful infringement remains important, as it is relevant to direct infringement.