David O. Taylor*

Several recent judicial opinions suggest that patent law's inequitable conduct doctrine is broken. These opinions indicate that—despite its admirable objective of encouraging disclosure of important information to the Patent Office-the inequitable conduct defense is being overused by alleged infringers in patent litigation to the detriment of the public. This overuse creates problems. First, it encourages overdisclosure of information to the Patent Office. In extreme cases, overdisclosure makes it difficult for patent examiners to identify information critical to deciding whether to issue patents, potentially resulting in the issuance of invalid patents. Second, overuse of the inequitable conduct defense unnecessarily increases costs associated with enforcement of patents. Costs to inventors, to the court system, and ultimately to the public itself all increase dramatically with each allegation of inequitable conduct. These problems with the inequitable conduct doctrine threaten the very purpose articulated in the patent clause in the Constitution—the promotion of the progress of science and useful arts. This Article analyzes the inequitable conduct doctrine and proposes a reform that would alleviate its present problems. "Patent fraud" should replace the current doctrine of inequitable conduct.

TABLE OF CONTENTS

I.	INTRODUCTION	51
II.	THE CURRENT LAW GOVERNING THE INEQUITABLE CONDUCT DEFENSE	52
	A. Information Asymmetry at the Patent Office	53
	B. The Duty of Candor and Good Faith	55
	C. The Inequitable Conduct Defense	57
	1. Evidentiary Standard for Proving Inequitable Conduct	58
	a. Materiality Required to Prove Inequitable Conduct	58
	b. State of Mind Required for Inequitable Conduct	59
	c. Lesser Degrees of Materiality or Intent May Be	
	Sufficient—Balancing Materiality and State of Mind	60
	2. Remedies for Inequitable Conduct	62
III.	PROBLEMS WITH THE CURRENT LAW GOVERNING THE INEQUITABLE CONDUCT	
	Defense	62
	A. The "Plague" of Allegations	63
	B. The Tolls of Allegations	65

^{*} J.D., 2003, Harvard Law School; B.S., Mechanical Engineering, 1999, Texas A&M University. I thank Xuan-Thao Nguyen, Professor of Law at the Dedman School of Law at Southern Methodist University, for her encouragement to write this Article, and Ned Snow, Professor of Law at the University of Arkansas School of Law, for his comments on early drafts. My wife Rachel deserves the most thanks for indulging me in this adventure. The views expressed in this Article, as well as any errors, are my own.

	С.	Recent Opinions Criticizing the Current Law Governing the	
		Defense	
		1. McKesson Information Solutions, Inc. v. Bridge Medical, Inc.	
		2. Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc.	. 66
		3. Larson Manufacturing Co. of South Dakota v. Aluminart	
		Products Ltd.	
	_	4. Exergen Corp. v. Wal-Mart Stores, Inc.	
IV.		FORMING THE INEQUITABLE CONDUCT DEFENSE	
	А.	A New Paradigm: "Patent Fraud"	
		1. Evidentiary Standard for Proving <i>Walker Process</i> Fraud	
		2. Materiality Required to Prove <i>Walker Process</i> Fraud	
		3. State of Mind Required to Prove <i>Walker Process</i> Fraud	. 76
		4. Lesser Showings of Materiality or Intent Are Not Sufficient—	
		No Balancing of Materiality and State of Mind	. 77
		5. Benefits of Adopting the Walker Process Materiality and	
		State of Mind Thresholds	. 77
	В.	Making It More Difficult to Infer Intent to Deceive	. 79
		1. Inequitable Conduct as Distinct from Fraud	. 80
		2. Increasing the State of Mind Standard for Inequitable	
		Conduct	. 81
	С.	Alternative Reforms	. 84
		1. Returning Discretion to the Application of Remedies	. 84
		2. Adopting a "Negligent Misrepresentation/Omission"	
		Defense (Or Not)	. 85
		3. Adopting a Preponderance Invalidity Standard for	
		Undisclosed and Unconsidered Material Prior Art	. 86
		4. Shifting Attorney Fees	. 89
		5. Professional Certifications	
		6. Administrative Review	
V.	Імр	PLEMENTING APPROPRIATE REFORMS: WHO SHOULD ACT?	
	А.	Congress	
	В.	Patent Office	
	С.	District Courts	
	D.	Federal Circuit	
	Б.	Supreme Court	
VI.		vclusion	
		1	
AFFE		ure 1: Ordering Materiality and State of Mind and Identifying	100
	гıg		100
	F !	Thresholds	100
	гıg	ure 2: Balancing Materiality and State of Mind and Proposing	104
		Proportional Remedies	101

50

I. INTRODUCTION

When inventors fail to provide relevant information to the Patent Office, they may be barred from enforcing their patent in court. Specifically, accused infringers may assert the defense of inequitable conduct to a patentee's enforcement claim. The specter of this defense encourages inventors to disclose information to the Patent Office. Yet its overuse creates numerous problems. It leads to overdisclosure of information, often causing critical information to be hidden like a needle in a haystack; patent examiners at the Patent Office waste time filtering through unimportant information and—in the worst case scenario—altogether overlook critical information, allowing invalid patents to issue. In addition, each allegation of inequitable conduct increases the cost of litigation on both parties and courts, distracts the trier of fact from the merits of other issues like infringement and validity, and takes a serious toll on the reputation of inventors, patent attorneys, and the patent system itself. In short, the Constitutional purpose of patents—"[t]o promote the Progress of Science and useful Arts"1—is thwarted while the costs to the public pile up.

Reformation of the inequitable conduct doctrine to address and correct these problems is long overdue. Several recent judicial opinions suggest that patent law's inequitable conduct doctrine is broken.² Congress currently is considering the first significant reform to the patent laws in over fifty-five years, and the Supreme Court has heard only five cases even remotely related to the inequitable conduct doctrine in the last seventy-five years—the last one forty-five years ago.³

The time has come to reform the inequitable conduct defense. This year an en banc panel of the Federal Circuit will be reassessing its precedent governing the inequitable conduct defense.⁴ This Article analyzes the purposes of the inequitable conduct defense, studies the problems associated with enforcing it in its current form, sets forth various proposals to reform the inequitable conduct defense, and

^{1.} U.S. CONST. art. 1. § 8, cl. 8.

^{2.} *See* Larson Mfg. Co. of S.D., Inc. v. Aluminart Prods. Ltd., 559 F.3d 1317, 1342–44 (Fed. Cir. 2009) (Linn, J., concurring) (discussing problems with deceptive intent test); Aventis Pharma S.A. v. Amphastar Pharms., Inc., 525 F.3d 1334, 1349–53 (Fed. Cir. 2008) (Rader, J., dissenting) (criticizing overly broad use of deceptive intent test); McKesson Info. Solutions, Inc. v. Bridge Med., Inc., 487 F.3d 897, 926–27 (Fed. Cir. 2007) (Newman, J., dissenting) (criticizing majority for finding deceptive intent without clear and convincing evidence); Ferring B.V. v. Barr Labs., Inc., 437 F.3d 1181, 1195–1205 (Fed. Cir. 2006) (Newman, J., dissenting) (discussing need for objective standard when determining deceptive intent).

^{3.} *See* Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172, 175–80 (1965) (discussing whether fraud in patent procurement can constitute violation of section 2 of Sherman Act); Kingsland v. Dorsey, 338 U.S. 318, 318–20 (1949) (per curiam) (discussing whether patent attorney committed gross misconduct); Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 814–20 (1945) (discussing whether plaintiff in patent case had unclean hands as it knew of alleged fraudulent misrepresentations in defendant's patent application); Hazel-Atlas Glass Co. v. Hartford-Empire Co., 322 U.S. 238, 244–51 (1944) (deciding whether circuit court had power to overturn district court judgment after evidence of fraud surfaced), *overruled on other grounds by* Standard Oil Co. v. United States, 429 U.S. 17, 18–19 (1976); Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 244–47 (1933) (discussing scope of clean hands doctrine in patent cases).

^{4.} See Therasense, Inc. v. Becton, Dickinson & Co., 374 Fed. Appx. 35, 35–36 (Fed. Cir. 2010) (per curiam) (granting en banc rehearing).

suggests that any reform should refocus the inequitable conduct defense on what could be called "patent fraud."⁵

Part II of this Article considers the issue of information asymmetry between patent applicants and the Patent Office and two of patent law's responses to that problem—the duty of candor and good faith and the inequitable conduct defense. Part III presents various problems associated with the current law governing the inequitable conduct defense—including the "plague" of allegations and the tolls of those allegations—and examines several recent opinions highlighting these problems. Part IV proposes and analyzes significant reforms to the inequitable conduct defense, including focusing on the prevention of "patent fraud" by utilizing heightened evidentiary thresholds. Part V examines the ability and appropriateness of Congress, the Patent Office, district courts, the Court of Appeals for the Federal Circuit, and the Supreme Court to adopt various reforms to the inequitable conduct defense.

II. THE CURRENT LAW GOVERNING THE INEQUITABLE CONDUCT DEFENSE

In light of the information asymmetry between patent applicants and the Patent Office, the Patent Office and the courts have placed on patent applicants a duty of candor and good faith in dealing with the Office. One mechanism to enforce this duty of candor and good faith—and, thus, to correct for the information asymmetry between patent applicants and the Patent Office—is the defense of inequitable conduct, which can be alleged in litigation in response to a charge of patent infringement.⁶

^{5.} See *infra* Part IV.A for a discussion of the meaning of "patent fraud," which I use to refer to a new defense to a charge of patent infringement—a modified version of the current inequitable conduct defense—that requires, inter alia, knowledge or intent regarding a highly material misrepresentation or omission. The phrase "patent fraud," however, is not new. *See, e.g.*, Colortronic Reinhard & Co. v. Plastic Controls, Inc., 496 F. Supp. 259, 260 n.1 (D. Mass. 1980) (noting that in certain circumstances a patent applicant may commit "patent fraud (pun intended)"), *aff'd in part*, 668 F.2d 1 (1st Cir. 1981).

^{6.} Other mechanisms to enforce the duty of candor and good faith through litigation include claims brought under the Racketeer Influenced and Corrupt Organizations Act ("RICO"), 18 U.S.C. §§ 1961-68 (2006), administrative proceedings brought by the Federal Trade Commission under the Federal Trade Commission Act, 15 U.S.C. §§ 41-58 (2006), and state tort law claims, such as unfair competition and tortuous interference with contractual relations. See, e.g., Hunter Douglas, Inc. v. Harmonic Design, Inc., 153 F.3d 1318, 1334-37 (Fed. Cir. 1998) (allowing state law claim of unfair competition to proceed even where underlying cause of action involved alleged invalidity of patent), overruled on other grounds, Midwest Indus., Inc. v. Karavan Trailers, Inc., 175 F.3d 1356, 1358-59 (Fed. Cir. 1999); Dow Chem. Co. v. Exxon Corp., 139 F.3d 1470, 1473-79 (Fed Cir. 1998) (allowing plaintiff to litigate claim for intentional interference with contractual relations insofar as claim involved inequitable conduct relating to underlying patent); Litton Indus. Prods., Inc. v. Solid State Sys. Corp., 755 F.2d 158, 167 (Fed. Cir. 1985) (noting that section 5 of Federal Trade Commission Act may apply to claims involving inequitable conduct in patent procurement); Lemelson v. Wang Labs., Inc., 874 F. Supp. 430, 432-34 (D. Mass. 1994) (allowing RICO claim to be asserted against party who extorted settlements through pattern of litigation based on fraudulently obtained patents). Outside of litigation, the Patent Office has the ability to enforce the duty of candor and good faith through disciplinary proceedings against registered patent attorneys and patent agents. E.g., Kingsland, 338 U.S. at 318-20; Klein v. Peterson, 866 F.2d 412, 416-17 (Fed. Cir. 1989); Jaskiewicz v. Mossinghoff, 822 F.2d 1053, 1059-61 (Fed. Cir. 1987).

A. Information Asymmetry at the Patent Office

Information asymmetry exists between patent applicants⁷ and the Patent Office. At first blush this may not be apparent, in part due to the vast number of patent applications handled by the Patent Office each year. The reality, however, is that patent applicants often possess more and better information concerning their own entitlements to patents than the Patent Office.⁸

On the one hand, by their very nature, patent applications often—but certainly not always⁹—disclose cutting-edge technology on the forefront of scientific exploration and engineering innovation.¹⁰ On the other hand, "there is nothing new under the sun."¹¹ Indeed, "[m]ost inventions arise from a combination of old elements and each element may often be found in the prior art."¹²

Patent applicants—particularly inventors—undoubtedly have the best knowledge and understanding of their own inventions. They have better information regarding their own date of invention,¹³ circumstances that might bar their own entitlement to a patent,¹⁴ and the completeness and accuracy of information submitted to the Patent Office in support of arguments for patentability. They have information regarding sales of products and publications of industry articles that predate their invention and on which their inventions

10. *See, e.g.*, U.S. Patent No. 1,647 (filed Apr. 7, 1838) (Samuel Morse's patent on the telegraph); U.S. Patent No. 223,898 (filed Nov. 4, 1879) (Thomas Edison's patent on the incandescent light bulb).

11. Ecclesiastes 1:9.

12. In re Kahn, 441 F.3d 977, 986 (Fed. Cir. 2006).

13. Identifying the date of invention in any particular case may depend on various factors including: (1) the date of conception; (2) the date the invention was "reduced to practice" either actually (building a working device) or constructively (filing a patent application describing the invention); (3) any diligence between the date of conception and the date the invention was "reduced to practice"; and (4) corroboration of the foregoing. *See* Thomas L. Irving & Stacy D. Lewis, *Proving a Date of Invention and Infringement After GATT/TRIPS*, 22 AIPLA Q.J. 309, 325–31 (1994) (discussing factors underlying determination of date of invention and who was first to invent).

14. An inventor's right to a patent is barred when "the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b) (2006). While the Patent Office is the repository for U.S. patents, the ability of a patent examiner to find every U.S. and foreign patent, let alone every printed publication, is unlikely. Furthermore, knowledge regarding possible barring activities in the form of public uses and sales is particularly unique to patent applicants.

2010]

^{7.} As used herein, patent applicant refers to any person subject to the duty of candor and good faith. The Patent Office applies the duty of candor and good faith to "[e]ach individual associated with the filing and prosecution of a patent application." 37 C.F.R. § 1.56 (2009).

^{8.} Abbott Labs. v. Sandoz, Inc., 544 F.3d 1341, 1357 (Fed. Cir. 2008) ("[T]he patent practice includes recognition that the inventor usually knows more about the field than does the 'expert' patent examiner.").

^{9.} *See, e.g.,* U.S. Patent No. 6,368,227 abstract (filed Nov. 17, 2000) (disclosing a "method of swinging on a swing" by "induc[ing] side to side motion by pulling alternately on one chain and then the other"); U.S. Patent No. 5,443,036 abstract (filed Nov. 2, 1993) (disclosing a "method for inducing cats to exercise" by "directing a beam of invisible light produced by a hand-held laser apparatus onto the floor or wall or other opaque surface in the vicinity of the cat, then moving the laser so as to cause the bright pattern of light to move in an irregular way fascinating to cats, and to any other animal with a chase instinct").

build upon and improve.¹⁵ In patent law, these prior products and industry publications are called "prior art."¹⁶

The Patent Office, by contrast, often does not possess a wealth of knowledge and information regarding cutting-edge technology and prior art.¹⁷ The Patent Office is not filled with experts that wear hard hats to test new mechanical devices, goggles to experiment with new chemical reagents, and rubber gloves to assess new surgical methods.¹⁸ The Patent Office is filled with bureaucrats—called examiners¹⁹—that make significant, often subjective, decisions concerning the patentability of technology based almost solely on written correspondence with patent applicants.²⁰

Moreover, knowledgeable third parties—for the most part—are shut out of the patent prosecution²¹ process and cannot lend their knowledge and information to the Patent Office to improve its ability to analyze patent applications and arguments submitted by patent applicants seeking to convince examiners to issue patents.²² The prosecution of patent applications at the Patent Office is primarily an ex parte activity—one that involves only the patent applicant and the Patent Office, not third parties.²³ Moreover, patent prosecution

18. See General Information Concerning Patents, UNITED STATES PATENT AND TRADEMARK OFFICE, http://www.uspto.gov/web/offices/pac/doc/general/#models (last revised January 2005) ("Models or exhibits are not required in most patent applications since the description of the invention in the specification and the drawings must be sufficiently full, clear, and complete and capable of being understood to disclose the invention without the aid of a model.").

19. This is not to denigrate examiners. Indeed, examiners follow a proud line that began with Thomas Jefferson, the first patent examiner in the United States. Ronald D. Hantman, *Doctrine of Equivalents*, 70 J. PAT. & TRADEMARK OFF. SOC'Y 511, 513 (1988) ("Jefferson might be considered both the first Commissioner of Patents and the first patent examiner.").

20. By rule, every interaction with the Patent Office must be reflected in a document. 37 C.F.R. 1.2 (2009) ("All business with the Patent and Trademark Office should be transacted in writing.").

21. "Prosecution" of patent applications refers to all aspects of the process of applying to the Patent Office to obtain a patent, including corresponding with the Patent Office, in an attempt to convince the Patent Office that an application meets all requirements necessary to obtain a patent.

22. There are narrow exceptions. For example, within the first two months after the publication of a patent application, any interested third party may submit prior art in the form of patents and printed publications to the Patent Office. 37 C.F.R. § 1.99. Any submission, however, "shall not include any explanation of the patents or publications, or any other information" such as prior art in the form of prior sales of products. *Id.* § 199(d). Furthermore, any such submission is "limited to ten total patents or publications." *Id.*

23. One exception is inter partes reexamination. See generally 35 U.S.C. §§ 311-18 (2006).

^{15.} See *supra* note 14 for a discussion of conditions that preclude entitlement to a patent. In addition to these barring activities, inventors are not entitled to patents for various other reasons, including if "the invention was known or used by others in this country ... or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent." 35 U.S.C. § 102(a) (2006).

^{16.} The Patent Act defines what is and what is not prior art. See generally 35 U.S.C. § 102.

^{17.} For example, the Patent Office has been criticized for its lack of resources to analyze applications for so-called "business method" patents. *See, e.g.,* Jeffrey R. Kuester & Lawrence E. Thompson, *Risks Associated with Restricting Business Method and E-Commerce Patents,* 17 GA. ST. U. L. REV. 657, 668 (2001) ("[B]oth sides of the business method patent debate agree that one of the main problems with the current system for examination of business method patents is the state of the prior art databases.").

takes place secretly, at least—typically—for the first eighteen months after a patent application is filed.²⁴

This confluence of factors can lead to stark imbalances in the amount and quality of information known to patent applicants and the Patent Office, not to mention the imbalance of incentives between patent applicants and examiners to search for the most relevant prior art.²⁵ As a result, the Patent Office and courts have created a duty of candor and good faith that seeks to address and correct this information asymmetry.

B. The Duty of Candor and Good Faith

In light of the information asymmetry inherent in the patent application process, the Patent Office and the courts have placed on each patent applicant a duty of candor and good faith in dealing with the Patent Office. The Patent Office explains this duty in what is known as "Rule 56."

Prior to 1992,²⁶ Rule 56 imposed a "duty of candor and good faith" that included a "duty to disclose . . . information [patent applicants] are aware of which is material to the examination of the application."²⁷ Rule 56 explained that "information is material where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent."²⁸ This standard for materiality is known as the "reasonable examiner" standard.

After a "concerted effort to change the standard of materiality,"²⁹ the Patent Office amended Rule 56 in 1992.³⁰ The modified version of Rule 56 still includes a

24. See 35 U.S.C. § 122 (discussing confidentiality of patent applicants and noting that—in absence of request from applicant—applications are not published until passage of eighteen months).

Turzillo v. P & Z Mergentime, 532 F.2d 1393, 1399 (D.C. Cir. 1976).

26. The Patent Office enacted the earliest version of Rule 56 in 1949. See 37 C.F.R. § 1.56(a) (1949). Around that time, Rule 56 "prohibited fraud but said nothing about inequitable conduct." Robert J. Goldman, Evolution of the Inequitable Conduct Defense in Patent Litigation, 7 HARV. J.L. & TECH. 37, 53 (1993).

27. 37 C.F.R. § 1.56(a) (1991). Prior to 1992, Rule 56(a) recited:

A duty of candor and good faith toward the [Patent] Office rests on the inventor, on each attorney or agent who prepares or prosecutes the application and on every other individual who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application. All such individuals have a duty to disclose to the Office information they are aware of which is material to the examination of the application. Such information is material where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent. The duty is commensurate with the degree of involvement in the preparation or prosecution of the application.

Id.

2010]

^{25. [}T]he proceeding before the patent office is not adversary and is dependent upon examination by an official who may not equal in resources those who are in the field commercially, and who does not have the extra spark of an economic incentive to avoid the tribute or other restraint that may be exacted by a patentee.

^{28.} Id.

^{29.} Goldman, *supra* note 26, at 88.

^{30. 37} C.F.R. § 1.56(a) (1992). Since 2002, Rule 56(a) has recited:

"duty of candor and good faith," although the "duty to disclose" now refers to "all information known [to the patent applicant] to be material to patentability."³¹ While this difference in language is slight—focusing on importance to "patentability" instead of to the "examination of the application"—the definition of when information is "material to patentability" is very different:

[I]nformation is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.³²

This detailed, technical standard for materiality is referred to as the "modern" materiality standard, the "post-1992" materiality standard, or simply the "new Rule 56 materiality standard."

A concept expressed in the new Rule 56 materiality standard is cumulativeness; information is material to patentability when it is not cumulative to information in the application, and it either contributes to a prima facie case of unpatentability or is at least inconsistent with one of the applicant's positions before the Patent Office.³³ Stated conversely, information is *not material* to patentability when it *is cumulative* to information considered by the Patent Office. As one example, cumulativeness refers to the situation where information teaches no more than what a reasonable examiner would consider to be taught by prior

A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the [Patent] Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. . . . [N]o patent will be granted on an application in connection with which fraud on the [Patent] Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct.

³⁷ C.F.R. § 1.56(a) (2009).

^{31. 37} C.F.R. § 1.56(a).

^{32.} Id. § 1.56(b).

^{33.} Id.

art already before the Patent Office.³⁴ The Patent Office's pre-1992 "reasonable examiner" standard did not expressly include the concept of cumulativeness, but the concept of cumulativeness existed before the Patent Office incorporated it into the post-1992 materiality standard.³⁵

The Supreme Court long ago expressed its agreement with the Patent Office's view that "the relationship of attorneys to the Patent Office requires the highest degree of candor and good faith."³⁶ The Court also has explained why the law places this duty of candor and good faith on patent applicants:

A patent by its very nature is affected with a public interest. As recognized by the Constitution, it is a special privilege designed to serve the public purpose of promoting the "Progress of Science and useful Arts." At the same time, a patent is an exception to the general rule against monopolies and to the right to access to a free and open market. The far-reaching social and economic consequences of a patent, therefore, give the public a paramount interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct and that such monopolies are kept within their legitimate scope.³⁷

The Court, on the one hand, recognized the Constitutional purpose of patents—to promote the "Progress of Science and useful Arts"³⁸—and, on the other hand, recognized the far-reaching social and economic consequences of patents, including the certain restrictions patents place on the use of inventions and the potential for monopolies. In view of these consequences, the Court stressed the "paramount interest" in seeing that patents are "kept within their legitimate scope."³⁹ This concern with granting patents only when appropriate justifies imposing the duty of disclosure on patent applicants. This duty seeks to ensure that the Patent Office considers the patentability of patent applications in light of the most relevant information available to the patent applicant.

C. The Inequitable Conduct Defense

While it is important to understand that the law imposes a duty of candor and good faith and a duty of disclosure on patent applicants, it is even more important to understand how these duties are enforced. One mechanism to enforce the duty of candor and good faith and the duty of disclosure is the

^{34.} Regents of Univ. of Cal. v. Eli Lilly & Co., 119 F.3d 1559, 1574-75 (Fed. Cir. 1997).

^{35.} Tech. Licensing Corp. v. Videotek, Inc., 545 F.3d 1316, 1337 (Fed. Cir. 2008) (citing Star Scientific, Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1367 (Fed. Cir. 2008); Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1582 (Fed. Cir. 1991), *overruled on other grounds*, Abbott Labs. v. Sandoz, Inc., 566 F.3d 1282 (Fed. Cir. 2009); Halliburton Co. v. Schlumberger Tech. Corp., 925 F.2d 1435, 1440 (Fed. Cir. 1991)).

^{36.} Kingsland v. Dorsey, 338 U.S. 318, 319 (1949).

^{37.} Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 816 (1945). "Those who have applications pending with the Patent Office or who are parties to Patent Office proceedings have an uncompromising duty to report to it all facts concerning possible fraud or inequitableness underlying the applications in issue." *Id.* at 818.

^{38.} U.S. CONST. art. I, § 8, cl. 8.

^{39.} Precision Instrument Mfg., 324 U.S. at 816.

inequitable conduct defense, which can be alleged in litigation in response to a claim of patent infringement. Two aspects of the inequitable conduct defense—explored below—include the evidentiary standard currently required to prove inequitable conduct and the remedies currently available when inequitable conduct is proven. These aspects of the inequitable conduct defense will be revisited when the topic of this Article turns toward reform of the current law of inequitable conduct.

1. Evidentiary Standard for Proving Inequitable Conduct

To prove inequitable conduct, courts generally have required (1) a "showing that the information that was misrepresented to or withheld from the [Patent Office] was material" and (2) a "showing of wrongfulness, such as deceptive intent, willful misconduct, or gross negligence."⁴⁰ To understand the evidentiary standard governing the inequitable conduct defense, it is helpful to focus separately on these two parts of the doctrine, namely its materiality and state of mind requirements.

a. Materiality Required to Prove Inequitable Conduct

Over time, various standards have emerged to determine whether information is material for purposes of proving inequitable conduct. These standards can be put into five categories: (1) a "subjective but for" standard; (2) an "objective but for" standard; (3) a "but it may have" standard; (4) the reasonable examiner standard; and (5) the modern Rule 56 standard.⁴¹

Originally, "neither the Supreme Court nor the [Patent Office] articulated exactly what constituted a material misrepresentation."⁴² Three materiality standards, however, emerged in early court decisions on inequitable conduct: the "subjective but for" standard, which requires that the information actually caused the examiner to issue the patent when the examiner would not otherwise have done so; the "objective but for" standard, which requires that information be so material that the patent should not have issued; and the "but it may have" standard, which requires that the information may have influenced the examiner.⁴³

The Patent Office eventually articulated two materiality standards in Rule 56. As discussed above, prior to 1992 the Patent Office's Rule 56 included the "reasonable examiner" standard for materiality.⁴⁴ This standard is strikingly similar to the "but it may have" standard.⁴⁵ In 1992, however, the Patent Office

^{40.} Digital Control Inc. v. Charles Mach. Works, 437 F.3d 1309, 1315 (Fed. Cir. 2006).

^{41.} The concept of cumulativeness likely applies with respect to some, but not all, of the five materiality standards applicable to the inequitable conduct defense. In particular, cumulativeness is a relevant consideration with respect to the "but may have," "reasonable examiner," and post-1992 materiality standards, and is likely a relevant consideration with respect to the "subjective but for" standard. However, it is probably not applicable to the "objective but for" standard.

^{42.} Digital Control, 437 F.3d at 1315.

^{43.} Id. (internal quotation marks omitted).

^{44.} Id.

^{45.} Id.

adopted the modern Rule 56 standard recited above.⁴⁶ The modern Rule 56 standard, by contrast, is unlike any of the materiality standards articulated in the case law.

The Federal Circuit, which since 1982 has had exclusive appellate jurisdiction over cases arising under the patent laws,⁴⁷ has held that neither the early nor the more recent Rule 56 standard for materiality "supplant[s] or replace[s]" the standards identified in the case law.⁴⁸ Significantly, however, it has recognized that the "reasonable examiner" standard is broader than the three standards originally articulated by courts and yet has nevertheless approved its use in analyzing inequitable conduct defenses.⁴⁹ Thus, the court effectively has concluded that the "reasonable examiner" standard is the *threshold* standard for purposes of the materiality prong of the inequitable conduct defense.⁵⁰ This threshold degree of materiality must be proven by clear and convincing evidence.⁵¹

b. State of Mind Required for Inequitable Conduct

Federal Circuit cases consistently state that the state of mind required to establish inequitable conduct is "intent to deceive."⁵² Intent to deceive, however, need not always be proven by direct evidence⁵³—the proverbial "smoking gun."⁵⁴ Instead, intent to deceive may be inferred by indirect evidence.⁵⁵ Intent to deceive

^{46.} Id. at 1314.

^{47. 28} U.S.C. § 1295(a)(1) (2006); see also Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826, 829–34 (2002) (discussing Federal Circuit's jurisdiction over patent cases).

^{48.} Digital Control, 437 F.3d at 1316.

^{49.} *Id.* In a bit of an understatement, the court also recognized that the Patent Office's post-1992 materiality standard is "arguably narrower" than its pre-1992 materiality standard. *Id.*

^{50.} The Federal Circuit justified its holding that the reasonable examiner standard is the threshold materiality standard for the inequitable conduct defense by indicating that "to the extent that one standard requires a higher showing of materiality than another standard, the requisite finding of intent may be lower." *Id.* See *infra* Part II.C.1.c for a discussion of the concept of balancing materiality and state of mind.

^{51.} Star Scientific, Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1365 (Fed. Cir. 2008).

^{52.} *See, e.g.*, Rentrop v. Spectranetics Corp., 550 F.3d 1112, 1120 (Fed. Cir. 2008) ("Intent need not be proven by direct evidence; it is usually inferred from the facts and circumstances surrounding the conduct at issue."); Honeywell Int'l Inc. v. Universal Avionics Sys. Corp., 488 F.3d 982, 999 (Fed. Cir. 2007) ("A breach of this duty—including affirmative misrepresentations of material facts, failure to disclose material information, or submission of false material information—coupled with an intent to deceive, constitutes inequitable conduct."); Impax Labs., Inc. v. Aventis Pharms. Inc., 468 F.3d 1366, 1374 (Fed. Cir. 2006) ("[I]nequitable conduct also requires an intent to deceive.").

^{53.} *Impax Labs.*, 468 F.3d at 1375 ("Intent need not, and rarely can, be proven by direct evidence." (quoting Merck & Co. v. Danbury Pharmacal, Inc., 873 F.2d 1418, 1422 (Fed. Cir. 1989))).

^{54.} *See* Dippin' Dots, Inc. v. Mosey, 476 F.3d 1337, 1345 (Fed. Cir. 2007) ("'Smoking gun evidence is not required in order to establish an intent to deceive.... Rather, this element of inequitable conduct[] must generally be inferred from the facts and circumstances surrounding the applicant's overall conduct." (alteration and omission in original) (quoting Paragon Podiatry Lab., Inc. v. KLM Labs. Inc., 984 F.2d 1182, 1189 (Fed. Cir. 1993))).

^{55.} Star Scientific, 537 F.3d at 1366.

generally is inferred from the facts and circumstances surrounding the patent applicant's overall conduct.⁵⁶

The prevailing Federal Circuit standard—relatively recently articulated in three opinions—permits an inference of intent to deceive when (1) highly material information is withheld, (2) the patent applicant knew of the information and knew or should have known of the materiality of the information, and (3) the patent applicant has not provided a credible explanation for withholding it.⁵⁷ In light of the "should have known" language, this standard arguably allows the fact finder to infer intent to deceive when the patent applicant is *negligent* regarding the materiality of withheld information and the evidence shows knowledge of the information, high materiality of the information, and an absence of a credible explanation for withholding the information. At least this *threshold* state of mind must be proven by clear and convincing evidence.⁵⁸ In addition, any inference of intent to deceive "must . . . be the single most reasonable inference able to be drawn from the evidence to meet the clear and convincing standard."⁵⁹

c. Lesser Degrees of Materiality or Intent May Be Sufficient—Balancing Materiality and State of Mind

The Federal Circuit has justified its holding that the reasonable examiner standard of materiality may be used in analyzing an allegation of inequitable conduct by indicating that, to the extent that one standard requires a higher showing of materiality than another standard, the requisite finding of intent may be lower.⁶⁰ The implicit corollary is that, to the extent one standard requires a lower showing of materiality than another standard, the requisite finding of intent may be higher. This balancing of the equities is a hallmark of the current law governing the inequitable conduct defense.

The Federal Circuit first addressed the balancing of evidence of materiality and state of mind in inequitable conduct cases in *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*⁶¹ There, the court, in an opinion by Judge Rich,⁶² analyzed the

61. 725 F.2d 1350, 1362-64 (Fed. Cir. 1984).

^{56.} See id. (stating that deceptive intent may be inferred from indirect or circumstantial evidence).

^{57.} Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1313–14 (Fed. Cir. 2008); Pfizer, Inc. v. Teva Pharms. USA, Inc., 518 F.3d 1353, 1367 (Fed. Cir. 2008); Ferring B.V. v. Barr Labs., Inc., 437 F.3d 1181, 1191 (Fed. Cir. 2006). Notably, Judge Dyk authored each of these three opinions. Whether these cases articulate the correct standard for determining when it is, and is not, appropriate to infer intent to deceive has become a hotly disputed issue at the Federal Circuit. See *infra* Part III.C for a discussion of recent opinions critiquing the current law.

^{58.} Star Scientific, 537 F.3d at 1365.

^{59.} Id. at 1366.

^{60.} Digital Control Inc. v. Charles Mach. Works, 437 F.3d 1309, 1315-16 (Fed. Cir. 2006).

^{62.} Judge Rich was one of the authors of the 1952 Patent Act and, at the time of his death in 1999, was the oldest active federal judge in the history of the United States. Richard A. Oppel, Jr., *Giles S. Rich, Oldest Active Federal Judge, Dies at 95*, N.Y. TIMES, June 12, 1999, at A13. Judge Rich's opinion in *Critikon, Inc. v. Becton Dickinson Vascular Access, Inc.*, 120 F.3d 1253, 1256 (Fed. Cir. 1997), recently has come under attack for relying upon precedent from *Driscoll v. Cebalo*, 731 F.2d 878, 885 (Fed. Cir. 1984), which was overruled in *Kingsdown Medical Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1988) (relevant portion en banc). *See* Larson Mfg. Co. of S.D., Inc. v. Aluminart Prods. Ltd., 559 F.3d 1317, 1344 n.1 (Fed. Cir. 2009) (Linn, J., concurring) (noting that *Critikon* relied on the simple negligence

competing materiality standards and concluded—much like it would later in *Digital Control Inc. v. Charles Machine Works*⁶³—that it did not need to be bound by any single standard because "'[q]uestions of materiality and culpability are often interrelated and intertwined."⁶⁴ Significantly, the court indicated that evidence sufficient to meet the "objective but for" standard of materiality could be combined with evidence of something less than gross negligence to reach the conclusion of inequitable conduct.⁶⁵ The court also indicated that evidence sufficient to meet the "but it may have" standard—which it identified as "strikingly similar" to the "reasonable examiner" standard⁶⁶—would need to be combined with evidence of "something more than gross negligence or recklessness."⁶⁷

Numerous more recent cases lay out the current "equitable balancing" test employed by the Federal Circuit. But unlike *American Hoist & Derrick Co.*, these cases do not express the equitable balancing test in concrete terms, with specifically permissible combinations of materiality and state of mind. For example, in *Digital Control*, the Federal Circuit recently explained that

where a reasonable examiner would merely have considered particular information to be important but not crucial to his decision the requisite finding of intent must be high. Conversely, where an objective "but for" standard of materiality is shown, a lesser showing of facts from which intent can be inferred may be sufficient.⁶⁸

While the court explains that the "reasonable examiner" materiality standard must be combined with a "high" finding of "intent,"⁶⁹ it does not identify the particular state of mind required to be shown. Similarly, while the court explains that the "objective but for" standard of materiality may be combined with "a lesser showing of facts from which intent can be inferred,"⁷⁰ it does not identify the particular threshold state of mind required to be shown.⁷¹

63. 437 F.3d 1309, 1315-16 (Fed. Cir. 2006).

64. *Am. Hoist & Derrick Co.*, 725 F.2d at 1363 (quoting Digital Equip. Corp. v. Diamond, 653 F.2d 701, 716 (1st Cir. 1981)) (internal quotation marks omitted).

65. Id. at 1363.

68. Digital Control, 437 F.3d at 1315–16 (citation omitted) (internal quotation marks omitted).

standard laid out in *Driscoll*); Ferring B.V. v. Barr Labs., Inc., 437 F.3d 1181, 1202 (Fed. Cir. 2006) (Newman, J., dissenting) (identifying *Critikon* as bad law in part because of its reliance of *Driscoll*). Yet, in *Critikon*, Judge Rich did not rely on any legal *concept* overruled in *Kingsdown*. In particular, he did not rely on gross negligence *alone* to find inequitable conduct. *Critikon, Inc.,* 120 F.3d at 1259. Instead, he found inequitable conduct by combining evidence of gross negligence together with evidence of materiality and the absence of any good faith explanation. *Id.* ("Given the materiality and the failure at any point to offer a good faith explanation of the pattern of non-disclosure, an intent to mislead may be inferred.").

^{66.} Id. at 1362.

^{67.} Id. at 1363.

^{69.} In context, it is clear that the use of the word "intent" in this portion of *Digital Control* is not limited to direct evidence of intent, but captures lesser states of mind that allow deceptive intent to be inferred. Similarly, use of the term "intent" in this Article, based on context, may refer to direct evidence of deceptive intent or to lesser states of mind whereby intent to deceive may be inferred.

^{70.} Digital Control, 437 F.3d at 1316.

^{71.} As will be shown, this penchant for vague terminology—though understandable in light of an equitable doctrine that favors flexibility—has led to a dispute over the state of mind threshold required

2. Remedies for Inequitable Conduct

Remedies for inequitable conduct "include unenforceability of the affected patent or patents and possible attorney fees."⁷² As for the first remedy, unenforceability, "[w]hen a court . . . determine[s] that inequitable conduct occurred in relation to *one or more claims*⁷³ during prosecution of the patent application, *the entire patent* is rendered unenforceable."⁷⁴ Inequitable conduct, however, also may render related patents unenforceable under what has been called the "doctrine of infectious unenforceability."⁷⁵

As for the second remedy, an award of attorney fees, the basis for awarding this remedy is statutory. In particular, 35 U.S.C. § 285 recites that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." "Exceptional cases are normally those involving bad faith litigation or those involving inequitable conduct by the patentee in procuring a patent."⁷⁶

III. PROBLEMS WITH THE CURRENT LAW GOVERNING THE INEQUITABLE CONDUCT DEFENSE

There are significant problems associated with the current law governing the inequitable conduct defense. And, while the law of inequitable conduct has long been a target of criticism, several recent opinions in Federal Circuit cases have brought the criticism to a crescendo. Traditional and more recent critiques of the inequitable conduct defense will be analyzed before this Article turns to a presentation and analysis of potential reforms of the defense, including transforming it into a tool to detect and prevent "patent fraud."

to prove inequitable conduct under current law. The current inequitable conduct law requires at least a showing of knowledge of an omission or misrepresentation and knowledge of its materiality when the evidence only meets the "reasonable examiner" standard of materiality. Conversely, when only gross negligence (or perhaps negligence) can be demonstrated, the current law likely requires that the omission or misrepresentation reach at least the "objective but for" standard of materiality. See *infra* notes 111–35 and accompanying text for an analysis of the dispute over the state of mind threshold required to prove inequitable conduct under the current law. Even if the law of inequitable conduct is not reformed, the appropriate combinations of materiality and state of mind should be identified specifically for the benefit of the patent bar and the courts.

^{72.} Nobelpharma AB v. Implant Innovations, Inc., 141 F.3d 1059, 1070 (Fed. Cir. 1998) (citing 35 U.S.C. §§ 282, 285 (1994)).

^{73.} Patent "claims" are the numbered paragraphs at the end of patents that "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, para. 2 (2006).

^{74.} Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 877 (Fed. Cir. 1988) (relevant portion en banc) (emphases added) (footnote added). In other words, inequitable conduct renders all claims of the patent unenforceable.

^{75.} Nilssen v. Osram Sylvania, Inc., 504 F.3d 1223, 1227, 1230 (Fed. Cir. 2007) (affirming a district court's application of the "doctrine of infectious unenforceability" because "inequitable conduct with respect to one or more patents in a family can infect related applications").

^{76.} Brasseler, U.S.A. I. L.P. v. Stryker Sales Corp., 267 F.3d 1370, 1380 (Fed. Cir. 2001) (citing Cambridge Prods., Ltd. v. Penn Nutrients Inc., 962 F.2d 1048, 1050–51 (Fed. Cir. 1992)).

A. The "Plague" of Allegations

The Federal Circuit has been grappling with inequitable conduct law almost since its inception. In an early opinion, the Federal Circuit lamented that "the habit of charging inequitable conduct in almost every major patent case has become an absolute plague."⁷⁷ This metaphor—invoking, perhaps, thoughts of swarms of flies or locusts⁷⁸—has become a recurring critique of inequitable conduct law.⁷⁹

The idea behind the metaphor is that allegations of inequitable conduct are too commonplace and, as a result, on balance the doctrine is more harmful than productive. The specter of the inequitable conduct defense, of course, encourages patent applicants to take steps to correct the information asymmetry inherent in their interaction with the Patent Office, which one might assume would benefit the public. And, as discussed earlier, the information asymmetry can be significant where examiners lack the necessary information regarding cutting-edge technology and prior art to make informed decisions about the patentability of inventions. But, from the opposite perspective, the gold at the end of the rainbow—unenforceability of patents and attorney fees—attracts prospectors, and each allegation of inequitable conduct has significant ramifications and costs. By invoking the "plague" critique, judges seemingly voice their opinion that the costs borne by the public outweigh the benefits to the public.

Costs associated with *over*enforcement of the inequitable conduct defense are significant. If patent applicants overdisclose prior art to the Patent Office,⁸⁰ for example, highly material prior art may end up being a needle in a haystack filled with immaterial prior art.⁸¹ Examiners may spend unnecessary time filtering through immaterial prior art that they otherwise would not waste time reviewing. Or worse, examiners may not find and review the highly material prior art and

^{77.} Burlington Indus., Inc. v. Dayco Corp., 849 F.2d 1418, 1422 (Fed. Cir. 1988).

^{78.} *See Exodus* 8:20–24, 10:3–15 (describing plague of flies and locusts divinely imposed upon Egypt to convince Pharaoh to free Israelite slaves).

^{79.} *See, e.g.*, Larson Mfg. Co. of S.D., Inc. v. Aluminart Prods. Ltd., 559 F.3d 1317, 1342 (Fed. Cir. 2009) (Linn, J., concurring) (characterizing inequitable conduct allegations as "plague" on judicial system); Aventis Pharma S.A. v. Amphastar Pharms., Inc., 525 F.3d 1334, 1350 (Fed. Cir. 2008) (Rader, J., dissenting) (same); McKesson Info. Solutions, Inc. v. Bridge Med., Inc., 487 F.3d 897, 926 (Fed. Cir. 2007) (Newman, J., dissenting) (same); Ferring B.V. v. Barr Labs., Inc., 437 F.3d 1181, 1196–1203 (Fed. Cir. 2006) (Newman, J., dissenting) (same).

^{80.} Overdisclosure of prior art (and other information) more often occurs during reexamination proceedings than during the original examination of patent applications. Reexamination proceedings often occur after the beginning of licensing negotiations or patent infringement litigation, where the patentee receives or develops voluminous information regarding prior art and other disputed issues like how the claims of the patent should be construed. Patentees often disclose all of this information to the Patent Office during reexamination proceedings.

^{81.} On the other hand, in a touch of irony, when a patent applicant effectively hides highly material prior art in a "haystack" of immaterial prior art, the "candor of th[e] act [of disclosure] . . . is severely diminished by the manner of th[e] disclosure," *Molins PLC v. Textron, Inc.,* 48 F.3d 1172, 1188 (Fed. Cir. 1995) (Nies, J., dissenting in part), and a finding of inequitable conduct may result. *See* Sean M. O'Connor, *Defusing the "Atomic Bomb" of Patent Litigation: Avoiding and Defending Against Allegations of Inequitable Conduct After* McKesson et al., 9 J. MARSHALL REV. INTELL. PROP. L. 330, 330 (2009) ("[T]he fact or appearance of 'burying' material documents within a ream of less relevant references remains a solid ground for a finding of inequitable conduct.").

allow invalid patents to issue.⁸² In that case, "[t]he far-reaching social and economic consequences of a patent"⁸³ would be unleashed while the public's "paramount interest in seeing that patent monopolies . . . are kept within their legitimate scope"⁸⁴—one of the very goals of the inequitable conduct defense— might be thwarted. These far-reaching social and economic consequences include the prevention of competition in the marketplace, the potential for patentees to be unable to meet consumer demand for new technology, the potential tax on consumers in the form of monopoly profits, transactional costs associated with licensing patented technology from patentees, and litigation costs related to enforcement actions. And while the validity of a patent can be questioned in subsequent patent infringement litigation, the presumption of validity⁸⁵ and the clear and convincing burden to prove invalidity⁸⁶ raise significant hurdles once a patent issues.

In light of the "plague" of inequitable conduct allegations,⁸⁷ it is important to recognize that there are two primary factors driving the number of inequitable conduct allegations: (1) the standard for proving inequitable conduct and (2) the reward for proving inequitable conduct. If the standard for proving inequitable conduct is too low, then—all else being equal—the number of allegations of inequitable conduct will be too high. Likewise, if the reward for proving inequitable conduct will be too high. The plague of inequitable conduct allegations may be the result of a combination of these two facts: too low a hurdle to prove inequitable conduct and too great a reward for proving inequitable conduct. Thus, two options are, first, to make the standard for proving inequitable conduct.

^{82.} Ultimately, overcompliance with the duty of disclosure degrades the quality of issued patents. *See* Christopher A. Cotropia, *Modernizing Patent Law's Inequitable Conduct Doctrine*, 24 BERKELEY TECH. L.J. 723, 728 (2009) (concluding that "the inequitable conduct doctrine has the ability to improve patent quality as long as the inherent tendency to overcomply with the doctrine by overloading the [Patent Office] with information is kept in check").

^{83.} Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 816 (1945).

^{84.} Id.

^{85.} See 35 U.S.C. § 282 (2006) (setting forth law that patents are presumed to be valid and providing defenses in actions claiming validity or infringement of patents).

^{86.} See, e.g., Am. Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1359-60 (Fed. Cir. 1984).

^{87.} The "plague" critique in judicial opinions appears to be based on anecdotal evidence rather than on hard data, since these opinions rarely, if ever, cite any authority regarding the number of inequitable conduct allegations in patent infringement cases. See supra note 79 for recent judicial opinions that have used the plague critique. Available statistics, however, show that the number of appellate and trial court judgments on the issue of inequitable conduct rose by over 100% between 2005 and 2009, although at least part of this increase likely reflects the increase in patent litigation over U.S. Patent the same time period. See Litigation Statistics, PATSTATS.ORG, http://www.patstats.org/Patstats2.html (follow respective hyperlinks for "2005" "2006" "2007" "2008" "2009") (last visitied Oct. 10, 2010) (indicating forty-six inequitable conduct judgments in 2005, sixtysix judgments in 2006, ninety-one judgments in 2007, and ninety-three judgments in 2008). On the other hand, inequitable conduct judgments in 2009 were down significantly from 2008. Id. (indicating thirty-eight judgments in 2009). Furthermore, these statistics cannot be used to identify the percentage of all patent cases involving allegations of inequitable conduct because they do not identify the number of cases that settle.

inequitable conduct more difficult to meet and, second, to reduce the benefit provided for proving inequitable conduct. These options will be explored below.

B. The Tolls of Allegations

Apart from the costs associated with overdisclosure of information to the Patent Office, each individual allegation of inequitable conduct incurs substantial costs. Of course, litigants have to spend time and effort to assert and defend these allegations, and courts have to spend time and effort to resolve them. While these costs only marginally increase the cost of patent infringement litigation, the high cost of patent litigation, with respect to litigants at least, is well documented.⁸⁸ The cost to courts is not well documented. But courts, too, bear significant transactional costs. Courts must analyze pleadings involving allegations of inequitable conduct for compliance with the heightened pleading requirement of Federal Rule of Civil Procedure 9(b), analyze discovery and summary judgment motions related to the defense, and conduct jury and/or separate bench trials on the defense.⁸⁹

Another effect of an allegation of inequitable conduct in a patent infringement lawsuit is to prevent patent attorneys accused of the inequitable conduct from representing the patentee in the lawsuit. This occurs because of ethical rules that effectively prohibit an attorney from advocating on behalf of a party at a trial in which the attorney will be a witness.⁹⁰ A problem with this result, at least from the perspective of the patentee, and perhaps too from the perspective of courts and juries, is that the attorney with the most knowledge of the technology at issue often is the attorney that prosecuted the patent.

Allegations of inequitable conduct also may affect juries' and courts' views of the merits of other issues in patent infringement lawsuits, primarily infringement and validity.⁹¹ And inequitable conduct allegations—perhaps even baseless ones—have a negative impact on the reputations of inventors and patent attorneys accused of wrongdoing.⁹² These allegations might also degrade the

^{88.} In 2009, the median total cost of a patent infringement lawsuit with between \$1 million and \$25 million at risk was \$2.5 million. LAW PRACTICE MGMT. COMM., AM. INTELLECTUAL PROP. LAW ASS'N, REPORT OF THE ECONOMIC SURVEY 2009, 29 (2009).

^{89.} The en banc Federal Circuit has held that "the ultimate question of whether inequitable conduct occurred is equitable in nature" and "committed to the discretion of the trial court." Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988) (relevant portion en banc). The court has also held that it is appropriate for a trial court to hold a bench trial on the issue of inequitable conduct. Agfa Corp. v. Creo Prods. Inc., 451 F.3d 1366, 1375 (Fed. Cir. 2006). Nevertheless, the inequitable conduct defense may be tried to a jury for an advisory ruling. *See, e.g.*, Qualcomm Inc. v. Broadcom Corp., 548 F.3d 1004, 1009 (Fed. Cir. 2008) (noting that jury returned unanimous advisory verdict concerning equitable issues in case at hand). Either approach involves costs. A bench trial, of course, requires the court to issue findings of fact and conclusions of law—a particularly laborious task.

^{90.} See, e.g., MODEL RULES OF PROF'L CONDUCT R. 3.7(a) (2009) (stating that a lawyer shall not act as an advocate in case where lawyer will likely testify unless specifically enumerated exceptions are met).

^{91.} This particular negative externality may be addressed by bifurcating issues of inequitable conduct from other issues in a lawsuit. *See* Gardco Mfg., Inc. v. Herst Lighting Co., 820 F.2d 1209, 1211–13 (Fed. Cir. 1987) (concluding that district court did not abuse discretion in trying an inequitable conduct claim prior to-other claims in patent infringement lawsuit).

^{92.} See Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc., 525 F.3d 1334 (Fed. Cir. 2008)

public's view of the patent system, which in turn may encourage infringement of patents.

C. Recent Opinions Criticizing the Current Law Governing the Defense

Recently, particular judges at the Federal Circuit have shown an interest in revisiting fundamental aspects of the defense of inequitable conduct. These judges' opinions include scathing criticisms of the application of the current law governing the inequitable conduct defense. The opinions highlight some of the problematic tolls of allegations of inequitable conduct, indicate that the time for reform of the inequitable conduct defense is at hand, and point toward the direction that the reform may be headed.

1. McKesson Information Solutions, Inc. v. Bridge Medical, Inc.

In *McKesson Information Solutions, Inc. v. Bridge Medical, Inc.*,⁹³ the Federal Circuit affirmed a district court's finding of inequitable conduct based on the nondisclosure of three pieces of information, where the undisclosed information related to co-pending patent applications.⁹⁴ Judge Newman dissented, highlighting her belief that the facts did not rise to the level necessary to prove deceptive intent.⁹⁵ In particular, she stressed that it is not clear and convincing evidence of deceptive intent that a patent applicant did not inform a patent examiner about information the applicant knew the examiner had access to and actually considered during examination of co-pending patent applications.⁹⁶ In Judge Newman's view, the majority's holding "returns to the 'plague' of encouraging unwarranted charges of inequitable conduct, spawning the opportunistic litigation that here succeeded despite consistently contrary precedent."⁹⁷

2. Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc.

In Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc.,⁹⁸ the Federal Circuit affirmed a district court's finding of inequitable conduct based on the

Id.

⁽Rader, J., dissenting) (discussing reputational risks a scientist takes when deceiving Patent Office about research supporting patent).

^{93. 487} F.3d 897 (Fed. Cir. 2007).

^{94.} McKesson Info. Solutions, 487 F.3d at 901-02.

^{95.} Id. at 926-27 (Newman, J., dissenting).

^{96.} *Id.* at 926. Judge Newman's analysis summarized the relevant facts as she saw them:

It is not clear and convincing evidence of deceptive intent that the applicant did not inform the examiner of the examiner's grant of a related case of common parentage a few months earlier, a case that was examined by the same examiner and whose existence has previously been explicitly pointed out by the same applicant. Nor is it clear and convincing evidence of deceptive intent that the applicant did not cite a reference that the applicant had cited in the same related case, and that had been explicitly discussed with the same examiner in the related case.

^{97.} *Id.* at 926–27; *see also* Ferring B.V. v. Barr Labs., Inc., 437 F.3d 1181, 1195–1205 (Fed. Cir. 2006) (Newman, J., dissenting) (disagreeing with majority's inference of deceptive intent and stating that majority's approach will have adverse impact on industrial innovation).

^{98. 525} F.3d 1334 (Fed. Cir. 2008).

failure to disclose information used to evaluate a comparison of the invention with prior art, where that comparison was emphasized during prosecution.⁹⁹ Judge Rader dissented, expressing his view that the law should "restrict[] a finding of inequitable conduct to only the most extreme cases of fraud and deception"¹⁰⁰ and bemoaning recent cases as "too often emphasiz[ing] materiality almost to the exclusion of any analysis of the lofty intent requirement for inequitable conduct."¹⁰¹ Judge Rader also highlighted some of the problematic incentives to allege inequitable conduct. He pointed out that an allegation of inequitable conduct

opens new avenues of discovery; impugns the integrity of [the] patentee, its counsel, and the patent itself; excludes the prosecuting attorney from [representing the patentee during trial]; and even offers the trial court a way to dispose of a case without the rigors of claim construction and other complex patent doctrines.¹⁰²

3. Larson Manufacturing Co. of South Dakota v. Aluminart Products Ltd.

In *Larson Manufacturing Co. of South Dakota v. Aluminart Products Ltd.*,¹⁰³ the Federal Circuit vacated a district court's finding of inequitable conduct, holding that the district court erred in concluding that three undisclosed items were material.¹⁰⁴ Because the Federal Circuit agreed with the district court that two other undisclosed items were material, the Federal Circuit remanded the case for the district court to redetermine the issue of intent and then, if it found intent, to rebalance materiality and intent to arrive at an ultimate conclusion on the issue of inequitable conduct.¹⁰⁵

Judge Linn filed a concurring opinion.¹⁰⁶ He expressed his view that the Federal Circuit's precedent has significantly diverged from the Supreme Court's treatment of inequitable conduct and perpetuates the plague of inequitable conduct allegations in almost every major patent case.¹⁰⁷ As Judge Linn noted, "[t]he Supreme Court's three inequitable conduct cases involved overt fraud, not equivocal acts of omission."¹⁰⁸

Judge Linn lamented that the Federal Circuit's case law is in "seeming contradiction"¹⁰⁹ with its en banc decision in *Kingsdown Medical Consultants, Ltd. v. Hollister Inc.*¹¹⁰ In *Kingsdown,* the en banc Federal Circuit clarified that

^{99.} *Aventis Pharma S.A.*, 525 F.3d at 1337. In particular, the patent applicant failed to disclose the dosage of a prior art composition used in half-life comparisons with the patented composition. *Id.* at 1346.

^{100.} Id. at 1349 (Rader, J., dissenting).

^{101.} Id. at 1350.

^{102.} Id. at 1349-50.

^{103. 559} F.3d 1317 (Fed. Cir. 2009).

^{104.} Larson Mfg. Co., 559 F.3d at 1320.

^{105.} *Id*. at 1320–21.

^{106.} Id. at 1342 (Linn, J., concurring).

^{107.} Id.

^{108.} Id. at 1343.

^{109.} Id.

^{110. 863} F.2d 867, 876 (Fed. Cir. 1988) (relevant portion en banc).

materiality and intent both must be proven by clear and convincing evidence, and that "'gross negligence does not of itself justify an inference of intent to deceive."¹¹¹ In Judge Linn's view, "a standard even lower than 'gross negligence' has propagated" through Federal Circuit case law addressing the inequitable conduct defense.¹¹²

In particular, Judge Linn criticized the Federal Circuit's case law that permits an inference of intent to deceive when "'(1) highly material information is withheld; (2) the applicant knew of the information [and] ... knew or should have known of the materiality of the information; and (3) the applicant has not provided a credible explanation for the withholding."¹¹³ In Judge Linn's view, the first prong simply repeats the materiality element, the second prong sets forth a simple negligence standard, and the third prong effectively shifts the burden to the patentee to prove a negative when the accused infringer has not even carried its burden to prove a threshold degree of intent by clear and convincing evidence.¹¹⁴ Judge Linn observed that this three-pronged standard for inferring deceptive intent "is in tension with the rule ... that the inference must ... be the *single most reasonable* inference able to be drawn from the evidence."¹¹⁵

Judge Linn concluded that

114. *Id*. at 1343–44. Technically, this first critique is not accurate. The first prong emphasizes one of the more stringent standards for proving materiality, not the threshold "reasonable examiner" materiality standard. Thus, the first prong does not "simply repeat[] the materiality element." *Id*.

115. Id. at 1344 (internal quotation marks omitted). For the rule that the "inference must... be the single most reasonable inference able to be drawn from the evidence," Judge Linn relies upon Star Scientific, Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1366 (Fed. Cir. 2008), which in turn relies upon Scanner Technologies Corp. v. ICOS Vision Sys. Corp., 528 F.3d 1365, 1375-76 (Fed. Cir. 2008), which in turn relies upon Akron Polymer Container Corp. v. Exxel Container, Inc., 148 F.3d 1380, 1384 (Fed. Cir. 1998), which in turn relies upon Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1580 (Fed. Cir. 1997), which in turn relies upon Kingsdown Medical Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988) (relevant portion en banc). As the Federal Circuit explained in Scanner, the Akron court "found clear error because the district court failed to give due weight to evidence of good faith that would call for inferences contrary to a finding of deceit." Scanner Techs. Corp., 528 F.3d at 1375. Akron itself recites that "[w]hen examining intent to deceive, a court must weigh all the evidence, including evidence of good faith." Akron, 148 F.3d at 1384. For this proposition, Akron cites Gambro Lundia AB, 110 F.3d at 1580, which recites that "[t]he court weighs the intent of the party in light of all evidence, including evidence of good faith." And Kingsdown holds that "all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require a finding of intent to deceive." Kingsdown, 863 F.2d at 876. In other words, all of the evidence (including evidence of gross negligence and good faith) must be considered before determining whether it is appropriate to infer deceptive intent. Star Scientific, however, applies a dose of common sense to the consideration of all the evidence. If evidence of good faith allows for an inference contrary to a finding of deceit, and that inference is more reasonable than an inference of deceit, then a priori there is no basis to infer deceptive intent. See Star Scientific, 537 F.3d at 1366. Notably, Star Scientific is consistent with Supreme Court precedent regarding the requirement to prove a "strong inference" of intent to deceive for purposes of establishing securities fraud under Federal law. See Tellabs, Inc. v. Makor Issues & Rights, Ltd., 551 U.S. 308, 314 (2007) (holding that, in the pleading context, "an inference of scienter must be more than merely plausible or reasonable---it must be cogent and at least as compelling as any opposing inference of nonfraudulent intent").

^{111.} Kingsdown Medical Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988).

^{112.} Larson Mfg. Co., 559 F.3d at 1343 (Linn, J., concurring).

^{113.} *Id.* (alteration and omission in original) (quoting Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1313–14 (Fed. Cir. 2008)) (internal quotation marks omitted).

the test for inferring deceptive intent, as it currently exists, falls short of the standard "need[ed] to strictly enforce the burden of proof and elevated standard of proof in the inequitable conduct context." The facts of this case suggest that the time has come for the court to review the issue en banc.¹¹⁶

Thus, Judge Linn expressly called for the Federal Circuit, en banc, to review the current law governing the inequitable conduct defense and, in particular, modify the test for inferring deceptive intent.

As a preliminary matter, while Judge Linn suggested that Kingsdown eliminated the ability to rely on "gross negligence" to infer intent and ultimately prove inequitable conduct,¹¹⁷ a close reading of *Kingsdown* reveals that it did not do so. Kingsdown emphasized that gross negligence in and of itself is not sufficient to prove inequitable conduct.¹¹⁸ Instead, *Kingsdown* requires the trier of fact to consider all the evidence, including evidence of gross negligence but also good faith, in determining whether there is intent to deceive.¹¹⁹ In this regard, it is important to recognize the holdings of the two cases overruled in Kingsdown: Driscoll v. Cebalo¹²⁰ and In re Jerabek.¹²¹ In Driscoll, the Federal Circuit reversed a holding of no inequitable conduct because the Federal Circuit (1) found materiality using the reasonable examiner standard and (2) inferred intent to deceive based upon a gross negligence standard.¹²² In Jerabek, the Federal Circuit similarly affirmed a holding of inequitable conduct based on (1) a finding of materiality using the *reasonable examiner standard* and (2) a finding of intent to deceive based upon a gross negligence standard.¹²³ Significantly, in neither Driscoll nor Jerabek did the Federal Circuit analyze the state of mind requirement in view of the finding of materiality under the reasonable examiner standard, nor did it balance the evidence of materiality and intent before reaching a conclusion regarding inequitable conduct. Instead, as recited in Jerabek, these cases merely held that "[a] permissible finding of gross negligence is sufficient and can be

^{116.} Larson Mfg. Co., 559 F.3d at 1344 (Linn, J., concurring) (alteration in original) (quoting Star Scientific, 537 F.3d at 1365).

^{117.} In a more recent case, Judge Linn expressly claims that *Kingsdown* eliminated a "gross negligence" standard for inequitable conduct. Therasense, Inc. v. Becton, Dickinson & Co., 593 F.3d 1289, 1319 (Fed. Cir.) (Linn, J., dissenting) ("The requisite level of intent is 'specific intent'—not simple negligence, or even gross negligence." (citing *Star Scientific Inc.*, 537 F.3d at 1368)), *vacated*, 374 Fed. Appx. 35, 35 (Fed. Cir. 2010) (per curiam) (granting en banc rehearing).

^{118.} Kingsdown, 863 F.2d at 876.

^{119.} *Id.* Not all commentators interpret *Kingsdown* in this way. Some interpret *Kingsdown* as rejecting the ability to rely on gross negligence at all. *E.g.*, Erik R. Puknys & Jared D. Schuettenhelm, *Application of the Inequitable Conduct Doctrine After* Kingsdown, 25 SANTA CLARA COMPUTER & HIGH TECH. LJ. 839, 849 (2009).

^{120. 731} F.2d 878 (Fed. Cir. 1984), overruled by Kingsdown, 863 F.2d at 876.

^{121. 789} F.2d 886 (Fed. Cir. 1986), overruled by Kingsdown, 863 F.2d at 876.

^{122.} *Driscoll*, 731 F.2d at 884–85. In *Driscoll*, the Federal Circuit emphasized that to prove inequitable conduct one need not prove *reliance* by the Patent Office on any violation of the duty of disclosure. *Id.* This aspect of *Driscoll* is consistent with cases after *Kingsdown. See, e.g.*, Agfa Corp. v. Creo Prods. Inc., 451 F.3d 1366, 1375 n.3 (Fed. Cir. 2006) (emphasizing that reliance is not an element of inequitable conduct defense).

^{123.} In re Jerabek, 789 F.2d at 890-92.

shown where [the applicant's] attorney knew or should have known that the withheld reference would be material to the [Patent Office]'s consideration."¹²⁴

Contrast these cases overruled in *Kingsdown* with the case that *Kingsdown* implicitly endorsed, *FMC Corp. v. Manitowoc Co.*¹²⁵ In *FMC*, the Federal Circuit explained how the investigations into materiality and state of mind include overlapping considerations that must be balanced before reaching a conclusion on the issue of inequitable conduct.¹²⁶ After recognizing that the level of materiality of information may be high or low, the court held that the patent applicant must be *chargeable* with both *knowledge* of the information and *knowledge* of its materiality.¹²⁷ Significantly, the court also held that "an applicant who knew of [prior] art or information *cannot intentionally avoid learning of its materiality through gross negligence, i.e., it may be found that the applicant 'should have known' of that materiality.¹¹²⁸ Thus, the court indicated that gross negligence (or even negligence in light of the "should have known" language) regarding materiality may support a finding of inequitable conduct in some situations.*

In *FMC*, however, the court went on to explain that gross negligence regarding materiality *alone* does not require a finding of intent to mislead, because evidence of subjective good faith may offset evidence of gross negligence.¹²⁹ Stated conversely, *FMC* indicates that knowledge of withheld prior art, coupled with gross negligence regarding its materiality, may be combined with an absence of evidence of subjective good faith to infer intent to mislead. The *FMC* opinion also recognizes that an inference of intent may be easier to prove when materiality is high and there is "clear proof that [the patent applicant] knew or should have known of that materiality."¹³⁰ Thus, in *FMC*, the Federal Circuit indicated that gross negligence (or even negligence given the "should have known" language) may be used to infer intent to mislead if the applicant *knew of withheld information* and *knew or should have known* that the withheld information was *highly material*.

Several opinions issued by the Federal Circuit shortly after *Kingsdown* are consistent with *FMC*. They indicate that gross negligence with regard to the materiality of prior art may be used to infer intent to mislead depending upon the totality of the circumstances.¹³¹ More recent cases also have interpreted

131. See, e.g., Halliburton Co. v. Schlumberger Tech. Corp., 925 F.2d 1435, 1443 (Fed. Cir. 1991) ("This court has clarified that *negligent conduct can support an inference of intent* only when, 'viewed in light of all the evidence, including evidence indicative of good faith,' the conduct is culpable enough 'to require a finding of intent to deceive.' . . . *Gross negligence cannot elevate itself* by its figurative bootstraps to an intent to mislead based on the identical factors used to establish gross negligence in the first instance *unless all the facts and circumstances indicate sufficient culpability*." (emphases added) (quoting Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988) (relevant portion en banc))); Wirco, Inc. v. Rolock, Inc., 17 U.S.P.Q.2d 1084, 1085 (Fed. Cir. 1990) ("The intent element of inequitable conduct cannot *always* be inferred from a pattern of conduct that amounts to gross

^{124.} Id. at 891.

^{125. 835} F.2d 1411 (Fed. Cir. 1987).

^{126.} FMC, 835 F.2d at 1415.

^{127.} Id.

^{128.} Id. (emphasis added).

^{129.} Id. at 1415 n.9 (citing J.P. Stevens & Co. v. Lex Tex Ltd., 747 F.2d 1553, 1560 (Fed. Cir. 1984)).

^{130.} Id. at 1416.

Kingsdown as holding that gross negligence may be combined with other factors to infer intent to deceive.¹³² Yet not *all* Federal Circuit opinions appear to interpret *Kingsdown* in this manner—particularly recent opinions.¹³³

Thus, while Judge Linn seemed to argue that current law diverges from the holding of *Kingsdown*, the current law taken as a whole appears to reflect the holding of *Kingsdown*, *FMC*, pre-*Kingsdown* cases addressing the balancing of equities in inequitable conduct cases,¹³⁴ and cases decided shortly after *Kingsdown*. Those cases hold that gross negligence (or even negligence given the "should have known" language) may be used to prove inequitable conduct *when combined with other evidence, such as highly material omissions or misrepresentations and the absence of evidence of good faith*.

Judge Linn, however, has highlighted that the current state of the law is inconsistent with the *purpose* of the holding of *Kingsdown*—to eliminate the plague of inequitable conduct allegations. In other words, in his view the law has not gone far enough to prevent the improper use and resulting costs of the inequitable conduct defense. And in his view, the root of that problem is the ability to infer intent to deceive based on evidence that includes negligence or gross negligence.

In light of these recent opinions, judges at the Federal Circuit appear ready to reconsider the current law governing the inequitable conduct defense and adopt a

132. *See, e.g.*, M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co., 439 F.3d 1335, 1343 (Fed. Cir. 2006) ("Even if there were evidence of gross negligence in nondisclosure, which was not found, that would not *necessarily* constitute inequitable conduct." (emphasis added)); CFMT, Inc. v. Yieldup Int'l Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003) ("[E]ven gross negligence does not *alone* suffice to establish intent." (emphasis added)).

negligence, but [applicant's] conduct here, 'viewed in light of all the evidence, including evidence indicative of good faith, . . . indicate[s] sufficient culpability to require a finding of intent to deceive.''' (second alteration in original) (emphasis added) (quoting *Kingsdown*, 863 F.2d at 876)); Hoffman-La Roche, Inc. v. Lemmon Co., 906 F.2d 684, 688 (Fed. Cir. 1990) ("[T]he district judge was incorrect with respect to both holdings of inequitable conduct when he found gross negligence and then inferred the intent to deceive based on that finding alone. Instead, *he must examine the gross negligence in light of all surrounding circumstances* (e.g., good faith) to see if [the applicant's] conduct rises to the level of an intent to deceive.'' (emphasis added)); Hewlett-Packard Co. v. Bausch & Lomb Inc., 882 F.2d 1556, 1562 (Fed. Cir. 1989) ("[G]rossly negligent conduct *may* or may not compel an inference of an intent to mislead. Such an inference depends upon the totality of the circumstances" (emphasis added)).

^{133.} See, e.g., Astrazeneca Pharm. LP v. Teva Pharm. USA, Inc., 583 F.3d 766, 776 (Fed. Cir. 2009) ("Appellants state that they have shown a 'high degree of materiality,' and that they therefore need a proportionally lesser showing of intent to deceive to establish the requisite threshold level of intent. That is incorrect. Evidence of mistake or negligence, even gross negligence, is not sufficient to support inequitable conduct in patent prosecution."); Abbott Labs. v. Sandoz, Inc., 544 F.3d 1341, 1353 (Fed. Cir. 2008) ("Mistake or negligence, even gross negligence, does not support a ruling of inequitable conduct."); see also In re Bose Corp., 580 F.3d 1240, 1244–45 (Fed. Cir. 2009) ("The principle that the standard for finding intent to deceive is stricter than the standard for negligence or gross negligence, even though announced in patent inequitable conduct cases, applies with equal force to trademark fraud cases."). Notably, Astrazeneca and Abbott were written by Judge Newman, who dissented in McKesson Information Solutions, Inc. v. Bridge Medical, Inc., 487 F.3d 897, 926 (Fed. Cir. 2007) (Newman, J., dissenting).

^{134.} *See, e.g.*, Am. Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1364 (Fed. Cir. 1984) (discussing necessity of balancing evidence of intent and materiality). Notably, *Kingsdown* did not purport to overrule *American Hoist and Derrick Co.*

higher standard to prove inequitable conduct. To do so, these judges might borrow from other legal doctrines, such as those addressing fraud. In this regard, it is important to note Judge Linn's subsequent opinion for the Federal Circuit in *Exergen Corp. v. Wal-Mart Stores, Inc.*,¹³⁵ because there Judge Linn *did* import concepts from the law of fraud into the law of inequitable conduct.

4. Exergen Corp. v. Wal-Mart Stores, Inc.

In *Exergen*, the Federal Circuit clarified the pleading standard applicable to claims of inequitable conduct.¹³⁶ Addressing an appeal from a denial of a motion to add inequitable conduct as an affirmative defense, the Federal Circuit held that Federal Rule of Civil Procedure 9(b) requires "identification of the specific who, what, when, where, and how of the material misrepresentation or omission" when pleading inequitable conduct in patent cases.¹³⁷

In reaching its holding, the Federal Circuit borrowed liberally from the law of fraud.¹³⁸ The court relied primarily upon Rule 9(b), which by its terms addresses fraud or mistake.¹³⁹ The Federal Circuit also cited cases in the First and Seventh Circuits addressing fraud.¹⁴⁰ *Exergen* may represent the first foray into the adoption of principles from the law of fraud into the law of inequitable conduct. More of these principles can and should be adopted.

IV. REFORMING THE INEQUITABLE CONDUCT DEFENSE

In light of the traditional displeasure with the plague of inequitable conduct assertions and the recent focus on tightening the doctrine—particularly regarding the ability to infer intent to deceive—it is time for a new paradigm: "patent fraud." In the alternative, the state of mind threshold to infer intent to deceive for inequitable conduct should be increased to at least recklessness.

A. A New Paradigm: "Patent Fraud"

A new paradigm should be adopted for the inequitable conduct defense that focuses on the prevention of fraud in the procurement of patents. The paradigm which I term the "patent fraud" paradigm—should concern only *highly material* and *knowing or intentional* omissions and misrepresentations made to the Patent

^{135. 575} F.3d 1312 (Fed. Cir. 2009).

^{136.} Exergen, 575 F.3d at 1326-29.

^{137.} Id. at 1327.

^{138.} One justification for the application of Rule 9(b) to allegations of inequitable conduct is the unfair reputational harm of unfounded allegations of inequitable conduct, discussed above. See *supra* note 92 and accompanying text for a brief discussion of the impact inequitable conduct allegations can have on inventor and patent attorney reputations. Notably, this justification borrows from case law addressing fraud. *Exergen*, 575 F.3d at 1329 n.6 ("[O]ne of the purposes of Rule 9(b) is 'to protect those whose reputation would be harmed as a result of being subject to fraud charges.'" (quoting Kearns v. Ford Motor Co., 567 F.3d 1120, 1125 (9th Cir. 2009)).

^{139.} FED. R. CIV. P. 9(b) ("In alleging fraud or mistake, a party must state with particularity the circumstances constituting fraud or mistake.").

^{140.} *Exergen*, 575 F.3d at 1326, 1327 (citing Alternative Sys. Concepts, Inc. v. Synopsys, Inc., 374 F.3d 23, 29 (1st Cir. 2004); DiLeo v. Ernst & Young, 901 F.2d 624, 627 (7th Cir. 1990)).

Office. Lesser forms of misconduct should be addressed by other legal doctrines. Such a change to the inequitable conduct defense—with its current remedies of unenforceability and possible attorney fees—would help to (1) increase the effectiveness of the duties of candor, good faith, and disclosure to the Patent Office by eliminating overdisclosure of information; (2) eliminate the plague of inequitable conduct allegations; and (3) reduce the negative tolls associated with allegations of inequitable conduct.

A "patent fraud" paradigm would adopt concepts from the law of fraud, in particular the materiality and state of mind thresholds utilized in the antitrust claim addressed by the Supreme Court in *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*¹⁴¹ This new paradigm would require clear and convincing evidence of (a) *knowledge or intent* regarding (b) a *highly material* misrepresentation or omission meeting the "objective but for" or "subjective but for" materiality standards. These concepts will be introduced by analyzing the *Walker Process* case itself.

In *Walker Process*, the Supreme Court provided guidance as to what constitutes fraudulent procurement of a patent. There, the patentee, Food Machinery and Chemical Corporation ("Food Machinery"), sued Walker Process Equipment ("Walker Process") for infringement based on a patent concerning technology used in sewage treatment plants.¹⁴² In response, Walker Process counterclaimed, alleging that Food Machinery fraudulently and in bad faith obtained its patent so as to create a monopoly that violated antitrust law.¹⁴³ The basis for Walker Process's antitrust counterclaim stemmed from Food Machinery's alleged public use of the invention more than a year prior to filing its patent application and its express, sworn representation to the Patent Office to the contrary.¹⁴⁴ In other words, the antitrust counterclaim was based on alleged fraud on the Patent Office.

The Supreme Court noted that it was dealing "with a special class of patents, i.e., those procured by *intentional* fraud."¹⁴⁵ The Court opined that, to prevail, Walker Process would need to prove that Food Machinery obtained its patent by *"knowingly and willfully* misrepresenting [the] facts to the Patent Office."¹⁴⁶ Proof

^{141. 382} U.S. 172 (1965).

^{142.} Walker Process, 382 U.S. at 173.

^{143.} Id. at 174.

^{144.} Id.

^{145.} Id. at 176 (emphasis added).

^{146.} *Id.* at 177 (emphasis added). The Court also indicated that permitting a private party to recover treble damages for the fraudulent procurement of a patent—when that conduct was coupled with proof of the other requirements of section 2 of the Sherman Act—would promote the purpose of "seeing that patent monopolies . . . are kept within their legitimate scope." *Id.* at 176–77 (quoting Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 816 (1945)). The Court held that, to prove an antitrust violation, Walker Process would still need to prove the remaining elements of section 2 of the Sherman Act, including exclusionary power in terms of the relevant market for the relevant product. *Id.* at 177–78. The fact that *Walker Process* involved an alleged antitrust violation, which requires additional proof over and above a finding of fraud on the Patent Office, however, does not affect the Court's analysis of the subsidiary issue of whether the patent applicant committed fraud on the Patent Office.

of good faith by Food Machinery, the Court continued, would furnish a complete defense.¹⁴⁷ Such good faith would include an honest mistake.¹⁴⁸

In a concurring opinion, Justice Harlan shed light on the requirements for showing intentional fraud. Like the majority, he emphasized that a plaintiff would need to prove that the relevant patent was "procured by *knowing and willful fraud* practiced by the defendant on the Patent Office."¹⁴⁹ He also pointed out that a plaintiff would not be able to prove fraud if it showed no more than invalidity of the patent due, for example, to obviousness.¹⁵⁰

1. Evidentiary Standard for Proving Walker Process Fraud

The Supreme Court's and Justice Harlan's focus on allegations of "knowingly and willfully misrepresenting facts" and "intentional fraud"-and their contrasting these allegations with "good faith," "honest mistake," and mere invalidity-indicate that the state of mind required to prove fraudulent procurement of a patent is high: knowing or intentional misconduct. Subsequent opinions by the lower courts have emphasized the heightened evidentiary standard required to prove what has become known as "Walker Process" fraud or a "Walker Process" antitrust claim. For example, the Federal Circuit has bluntly stated that "an extremely high level of misconduct . . . is necessary to sustain a Walker Process antitrust claim."¹⁵¹ The court has explained what this "extremely high level of misconduct" entails: "independent and clear evidence of deceptive intent together with a clear showing of reliance, i.e., that the patent would not have issued but for the misrepresentation or omission."152 A helpful way to understand this evidentiary standard—and how to incorporate it into the standard governing inequitable conduct allegations—is to focus on the requirements of materiality and state of mind.

2. Materiality Required to Prove Walker Process Fraud

A first concept embodied in the evidentiary standard governing allegations of *Walker Process* fraud is materiality. While the Supreme Court in *Walker Process* did not use the term "materiality," it focused on the same concept by assuming

^{147.} Id. at 177.

^{148.} *Id.* The Court indicated that an honest mistake would constitute "technical fraud," a phrase it used to refer to the absence of intentional fraud. *Id.*

^{149.} Id. at 179 (Harlan, J., concurring) (emphasis added).

^{150.} Id. To obtain a patent, an invention must be nonobvious. 35 U.S.C. § 103(a) (2006).

^{151.} Hewlett-Packard Co. v. Bausch & Lomb Inc., 882 F.2d 1556, 1563 (Fed. Cir. 1989).

^{152.} Nobelpharma AB v. Implant Innovations, Inc., 141 F.3d 1059, 1071 (Fed. Cir. 1998). *Nobelpharma* is notable because it is the first Federal Circuit case extending the reach of *Walker Process* to cases involving allegations of fraudulent *omissions. See id.* at 1070 ("[A] fraudulent omission can be just as reprehensible as a fraudulent misrepresentation."). The Federal Circuit has expanded upon the description of the evidentiary standard found in *Nobelpharma*:

Applied to patent prosecution, fraud requires (1) a false representation or deliberate omission of a fact material to patentability, (2) made with the intent to deceive the patent examiner, (3) on which the examiner justifiably relied in granting the patent, and (4) but for which misrepresentation or deliberate omission the patent would not have been granted.

C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1364 (Fed. Cir. 1998).

that Food Machinery swore to the Patent Office that it did not know that its invention had been in public use for more than one year prior to the filing date of its patent application, and that the opposite was true.¹⁵³ This is because, at the time of Food Machinery's assumed conduct, an owner of an invention in public use for more than one year prior to the filing of a patent application on the invention was barred from obtaining a patent on the invention.¹⁵⁴ In other words, Food Machinery never would have obtained its patent *but for* its (1) submission of false information to the Patent Office and (2) withholding of true information from the Patent Office. This materiality standard is the "objective but for" standard because it does not depend on the subjective opinion of any particular patent examiner, let alone the one that actually examined the patent at issue.¹⁵⁵

In subsequent cases addressing allegations of *Walker Process* fraud, the Federal Circuit has combined the "*objective* but for" standard with the concept of reliance, resulting in a "*subjective* but for" standard that *does* depend on the opinion of the particular patent examiner that handled the patent at issue. In the words of the Federal Circuit, *Walker Process* fraud requires "a clear showing of *reliance*, i.e., that the patent would not have issued but for the misrepresentation or omission."¹⁵⁶ Thus, according to the Federal Circuit, fraud in the procurement of a patent requires "a false representation or deliberate omission of a fact material to patentability ... on which the examiner justifiably relied in granting the patent, and ... but for which misrepresentation or deliberate omission the patent would not have been granted."¹⁵⁷

Both the objective and subjective "but for" standards of materiality differ substantially from the standards of materiality articulated by the Patent Office with respect to the duty of due care and duty of disclosure. The "reasonable examiner" materiality standard, for example, does not require evidence that the patent would not have issued but for the omission or misrepresentation; it only requires that the omission or misrepresentation would have been important to a reasonable examiner. Similarly, the modern Rule 56 materiality standard does not require evidence that the patent would not have issued but for the omission or misrepresentation; it only requires that the omission or misrepresentation give rise to a *prima facie* case of unpatentability or be inconsistent with an argument made in favor of patentability. Thus, the objective and subjective "but for"

^{153.} *Walker Process*, 382 U.S. at 174. Because of the procedural posture of the case, the Supreme Court noted that it was required to consider Walker Process's allegations as true. *Id.* at 174–75.

^{154. 35} U.S.C. § 102(b) (1965).

^{155.} *See* Digital Control Inc. v. Charles Mach. Works, 437 F.3d 1309, 1315–16 (Fed. Cir. 2006) (discussing differences between materiality standards).

^{156.} Nobelpharma, 141 F.3d at 1071 (emphasis added).

^{157.} *C.R. Bard*, 157 F.3d at 1364 (emphasis added). Applying this "subjective but for" standard of materiality, the Federal Circuit affirmed a judgment of *Walker Process* fraud based on a finding that "a reasonable jury could have found . . . that the [prior art reference at issue] anticipated the patent *and that the examiner would not have granted the patent if he had been aware of the [prior art reference at issue]." Nobelpharma*, 141 F.3d at 1072 (emphasis added). The finding that a reasonable jury could conclude that a prior art reference "anticipated the patent" means that a reasonable jury could find the patent invalid under one or more subsections of 35 U.S.C. § 102 (2006). *E.g.*, Ormco Corp. v. Align Tech., Inc., 463 F.3d 1299, 1305 (Fed. Cir. 2006) (considering section 102(a) in this context).

standards of materiality are much more difficult to meet than the "reasonable examiner" materiality standard and the modern Rule 56 materiality standard.

Adopting the objective and subjective "but for" standards of materiality for the inequitable conduct defense—and replacing the current "reasonable examiner" standard—would focus the law of inequitable conduct on "patent fraud" and, all else being equal, reduce both the number of allegations of inequitable conduct and the problems associated with overenforcement of the defense.

3. State of Mind Required to Prove Walker Process Fraud

A second concept embodied in the evidentiary standard governing allegations of *Walker Process* fraud is state of mind. As discussed, in *Walker Process* the Supreme Court indicated that the state of mind required to prove fraudulent procurement of a patent is knowledge or intent.¹⁵⁸ As explained by the Federal Circuit, "knowing and willful fraud' as the term is used in *Walker [Process]* can mean no less than clear, convincing proof of *intentional* fraud involving affirmative dishonesty, 'a deliberately planned and carefully executed scheme to defraud . . . the Patent Office."¹⁵⁹ The Federal Circuit thus views *Walker Process* fraud as an intentional, deliberate act of dishonesty to defraud the Patent Office.

Despite its view that *Walker Process* fraud must be intentional and deliberate, the Federal Circuit has held that intent to mislead may be *inferred*. Notably, however, any inference must be based on *knowledge* of information and *knowledge* of that information's materiality. For example, intent to mislead may be inferred when evidence shows that the patent applicant had *knowledge* of withheld prior art and had *knowledge* of the prior art's materiality.¹⁶⁰ The Federal Circuit, for instance, has found that a jury could properly have *inferred* that an inventor had the requisite intent to defraud the Patent Office based on his failure to disclose a prior art book because that inventor—the author of the book in question—"presumably *knew* of the book's relevance to the invention."¹⁶¹ Thus, with respect to *Walker Process* fraud, at a minimum, *knowledge* of high materiality must be proven.

The requirement to prove at least *knowledge* of high materiality is a substantial difference between *Walker Process* fraud and the current law of inequitable conduct. As discussed, the current law of inequitable conduct allows intent to deceive to be inferred based in part on evidence of gross negligence (or perhaps even negligence) regarding high materiality.¹⁶² As with raising the

^{158.} See *supra* Part II.C.1.b for a general discussion of the state of mind necessary for a finding of inequitable conduct.

^{159.} *C.R. Bard*, 157 F.3d at 1364 (omission in original) (emphasis added) (quoting Handgards, Inc. v. Ethicon, Inc., 601 F.2d 986, 996 (9th. Cir. 1979)). The Federal Circuit has concluded that the question of "whether conduct in procuring or enforcing a patent is sufficient to strip a patentee of its immunity from the antitrust laws is to be decided as a question of Federal Circuit law." *Nobelpharma*, 141 F.3d at 1068.

^{160.} Nobelpharma, 141 F.3d at 1072.

^{161.} Id. (emphasis added).

^{162.} See supra notes 117–34 and accompanying text for a discussion of the gross negligence standard.

threshold for materiality, raising the state of mind threshold from gross negligence (or negligence) to knowledge would focus the law of inequitable conduct on "patent fraud" and, all else being equal, reduce both the number of allegations of inequitable conduct and the problems associated with overenforcement of the defense.

4. Lesser Showings of Materiality or Intent Are Not Sufficient—No Balancing of Materiality and State of Mind

While the current law governing the inequitable conduct defense allows a lesser degree of materiality (e.g., evidence meeting the "reasonable examiner" materiality standard) to be combined with a higher degree of intent (e.g., knowledge) to prove inequitable conduct, and a lesser degree of intent (e.g., gross negligence) to be combined with a higher degree of materiality (e.g., "objective but for" materiality) to prove inequitable conduct, *Walker Process* fraud does not permit lesser degrees of materiality or state of mind. That is, "a finding of *Walker Process* fraud may not be based upon an equitable balancing of lesser degrees of materiality and intent."¹⁶³ Rather, *Walker Process* fraud must be based on "independent" evidence of higher degrees of both materiality and intent.¹⁶⁴

Eliminating the ability to find inequitable conduct when either evidence of materiality or state of mind meets only a low standard would, again, focus the law of inequitable conduct on "patent fraud" and, all else being equal, reduce the number of allegations of inequitable conduct and problems associated with overenforcement of the defense.

5. Benefits of Adopting the *Walker Process* Materiality and State of Mind Thresholds

By adopting the *Walker Process* materiality and state of mind thresholds, a "patent fraud" defense would require meeting the following two-prong test: (1) clear and convincing evidence of a *highly material* omission or misrepresentation rising to the level of either (a) the "objective but for" materiality standard or (b) the "subjective but for" materiality standard; and (2) clear and convincing evidence of a state of mind rising to the level of either (a) *knowledge* of the omission or misrepresentation and *knowledge* of its high materiality or (b) an *intent* to deceive the Patent Office.¹⁶⁵

With respect to the materiality prong, the "objective but for" or "subjective but for" test would be required. Thus, in effect, the "objective but for" standard would be the threshold materiality standard. Evidence meeting the "but may have," "reasonable examiner," or modern Rule 56 materiality standards would not be sufficient.

^{163.} Nobelpharma, 141 F.3d at 1071.

^{164.} Id. at 1070-71.

^{165.} Figure 1 in the Appendix indicates the threshold materiality and state of mind standards associated with the proposed "patent fraud" defense. Figure 2 then identifies appropriate combinations of specific degrees of materiality and state of mind to prove "patent fraud."

With respect to the state of mind prong, intent or knowledge regarding materiality would be required. Thus, in effect, knowledge regarding materiality would be the threshold state of mind requirement. Recklessness, gross negligence, or negligence regarding materiality would not be sufficient. In other words, an inference of knowledge regarding materiality would not be allowed. Instead, either both knowledge of the omission or misrepresentation and knowledge of its high materiality, or intent to deceive, would need to be proven by direct evidence.¹⁶⁶

As shown, this proposal for a "patent fraud" defense largely incorporates the materiality and state of mind standards required to prove a *Walker Process* antitrust claim. A "patent fraud" defense would not, however, require proof of exclusionary power in terms of the relevant market for the relevant product, which is an additional requirement of *Walker Process* antitrust claims.¹⁶⁷ Nor would it include a remedy of treble damages, unlike *Walker Process* antitrust claims.¹⁶⁸ There is no reason to adopt the requirement to prove market power or to provide damages for a successful showing of "patent fraud." Indeed, these two aspects of *Walker Process* antitrust claims are directly related; the remedy of treble damages is particularly appropriate when a patentee has obtained a monopoly in the relevant market.¹⁶⁹

While the Federal Circuit has seemingly justified the heightened materiality and state of mind standards for *Walker Process* antitrust claims by highlighting the ability to obtain treble damages for a *Walker Process* antitrust violation,¹⁷⁰ the ability to obtain treble damages justifies the requirement to *show market power in the relevant market*. The ability to obtain treble damages is not the driving force for the heightened materiality and state of mind standards behind *Walker Process* antitrust claims; the requirement to prove fraud on the Patent Office is.

There are many justifications for adopting the heightened materiality and state of mind standards in the context of the inequitable conduct defense, including the many problems with the current law of inequitable conduct.¹⁷¹ Moreover, the ability to obtain a judgment of unenforceability of a patent and its related patents (through the doctrine of "infectious unenforceability") justifies the use of heightened materiality and state of mind standards in a "patent fraud" defense.

^{166.} The ability to prove "patent fraud" by proving knowledge of an omission or misrepresentation and high materiality would, in effect, be allowing a limited inference of an intent to deceive.

^{167.} *See* Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172, 177 (1965) (noting the need to "appraise the exclusionary power of the illegal patent claim in terms of the relevant market for the product involved").

^{168. 15} U.S.C. § 15(a) (2006); *see also Walker Process*, 382 U.S. at 176–77 (noting availability of treble damages under section 4 of Clayton Act in event patent is procured in violation of section 2 of Sherman Act).

^{169.} *Nobelpharma*, 141 F.3d at 1070. The Federal Circuit has recognized that an allegation of *Walker Process* fraud is a sword, not a shield. *Id.*

^{170.} Id.

^{171.} See *supra* Part III for a discussion of the problems with the current law governing inequitable conduct.

On the one hand, this proposal for a "patent fraud" defense would reject several aspects of the current law of inequitable conduct. In particular, it would eliminate the ability to rely on lesser standards of materiality or state of mind because it would eliminate the ability of courts to balance materiality and state of mind. On the other hand, the remedies for proving "patent fraud" would remain the same as the current remedies for proving inequitable conduct: unenforceability of the patent at issue, potential "infectious unenforceability," and attorney fees.

Significantly, if this "patent fraud" defense replaced the current inequitable conduct defense, it would continue to encourage compliance with the duties of candor, good faith, and disclosure in dealings with the Patent Office, while raising the bar such that inequitable conduct might not be alleged in "every major patent case."¹⁷² It likely would eliminate problems associated with *over*enforcement of the inequitable conduct defense—namely disclosure of nonmaterial prior art— ultimately increasing the quality of examination of disclosed prior art by the Patent Office. It also likely would reduce the average cost of patent litigation on both litigants and the public, increase the quality of legal representation of patentees in patent infringement lawsuits by allowing the attorneys that prosecuted the applications at the Patent Office to represent the patentee in litigation, decrease the influence of inequitable conduct allegations on considerations of issues like infringement and invalidity, and reduce the frequency (albeit increase the impact) of allegations that harm the reputations of inventors, patent attorneys, and the patent system itself.

Although it might be argued that adoption of a "patent fraud" defense would encourage patent applicants to take a head-in-the-sand approach to prior art, this concern is ill-founded. Indeed, the current law does not require patent applicants to search for prior art.¹⁷³ Moreover, any remaining concern regarding nondisclosure of prior art to the Patent Office could be remedied by another reform discussed in more detail below: eliminating the clear and convincing standard for proving invalidity based on material prior art not disclosed to or considered by the Patent Office.¹⁷⁴

For all of these reasons, a "patent fraud" paradigm should be adopted to replace the current law governing the inequitable conduct defense.

B. Making It More Difficult to Infer Intent to Deceive

At a minimum, and as an alternative to the adoption of a "patent fraud" paradigm, proof of more than gross negligence should be required to infer intent to deceive and prove inequitable conduct.

2010]

^{172.} See Burlington Indus., Inc. v. Dayco Corp., 849 F.2d 1418, 1422 (Fed. Cir. 1988) (noting plague "of charging inequitable conduct in almost every major patent case").

^{173.} See 35 U.S.C. § 111(a) (listing requirements for non-provisional patent application).

^{174.} See infra Part IV.C.3 for a discussion of a potential preponderance standard for invalidity.

1. Inequitable Conduct as Distinct from Fraud

A hurdle for a court considering the adoption of a "patent fraud" paradigm to replace the current law governing the inequitable conduct defense is precedent indicating that inequitable conduct involves more than just fraud. In *Precision Instrument Manufacturing Co. v. Automotive Maintenance Machinery Co.*,¹⁷⁵ for example, the Supreme Court recognized the "paramount interest in seeing that patent monopolies spring from backgrounds free from *fraud or other inequitable conduct.*"¹⁷⁶ This reference to "fraud or other inequitable conduct." implies that fraud is a type of inequitable conduct, but that inequitable conduct is broader than fraud. The Court, however, has not suggested the bounds of inequitable conduct. Indeed, the Court has not had the opportunity to address a case involving inequitable conduct in a form other than fraud, so any reference to "other inequitable conduct" is dicta.¹⁷⁷

Because the Supreme Court has not had occasion to address the defense of inequitable conduct outside of circumstances involving fraud, the development of the inequitable conduct defense has been left to the lower courts, including most recently the Federal Circuit.¹⁷⁸ The Federal Circuit, for its part, has distinguished the concept of inequitable conduct from common law fraud and *Walker Process* fraud.¹⁷⁹

According to the Federal Circuit, "inequitable conduct is a broader, more inclusive concept than the common law fraud needed to support a *Walker Process*"

178. *See* Digital Control Inc. v. Charles Mach. Works, 437 F.3d 1309, 1315 (Fed. Cir. 2006) (noting that Supreme Court has articulated what constitutes a material misrepresentation standard and explaining different materiality standards developed by Federal Circuit and other courts).

80

^{175. 324} U.S. 806 (1945).

^{176.} Precision Instrument Mfg., 324 U.S. at 816 (emphasis added).

^{177.} In *Keystone Driller Co. v. General Excavator Co.*, for example, the Court addressed facts involving an agreement to suppress evidence of prior use that would have invalidated the patent. 290 U.S. 240, 243 (1933). While the district court found that the use of a prior judgment entered without the benefit of the suppressed evidence was "not a fraud upon the court," the appellate court disagreed and the Supreme Court affirmed. *Id.* at 244, 247. In *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, the Court addressed facts involving "a deliberately planned and carefully executed scheme to defraud not only the Patent Office but the Circuit Court of Appeals." 322 U.S. 238, 245–46 (1944), *overruled on other grounds by* Standard Oil Co. v. United States, 429 U.S. 17 (1976). In particular, this "fraud ... had its genesis in the plan to publish an article for the deliberate purpose of deceiving the Patent Office. The plan was executed, and the article was put to fraudulent use in the Patent Office, contrary to law." *Id.* at 250. And in *Precision Instrument Manufacturing*, the Court addressed facts involving "fraud" in the form of "perjury-tainted patents and contracts," where a patent "application was admittedly based upon false data." 324 U.S. at 816.

^{179.} Fraud requires "(1) a representation of a material fact, (2) the falsity of that representation, (3) the intent to deceive (or an equivalent recklessness), (4) justifiable reliance by the deceived party, and (5) injury to the deceived party." Agfa Corp. v. Creo Prods. Inc., 451 F.3d 1366, 1375 n.3 (Fed. Cir. 2006) (citing Norton v. Curtiss, 433 F.2d 779, 792–93 (C.C.P.A. 1970)). By contrast, "reliance and injury are not elements of today's inequitable conduct defense." *Id.* (citing *Norton*, 433 F.2d at 792–93). Note that the first two factors listed in *Agfa* represent two concepts embedded in the first factor listed in *C.R. Bard* not else *supra* note 152 for the list of factors required by the *C.R. Bard* court. Also note that the last factor listed in *C.R. Bard* is a specific application to patent prosecution of the last factor listed in *Agfa* do not differ in any relevant respect.

claim.¹⁸⁰ In the court's words: "Inequitable conduct in fact is a lesser offense than common law fraud, and includes types of conduct less serious than 'knowing and willful' fraud."¹⁸¹ This conclusion is evident from the fact that the current law of inequitable conduct does not require a showing of reliance and injury, whereas common law fraud does. Moreover, under the current law the threshold materiality and state of mind standards for inequitable conduct are lower than the threshold materiality and state of mind standards for *Walker Process* fraud, as already discussed. Thus, to adopt a conception of inequitable conduct as "patent fraud," certainly the Federal Circuit would need to revisit and overrule its precedent.

2. Increasing the State of Mind Standard for Inequitable Conduct

To the extent that a "patent fraud" paradigm is not adopted, at a minimum the state of mind standard—the degree of intent—for inequitable conduct should be increased. As discussed above, it appears that various Federal Circuit judges believe that the law of inequitable conduct should require something more than gross negligence (and certainly negligence), even when the level of materiality of omissions or misrepresentations is high. A first option is eliminating any ability to rely upon something less than intent or knowledge regarding materiality—in other words, eliminating the ability to rely on recklessness, gross negligence, or negligence, even if combined with a showing of high materiality. Such a reform would likely go far in eliminating the plague of inequitable conduct allegations and many of the costs and inefficiencies associated with the current law of inequitable conduct. Like the "patent fraud" paradigm, however, this would be a significant divergence from the current law.

A second option is to set the threshold state of mind standard at recklessness when the evidence proves that omissions or misrepresentations are highly material. In other words, this second option would eliminate the ability to rely upon gross negligence or negligence even if the evidence shows omissions or misrepresentations are highly material. This level of reform still would reduce the number of inequitable conduct allegations and many of the costs and inefficiencies associated with the current law of inequitable conduct, but it would not be as significant a divergence from the current law. While this reform would leave undisturbed the requirement to show knowledge or intent regarding omissions or "reasonable examiner" materiality standards, it would require only recklessness regarding omissions or misrepresentations meeting either of the "subjective but for" or "objective but for" materiality standards.¹⁸²

It is helpful to look outside the context of the Federal Circuit's inequitable conduct doctrine and into other circuits' considerations of state of mind requirements in similar contexts. For example, consider that section 10(b) of the

^{180.} Nobelpharma AB v. Implant Innovations, Inc., 141 F.3d 1059, 1069 (Fed. Cir. 1998).

^{181.} *Id.*

^{182.} Figure 1 in the Appendix indicates the possibility of increasing the state of mind threshold for inequitable conduct to recklessness. Figure 2 applies this heightened state of mind threshold to various combinations of materiality and state of mind.

Securities Exchange Act of 1934 prohibits fraud in securities transactions.¹⁸³ Notably, the Fourth Circuit has recognized that every circuit considering the issue has held that securities fraud under section 10(b) may be established by a showing of *recklessness*.¹⁸⁴ Thus, adoption of recklessness as the threshold to infer intent to deceive for inequitable conduct purposes would be consistent with every other circuits' consideration of the threshold required to infer intent to deceive in the context of securities fraud.

There is recent precedent for the Federal Circuit replacing a common law negligence standard with a recklessness standard. In *In re Seagate Technology, LLC*,¹⁸⁵ the en banc Federal Circuit addressed the standard of proof required to prove willful infringement. In that case, the court eliminated what had become known as the "duty of due care" to avoid infringement.¹⁸⁶ The court found that

the duty of [due] care ... sets a lower threshold for willful infringement that is more akin to negligence. This standard fails to comport with the general understanding of willfulness in the civil context, and it allows for punitive damages in a manner inconsistent with Supreme Court precedent. Accordingly, we overrule the [duty of due care] standard ... and hold that proof of willful infringement permitting enhanced damages requires at least a showing of objective recklessness.¹⁸⁷

Thus, the Federal Circuit overruled its precedent by requiring recklessness, instead of mere negligence, to prove willfulness.¹⁸⁸ Notably, the court based its reversal of precedent on the fact that willfulness is a ground for punitive damages under 35 U.S.C. § 284, and Supreme Court precedent does not allow for punitive damages based on negligence.¹⁸⁹

While inequitable conduct is not a ground for punitive damages under 35 U.S.C. § 284, the holding of *Seagate* could nevertheless be applied to the law of inequitable conduct to eliminate a negligence-based standard, because holding a patent unenforceable for inequitable conduct is also an act of punishment.¹⁹⁰ To

185. 497 F.3d 1360 (Fed. Cir. 2007) (en banc).

187. Id. (citations omitted).

188. Id.

^{183. 17} C.F.R. § 240.10b-5(c) (2009).

^{184.} Ottmann v. Hanger Orthopedic Grp., Inc., 353 F.3d 338, 343 (4th Cir. 2003) (citing Hudson v. Phillips Petroleum Co., 881 F.2d 1236, 1244 (3d Cir. 1989); Van Dyke v. Coburn Enters., 873 F.2d 1094, 1100 (8th Cir. 1989); McDonald v. Alan Bush Brokerage Co., 863 F.2d 809, 814 (11th Cir. 1989); Hackbart v. Holmes, 675 F.2d 1114, 1117–18 (10th Cir. 1982); Broad v. Rockwell Int'l Corp., 642 F.2d 929, 961–62 (5th Cir. 1981) (en banc); Mansbach v. Prescott, Ball & Turben, 598 F.2d 1017, 1023–25 (6th Cir. 1979); Rolf v. Blyth, Eastman Dillon & Co., 570 F.2d 38, 46 (2d Cir. 1978); Sundstrand Corp. v. Sun Chem. Corp., 553 F.2d 1033, 1044–45 (7th Cir. 1977)).

^{186.} In re Seagate, 497 F.3d at 1371.

^{189.} Id. at 1368, 1371.

^{190.} *See* Scanner Techs. Corp. v. ICOS Vision Sys. Corp. N.V., 528 F.3d 1365, 1376 (Fed. Cir. 2008) (noting that a finding of inequitable conduct comes "with the *punishment* of unenforceability of the entire patent" (emphasis added)). By contrast, an award of attorney fees is not a matter of punitive damages. Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337, 1347 (Fed. Cir. 2004) (en banc). Thus, it is of no moment that, like inequitable conduct, willful infringement is a basis to award attorney fees under 35 U.S.C. § 285. *See* S.C. Johnson & Son, Inc., v. Carter-Wallace, Inc., 781 F.2d 198, 200 (Fed. Cir. 1986) (noting tendency to award fees when willful infringement has been proven).

the extent the duty of disclosure sets a threshold for inequitable conduct that is more akin to negligence, it allows for a form of punishment—unenforceability of the relevant patent or patents—in a manner that likewise is inconsistent with Supreme Court precedent.¹⁹¹ As a result, an en banc panel of the Federal Circuit could hold—similar to *Seagate*—that proof of inequitable conduct resulting in the unenforceability of patents requires at least a showing of recklessness.

In *Seagate*, the Federal Circuit defined the level of conduct necessary to meet its new, heightened recklessness standard for willful infringement:

[T]o establish willful 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. The state of mind of the accused infringer is not relevant to this objective inquiry. If this threshold objective standard is satisfied, 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.¹⁹²

Thus, for purposes of willfulness, the recklessness standard includes two prongs: (a) clear and convincing evidence of action despite an objectively high likelihood of infringement of a valid patent and (b) evidence that the infringer knew or should have known of the objectively high likelihood of infringement.

Likewise, an en banc Federal Circuit could define the level of conduct necessary to meet a new, heightened recklessness standard for inequitable conduct. In particular, it might hold that to establish inequitable conduct, an alleged infringer is required to show by clear and convincing evidence that the patent applicant acted despite an objectively high likelihood that its actions constituted either (a) failure to disclose known, highly material information to the Patent Office or (b) disclosure of known, highly material misinformation to the Patent Office. (Highly material would refer to evidence establishing by clear and convincing evidence the "objective but for" or "subjective but for" standards of materiality.) The state of mind of the patent applicant would not be relevant to this objective inquiry.¹⁹³ If this threshold objective standard was satisfied, the patent applicant also would be required to demonstrate that the objectively-defined risk (determined by the record developed during invalidity proceedings) was either known or so obvious that it should have been known to the patent applicant.¹⁹⁴

^{191.} See, e.g., Smith v. Wade, 461 U.S. 30, 51 (1983) (indicating that recklessness is an appropriate standard for punitive damages).

^{192.} In re Seagate, 497 F.3d at 1371 (citation omitted).

^{193.} While the use of the word "known" might seem to collapse this articulation of a "recklessness" state of mind into the higher "knowledge" state of mind, the modifier "objectively high likelihood" and the absence of any actual requirement to identify the state of mind of the patent applicant sufficiently distinguishes the two degrees.

^{194.} Note that even this formation of a recklessness standard involves the language "should have known," which sounds like negligence. Significantly, however, before the "should have known" portion of the standard is applied, the facts must meet the objective portion, which does not include any "should have known" factor.

For all of these reasons, if a "patent fraud" paradigm is not adopted to replace the current law governing the inequitable conduct defense, the threshold state of mind standard should be increased to knowledge or, at a minimum, recklessness.

C. Alternative Reforms

There are various other ways to reform the law of inequitable conduct, not only to further address the problem of information asymmetry between patent applicants and the Patent Office, but also to account for the plague of assertions of inequitable conduct in patent litigation and the costs and inefficiencies this plague creates. These reforms could be applied independently to the current law of inequitable conduct; they could be combined with an adoption of the "patent fraud" paradigm; they could be combined with the adoption of a higher threshold state of mind standard; or they could be combined with one another as appropriate.

1. Returning Discretion to the Application of Remedies

One possible reform is to return judicial discretion to the application of remedies for findings of inequitable conduct. A finding of inequitable conduct currently results in a judgment of unenforceability of every claim in a patent, with the possibility that related patents are also ruled unenforceable. In *Kingsdown Medical Consultants, Ltd. v. Hollister Inc.*,¹⁹⁵ the en banc Federal Circuit reaffirmed the rule that "[w]hen a court has finally determined that inequitable conduct occurred in relation to one or more claims during prosecution of [a] patent application, the entire patent is rendered unenforceable."¹⁹⁶ This holding of *Kingsdown* should be revisited.

A judgment of unenforceability is a very blunt instrument to deal with cases, like those involving allegations of inequitable conduct, that involve such diverse facts. Moreover, to the extent the current law provides a greater reward than necessary or appropriate, an alleged infringer is provided too much incentive to allege inequitable conduct, thereby contributing to the "plague" of inequitable conduct allegations and all of its costs.

It should be recognized that in *Kingsdown* the en banc Federal Circuit actually addressed two issues: (1) whether gross negligence alone is sufficient to prove inequitable conduct, and (2) whether inequitable conduct, if proven, renders an entire patent unenforceable.¹⁹⁷ The fact that the court addressed both of these concepts highlights the fact that the standard for proving inequitable conduct is linked to the remedy. The Federal Circuit, in effect, decided that gross negligence *alone* does not justify adjudicating an entire patent unenforceable, but that gross negligence combined with additional facts may justify adjudicating an entire patent unenforceable. The underlying concept is proportionality.¹⁹⁸

^{195. 863} F.2d 867 (Fed. Cir. 1988) (relevant portion en banc).

^{196.} Kingsdown, 863 F.2d at 877.

^{197.} Id. at 876-77.

^{198.} See Matthew M. Peters, *The Equitable Inequitable: Adding Proportionality and Predictability to Inequitable Conduct in the Patent Reform Act of 2008*, 19 DEPAUL J. ART, TECH. & INTELL. PROP. L. 77, 108–09 (2008) (proposing scalable system of remedies for wrongdoing ranging from fines to invalidation of

The return of discretion to trial courts would allow them to fashion remedies proportional to particular instances of inequitable conduct. For example, the remedy of "infectious unenforceability" should be reserved for the most egregious conduct—combinations of the highest degrees of materiality and state of mind, i.e., "patent fraud." An award of attorney fees should be reserved for combinations that include one of the highest two standards for materiality combined with a state of mind of at least recklessness. Unenforceability of the patent related to the misconduct at issue should be reserved for situations in which the materiality or state of mind falls within the highest two standards. And a negligent misrepresentation or omission would justify reducing the standard for proving invalidity from clear and convincing evidence to a preponderance of the evidence, a concept discussed in more detail below.

Support for this reform can be drawn from the Supreme Court cases that established the foundation of the inequitable conduct defense. These cases indicate that the defense is based on the doctrine of unclean hands, itself an equitable doctrine.¹⁹⁹ Significantly, the Court emphasized in these cases that the doctrine of unclean hands "necessarily gives wide range to the equity court's use of discretion in refusing to aid the unclean litigant. It is 'not bound by formula or restrained by any limitation that tends to trammel the free and just exercise of discretion."²⁰⁰ In short, using their discretion, trial courts should be able to match inequitable conduct standards and remedies.²⁰¹

2. Adopting a "Negligent Misrepresentation/Omission" Defense (Or Not)

Another potential reform is to introduce a "negligent misrepresentation/ omission" defense to the law of inequitable conduct, coupled with a reduced remedy.²⁰² This reform would be consistent with the idea of returning discretion and proportionality to the application of remedies for findings of inequitable conduct. To prove that a patent applicant was guilty of a negligent misrepresentation or omission, an alleged infringer would have to prove materiality meeting one of the lowest three standards (the modern Rule 56 test, the "but may have" test, or the "reasonable examiner" test), and prove a state of mind meeting one of the lowest three standards (recklessness, gross negligence, or negligence).

While a "patent fraud" regime surely would reduce the number of allegations of inequitable conduct, and a heightened state of mind standard for inequitable conduct likely would do the same, a "negligent misrepresentation/omission" defense that is easier to meet than the current inequitable conduct standard

2010]

claims to, in part, "add[] much needed proportionality to the [inequitable conduct] doctrine").

^{199.} *See* Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 819 (1945) (citing Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 245–46 (1933)) (stating that defendant's conduct failed to meet standard necessary to maintain suit in equity).

^{200.} Precision Instrument Mfg., 324 U.S. at 815 (quoting Keystone Driller, 290 U.S. at 245-46).

^{201.} See *infra* Figure 2 in Appendix for a proposed sliding scale of remedies for the various combinations of materiality and state of mind.

^{202.} Under this approach, the clear and convincing standard for proving invalidity could be replaced with a preponderance standard when a negligent misrepresentation or omission occurs. For further discussion of this approach, see *infra* Part IV.C.3.

would do the opposite. Thus, to the extent the current inequitable conduct defense has created a plague of inequitable conduct allegations and created all sorts of inefficiencies, it would be even more inefficient to sanction a "negligent misrepresentation/omission" defense. While such a defense would encourage patent applicants to comply with their duties of candor, good faith, and disclosure, it would exacerbate the problems associated with the current law of inequitable conduct. In particular, it would encourage even greater overdisclosure of prior art to the Patent Office; further increase costs associated with patent infringement litigation; impugn the reputations of even more patent attorneys and inventors; provide additional opportunities to prevent attorneys from representing patentees in litigation; and continue to negatively influence triers of fact on infringement.203 unrelated issues such as Thus, а "negligent misrepresentation/omission" defense should not be adopted.

3. Adopting a Preponderance Invalidity Standard for Undisclosed and Unconsidered Material Prior Art

Another potential reform is replacing the clear and convincing standard for proving invalidity with a preponderance standard when the Patent Office was not provided, or did not consider, material prior art. Materiality in this context could be measured by any of the materiality standards. Reducing the standard of proving invalidity for undisclosed or unconsidered material prior art would encourage compliance with the duty of disclosure—indeed it would encourage patent applicants to search for prior art and disclose prior art to the Patent Office rather than stick their heads in the sand as the inequitable conduct doctrine arguably does and as the adoption of a "patent fraud" paradigm might do. As a result, it would correct the information asymmetry between patent applicants and the Patent Office.²⁰⁴ Whether the replacement of the clear and convincing standard with a preponderance standard would simultaneously reduce the

^{203.} Figure 1 in the Appendix indicates the possibility of adopting a "negligent misrepresentation/omission" defense to a charge of patent infringement. While a "negligent misrepresentation/omission" defense should not be adopted, its use in Figure 1 serves as a placeholder for a different type of reform introduced below: elimination of the clear and convincing evidentiary standard to prove invalidity for material prior art not disclosed or considered by the Patent Office. Figure 2 highlights combinations of materiality and state of mind that would not support any form of defense, not even a "negligent misrepresentation/omission" defense. These combinations also form a placeholder for another reform introduced below, the shifting of attorney fees. See *infra* Part IV.C.4 for a discussion of the possibility of shifting attorney fees.

^{204.} Applying a preponderance standard to the question of invalidity when prior art has not been considered by the Patent Office would encourage patent applicants to search for prior art and disclose it to the Patent Office, a seemingly beneficial result. *See* Katherine Nolan-Stevaux, *Inequitable Conduct Claims in the 21st Century: Combating the Plague*, 20 BERKELEY TECH. L.J. 147, 170–71 (2005) (noting that lowering standard to preponderance of evidence would lessen any fears that patents would be perceived as less worthy). On the other hand, another school of thought is that the best examination of patent claims is in patent infringement litigation, not at the Patent Office. *See* Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. REV. 1495, 1497 (2001) (concluding that Patent Office "doesn't do a very detailed job of examining patents, but we probably don't want it to" because of cost and fact that "overwhelming majority of patents are never litigated or even licensed").

number of inequitable conduct assertions or reduce the amount of work for parties and courts would depend on its implementation.

If this reform were adopted without any other change to the current law of inequitable conduct, it likely would not reduce the number of allegations of inequitable conduct, although it would increase the viability of invalidity defenses at the expense of the inequitable conduct defense. This reform, however, when combined with other reforms to the inequitable conduct doctrine has the potential to significantly reduce transaction costs affecting litigants and courts (and ultimately the public) by reducing allegations of inequitable conduct while maintaining incentives to disclose material prior art to the Patent Office.

This reform could be implemented in several ways, including, as discussed above, as a remedy for a negligent misrepresentation or omission. A better implementation of this reform, however, is to institute a strict liability approach when a patent applicant fails to disclose material prior art to the Patent Office—such that state of mind would not matter.²⁰⁵ This implementation would still require determining materiality, but it would eliminate the need of a court or jury to analyze the difficult issue of one's state of mind. The best option is to adopt this reform in its strict liability form simultaneously with the adoption of the "patent fraud" paradigm, because this combination of reforms would substantially reduce the number of inequitable conduct allegations while still providing a strong incentive to disclose prior art to the Patent Office.

Another potential implementation of this reform includes combining it with an elimination of lower tests for materiality with respect to inequitable conduct namely the modern Rule 56, the "may have been," and the "reasonable examiner" standards. These materiality tests could then be left to the question of whether the standard for proving invalidity should be reduced for prior art references not disclosed to, or considered by, the Patent Office. This implementation would avoid adding an extra layer to the inequitable conduct doctrine and would, instead, permit removal of a layer, likely resulting in a reduction of the number of allegations of inequitable conduct in patent infringement litigation.

To understand the basis for this proposal to reduce the standard for proving invalidity when prior art is not disclosed to or considered by the Patent Office, it is helpful to understand (1) the "presumption of validity," (2) the various regional circuits' and Federal Circuit's interpretation of the "presumption of validity," and (3) Supreme Court authority on point.

In *Radio Corp. of America v. Radio Engineering Laboratories, Inc.*,²⁰⁶ the Supreme Court reviewed various regional circuits' formulations of the standard to prove invalidity of issued patents.²⁰⁷ It noted that "[a] patent *regularly issued*, and even more obviously a patent *issued after a hearing of all the rival claimants*, is presumed to be valid until the presumption has been overcome by convincing evidence of error.²⁰⁸ It concluded that "one otherwise an infringer who assails the validity of a patent *fair upon its face* bears a heavy burden of persuasion, and fails

^{205.} Both of these alternatives are indicated in Figure 2 in the Appendix.

^{206. 293} U.S. 1 (1934).

^{207.} Radio Corp. of America, 293 U.S. at 7–8.

^{208.} Id. at 7 (emphases added).

unless his evidence has *more than a dubious preponderance.*^{"209} By focusing on patents "regularly issued" and "fair upon [their] face," and moreover by highlighting patents "issued after a hearing of all the rival claimants," the Court left open the door to a lesser standard for proving invalidity in certain circumstances.

In *Corona Cord Tire Co. v. Dovan Chemical Corp.*,²¹⁰ the Supreme Court rejected the argument that a patent secured by false evidence is not entitled to the presumption of validity.²¹¹ Notably, however, it held that the allegedly false evidence—affidavits—"though perhaps reckless, were not the basis for [the granting of the patent] or essentially material to its issue. The reasonable presumption of validity furnished by the grant of the patent therefore would not seem to be destroyed."²¹² Thus, the Court left open the door that false evidence relied upon by the Patent Office or material to the issuance of the patent may overcome or at least affect the application of the presumption of the patent's validity.

The statutory presumption of validity, codified after *Radio Corp.* and *Corona Cord Tire* in the Patent Act of 1952, requires that every patent be "presumed valid."²¹³ In practical terms, this presumption means that the alleged infringer bears, in the statute's terms, the "burden of establishing invalidity."²¹⁴ The statute, however, does not define exactly what this burden is.²¹⁵

After *Radio Corp., Corona Cord Tire*, and the codification of the presumption of validity—but prior to the formation of the Federal Circuit—various regional circuits interpreted the statutory presumption of validity and the undefined statutory burden and concluded that they allow for the alleged infringer to prove invalidity by a preponderance of the evidence in certain situations, such as when "relevant,"²¹⁶ "significant,"²¹⁷ "pertinent,"²¹⁸ "more pertinent,"²¹⁹ or the "most pertinent"²²⁰ prior art was not considered by the Patent Office, if unconsidered

216. *E.g.*, Baumstimler v. Rankin, 677 F.2d 1061, 1068 (5th Cir. 1982); Futorian Mfg. Corp. v. Dual Mfg. & Eng'g, Inc., 528 F.2d 941, 943 (1st Cir. 1976); Cont'l Can Co. v. Old Dominion Box Co., 393 F.2d 321, 326 n.8 (2d Cir. 1968); Marston v. J.C. Penney Co., 353 F.2d 976, 982 (4th Cir. 1965).

217. E.g., U.S. Expansion Bolt Co. v. Jordan Indus., Inc., 488 F.2d 566, 569 (3d Cir. 1973).

218. *E.g.*, Mfg. Research Corp. v. Graybar Elec. Co., 679 F.2d 1355, 1360–61 (11th Cir. 1982); Turzillo v. P & Z Mergentime, 532 F.2d 1393, 1399–1400 (D.C. Cir. 1976); Purina Co. v. Gen. Foods Corp., 442 F.2d 389, 390 (8th Cir. 1971); *c.f.* Preformed Line Prods. Co. v. Fanner Mfg. Co., 328 F.2d 265, 271 (6th Cir. 1964) (stating that failure to consider pertinent prior art weakens, but does not necessarily destroy, presumption of validity).

219. *C.f.* Power Curbers, Inc. v. E.D. Etnyre & Co., 298 F.2d 484, 493 (4th Cir. 1962) (affirming district court's reasoning that defendant's failure to introduce "more pertinent" prior unconsidered art strengthened presumption of validity).

220. E.g., Jaybee Mfg. Corp. v. Ajax Hardware Mfg. Corp., 287 F.2d 228, 229 (9th Cir. 1961).

^{209.} Id. at 8 (emphases added).

^{210. 276} U.S. 358 (1928).

^{211.} Corona Cord Tire, 276 U.S. at 374.

^{212.} Id. (emphasis added)

^{213. &}quot;A patent shall be presumed valid.... The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." 35 U.S.C. § 282 (2006).

^{214.} Id.

^{215.} Id.

prior art led one to "reasonably question" the Patent Office's decision,²²¹ or just because a single prior art reference was not considered by the Patent Office.²²² The Federal Circuit, however, has interpreted the statutory presumption of validity and the undefined statutory burden to mean that an alleged infringer must prove invalidity by clear and convincing evidence regardless of any other consideration.²²³ The court has explained that the basis for the presumption of validity and this heightened standard is that the Patent Office is presumed to have performed its duties correctly.²²⁴ But even when an invalidity defense is based on prior art not considered by the Patent Office during a patent's prosecution, and even if that prior art is more material than the prior art considered by the Patent Office, the Federal Circuit still requires that invalidity be proven using a clear and convincing evidence standard.²²⁵ The Federal Circuit has gone so far as to say that the presumption of validity "is *never* annihilated, destroyed, or even weakened, regardless of what facts are of record."²²⁶

The Supreme Court has not resolved the conflict between the Federal Circuit and its sister circuits. In *KSR International Co. v. Teleflex Inc.*,²²⁷ the Court specifically declined to reach the question whether the failure to disclose a prior art reference during prosecution voids the presumption of validity given to issued patents.²²⁸ It did note, however, "that the rationale underlying the presumption that the [Patent Office], in its expertise, has approved the claim—seems much diminished" in this situation.²²⁹ Thus, there is reason to think that the Supreme Court would be receptive to the reform proposed here—reducing the burden of proving invalidity when material prior art is not disclosed to, or considered by, the Patent Office.

4. Shifting Attorney Fees

To "vaccinate" patent cases against the "plague" of inequitable conduct charges, one possibility is to assess attorney fees against parties unable to sustain their burden of proving inequitable conduct.²³⁰ This reform could be implemented

^{221.} Plastic Container Corp. v. Cont'l Plastics of Okla., Inc., 708 F.2d 1554, 1558 (10th Cir. 1983) (noting that "[t]he crucial inquiry is not the relative pertinence of the prior unconsidered art; instead, it is whether the unconsidered art leads the court to reasonably question the [Patent Office's] decision").

^{222.} *See, e.g.,* Henry Mfg. Co. v. Commercial Filters Corp., 489 F.2d 1008, 1013 (7th Cir. 1972) (stating that presumption of validity can be defeated by evidence that Patent Office failed to consider even a single prior art reference).

^{223.} Am. Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1359-60 (Fed. Cir. 1984).

^{224.} Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1323 (Fed. Cir. 1999) ("The 'presumption of validity under 35 U.S.C. § 282 carries with it a presumption that the Examiner did his duty and knew what claims he was allowing." (quoting Intervet Am., Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1054 (Fed. Cir. 1989))).

^{225.} *See* Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1050 (Fed. Cir. 1988) (using clear and convincing evidence standard where prior art was not considered by Patent Office).

^{226.} ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1574-75 (Fed. Cir. 1984).

^{227. 550} U.S. 398 (2007).

^{228.} KSR Int'l Co., 550 U.S. at 426.

^{229.} Id.

^{230.} See Kevin Mack, Reforming Inequitable Conduct to Improve Patent Quality: Cleansing Unclean Hands, 21 BERKELEY TECH. L.J. 147, 172 (2006) (stating that fee-shifting mechanism could be introduced

in various forms. On one hand, parties might be held strictly liable for alleging but failing to prove inequitable conduct. On the other hand, parties might be ordered to pay a patentee's attorney fees only if an allegation of inequitable conduct is found to be baseless. Either form of fee shifting would act as a deterrent against baseless assertions of inequitable conduct. And while a strict liability regime would be more efficient—eliminating any secondary issues for a judge or jury to resolve after reaching a conclusion of no inequitable conduct—this efficiency would not come without a cost, as a strict liability regime would act as a deterrent to legitimate assertions of inequitable conduct based on questionable activities by patent applicants.

It probably would require action by Congress to implement a strict liability regime for failing to prove inequitable conduct, given that fee shifting is contradictory to the prevailing common law in the United States and no current statute requires it.²³¹ The idea of Congress implementing such a regime, however, is not a new one. The first statute governing the issuance and enforcement of patents in the United States, the Patent Act of 1790, authorized private parties to file lawsuits against patentees "within one year" after the issuance of a patent as a way to repeal patents "obtained surreptitiously by, or upon false suggestion."²³² Significantly, if a plaintiff failed in its attempt to show that the patent was "obtained surreptitiously by, or upon false suggestion," the plaintiff was required to "pay all such costs as the defendant shall be put to in defending the suit."²³³ The Patent Act of 1793 extended the time period to three years for a party to seek a repeal on this basis, but maintained the requirement to shift fees when the plaintiff was unsuccessful.²³⁴ This fee-shifting requirement, however, ended when the Patent Act of 1836 omitted any provision whatsoever regarding the repeal of patents.235

By contrast, although rarely if ever applied in this context, in theory the current law already supports fee shifting for baseless assertions of inequitable conduct. First, Rule 11 of the Federal Rules of Civil Procedure provides an avenue to shift fees in the face of a baseless assertion of inequitable conduct.²³⁶ A baseless assertion of inequitable conduct might be presented to harass the patentee or needlessly increase the cost of litigation, or it might be presented based on factual assertions without evidentiary support or likely evidentiary support in the record. In these circumstances, Rule 11 allows courts to impose "an appropriate

to deter parties from "frivolously pleading inequitable conduct").

^{231.} *See* Chambers v. NASCO, Inc., 501 U.S. 32, 45 (1991) (noting that, although "American Rule" bars fee shifting in most cases, there are three narrowly defined circumstances where federal courts have inherent power to assess attorney fees).

^{232.} Patent Act of 1790, ch. 7, § 5, 1 Stat. 109, 111 (repealed 1793).

^{233.} *Id.* § 5 ("[I]f the party at whose complaint the process issued, shall have judgment given against him, he shall pay all such costs as the defendant shall be put to in defending the suit, to be taxed by the court, and recovered in such manner as costs expended by defendants, shall be recovered in due course of law.").

^{234.} Patent Act of 1793, ch. 11, § 10, 1 Stat. 318, 323 (repealed 1836).

^{235.} Patent Act of 1836, ch. 357, 5 Stat. 117 (repealed 1842).

^{236.} See FED. R. CIV. P. 11 (providing for sanctions where specified misrepresentations to court are made).

sanction."²³⁷ An appropriate sanction may include an award of attorney fees and other expenses directly resulting from the violation of Rule 11.²³⁸ Second, the Patent Act itself authorizes courts "in exceptional cases [to] award reasonable attorney fees to the prevailing party."²³⁹ A case involving a baseless assertion of inequitable conduct probably qualifies as an "exceptional case" and justifies awarding the patentee its attorney fees.²⁴⁰

5. Professional Certifications

Another potential reform to the law of inequitable conduct is to require that, before a defense of inequitable conduct can be alleged in court, a licensed patent attorney²⁴¹ file a statement such as the following: "Based on my professional judgment, I believe [insert names of particular people] committed inequitable conduct during the prosecution of [insert patent number(s)] based on my review of the evidence." While Federal Rule of Civil Procedure 11 already effectively requires attorneys to make this statement implicitly, an express statement of this sort is not required. An express statement, however, would cause an attorney to think twice before impugning the integrity of a fellow patent attorney—supply the express statement would cause patent attorneys in "glass houses" to think twice before casting the first stone. Presumably local patent rules, now the rage in district courts across the country,²⁴² could include the requirement for such a professional certification. Indeed, the Federal Circuit itself requires similar statements to be filed with petitions for hearing or rehearing en banc.²⁴³

^{237.} FED. R. CIV. P. 11(c)(1).

^{238.} FED. R. CIV. P. 11(c)(4). There are, however, express limitations on monetary sanctions. Monetary sanctions may not be imposed on a represented party for nonfrivolous arguments to extend existing law or establish new law, or sua sponte unless the court issues a show-cause order prior to voluntary dismissal or settlement of the claims made by the entity to be sanctioned. FED. R. CIV. P. 11(c)(5).

^{239. 35} U.S.C. § 285 (2006).

^{240.} Figure 2 in the Appendix provides examples of when fee shifting might be appropriate.

^{241.} To practice in front of the Patent Office, an attorney must meet certain scientific and technical qualifications (e.g., an engineering degree) and pass a separate bar exam. *See* 37 C.F.R. § 11.7 (2009) (noting the requirements for individuals to practice include "the legal, scientific, and technical qualifications necessary").

^{242.} Douglas C. Muth et al., *The Local Patent Rules Bandwagon*, INTELL. PROP. & TECH. L. J., August 2009, at 19, 19 ("The number of districts with local patent rules has nearly tripled in less than four years.").

^{243.} See FED. CIR. R. 35(b)(1) (requiring petition for appeal to be heard initially by en banc panel to include following statement by counsel: "Based on my professional judgment, I believe this appeal requires an answer to one or more precedent-setting questions of exceptional importance"); FED. CIR. R. 35(b)(2) (requiring that petition for appeal to be reheard en banc include one of the following statements by counsel: "Based on my professional judgment, I believe the panel decision is contrary to the following decision(s)"; or, "[b]ased on my professional judgment, I believe this appeal requires an answer to one or more precedent-setting questions of exceptional importance").

6. Administrative Review

Yet another potential reform involves the Patent Office providing administrative review of inequitable conduct allegations. In 1982, the Patent Office began investigating allegations of inequitable conduct.²⁴⁴ Shortly thereafter, however, in 1988 the Patent Office largely stopped its investigations.²⁴⁵ It has since articulated persuasive reasons why inequitable conduct should not be handled by the Patent Office during ex parte proceedings. Those reasons include the inability of the Patent Office to subpoena documents and witnesses; the inability to observe the demeanor of witnesses subjected to cross-examination; the inability to fashion any tailored equitable remedies to fit cases in which inequitable conduct is established; the inappropriateness of an administrative body to address an equitable doctrine developed by courts and not set by statute; and the reality that, because of the lack of tools in the Patent Office to thoroughly vet allegations of inequitable conduct and the inability of parties adverse to the patent applicant to participate in any resolution in the Patent Office would provide no resolution of the issue for either the patentee or any adverse partiesand be expensive to boot.246

Significantly, however, many of these reasons do not apply to adversarial, inter partes proceedings. The Patent Office, for example, does consider allegations of inequitable conduct during what are called "interference" proceedings.²⁴⁷ Interference proceedings are inter partes proceedings. Another type of inter partes proceeding that might be appropriate is an opposition proceeding. For example, Congress might establish a postissuance opposition period that provides the public with an opportunity to file complaints regarding inequitable conduct committed during the prosecution of issued patents and to engage in inter partes proceedings to resolve those complaints. The parties could be given subpoena power and the Patent Office's resolution of the issue could be binding on the party filing the opposition.²⁴⁸

Congress could make these postissuance, inter partes proceedings at the Patent Office the exclusive forum for resolution of inequitable conduct claims. If

^{244.} See Mack, supra note 230, at 174 (noting that Patent Office amended Rule 56 in 1982 to allow for rejections of patent applications based on inequitable conduct).

^{245.} Id. at 175.

^{246.} U.S. PATENT AND TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 2010 (8th ed., rev. 7, 2010), *available at* http://www.uspto.gov/web/offices/pac/mpep/mpep.htm (follow "2000 PDF" hyperlink).

^{247.} *Id.* ("Issues of fraud and/or inequitable conduct in an interference proceeding before the Board of Patent Appeals and Interferences (Board) will be considered by the Board").

^{248.} There are various other possible reforms to address the information asymmetry between patent applicants and the Patent Office without modifying the standards governing the inequitable conduct defense. *See generally, e.g.,* Jay P. Kesan, *Carrots and Sticks to Create a Better Patent System,* 17 BERKELEY TECH. L.J. 763 (2002). And, of course, there are other possible reforms to the inequitable conduct doctrine itself that would reduce costs associated with over-use of the doctrine as a defense to a charge of patent infringement. *See* Christopher A. Cotropia, *Modernizing Patent Law's Inequitable Conduct Doctrine,* 24 BERKELEY TECH. L.J. 723, 774–81 (2009) (noting that costs would be reduced by, inter alia, minimizing remedies; maintaining a specific, independent standard of intent; and prohibiting submission of cumulative, nonmaterial art).

Congress did so, the expertise of the Patent Office for handling such claims would be harnessed, while the pernicious effects on the court system and patent infringement litigation would be eliminated. And even if these proceedings were not made the exclusive forum for resolution of inequitable conduct claims, they would presumably reduce the need for resolution by courts.

V. IMPLEMENTING APPROPRIATE REFORMS: WHO SHOULD ACT?

Once all potential reforms to the law of inequitable conduct are on the table, the next question is: Who will evaluate and institute the most helpful and practical reforms—Congress, the Patent Office, district courts, the Federal Circuit, or the Supreme Court? As will be shown, each has a role to play in selecting and implementing appropriate reforms to the inequitable conduct defense.

A. Congress

Congress currently is considering the first significant reform to the patent laws in over fifty-five years. While the patent laws have remained relatively the same since the Patent Act of 1952,²⁴⁹ Congress has recently considered reforming various areas of patent law, including the law of inequitable conduct. For example, in 2007 the House of Representatives and the Senate considered bills that would have codified the law of inequitable conduct.²⁵⁰

The 2007 House bill would have required that inequitable conduct pleadings comply with Rule 9(b) of the Federal Rules of Civil Procedure; defined materiality in terms similar to the modern Rule 56 standard articulated by the Patent Office; defined intent to deceive as requiring "specific facts beyond materiality" showing "conscious or deliberate behavior;" provided various possible remedies for inequitable conduct; and allowed courts to refer patent attorneys to the Patent Office for appropriate disciplinary action when there was evidence that inequitable conduct was attributable to them.²⁵¹

The 2007 Senate bill included some but not all of these reforms. It would have required that inequitable conduct pleadings comply with Rule 9(b) of the Federal Rules of Civil Procedure; defined materiality in terms similar to the modern Rule 56 standard; defined intent largely by adopting the holding of *Kingsdown Medical Consultants, Inc. v. Hollister Inc.*,²⁵² such that gross negligence

^{249.} Act of July 19, 1952, ch. 950, 66 Stat. 792 (codified as amended in various sections of Title 35 of the United States Code).

^{250.} See Patent Reform Act of 2007, H.R. 1908, 110th Cong. § 12 (2007) (providing defense to allegation of patent infringement if individuals with duty of disclosure intended to mislead patent examiner with regard to material information); Patent Reform Act of 2007, S. 1145, 110th Cong. § 12 (2007) (same).

^{251.} H.R. 1908 § 12.

^{252.} See Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876 (Fed. Cir. 1988) (relevant portion en banc) (holding that materiality and intent must both be proven by clear and convincing evidence and that "gross negligence" does not "of itself justify an inference of intent to deceive").

alone would be insufficient to prove inequitable conduct; and provided various possible remedies for inequitable conduct.²⁵³

On the one hand, some of the reforms considered by Congress are not necessary. For example, in light of the recent *Exergen* decision, there is no need to codify the requirement that inequitable conduct pleadings comply with Rule 9(b) of the Federal Rules of Civil Procedure.²⁵⁴ Furthermore, there is no reason for courts to refer patent attorneys to the Patent Office for appropriate disciplinary action when there was evidence that inequitable conduct was attributable to them. The Patent Office already has an Office of Enrollment and Discipline that is, or at least should be, analyzing court decisions on inequitable conduct.²⁵⁵

On the other hand, other reforms considered by Congress should be adopted. For example, as discussed above, trial courts should be given discretion to adopt various possible remedies for inequitable conduct.²⁵⁶ Congress should also clarify the materiality and state of mind thresholds for proving inequitable conduct. In particular, Congress should adopt the "patent fraud" paradigm for inequitable conduct discussed in this Article.²⁵⁷ In addition, Congress should clarify the standard for proving invalidity when the Patent Office was not provided or did not consider material prior art, replace the Federal Circuit's clear and convincing standard with a preponderance of the evidence standard in this situation,²⁵⁸ and consider a strict liability standard for shifting attorney fees in cases where inequitable conduct is not proven.²⁵⁹ Finally, Congress should include in any postissuance opposition period an opportunity for the public to file complaints regarding inequitable conduct committed during the prosecution of issued patents and to engage in inter partes proceedings to resolve those complaints.²⁶⁰

Unfortunately, the most recent patent reform bills being considered by the House of Representatives and the Senate do not include any reforms to the law of

^{253.} Patent Reform Act of 2007, S. 1145, 110th Cong. (2007).

^{254.} See *supra* Part III.C.4. for a discussion of *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312 (Fed. Cir. 2009), which held that inequitable conduct pleadings must satisfy Rule 9(b) of the Federal Rules of Civil Procedure.

^{255.} See Kingsland v. Dorsey, 338 U.S. 318, 319–20 (1949) (noting that Congress intended for Commissioner of Patents, not courts, to protect public from consequences of patent-attorney misconduct); Klein v. Peterson, 866 F.2d 412, 416–17 (Fed. Cir. 1989) (indicating that patent attorneys must deal with Patent Office in honest manner and that failure to do so is ground for sanctions); Jaskiewicz v. Mossinghoff, 822 F.2d 1053, 1059–61 (Fed. Cir. 1987) (affirming in part and reversing in part Patent Office's decision to discipline patent attorney for misconduct).

^{256.} See *supra* Part IV.C.1 for a discussion of the proposal to give district courts more power to assess appropriate remedies.

^{257.} See supra Part IV.A for a discussion of the "patent fraud" paradigm.

^{258.} See *supra* Part IV.C.3 for an argument that the clear and convincing standard for proving invalidity should be replaced with a preponderance of the evidence standard.

^{259.} See *supra* Part IV.C.4 for a discussion of when shifting attorney fees would be appropriate in the inequitable conduct context.

^{260.} See *supra* Part IV.C.6 for a discussion of the Patent Office providing administrative review of allegations of inequitable conduct.

inequitable conduct.²⁶¹ Congress should amend these bills to address and correct the significant problems associated with the current law of inequitable conduct.

B. Patent Office

The Patent Office should consider and adopt appropriate reforms to assist the courts in addressing the problems with the current law of inequitable conduct. The Patent Office likely has the rulemaking authority required to implement certain types of administrative review of inequitable conduct allegations. Indeed, in 1982 it amended Rule 56 to allow examiners to reject patent applications during the patent application process based on evidence of inequitable conduct.²⁶² It likely does not have the authority, however, to implement inter partes postissuance opposition proceedings.²⁶³ If Congress implements inter partes postissuance opposition proceedings, the Patent Office should consider the benefits of providing tools to parties and examiners to adjudicate allegations of inequitable conduct during these proceedings.

C. District Courts

While district courts²⁶⁴ obviously cannot overturn Federal Circuit or Supreme Court precedent, they should be allowed to exercise their discretion to fashion appropriate remedies for inequitable conduct based on the degree of inappropriate behavior.²⁶⁵ They also should consider shifting attorney fees in cases where assertions of inequitable conduct are baseless.²⁶⁶ Moreover, district courts should amend local patent rules to require professional certifications by patent attorneys of inequitable conduct assertions.²⁶⁷

D. Federal Circuit

The Federal Circuit was formed in 1982 in part to bring uniformity and consistency to patent law.²⁶⁸ The Federal Circuit has not taken its role lightly. In recent years, en banc panels of the Federal Circuit have addressed controversial

^{261.} Patent Reform Act of 2009, H.R. 1260, 111th Cong. (2009); Patent Reform Act of 2009, S. 515, 111th Cong. (2009).

^{262.} Notice of Final Rulemaking, 47 Fed. Reg. 21,746, 21,746-47 (May 19, 1982).

^{263.} *See* 35 U.S.C. § 2(b)(2) (2006) (granting authority to Patent Office to issue regulations relating to internal procedure); Tafas v. Doll, 559 F.3d 1345, 1351–53 (Fed. Cir. 2009) (holding that Patent Office is limited to procedural rulemaking authority).

^{264.} While I use the term "district courts," I am referring to district courts as well as the Court of Federal Claims, which has exclusive jurisdiction over allegations of patent infringement by the United States. *See* 28 U.S.C. § 1498(a) (2006) (granting jurisdiction over patent claims against United States to Court of Federal Claims).

^{265.} See *supra* Part IV.C.1 for a discussion of the proposal to give district courts more power to assess appropriate remedies.

^{266.} See *supra* Part IV.C.4 for a discussion of the benefits of a strict liability regime for shifting attorney fees.

^{267.} See *supra* Part IV.C.5 for a discussion of the proposal to require patent attorneys to provide professional certifications of inequitable conduct claims.

^{268.} *See* H.R. REP. No. 97-312, at 18–24 (1981) (proposing creation of United States Court of Appeals for the Federal Circuit).

and difficult aspects of patent law, including patentability,²⁶⁹ claim construction,²⁷⁰ and the written description requirement.²⁷¹ Recently, in *Therasense, Inc. v. Becton, Dickinson and Co.*,²⁷² the Federal Circuit agreed to address en banc another controversial and difficult aspect of patent law: the inequitable conduct defense.²⁷³

It is helpful that the Federal Circuit will be addressing potential reforms to the law of inequitable conduct before the Supreme Court does so. Unlike *KSR International Co. v. Teleflex Inc.*, ²⁷⁴ in which the Supreme Court granted a petition for certiorari before the Federal Circuit squarely addressed arguments for reform of an important and basic area of patent law (nonobviousness), the Federal Circuit should squarely address arguments for reform of the inequitable conduct defense before the Supreme Court hears a case addressing the same subject.²⁷⁵ Given that the doctrine of inequitable conduct as it now exists was developed and articulated by the Federal Circuit and not the Supreme Court,²⁷⁶ the Federal Circuit best understands the complexities of the current inequitable conduct law, its problems, and the particular aspects of it that are ripe for improvement. Thus, the Federal Circuit is the best entity to assess and implement potential reforms.

The Federal Circuit should adopt a "patent fraud" paradigm²⁷⁷ or, at a minimum, increase the state of mind standard required to prove inequitable

271. *See* ARIAD Pharm., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1343–54 (Fed. Cir. 2010) (en banc) (concluding that 35 U.S.C. § 112, ¶ 2 includes a separate written description requirement).

272. 374 Fed. Appx. 35 (Fed. Cir. 2010).

^{269.} See In re Bilski, 545 F.3d 943, 949–63 (Fed. Cir. 2008) (en banc) (determining applicable test for patent-eligibility for process calims), *aff'd*, Bilski v. Kappos 130 S. Ct. 3218 (2010).

^{270.} *See* Phillips v. AWH Corp., 415 F.3d 1303, 1311–24 (Fed. Cir. 2005) (en banc) (rejecting "rigid algorithm for claim construction"). *But see id.* at 1330–35 (Mayer, J., dissenting) (bemoaning Court's failure to address whether claim construction determinations should be reviewed on appeal for clear error rather than de novo).

^{273.} In particular, the Federal Circuit will address the following six questions:

^{1.} Should the materiality-intent-balancing framework for inequitable conduct be modified or replaced?

^{2.} If so, how? In particular, should the standard be tied directly to fraud or unclean hands? If so, what is the appropriate standard for fraud or unclean hands?

^{3.} What is the proper standard for materiality? What role should the United States Patent and Trademark Office's rules play in defining materiality? Should a finding of materiality require that but for the alleged misconduct, one or more claims would not have issued?

^{4.} Under what circumstances is it proper to infer intent from materiality?

^{5.} Should the balancing inquiry (balancing materiality and intent) be abandoned?

^{6.} Whether the standards for materiality and intent in other federal agency contexts or at common law shed light on the appropriate standards to be applied in the patent context.

Therasense, Inc., 374 Fed. Appx. at 35-36 (citations omitted).

^{274. 550} U.S. 398 (2007).

^{275.} See John F. Duffy, *The* Festo *Decision and the Return of the Supreme Court to the Bar of Patents*, 2002 SUP. CT. REV. 273, 300–01 (lauding ability of Federal Circuit to thoroughly vet an issue so that it is "ready for a grant of certiorari").

^{276.} See *supra* note 178 and accompanying text for a discussion of how inequitable conduct law primarily has been developed by the Federal Circuit.

^{277.} See supra Part IV.A for a discussion of the "patent fraud" concept.

conduct.²⁷⁸ In addition, it should return discretion to district courts to assess appropriate remedies for inequitable conduct.²⁷⁹ Finally, it should replace its clear and convincing standard with a preponderance standard for proving invalidity based on undisclosed, unconsidered material prior art.²⁸⁰

E. Supreme Court

The Supreme Court has not considered an allegation of inequitable conduct in the procurement of a patent outside of fraud,²⁸¹ and the Supreme Court last considered a case involving an allegation of fraud in the procurement of a patent over forty-five years ago.²⁸² Even this most recent case addressed antitrust liability rather than the inequitable conduct defense.²⁸³ Thus, over the last four and a half decades, various lower courts—most notably the Federal Circuit—have addressed the doctrine of inequitable conduct and developed it into its current form without any oversight. It is time for the Supreme Court to reenter the field to provide that oversight.

Much like the Federal Circuit, the Supreme Court has addressed several important aspects of patent law in the last few years, including the doctrine of equivalents,²⁸⁴ the statutory research exemption from infringement,²⁸⁵ the intersection of patent and antitrust law,²⁸⁶ injunctive relief,²⁸⁷ export infringement,²⁸⁸ obviousness,²⁸⁹ patent exhaustion,²⁹⁰ and patentability.²⁹¹ The

^{278.} See *supra* Part IV.B for an argument in favor of raising the standard for determining intent to deceive.

^{279.} See *supra* Part IV.C.1 for a discussion of the proposal to give district courts more power to assess appropriate remedies.

^{280.} See *supra* Part IV.C.3 for a proposal to adopt a preponderance standard for proving invalidity using unconsidered, material prior art rather than the current standard of clear and convincing evidence.

^{281.} *See* Kingsland v. Dorsey, 338 U.S. 318, 318–20 (1949) (affirming district court's conclusion that Patent Office's decision to disbar patent attorney for participating in defrauding Office was supported by substantial evidence and based on fair proceeding); Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 8066, 819 (1945) (affirming district court's conclusion that, because of patent holder's knowledge or reasonable belief that perjury tainted the patent proceedings, the equitable doctrine of unclean hands barred enforcement of the patent); Hazel-Atlas Glass Co. v. Hartford-Empire Co., 322 U.S. 238, 250 (1944) (holding that, despite passage of nine years, the circuit court had authority to set aside district court judgment based on later-discovered fraud), *overruled on other grounds by* Standard Oil Co. v. United States, 429 U.S. 17, 18–19 (1976); Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 246–47 (1933) (applying doctrine of unclean hands to bar plaintiff from bringing suit).

^{282.} See generally Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172 (1965). 283. See generally id.

^{284.} Festo Corp. v Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730–42 (2002).

^{285.} Merck KGaA v. Integra Lifesciences I, Ltd., 545 U.S. 193, 202–08 (2005).

^{286.} Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 33–46 (2006).

^{287.} eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391-94 (2006).

^{288.} Microsoft Corp. v. AT&T Corp., 550 U.S. 437, 442-59 (2007).

^{289.} KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 415–22 (2007).

^{290.} Quanta Computer, Inc. v. LG Elecs., Inc., 128 S. Ct. 2109, 2115-22 (2008).

^{291.} *See* Bilski v. Kappos, 130 S. Ct. 3218, 3221–24 (2010) (addressing appropriate standard governing application of 35 U.S.C. § 101); Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 548 U.S. 124, 125 (2006) (per curiam) (dismissing writ of certiorari as improvidently granted).

Supreme Court should get its hands dirty in patent law's unclean hands doctrine inequitable conduct. The Federal Circuit, however, should be presented with potential reforms before the Supreme Court grants any petitions for certiorari addressing this area of the law.²⁹²

In particular, the Supreme Court should adopt a "patent fraud" paradigm²⁹³ or, at a minimum, increase the state of mind standard required to prove inequitable conduct.²⁹⁴ Like the Federal Circuit, it should return discretion to district courts to assess appropriate remedies for inequitable conduct.²⁹⁵ It also should consider the split between the Federal Circuit and various regional circuits regarding the appropriate burden of proof required to prove invalidity when material prior art has not been considered by the Patent Office, and it should adopt a preponderance standard.²⁹⁶

VI. CONCLUSION

The time has come to reform the law of inequitable conduct. While the inherent information asymmetry between patent applicants and the Patent Office is a real problem, the solution to that problem—the inequitable conduct defense should be something more than just another problem. To serve the public interest in encouraging patent applicants to disclose important information to the Patent Office, and to correct for the "plague" of inequitable conduct allegations and their many tolls, the inequitable conduct defense should be transformed into a tool to address "patent fraud." In particular, the law should require clear and convincing evidence meeting both a heightened materiality and heightened state of mind standard before patents are rendered unenforceable. Other potential reforms including returning discretion to the application of remedies for inequitable conduct, eliminating the clear and convincing standard for proving invalidity based on material prior art not disclosed or considered by the Patent Office, and shifting attorney fees when an alleged infringer fails to prove inequitable conduct—should also be considered. Congress, the Patent Office, district courts, the Federal Circuit, and the Supreme Court should consider all reasonable options and act.

^{292.} See *supra* notes 274–76 and accompanying text for a discussion of why the Federal Circuit should assess reforms to the inequitable conduct doctrine prior to the Supreme Court.

^{293.} See supra Part IV.A for a discussion of the concept of "patent fraud."

^{294.} See supra Part IV.B for an argument about raising the standard for determining intent to deceive.

^{295.} See *supra* Part IV.C.1 for a proposal to give district courts more power to assess appropriate remedies.

^{296.} See *supra* Part IV.C.3 for a proposal to replace the current clear and convincing standard for proving invalidity with a preponderance standard when the Patent Office has not considered material prior art.

2010]

Appendix

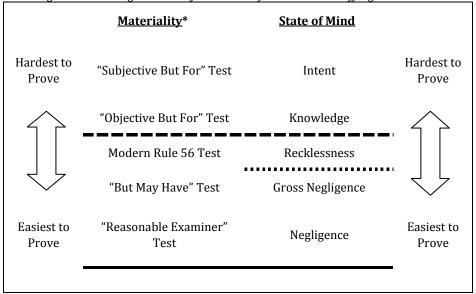


Figure 1: Ordering Materiality and State of Mind and Identifying Thresholds

* The modern Rule 56, "but may have," and "reasonable examiner" materiality tests include a non-cumulativeness requirement. The "subjective but for" test likely includes this requirement.

The dashed line represents "patent fraud" thresholds. "Patent fraud" could be shown by evidence meeting (1) at least one of the materiality standards above the dashed line and (2) at least one of the state of mind standards above the dashed line.

The solid line represents the "negligent misrepresentation/omission" thresholds. "Negligent misrepresentation / omission" might be shown by evidence meeting (1) at least one of the materiality standards above the solid line but below the dashed line and (2) at least one of the state of mind standards above the solid line but below the dashed line.

Under the current law, inequitable conduct can be shown by evidence meeting (1) at least one of the materiality standards above the dashed line and (2) at least one of the state of mind standards above the solid line, *or* by evidence meeting (1) at least one of the materiality standards above the solid line and (2) at least one of the state of mind standards above the solid line and (2) at least one of the state of mind standards above the dashed line and (2) at least one of the state of mind standards above the dashed line.

The dotted line represents the adoption of a heightened state of mind standard for inequitable conduct. Using this heightened state of mind standard, inequitable conduct could be shown by evidence meeting (1) at least one of the materiality standards above the dashed line and (2) at least one of the state of mind standards above the dotted line, *or* by evidence meeting (1) at least one of the materiality standards above the solid line and (2) at least one of the state of mind standards above the dashed line.

<u>Materiality*</u>	State of Mind	Legal Conclusion	<u>Remedy</u>
"Subjective But For" Test or "Objective But For" Test	Intent or Knowledge	Potential Walker Process Antitrust Violation; "Patent Fraud"; Heightened Inequitable Conduct; Current Inequitable Conduct	Unenforceability of Patent(s); Attorney Fees; Potential Damages for Walker Process Antitrust Violation
"Subjective But For" Test or "Objective But For" Test	Recklessness	Heightened Inequitable Conduct; Current Inequitable Conduct	Unenforceability of Patent; Attorney Fees
"Subjective But For" Test or "Objective But For" Test	Gross Negligence, or Negligence	Current Inequitable Conduct	Unenforceability of Patent
Modern Rule 56 Test, "But May Have" Test, or "Reasonable Examiner" Test	Intent or Knowledge	Heightened Inequitable Conduct; Current Inequitable Conduct	Unenforceability of Patent
Modern Rule 56 Test, "But May Have" Test, or "Reasonable Examiner" Test	Recklessness, Gross Negligence, or Negligence	"Negligent Misrepresentation / Omission"	No Clear and Convincing Invalidity Standard (Potential Invalidity)#
Any	None	No Misconduct	None ^{#+}
None	Any	No Misconduct	None ⁺

Figure 2: Balancing Materiality and State of Mind and Proposing Proportional Remedies

* The modern Rule 56, "but may have," and "reasonable examiner" materiality tests include a non-cumulativeness requirement. The "subjective but for" test likely includes this requirement.

An alternative to a "negligent misrepresentation / omission" defense would be to replace the clear and convincing invalidity standard with a preponderance invalidity standard for prior art not disclosed or considered by the Patent Office and meeting any materiality standard, without any state of mind requirement. This alternative could reduce the "plague" of inequitable conduct assertions while supporting the duty of candor and good faith. See *supra* Part IV.C.1 for a proposal to give district courts more power to assess appropriate remedies in inequitable conduct cases.

+ One possibility is to shift attorney fees to parties unable to prove misconduct. This also would help reduce the "plague" of inequitable conduct assertions. See *supra* Part IV.C.4 for a discussion of the benefits of adopting a strict liability standard for shifting attorney fees.

2010]