ARTICLES

UNCLEAN PATENTS

SEAN B. SEYMORE*

ABSTRACT

The doctrine of unclean hands is perhaps the most storied affirmative defense in civil cases. It allows a court to dismiss a lawsuit without reaching the merits if the patent owner (patentee) engaged in misconduct related to the claim being asserted. In patent law, the Supreme Court has stated that the doctrine is of "paramount interest" given the nature of the patent bargain between the inventor and the public. Nonetheless, unclean hands has been a relatively dormant defense in patent cases, other than in the specific context of patent procurement at the Patent Office (where it has evolved into the doctrine of inequitable conduct). It has also been mostly limited to cases involving litigation misconduct where the dismissal rendered the patent unenforceable against the accused infringer. Recently, however, the defense was successfully asserted against a patentee for prelitigation business misconduct. This holding raised eyebrows because it resurrected the doctrine and applied it more broadly than prior cases.

Resurrecting unclean hands in patent law makes sense from a normative perspective. Allowing patentees to take advantage of their own misconduct contravenes the public interest, jeopardizes the legitimacy of the courts, and ultimately undermines the integrity of the patent system. But this insight raises three important normative questions: First, what types of misconduct should trigger the defense? Second, what nexus in time, causation, and logical linkage should exist between the alleged misconduct and the patent-in-suit? And third, does resurrecting the doctrine align with current patent policy and other goals of the patent system?

I answer these questions in this Article by offering a new theory of unclean hands in patent law. I argue that misconduct during the acquisition of the patent right (other than at the Patent Office) should render the patent universally

^{*} Centennial Professor of Law and Professor of Chemistry, Vanderbilt University. For helpful comments and conversations, I thank Jonas Anderson, T. Leigh Anenson, Samuel Bray, Joseph Fishman, Janet Freilich, Paul Gugliuzza, Timothy Holbrook, Justin Hughes, Dmitry Karshtedt, Christa Laser, Douglas Laycock, Mark Lemley, Jonathan Masur, Andrew Michaels, Robert Mikos, Craig Nard, Lisa Larrimore Ouellette, Greg Reilly, Jacob Sherkow, and Stephen Yelderman, along with workshop participants at the Notre Dame Patent Colloquium and the Sixth Annual Patent Scholars Roundtable.

unenforceable against any potential defendant-infringer if the defendantinfringer can show a sufficient nexus. After exploring the types of misconduct that would or wouldn't trigger the doctrine, I describe how the proposed approach aligns with normative justifications for unclean hands and broader goals of the patent system. I also offer a set of principles to limit and guide a court's discretion in applying the doctrine in patent suits.

1493

CONTENTS

INTRO	RODUCTION		
I.	Uni	DERSTANDING PATENT LAW'S UNENFORCEABILITY	
	DOCTRINES		1496
	Α.	Historical Foundations	1497
	В.	Inequitable Conduct	1502
		1. Fraud on the Patent Office	
		2. The Patent Applicant's Duty of Disclosure	1503
		3. Basic Principles	
		4. The <i>Therasense</i> Standard	
	C.	Unclean Hands	1508
		1. The Governing Legal Standard	
		2. Gilead Resurrects (and Broadens) the Doctrine	
II.	Rei	NVIGORATING UNCLEAN HANDS IN PATENT LAW	1515
	Α.	Toward a New Theory	1515
		1. Universal Unenforceability	1515
		2. The Nexus (Relatedness) Requirement and Collateral	
		Misconduct	1517
	Β.	Exemplary Scenarios	1518
		1. Fabricating Results	
		2. Fruit of the Poisonous Tree	
		3. Surreptitious Acquisition of Knowledge About an	
		Invention	1522
		4. Deceptive Conduct in Standard-Setting Organizations.	1523
		5. Corporate Malfeasance	
		6. Poaching for the Public Good	1528
III.	Pol	ICY CONSIDERATIONS	1530
	Α.	Normative Justifications	1530
		1. Court Integrity	1530
		2. Public Interest	1531
		3. Deterrence of Wrongful Conduct	1533
	В.	Discretion-Limiting Principles	1534
	C.	Addressing Objections and Criticisms	1538
		1. Should the Taint of Unclean Hands Run With the	
		Patent?	1538
		2. Can Substantive Patent Validity Doctrines Handle	
		Uncleanliness?	1539
		3. Can a Patent Be Purged of Unclean Hands?	1541
		4. Should Patent Law Tolerate Some Uncleanliness?	1542
CONCLUSION			1545

INTRODUCTION

Perhaps the most storied affirmative defense in civil cases is the unclean hands doctrine.¹ It can be traced to a moral principle in Roman law that "relief will be refused to one who is trying to get the court to give him relief based on a shameful act."² The English chancellors, influenced by medieval canon lawyers,³ established the maxim that "one who invokes the aid of a court must come into it with a clear conscience and clean hands."⁴ This maxim is a bedrock of equity jurisprudence.⁵ In the United States, the doctrine dates back to the early Republic.⁶

Unclean hands shuts the courthouse doors to a plaintiff who commits a willful act "tainted with inequitableness or bad faith" relative to the matter for which relief is sought.⁷ Courts have applied the doctrine in a wide array of cases, including those involving conveying a house to shield it from creditors,⁸ relief

⁴ Zechariah Chafee, Jr., *Coming into Equity with Clean Hands*, 47 MICH. L. REV. 1065, 1088 (1949) (quoting Kellogg v. Kellogg, 137 N.W. 249, 250 (Mich. 1912); *see also* 1 JOHN NORTON POMEROY, A TREATISE ON EQUITY JURISPRUDENCE § 363, at 393-94 (1886) (listing "maxims of equity," including "he who comes into equity must come with clean hands"); RICHARD FRANCIS, MAXIMS OF EQUITY viii (3d ed. 1791) ("Maxim II. He that hath committed Iniquity, shall not have Equity."); Samuel L. Bray, A Student's Guide to the Meanings of "Equity" 5 (July 20, 2016) (unpublished manuscript) (on file with author) (describing hallmarks of equity courts as "case-specificity, discretion, flexibility, moral reasoning, and resistance to fraud, exploitation, and the abuse of legal rights").

⁵ HAROLD GREVILLE HANBURY, MODERN EQUITY 37 (1935) ("A plaintiff must come to equity with clean hands."); *cf*. RONALD DWORKIN, TAKING RIGHTS SERIOUSLY 27 (1977) ("We say that our law respects the principle that no man may profit from his own wrong"). Perhaps the most famous application of the doctrine is the 1725 English case of *Everet v*. *Williams*, better known as *The Highwayman's Case*, in which a robber was refused an accounting of the profits of their joint crime. *See* Note, *The Highwayman's Case*, 9 L.Q. REV. 197 (1893) (reporting case). The Court of Exchequer refused to hear the case, deemed it "both scandalous and impertinent," had both criminals hanged, and held the plaintiff's solicitor in contempt. *See id*. at 198-99.

⁶ ZECHARIAH CHAFEE, JR., SOME PROBLEMS OF EQUITY 5 (1950). The Supreme Court first recognized the doctrine in *Talbot v. Jansen*, 3 U.S. 133 (1795). *See id.* at 158 ("[P]ersons guilty of fraud, should not gain by it. Hence the efficacy of the legal principle, that no man shall set up his own fraud or iniquity, as a ground of action or defence."); *see also* Cathcart v. Robinson, 30 U.S. 264, 276 (1831) (applying "well-settled" principle that "plaintiff must come into court with clean hands," lest "a court . . . withhold its aid").

⁷ Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 814 (1945).

⁸ See Senter v. Furman, 265 S.E.2d 784, 785-86 (Ga. 1980) (affirming trial court's grant of summary judgment in dentist's action to impose constructive trust where evidence

¹ See generally DAN B. DOBBS & CAPRICE L. ROBERTS, LAW OF REMEDIES: DAMAGES— EQUITY—RESTITUTION § 2.4(2) (3d ed. 2018).

² RALPH A. NEWMAN, EQUITY AND LAW: A COMPARATIVE STUDY 250 (1961).

³ William W. Bassett, *Canon Law and the Common Law*, 29 HASTINGS L.J. 1383, 1417-18 (1978) (explaining that English chancellors followed medieval canon lawyers, who developed notions of equity far beyond those in Roman law).

from payment of child support,⁹ nonpayment of attorney's fees,¹⁰ and enforcement of a trademark for a laxative named "Syrup of Figs" that lacked figs.¹¹ In patent cases, the Supreme Court has stated that the doctrine "assumes even wider and more significant proportions"¹² because of the "carefully crafted bargain"¹³ or quid pro quo between the inventor and the public.¹⁴ Patents tainted with fraud or inequitableness prevent the public from recouping its end of the bargain. Thus, a plaintiff trying to enforce a tainted patent in litigation may be denied relief based on the unclean hands defense, which results in the court's dismissal of the infringement suit.¹⁵

Despite the Supreme Court's views, unclean hands has been a fairly dormant, affirmative defense in patent cases. As a consequence, it hasn't generated substantial attention from legal scholars. More attention is paid to a related affirmative defense derived from unclean hands—the doctrine of inequitable conduct.¹⁶ This judge-made doctrine polices the duty of candor and good faith that each patent applicant owes to the U.S. Patent and Trademark Office ("Patent Office"). A finding of inequitable conduct renders a patent unenforceable if intentional misconduct (such as withholding information material to patentability) led the Patent Office to issue the patent.¹⁷

Unclean hands is a broader doctrine that polices patentee misconduct beyond dealings with the Patent Office. This distinction from inequitable conduct came to light in the 2018 case *Gilead Sciences*, *Inc. v. Merck & Co.*,¹⁸ where the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit")¹⁹ affirmed a ruling that the patents-in-suit couldn't be enforced for unclean hands based on prelitigation business misconduct.²⁰ Before *Gilead*, most patent-related unclean

¹⁰ See Feingold v. Pucello, 654 A.2d 1093, 1094-95 (Pa. Super. Ct. 1995) (rejecting attorney's *quantum meruit* recovery for failure to disclose attorney's contingency fee arrangement).

¹¹ See Worden v. Cal. Fig Syrup Co., 187 U.S. 516, 538-40 (1903) (refusing to enforce trademark because syrup contained senna instead of figs as primary active ingredient).

¹² Precision Instrument, 324 U.S. at 812.

- ¹³ Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 150 (1989).
- ¹⁴ See infra notes 89-94 and accompanying text.
- ¹⁵ See infra Section I.C.1.
- ¹⁶ See infra Section I.B.
- ¹⁷ See infra Section I.B.3.
- ¹⁸ 888 F.3d 1231 (Fed. Cir. 2018).

¹⁹ The U.S. Court of Appeals for the Federal Circuit ("Federal Circuit") is a twelve-judge Article III court whose jurisdiction includes appeals from the Patent Office and patent suits emerging from the U.S. district courts. *See* 28 U.S.C. §§ 44, 1295(a).

²⁰ Gilead, 888 F.3d at 1234.

established that dentist transferred property with intent to avoid liability exposure on malpractice claim).

⁹ See Bond v. Bond, 114 A.2d 725, 728 (N.J. Super. Ct. App. Div. 1955) (rejecting plaintiff's motion to vacate support order because plaintiff made fraudulent representations to court).

hands cases involved litigation misconduct. So *Gilead* raised eyebrows because it resurrected the doctrine and applied it more broadly than before.²¹

While *Gilead* has drawn attention to the unclean hands doctrine in patent law, the limits of the resurrected defense remain unclear. *Gilead* also raises three important normative questions. First, what types of misconduct should trigger the defense? Second, what nexus in time, causation, and logical linkage should exist between the alleged misconduct and the patent-in-suit? Third, does resurrecting the doctrine align with current patent policy and other goals of the patent system?

This Article aims to address these questions and take on the largely understudied and undertheorized role of unenforceability as a remedy for patentee misconduct. The Article begins, in Part I, by describing the historical foundations of unclean hands in patent law, its relation to other unenforceability doctrines, the governing legal standard, and Gilead's resurrection of the doctrine. Part II offers a new theory of unclean hands in patent law: misconduct during the acquisition of the patent can result in unenforceability that runs with the patent-universal unenforceability-if a direct nexus is shown. It then illustrates scenarios in which the doctrine should or shouldn't apply. Finally, Part III explores the policy considerations associated with reinvigorating the unclean hands defense in patent law. It begins by discussing the normative justifications that have been offered for unclean hands: court integrity, public interest, and deterrence of wrongful conduct. Mindful of these policy norms and the doctrine's amorphous and discretionary nature, I explain how the reinvigorated defense should be applied by offering five discretion-limiting principles for courts adjudicating unclean hands in patent cases. I conclude by addressing potential criticisms and objections to reinvigorating unclean hands in patent law.

I. UNDERSTANDING PATENT LAW'S UNENFORCEABILITY DOCTRINES

A patent gives its owner, or patentee, the statutory right "to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States."²² After patent issuance, the patentee can bring an infringement suit for damages and injunctive relief in federal court against any person or entity who allegedly has infringed the patent.²³ An alleged infringer can defend against the suit by asserting a number of affirmative defenses, including noninfringement,²⁴ invalidity,²⁵ and

²¹ See infra Section I.C.2.

²² 35 U.S.C. §§ 154(a)(1), 271(a).

²³ *Id.* § 281.

²⁴ See id. § 282(b)(1). Infringement is a question of fact that the patentee must prove by a preponderance of the evidence. Siemens Med. Sols. USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc., 637 F.3d 1269, 1279 (Fed. Cir. 2011).

²⁵ See 35 U.S.C. § 282(b)(2). An invalidity defense requires the accused infringer to prove by clear and convincing evidence that the patent fails to satisfy one or more of the statutory

unenforceability.²⁶ As I discuss below, two unenforceability defenses²⁷—inequitable conduct and unclean hands—have been shaped by the decisional law in cases where the patentee defrauded the court or the Patent Office.

A. Historical Foundations

As late as 1932, federal courts wouldn't consider assertions of fraud in patent infringement suits.²⁸ But in a trio of cases decided between 1933 and 1945,²⁹ the Supreme Court addressed circumstances in which a patentee seeking to enforce a patent had engaged in deceit or fraud before the court or the Patent Office. In each case, the patentee was denied the relief sought.³⁰

²⁸ See, e.g., Fahrenwald v. Republic Iron & Steel Co., 61 F.2d 385, 386 (3d Cir. 1932) (refusing to inquire into misrepresentations made by patentee during patent procurement); *see also* 2 WILLIAM C. ROBINSON, THE LAW OF PATENTS FOR USEFUL INVENTIONS 458 (1890) (explaining that patent's procurement by fraud isn't defense to patent infringement). At the time, the federal government had the exclusive right to bring a cancellation proceeding for fraudulent procurement of a patent. *See infra* note 45.

²⁹ Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240 (1933); Hazel-Atlas Glass Co. v. Hartford-Empire Co., 322 U.S. 238 (1944), *abrogated by* Standard Oil Co. v. United States, 429 U.S. 17 (1976); Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806 (1945).

³⁰ *Keystone Driller*, 290 U.S. at 247 (involving injunctions); *Precision Instrument*, 324 U.S. at 814-15 (describing suit of equity as one where relief involves injunctions and specific performance); *Hazel-Atlas Glass*, 322 U.S. at 241 (detailing plaintiff's prayer for injunction and for accounting for profits and damages).

patentability requirements. Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95 (2011). Briefly, the claimed invention must be useful, novel, nonobvious, and directed to patentable subject matter. 35 U.S.C. §§ 101-103. The patent must adequately describe, enable, and set forth the best mode for the invention and conclude with definite claims. *Id.* § 112(a)-(b).

²⁶ See 35 U.S.C. § 282(b)(1). Unenforceability and invalidity are different. A patent can be valid (because it satisfies all of the statutory patentability requirements) yet unenforceable. That said, an unenforceable patent is essentially "useless" to the patentee (aside from possibly serving as a source of patent-defeating prior art against other inventors). Lee Petherbridge, Jason Rantanen & R. Polk Wagner, *Unenforceability*, 70 WASH. & LEE L. REV. 1751, 1753-54 (2013).

²⁷ A third unenforceability defense—patent misuse—may arise when the patentee expands the legitimate physical or temporal scope of an asserted patent in an anticompetitive manner. *See* Windsurfing Int'1, Inc. v. AMF, Inc., 782 F.2d 995, 1001 (Fed. Cir. 1986) (citing Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found., 402 U.S. 313, 343 (1971)). It is an amorphous doctrine applied to limit the abuse of patent rights. *See* MUELLER, *infra* note 99, at 929-34. Although it (like inequitable conduct) finds its roots in unclean hands, patent misuse focuses on the way the patentee exploits the patent. *See* U.S. Gypsum Co. v. Nat'l Gypsum Co., 352 U.S. 457, 465 (1957). Patent misuse "has become increasingly irrelevant outside a narrow sliver of cases where a patent owner with market power engages in licensing practices with demonstrable anticompetitive effects." Deepa Varadarajan, *The Uses of IP Misuse*, 68 EMORY L.J. 739, 742 (2019). Misuse can be purged, thereby rendering the patent enforceable. *See infra* notes 365, 367.

In Keystone Driller Co. v. General Excavator Co.,³¹ the patentee knew of a possible invalidating prior use by a third party prior to filing a patent application.³² After the patent issued, the patentee paid the third party to sign a (false) affidavit claiming that its use was an abandoned experiment to keep secret the details of the use and to suppress evidence of the use.³³ The patentee then prevailed in an infringement suit, no doubt because the court was unaware of the patentee's misconduct.³⁴ However, the misconduct came to light in a second infringement suit when the patentee asserted the same patent and sought injunctive relief against different defendants.³⁵ In affirming the dismissal of both cases, the Supreme Court explained that if the court in the first case had been aware of the corrupt transaction, it "undoubtedly would have been warranted ... in holding it sufficient to require dismissal of the cause of action."³⁶ Because the patentee used that victory as the basis for the injunction, it "did not come with clean hands in respect of any cause of action in these cases."³⁷ thereby making dismissal the appropriate relief in both cases. However, the patentee was free to enforce the patent against other defendants without the taint of the prior misconduct.³⁸

³¹ Keystone Driller, 290 U.S. 240.

³² *Id.* at 243-44. A third party's prior use of the invention defeats patent law's novelty requirement. *See* Coffin v. Ogden, 85 U.S. (18 Wall.) 120, 120 (1873).

³³ *Keystone Driller*, 290 U.S. at 243. An abandoned experiment by a third party couldn't serve as a patent-defeating prior use of the invention. *Coffin*, 85 U.S. (18 Wall.) at 124. Likewise, a third party's concealment, suppression, or secret use doesn't qualify as a patent-defeating prior use because private knowledge can't defeat patent law's novelty requirement. Gayler v. Wilder, 51 U.S. (10 How.) 477, 497 (1850).

³⁴ *Keystone Driller*, 290 U.S. at 243.

³⁵ See id.

³⁶ *Id.* at 246. Perhaps the court was referring to the then-existing "whole truth" statutory defense to patent infringement, which allowed a defendant to prove "[t]hat for the purpose of deceiving the public the description and specification filed by the patentee in the Patent-Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect." Patent Act of 1870, ch. 230, § 61, 16 Stat. 198, 208 (repealed 1952); *see also* Loom Co. v. Higgins, 105 U.S. 580, 588-89 (1881) (discussing defense).

³⁷ Keystone Driller, 290 U.S. at 247.

³⁸ This is exactly what happened two years later in *Keystone Driller Co. v. Northwestern Engineering Corp.*, 294 U.S. 42 (1935). While the Court acknowledged the earlier unclean hands finding, it nevertheless resolved the case on the merits. *See id.* at 44 n.2. Some take this to mean that (1) prior litigation misconduct doesn't taint a subsequent case (i.e., render a patent universally unenforceable) and (2) litigation conduct leaves the property right intact (i.e., the patent remains enforceable). *See* Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1377 (Fed. Cir. 2001).

In *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*,³⁹ the patentee fabricated an article describing the invention as a remarkable advance in the art and had a well-known expert publish it in a trade journal as his own—all in an effort to overcome "an apparently insurmountable" Patent Office rejection.⁴⁰ After the patentee submitted the article, the Patent Office withdrew the rejection and issued the patent.⁴¹ In infringement litigation against Hazel-Atlas, the patentee took great effort to conceal the false authorship before the Third Circuit, which relied on the fabricated article to hold the patent valid and infringed.⁴² When the misconduct came to light in a subsequent infringement suit involving another litigant, Hazel-Atlas petitioned the Third Circuit to vacate its judgment.⁴³ The Third Circuit refused, but the Supreme Court reversed:

Hartford's 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 From there the trail of fraud continued without break through the District Court and up to the Circuit Court of Appeals. Had the District Court learned of the fraud on the Patent Office at the original infringement trial, it would have been warranted in dismissing Hartford's case. ... So, also, could the Circuit Court of Appeals have dismissed the appeal had it been aware of Hartford's corrupt activities in suppressing the truth concerning the authorship of the article. The total effect of all this fraud ... calls for nothing less than a complete denial of relief to Hartford for the claimed infringement of the patent thereby procured and enforced.⁴⁴

Accordingly, the Court vacated the judgment and dismissed the suit.45

In Precision Instrument Manufacturing. Co. v Automotive Maintenance Machinery Co.,⁴⁶ a Precision employee applied for a patent on a torque

³⁹ 322 U.S. 238 (1944), *abgrogated by* Standard Oil Co. v. United States, 429 U.S. 17 (1976).

⁴⁰ *Id*. at 240.

⁴¹ *Id*. at 240-41.

⁴² *Id*. at 241-43.

⁴³ *Id*. at 240.

⁴⁴ *Id.* at 250 (citations omitted).

⁴⁵ The Court noted in dicta that "[t]o grant full protection to the public against a patent obtained by fraud, that patent must be vacated." *Id.* at 251. However, the Court explained that "[i]t has previously been decided that such a remedy is not available in infringement proceedings, but can only be accomplished in a direct proceeding brought by the [g]overnment." *Id.* (citing United States v. Am. Bell Tel. Co., 128 U.S. 315, 358 (1888)). *See also* Mowry v. Whitney, 81 U.S. (14 Wall.) 434, 439-41 (1871) (holding that judicial proceeding to cancel patent obtained by fraud must be instituted by federal government). For a detailed discussion, see John F. Duffy, *The Inequities of Inequitable Conduct: A Case Study of Judicial Control of Administrative Process*, 51 HOUS. L. REV. 417, 423-28 (2013) (delving into law regarding fraud and analyzing outcome and impact of *Mowry*).

⁴⁶ 324 U.S. 806 (1945).

wrench.⁴⁷ During prosecution, the employee amended the application to broaden its scope and submitted a false affidavit to support the amendment.⁴⁸ Meanwhile, Automotive filed a patent application claiming a torque wrench.⁴⁹ The Patent Office declared an interference—a fight between two inventors over who is entitled to a patent.⁵⁰ During the discovery phase of the interference, Automotive learned about the false affidavit and that Precision's employee had stolen the invention from Automotive.⁵¹ Rather than disclose the fraud to the Patent Office, Automotive coerced Precision into a settlement which included (1) a concession that Automotive should win the interference, (2) an assignment of the perjurytainted patent application to Automotive, (3) an agreement that Precision would never challenge the validity of any resulting patents, and (4) a license for Precision to make a fixed number of wrenches.⁵² The Patent Office ultimately issued patents to Automotive for both its own and the tainted application.⁵³ When Precision started manufacturing wrenches covered by the patents, Automotive sued for infringement and breach of contract.⁵⁴ The district court found unclean hands and dismissed the suit, which the Seventh Circuit reversed.55 Given the public's "paramount interest" in seeing that patents "spring from backgrounds free of fraud or other inequitable conduct,"56 the Supreme Court reinstated the district court's dismissal.⁵⁷ The Court stated that parties before the Patent Office "have an uncompromising duty to report to it all facts concerning possible fraud or inequitableness underlying the applications in issue";58 otherwise the Patent Office and the public become "classed among the 'mute and helpless victims of deception and fraud.""59

⁵⁰ *Id.* Under the first-to-invent system, patent rights were awarded to the first inventor. 35 U.S.C. § 102(g) (repealed 2011). When two parties claim the same invention, the Patent Office institutes an "interference" proceeding to determine priority (i.e., which party is entitled to a patent). *Id.* The first party to reduce the invention to practice usually wins; however, a party that was "first to conceive the invention but last to reduce it to practice" (either actively or constructively) will win if that party "demonstrates reasonable diligence [toward] reduction to practice." Cooper v. Goldfarb, 240 F.3d 1378, 1382 (Fed. Cir. 2001).

- ⁵² See id. at 813, 818-19.
- ⁵³ *Id*. at 814.

- ⁵⁵ *Id.* at 808.
- ⁵⁶ *Id*. at 816.
- ⁵⁷ *Id.* at 819-20.
- ⁵⁸ *Id.* at 818.

⁴⁷ *Id*. at 807.

⁴⁸ *Id*. at 809-10.

⁴⁹ *Id*. at 809.

⁵¹ See Precision Instrument, 324 U.S. at 810-11.

⁵⁴ Id.

⁵⁹ Id. (quoting Hazel-Atlas Glass Co. v. Hartford-Empire Co., 322 U.S. 238, 246 (1944)).

The Supreme Court hasn't addressed unclean hands or inequitable conduct in a patent case since 1949.⁶⁰ This left the U.S. Court of Customs and Patent Appeals ("C.C.P.A.")⁶¹ and its successor court, the Federal Circuit,⁶² to develop the modern doctrines.⁶³ In *Therasense, Inc. v. Becton, Dickinson & Co.*,⁶⁴ the Federal Circuit stated that "[t]he unclean hands cases of *Keystone, Hazel-Atlas*, and *Precision* formed the basis for a new doctrine of inequitable conduct that developed and evolved over time."⁶⁵ Some legal scholars, however, question the way the doctrine has evolved. T. Leigh Anenson and Gideon Mark argue that *Therasense* "redirected the remedial doctrine from its equitable roots."⁶⁶ John Duffy argues that the Patent Office, not the courts, should police fraud on the agency.⁶⁷ The narrowed *Therasense* standard, Duffy argues, "does not eliminate the problem of Monday morning quarterbacking" by the courts and creates incentives for both ignorance of facts and the overdisclosure of information to the Patent Office "that the agency neither wants nor needs" to gauge patentability.⁶⁸

⁶¹ C.C.P.A. was a five-judge Article III appellate court on the same level as the U.S. Courts of Appeals. The Federal Courts Improvement Act of 1982 abolished the C.C.P.A. *See* Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25 (codified as amended in scattered sections of 28 U.S.C.). Soon after its creation, the Federal Circuit adopted C.C.P.A. decisional law as binding precedent. *See* South Corp. v. United States, 690 F.2d 1368, 1370 (Fed. Cir. 1982) (en banc).

⁶² See supra note 19.

⁶³ See Norton v. Curtiss, 433 F.2d 779, 795-96 (C.C.P.A. 1970); Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1286-95 (Fed. Cir. 2011) (en banc).

⁶⁵ *Id.* at 1287.

⁶⁶ T. Leigh Anenson & Gideon Mark, *Inequitable Conduct in Retrospective:* Understanding Unclean Hands in Patent Remedies, 62 AM. U.L. REV. 1441, 1455-56 (2013).

⁶⁷ Duffy, *supra* note 45, at 444-50. For a different viewpoint, see Harry F. Manbeck, *The Evolution and Issue of New Rule 56*, 20 AIPLA Q.J. 136, 139 (1992) (arguing that Patent Office's then-existing "fraud squad" was ill-equipped to investigate inequitable conduct issues, in part because agency couldn't handle live testimony—which it felt necessary to gauge intent).

⁶⁸ Duffy, *supra* note 45, at 447-48.

2022]

⁶⁰ In *Kingsland v. Dorsey*, 338 U.S. 318 (1949) (per curiam), the Court considered the disbarment of the attorneys who helped fraudulently procure the patents at issue in *Hazel-Atlas*. It held that "it was the Commissioner [of Patents], not the courts, that Congress made primarily responsible for protecting the public from the evil consequences that might result if practitioners should betray their high trust." *Id.* at 319-20. In *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965), the Court referred to inequitable conduct when it stated that "a person sued for infringement may challenge the validity of the patent on various grounds, including fraudulent procurement." *Id.* at 176. Robert Merges and John Duffy argue that these cases "have no holdings on the scope of judicial power to hold patents unenforceable based on administrative conduct." ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY 989 (7th ed. 2017).

⁶⁴ Therasense, 649 F.3d 1276.

B. Inequitable Conduct

Inequitable conduct is a form of unclean hands that evolved from *Keystone Driller*, *Hazel-Atlas*, and *Precision Instrument*.⁶⁹ It arises in the specific context of patent procurement at the Patent Office.

1. Fraud on the Patent Office

Inequitable conduct is loosely referred to as "fraud on the Patent Office."⁷⁰ It's an equitable defense to patent infringement that's "only applied where the patentee has unfairly obtained an unwarranted patent through misconduct."⁷¹ To prevail on the inequitable conduct defense, "the accused infringer must prove that the applicant misrepresented or omitted material information with the specific intent to deceive the [Patent Office]."⁷² If proven, the patentee can't enforce the patent.⁷³ Unlike the validity defenses (lack of novelty, obviousness, nonenablement, etc.) that are claim specific, a finding of inequitable conduct renders the *entire* patent unenforceable against any defendant.⁷⁴

The "taint" of a finding of inequitable conduct typically can't be cured after litigation has begun.⁷⁵ However, the America Invents Act of 2011 ("AIA")⁷⁶

⁷¹ Ohio Willow Wood Co. v. Alps S., LLC, 735 F.3d 1333, 1344 (Fed. Cir. 2013) (citing Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1292 (Fed. Cir. 2011) (en banc)).

⁷² *Therasense*, 649 F.3d at 1287. Materiality is broadly defined as "any" information relevant to patentability. Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc., 326 F.3d 1226, 1234 (Fed. Cir. 2003).

⁷³ Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1394 (Fed. Cir. 1988); *see also* Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1376 (Fed. Cir. 2001) ("This court's doctrines of inequitable conduct render the patent itself unenforceable to prevent 'the enforcement of patents secured by fraud." (quoting Smith Int'l, Inc. v. Hughes Tool Co., 759 F.2d 1572, 1578 (Fed. Cir. 1985))).

⁷⁴ Therasense, 649 F.2d at 1288 (citing Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 877 (Fed. Cir. 1988) (en banc)); see also infra notes 181-82 and accompanying text.

⁷⁵ *Therasense*, 649 F.2d at 1288.

⁷⁶ The AIA is the most sweeping change to the U.S. patent system since the Patent Act of 1952. *See* Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.). Most notably, the AIA converted

⁶⁹ See supra note 65 and accompanying text.

⁷⁰ Korody-Colyer Corp. v. Gen. Motors Corp., 760 F.2d 1293, 1294 n.1 (Fed. Cir. 1985) (describing "inequitable conduct" as "fraud on the Patent and Trademark Office"). However, inequitable conduct differs from (and is a lesser offense than) common law fraud. Nobelpharma AB v. Implant Innovations, Inc., 141 F.3d 1059, 1069-70 (Fed. Cir. 1998) (specifying common law fraud requires "(1) a representation of a material fact, (2) the falsity of that representation, (3) the intent to deceive or, at least, a state of mind so reckless as to the consequences that it is held to be the equivalent of intent (scienter), (4) a justifiable reliance upon the misrepresentation by the party deceived which induces him to act thereon, and (5) injury to the party deceived as a result of his reliance on the misrepresentation" (quoting Norton v. Curtiss, 433 F.2d 779, 793 (C.C.P.A. 1970))).

permits patentees to request a postissuance "supplemental examination"⁷⁷ by the Patent Office "to consider, reconsider, or correct information believed to be relevant to the patent" without having to admit why the missing or incorrect information was initially withheld.⁷⁸ Importantly for the patentee, a trial court can't hold a patent unenforceable "on the basis of conduct relating to information that had not been considered, was inadequately considered, or was incorrect in a prior examination of the patent if the information was considered, reconsidered, or corrected during a supplemental examination of the patent."⁷⁹ So supplemental examination provides "amnesty"⁸⁰ to patentees by permitting them to "inoculate"⁸¹ patents against plausible charges of inequitable conduct.⁸²

2. The Patent Applicant's Duty of Disclosure

For patent applicants, "[t]he potential for mischief is great"⁸³ in dealings with the Patent Office. Applicants know more about their invention than the Patent Office, including information that might jeopardize patentability.⁸⁴ And because the Patent Office has no way to test or verify what's disclosed, it must rely on

⁷⁷ 35 U.S.C. § 257(a).

⁷⁸ *Id.* But there are critics. *Compare* Jason Rantanen & Lee Petherbridge, *Toward a System* of *Invention Registration: The Leahy-Smith America Invents Act*, 110 MICH. L. REV. FIRST IMPRESSIONS 24, 27-31 (2011) (arguing that supplemental examination will open door for strategic disclosures by patentees and ultimately increase number of low-quality patents), *with* Robert A. Armitage, *Understanding the America Invents Act and Its Implications for Patenting*, 40 AIPLA Q.J. 1, 111 (2012).

- ⁸⁰ CRAIG ALLEN NARD, THE LAW OF PATENTS 844 (5th ed. 2020).
- ⁸¹ MERGES & DUFFY, *supra* note 60, at 990.

⁸² The supplemental examination amnesty is subject to two limitations. First, the patentee must wait for the supplemental examination to conclude before filing an infringement suit. 35 U.S.C. § 257(c)(2). Second, the amnesty doesn't apply if an inequitable conduct is fully pleaded before supplemental examination is sought. *Id.* Suppose the Patent Office detects fraud. Section 257(e) orders that the Director who "becomes aware, during the course of a supplemental examination," that "a material fraud on the Office may have been committed in connection with the patent that is the subject of the supplemental examination," must take action, including referring "the matter to the Attorney General for such further action as the Attorney General may deem appropriate." 35 U.S.C. § 257(e).

⁸³ Robert J. Goldman, *Evolution of the Inequitable Conduct Defense in Patent Litigation*, 7 HARV. J.L. & TECH. 37, 37 (1993).

⁸⁴ See Joseph Scott Miller, Building a Better Bounty: Litigation-Stage Rewards for Defeating Patents, 19 BERKELEY TECH. L.J. 667, 734 (2004) (arguing that applicants can do much to improve the information deficit because they "know better than [the Patent Office or] anyone else precisely what it is they have developed or invented").

2022]

the U.S. patent system from a first-to-invent regime to a first-inventor-to-file regime. John Villasenor, *Untangling the Real Meaning of "First-to-File" Patents*, FAST CO. (Mar. 6, 2012), https://www.fastcompany.com/1822846/untangling-real-meaning-first-file-patents [https://perma.cc/5KGU-ZJJ9] (discussing implications of AIA replacing longstanding first-

[[]https://perma.cc/SKGU-ZJJ9] (discussing implications of AIA replacing longstanding firstto-invent regime with first-to-file system).

⁷⁹ 35 U.S.C. § 257(c)(1).

information presented by the applicant.⁸⁵ So the applicant might be tempted to withhold information because the Patent Office has no other way to find out about it.⁸⁶ Also, a patent attorney representing an applicant might be torn between a duty to disclose and a duty of advocacy owed to the client.⁸⁷ The confluence of these factors creates an information asymmetry between the Patent Office and the applicant.⁸⁸ As a result, the Patent Office and the courts impose a duty of candor and good faith (also known as the duty of disclosure)⁸⁹ upon applicants to combat the information asymmetry.

3. Basic Principles

The duty of disclosure is inextricably intertwined with the public's interest in granting patents. The essence of the U.S. patent system is a quid pro quo between the patentee and the public.⁹⁰ The basic idea is that in order to promote the full disclosure of information about the invention to the public, the patentee must receive something in return.⁹¹ What the patentee gets is the limited period of exclusivity conferred by the patent grant.⁹² The public gets detailed knowledge

⁸⁷ Goldman, *supra* note 83, at 37; Mueller Brass Co. v. Reading Indus., Inc., 352 F. Supp. 1357, 1379 (E.D. Pa. 1972) (discussing "[t]wo conflicting principles [that] tear at an attorney practicing before the patent office"), *aff'd*, 487 F.2d 1395 (3d Cir. 1973); GS Cleantech Corp. v. Adkins Energy LLC, 951 F.3d 1310, 1324 (Fed. Cir. 2020) (affirming finding of inequitable conduct based on district court's conclusion that applicant's attorneys "chose advocacy over candor" in their dealings with Patent Office).

⁸⁸ For a deeper discussion of the information asymmetry, see Sean B. Seymore, *Patent Asymmetries*, 49 U.C. DAVIS L. REV. 963, 991-96 (2016).

⁸⁹ Digit. Control Inc. v. Charles Mach. Works, 437 F.3d 1309, 1314 (Fed. Cir. 2006) (describing duty of candor and good faith).

⁸⁵ Beckman Instruments, Inc. v. Chemtronics, Inc., 439 F.2d 1369, 1378-79 (5th Cir. 1970); FED. TRADE COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY ch. 5, at 9 (2003) [hereinafter FTC REPORT], https://www.ftc.gov/sites/default/files/documents/reports/promote-innovation-proper-balance-competition-and-patent-law-and-policy/innovationrpt.pdf [https://perma.cc/DSM4-QTMU] ("[T]he [Patent Office] lacks testing facilities, and assertions that cannot be overcome by documentary evidence promptly identifiable by the examiner often must be accepted.").

⁸⁶ See Timothy R. Holbrook, *Patents, Presumptions, and Public Notice*, 86 IND. L.J. 779, 805, 818 (2011) (exploring incentives for applicants to behave strategically and withhold certain information from examiner, particularly in absence of adversarial check).

⁹⁰ Special Equip. Co. v. Coe, 324 U.S. 370, 378 (1945) (discussing bestowal of exclusivity that accompanies grant of patent); Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480-81 (1974) (explaining wisdom of bestowing limited monopoly rights in patent system to encourage innovation).

⁹¹ *Kewanee*, 416 U.S. at 480-81.

⁹² *Id*. at 480.

2022]

about the invention as soon as the patent document publishes⁹³ and possession of the invention at the end of the patent term.⁹⁴

But the putative public benefit of this paradigm rests on the assumption that the applicant was honest and candid with the Patent Office. Again, the agency must rely on applicants to disclose most of the facts upon which its decisions are based.⁹⁵ According to the C.C.P.A.,⁹⁶ this creates a "relationship of trust" between the Patent Office and the applicant.⁹⁷ Thus, the "highest standards of honesty and candor" on the part of applicants in presenting facts to the Patent Office are not only necessary but also "essential" elements in a working patent system.⁹⁸

Similarly, the Supreme Court has recognized that in working with applicants during patent prosecution,⁹⁹ the Patent Office "must rely upon their integrity and deal with them in a spirit of trust and confidence."¹⁰⁰ This reliance, according to the Court, "requires the highest degree of candor and good faith."¹⁰¹ The public has "a paramount interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct"¹⁰² to ensure that it gets its end of the patent bargain.¹⁰³

The Patent Office imposes the duty of candor and disclosure on every individual substantively involved in patent prosecution—including the inventor, the attorney or agent that prepares the patent application, and the assignee.¹⁰⁴ The duty exists with respect to each claim in a patent application until a patent issues or the application is abandoned.¹⁰⁵ Examples of cases where the Federal Circuit has found a breach of the duty of candor and disclosure include

97 Norton v. Curtiss, 433 F.2d 779, 794 (C.C.P.A. 1970).

⁹³ See *id.* at 481 (explaining that when information disclosed in patent becomes publicly available it adds to "general store of knowledge" and assumedly will stimulate ideas and promote technological development).

 $^{^{94}}$ Evans v. Eaton, 20 U.S. (7 Wheat.) 356, 418 (1822) ("The object is to put the public in complete possession of the invention . . . so that interference with it may be avoided while the patent continues, and its benefits may be fully enjoyed by the public, after the patent expires.").

⁹⁵ See supra note 85 and accompanying text.

⁹⁶ See supra note 61.

⁹⁸ *Id.*; *see also* Molins PLC v. Textron, Inc., 48 F.3d 1172, 1178 (Fed. Cir. 1995) (explaining that applicants must prosecute patent applications "with candor, good faith, and honesty").

⁹⁹ The process of obtaining a patent—where the inventor or their agent or attorney files an application with the Patent Office—is called patent prosecution. JANICE M. MUELLER, PATENT LAW 59 (5th ed. 2016).

¹⁰⁰ Kingsland v. Dorsey, 338 U.S. 318, 319 (1949).

 $^{^{101}}$ Id.

¹⁰² Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 816 (1945).

¹⁰³ See supra notes 90-94 and accompanying text.

¹⁰⁴ See 37 C.F.R. § 1.56(a) (2019) (setting requirements for duty of disclosure).

¹⁰⁵ *Id.*; MPEP § 2001.04 (9th ed. Rev. 10, June 2020).

(1) intentionally withholding a material prior art reference,¹⁰⁶ (2) "affirmatively and knowingly mispresenting material facts regarding the prior art,"¹⁰⁷ (3) intentionally mischaracterizing a material foreign language printed publication,¹⁰⁸ and (4) intentionally failing to disclose a scientific article revealing that some of the claimed subject matter didn't work.¹⁰⁹

4. The Therasense Standard

The duty of disclosure is enforced primarily through the judge-made doctrine of inequitable conduct.¹¹⁰ A finding of inequitable conduct renders a patent unenforceable if intentional misconduct (such as a deliberate misrepresentation or omission of material information from the Patent Office) led the patentee to obtain an unwarranted patent claim.¹¹¹ The Patent Office rarely learns about potential misconduct during prosecution; it typically comes to light in patent litigation. Thus, inequitable conduct is usually asserted as an affirmative defense to patent infringement tried to the district judge and reviewed for an abuse of discretion.¹¹²

A decade ago the Federal Circuit reconsidered the contours and standards governing the inequitable conduct defense in *Therasense*, which was borne out of the unclean hands doctrine.¹¹³ The defense has two prongs—materiality and intent.¹¹⁴ Regarding materiality, the general rule is that the misrepresented or omitted information must be "but-for material"—meaning that the challenger

¹⁰⁶ See, e.g., GS Cleantech Corp. v. Adkins Energy LLC, 951 F.3d 1310, 1325-32 (Fed. Cir. 2020) (concluding that inventor intentionally withheld information and made false representations about an invalidating prefiling commercial activity). "Prior art" is preexisting knowledge and technology already in the public domain used to gauge the novelty or nonobviousness of an invention. *See* Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1453 (Fed. Cir. 1984). Documents (like issued patents and printed publications), devices, activities, and events are sources of prior art. *See* 35 U.S.C. § 102(a). A specific document, device, activity, or event asserted against the claimed invention is called a prior art reference. HERBERT F. SCHWARTZ, PATENT LAW AND PRACTICE 18 (3d ed. 2001).

¹⁰⁷ Apotex Inc. v. UCB, Inc., 763 F.3d 1354, 1362 (Fed. Cir. 2014).

¹⁰⁸ See, e.g., Semiconductor Energy Lab'y Co. v. Samsung Elecs. Co., 204 F.3d 1368, 1373 (Fed. Cir. 2000) (concluding that inventor intentionally tried to deceive examiner by submitting partial translation of Japanese reference and full untranslated reference, where untranslated portion was highly material to patentability), *cited with approval in* Am. Calcar, Inc. v. Am. Honda Motor Co., 768 F.3d 1185, 1190 (Fed. Cir. 2014).

¹⁰⁹ Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc., 326 F.3d 1226, 1229 (Fed. Cir. 2003).

¹¹⁰ 6A DONALD S. CHISUM, CHISUM ON PATENTS § 19.03A (2009).

¹¹¹ Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1292 (Fed. Cir. 2011) (en banc).

¹¹² Energy Heating, LLC v. Heat On-The-Fly, LLC, 889 F.3d 1291, 1299 (Fed. Cir. 2018); *see also* 6A CHISUM, *supra* note 110, at § 19.03.

¹¹³ *Therasense*, 649 F.3d at 1287.

¹¹⁴ *Id*. at 1290.

must prove, by a preponderance of the evidence, that "the [Patent Office] would not have allowed a claim had it been aware of the undisclosed" information.¹¹⁵ This "requires that the court place itself in the shoes of a patent examiner and determine whether, had the [information] been before the examiner at the time. the claims of the patent would have still issued."116 Regarding intent, the challenger must prove by clear and convincing evidence a specific intent to deceive the Patent Office, which must be the most reasonable inference drawn from the evidence.¹¹⁷ In the case of nondisclosure, this requires proof that "the applicant made a deliberate decision to withhold" known material information.¹¹⁸ This means "that the applicant knew of the [information], knew that it was material, and made a deliberate decision to withhold it."¹¹⁹ If the challenger proves both elements, then the court "must weigh the equities to determine whether the applicant's conduct before the [Patent Office] warrants rendering the entire patent unenforceable."120 Sometimes "the taint of a finding of inequitable conduct can spread from a single patent to render unenforceable other related patents and applications in the same technology family,"¹²¹ thereby endangering an entire patent portfolio.¹²² What is more, a patent rendered

¹¹⁶ Regeneron Pharms., Inc. v. Merus N.V., 864 F.3d 1343, 1351 (Fed. Cir. 2017) (citing *Therasense*, 649 F.3d at 1291-92).

¹¹⁷ *Therasense*, 649 F.3d at 1290.

¹¹⁸ Id.

¹¹⁹ *Id.*; *accord* 1st Media, LLC v. Elec. Arts, Inc., 694 F.3d 1367, 1376-77 (Fed. Cir. 2012) (affirming *Therasense* three-part test for deceptive intent). Given the difficulty in obtaining direct evidence of deception, intent can be inferred from indirect and circumstantial evidence if it's "the single most reasonable inference." *Therasense*, 649 F.3d at 1290 (quoting Star Sci., Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1366 (Fed. Cir. 2008)).

¹²⁰ *Therasense*, 649 F.3d at 1287. Unlike invalidity, which may only affect a single claim, it is "settled law that inequitable conduct with respect to one claim renders the entire patent unenforceable." Baxter Int'l, Inc. v. McGaw, Inc., 149 F.3d 1321, 1332 (Fed. Cir. 1998). Also, a patent can be rendered unenforceable despite its validity. *See infra* note 181.

¹²¹ *Therasense*, 649 F.3d at 1288.

¹²² *Id.* at 1289; *see also* Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1376 (Fed. Cir. 2001) ("Inequitable conduct in the process of procuring a patent taints the property right itself."); Fox Indus., Inc. v. Structural Pres. Sys., Inc., 922 F.2d 801, 804 (Fed. Cir. 1990) ("[A] breach of the duty of candor early in the prosecution may render unenforceable all claims which eventually issue from the same or a related application."). *But see Baxter*, 149 F.3d at 1332 ("[W]here the claims are subsequently separated from those tainted by inequitable conduct through a divisional application, and where the issued claims have no relation to the omitted [material information], the patent issued from the divisional application

2022]

¹¹⁵ *Id.* at 1291; *accord* Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324, 1334 (Fed. Cir. 2012). The key exception is in cases of "affirmative acts of egregious misconduct," such as when the patentee filed "an unmistakably false affidavit." *Therasense*, 649 F.3d at 1292; *see also* Intellect Wireless, Inc. v. HTC Corp., 732 F.3d 1339, 1345 (Fed. Cir. 2013) (discussing that applicant's "[s]ubmission of an affidavit containing fabricated examples of actual reduction to practice in order to overcome a prior art reference raises a strong inference of intent to deceive").

unenforceable due to inequitable conduct can't be asserted in future cases "because the property right [itself] is tainted *ab initio*."¹²³

C. Unclean Hands

The Supreme Court has stated that unclean hands comes from the principle that the plaintiff, in addition to asserting a meritorious claim, must also "come into court with clean hands."¹²⁴ When the plaintiff who "seeks to set the judicial machinery in motion and obtain some remedy, has violated conscience, or good faith, or other equitable principle, in his prior conduct, then the doors of the court will be shut . . . [and] the court will refuse . . . to award him him any remedy."¹²⁵ While 35 U.S.C. § 282 requires a defendant to raise unenforceability as an affirmative defense in its answer,¹²⁶ some courts have raised unclean hands sua sponte.¹²⁷

¹²⁴ Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 244 (1933) (quoting 1 JOSEPH STORY, COMMENTARIES ON EQUITY JURISPRUDENCE 98 (W.H. Lyon, Jr. ed., 14th ed. 1918) (1884)).

¹²⁵ *Id.* at 245 (quoting JOHN NORTON POMEROY, A TREATISE ON EQUITY JURISPRUDENCE 738 (4th ed. 1918)); *see also* Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 814 (1945) (explaining that doctrine "closes the doors of a court of equity to one tainted with inequitableness or bad faith relative to the matter in which he seeks relief, however improper may have been the behavior of the defendant").

¹²⁶ See 35 U.S.C. § 282(b)(1) ("The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded ... [n]oninfringement, absence of liability for infringement or unenforceability").

¹²⁷ An oft-cited illustration (decided before passage of § 282 of the 1952 Patent Act) is the 1945 case of *Frank Adam Electric Co. v. Westinghouse Electric & Manufacturing Co.*, 146 F.2d 165 (8th Cir. 1945), where the court learned that the patentee had acquired a pool of patents, including the patent-in-suit, to suppress competition and create a monopoly in unpatented materials—all in violation of the antitrust laws. *Id.* at 166-67. The Eighth Circuit remanded the case to the trial court to adjudicate the unclean hands issue; explaining that "whenever in the course of the proceeding the court is informed in any way that the plaintiff is without clean hands . . . the court should inquire into the facts of its own accord, and if it finds the charge to be true relief should not be granted." *Id.* at 167 (citation omitted); *accord* Hall v. Wright, 240 F.2d 787, 796 (9th Cir. 1957) (affirming trial court's denial of relief to both parties under doctrine of unclean hands because each engaged in self-help during the pendency of patenting infringement litigation, which "kept the controversy in a constant state of flux and confusion"). *But see* Stiegele v. J.M. Moore Import-Export Co., 312 F.2d 588, 595 (7th Cir. 1963) (declining to decide whether under § 282 court may, in appropriate circumstances, deny relief for unclean hands even in absence of pleadings).

will not...be unenforceable due to inequitable conduct committed in the parent application.").

¹²³ Aptix, 269 F.3d at 1376 (citing Hazel-Atlas Glass Co. v. Hartford-Empire Co., 322 U.S. 238, 251 (1944), *abrogated by* Standard Oil Co. v. United States, 429 U.S. 17 (1976)); *see also infra* notes 181-82 and accompanying text.

2022]

1. The Governing Legal Standard

In *Keystone Driller* and *Precision Instrument*, the Supreme Court articulated the legal standard for the unclean hands defense in patent suits.¹²⁸ It's appropriate when the plaintiff's alleged misconduct "has immediate and necessary relation" to the relief sought.¹²⁹ The alleged misconduct "need not necessarily have been of such a nature as to be punishable as a crime or as to justify legal proceedings of any character."¹³⁰ However, being a bad actor isn't enough¹³¹ because the doctrine isn't applied as a generalized punishment.¹³² Courts aren't "bound by formula" and have "wide . . . use of discretion in refusing to aid the unclean litigant."¹³³ An accused infringer asserting unclean hands must prove it with clear and convincing evidence.¹³⁴ A court's conclusion of unclean hands leads to dismissal of the lawsuit; thereby preventing the patentee from enforcing the patent against the defendant. On appeal, this conclusion is reviewed for an abuse of discretion.¹³⁵

In *Precision Instrument*, the Court explained that the doctrine is vitally significant in patent suits because the misconduct has far-reaching consequences:

The possession and assertion of patent rights are "issues of great moment to the public." 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-

¹³² *Keystone Driller*, 290 U.S. at 245 ("They apply the maxim, not by way of punishment for extraneous transgressions, but upon considerations that make for the advancement of right and justice."); *see also* Johnson v. Yellow Cab Transit Co., 321 U.S. 383, 403 (1944) (Frankfurter, J., dissenting) ("The abstention which equity exercises . . . under the short hand phrase of the 'clean hands doctrine' is not due to any desire to punish a litigant for his uncleanliness."); *infra* note 185.

¹³³ Precision Instrument, 324 U.S. at 815.

¹³⁴ *In re* Omeprazole Pat. Litig., 483 F.3d 1364, 1374 (Fed. Cir. 2007); Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1374 (Fed. Cir. 2001).

¹³⁵ Aptix, 269 F.3d at 1374; Gilead Scis., Inc. v. Merck & Co., 888 F.3d 1231, 1240 (Fed. Cir. 2018).

¹²⁸ Keystone Driller, 290 U.S. at 246; Precision Instrument, 324 U.S. at 815.

¹²⁹ Keystone Driller, 290 U.S. at 245; see also DOUGLAS LAYCOCK & RICHARD L. HASEN, MODERN AMERICAN REMEDIES 992 (5th ed. 2019) ("The bare minimum requirement is that 'plaintiff's improper conduct relates in some significant way to the claim he now asserts." (quoting Salzman v. Bachrach, 996 P.2d 1263, 1269 (Colo. 2000))).

¹³⁰ Precision Instrument, 324 U.S. at 815.

¹³¹ *Keystone Driller*, 290 U.S. at 245; *see also* Loughran v. Loughran, 292 U.S. 216, 229 (1934) ("Equity does not demand that its suitors shall have led blameless lives."); JAMES M. FISCHER, UNDERSTANDING REMEDIES 463 (3d ed. 2014) (noting that unclean hands doctrine does not bar recovery for "morally repugnant persons in general").

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.¹³⁶

So, applying the doctrine prevents the patentee from disregarding the public interest.¹³⁷

Though related,¹³⁸ unclean hands differs from inequitable conduct.¹³⁹ Whereas inequitable conduct addresses a breach of the duty of candor owed to the Patent Office,¹⁴⁰ unclean hands encompasses a broader range of misconduct.¹⁴¹ For example, a trial applied the unclean hands doctrine to a patentee who concealed the existence of a patent in bankruptcy proceedings from later enforcing it in an infringement proceeding.¹⁴² In another case, a court applied the unclean hands doctrine to a patentee who failed to disclose a patent application and patent to an accused infringer as required by a prior settlement agreement.¹⁴³

Historically, unclean hands and inequitable conduct differ in the resulting relief. As the Federal Circuit explained in *Therasense*, "[i]nequitable conduct . . . diverged from the doctrine of unclean hands by adopting a different and more potent remedy—unenforceability of the entire patent rather than mere dismissal of the instant suit."¹⁴⁴ So, when the alleged misconduct doesn't involve

¹³⁹ See Therasense, 649 F.3d at 1287; see also Gilead, 888 F.3d at 1240 n.3 (recognizing distinction but refusing "to consider issues that may arise in seeking to ensure that the unclean-hands doctrine operates in harmony with, and does not override, [the] court's inequitable-conduct standards governing unenforceability challenges").

¹⁴⁰ See supra Section I.A; Gilead, 888 F.3d at 1240 ("Nor is this a case involving alleged deficiencies in communications with the [Patent Office] during patent prosecution, for which [the] court's inequitable-conduct decisions [apply]").

¹⁴¹ Consol. Aluminum Corp. v. Foseco Int'l Ltd., 910 F.2d 804, 812 (Fed. Cir. 1990) (discussing *Keystone Driller* and *Precision Instrument* and explaining that "what we have termed 'inequitable conduct' is no more than the unclean hands doctrine applied to particular conduct before the [Patent Office]").

¹⁴⁴ *Therasense*, 649 F.3d at 1287; *see* Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 819 (1945) (holding that patentee's failure to act to uproot and destroy effects of perjury was misconduct that "impregnated [its] entire cause of action and justified

¹³⁶ Precision Instrument, 324 U.S. at 815-16 (citations omitted).

¹³⁷ See infra Section III.A.2.

¹³⁸ See Demaco Corp. v. F. Von Langsdorff Licensing, Ltd., 851 F.2d 1387, 1394 (Fed. Cir. 1988) ("The concept of inequitable conduct in patent procurement derives from the equitable doctrine of unclean hands."). The Federal Circuit cites the trio of Supreme Court "unclean hands" cases discussed *supra* Section I.A.—*Keystone Driller*, *Hazel-Atlas*, and *Precision Instrument*—as "set[ting] in motion the development of the inequitable conduct doctrine." Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1290 (Fed. Cir. 2011) (en banc).

¹⁴² Ott v. Goodpasture, Inc., 40 U.S.P.Q.2d 1831, 1836 (N.D. Tex. 1996).

¹⁴³ Hasbro, Inc. v. Amron, 419 F. Supp. 2d 678, 690-92 (E.D. Pa. 2006).

dealings with the Patent Office, the Federal Circuit has held that "a finding of unclean hands generally does not prejudice the offending party in subsequent cases, but only provides a bar to relief in the case at hand."¹⁴⁵ In this instantiation, unclean hands functions as a personal defense that renders the patent de facto unenforceable as to the accused infringer in the pending lawsuit,¹⁴⁶ though the patentee is free to bring infringement suits against other defendants without the taint of the earlier misconduct.¹⁴⁷ This is exactly what occurred in the *Keystone Driller* line of cases discussed above.¹⁴⁸ The rationale is that the misconduct didn't occur during *acquisition* of the patent;¹⁴⁹ thus the underlying property right remains intact and a limited sanction for the specific

case is warranted.¹⁵⁰ To illustrate, consider an infringement suit where the court finds unclean hands based on the patentee's litigation misconduct. In this scenario, the Federal Circuit has explained that

Litigation misconduct, while serving as a basis to dismiss the wrongful litigant, does not infect, or even affect, the original grant of the property right. The doctrine of unclean hands does not reach out to extinguish a property right based on misconduct during litigation to enforce the right.... [T]he remedies for litigation misconduct bar the malfeasant who committed the misconduct. The property right itself remains independent of the conduct of a litigant.¹⁵¹

Thus, "the relief for unclean hands *targets specifically the misconduct*, without reference to the property right that is the subject of the litigation."¹⁵²

2. Gilead Resurrects (and Broadens) the Doctrine

In *Therasense*, the Federal Circuit noted that "the unclean hands doctrine remains available to supply a remedy for egregious misconduct" in patent cases.¹⁵³ Because most appellate opinions involving unclean hands in patent law

dismissal by resort to the unclean hands doctrine"); Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 247 (1933) (affirming dismissal of patentee's cause of action due to litigation misconduct).

¹⁴⁵ Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1376 (Fed. Cir. 2001).

¹⁴⁶ See, e.g., *id.* at 1378 (affirming district court's dismissal of complaint but leaving patent enforceable); Gilead Scis., Inc. v. Merck & Co., 888 F.3d 1231, 1240 (Fed. Cir. 2018) (affirming district court's conclusion of unclean hands and order barring Merck from enforcing its patents against Gilead).

¹⁴⁷ Aptix, 269 F.3d at 1375-77.

¹⁴⁸ See supra note 38 and accompanying text.

¹⁴⁹ See supra note 123 and accompanying text.

¹⁵⁰ Aptix, 269 F.3d at 1375.

¹⁵¹ *Id.* at 1375 (citations omitted).

¹⁵² *Id.* at 1376 (emphasis added).

¹⁵³ Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1287 (Fed. Cir. 2011) (en banc).

deal with litigation misconduct,¹⁵⁴ the potential reach of the doctrine for other types of misconduct has been uncertain. This changed in 2018 when the Federal Circuit issued its opinion in *Gilead*¹⁵⁵ By broadening the types of misconduct that might be deemed unclean, *Gilead* shows the doctrine's flexibility (as urged by the Supreme Court)¹⁵⁶ and breadth in patent law.

To fully understand the impact of Gilead, it's necessary to look briefly at the facts of this complex case. Merck and Gilead began a technology collaboration in the early 2000s to explore opportunities in the field of hepatitis C.¹⁵⁷ Gilead offered to share sofosbuvir, its lead compound,¹⁵⁸ with Merck to evaluate under a nondisclosure agreement as long as Merck didn't try to discern sofosbuvir's chemical structure.¹⁵⁹ Gilead did agree to share sofosbuvir's structural information with Merck subject to a confidential "firewall" agreement in which the Merck chemist receiving the proprietary information wouldn't be involved with Merck's own internal hepatitis C research team.¹⁶⁰ But Merck didn't prevent an in-house lawyer-chemist involved in prosecuting Merck's own hepatitis C patent applications from participating in a teleconference with Gilead. During this call, this attorney falsey stated that he was a firewalled employee and learned sofosbuvir's chemical structure.¹⁶¹ The in-house attorney then proceeded to amend Merck's pending patent applications to focus on sofosbuvir.¹⁶² Eventually Merck's patents issued. Meanwhile, Gilead began selling its hepatitis C drugs based on sofosbuvir.

In the ensuing litigation, Merck alleged that Gilead infringed its hepatitis C patents. Gilead asserted invalidity and unenforceability due to unclean hands.¹⁶³

¹⁵⁸ A lead compound is a new chemical entity with sought-for bioactivity but requires further optimization to improve its bioavailability and/or minimize its side effects in order to become a useful drug. 108 THE IMA VOLUMES IN MATHEMATICS AND ITS APPLICATIONS: RATIONAL DRUG DESIGN vii (Donald G. Truhlar, W. Jeffrey Howe, Anothy J. Hopfinger, Jeff Blaney & Richard A Dammkoehler eds. 1999).

¹⁵⁹ *Gilead*, 888 F.3d at 1241.

¹⁶⁰ See id. A firewall "is a key method to protect a confidential compound's structural information, because it limits that confidential information to only individuals not involved with the project at hand, therefore maintaining confidentiality." Gilead Scis., Inc. v. Merck & Co., No. 13-cv-04057, 2016 WL 3143943, at *7 (N.D. Cal. June 6, 2016), *aff'd*, *Gilead*, 888 F.3d 1231. For commentary on the role of firewalls this context, see Robert Graham Gibbons & Bryan J. Vogel, *The Increasing Importance of Trade Secret Protection in the Biotechnology, Pharmaceutical and Medical Device Fields*, 89 J. PAT. & TRADEMARK OFF. Soc'Y 261, 273-77 (2007).

¹⁶² *Id.* at 1242.

¹⁶³ Gilead raised several grounds of invalidity under the governing statutory provisions of the 1952 Patent Act, including: inadequate written description, § 112 para. 1; lack of

¹⁵⁴ Aptix, 269 F.3d at 1375-78.

¹⁵⁵ 888 F.3d 1231 (Fed. Cir. 2018).

¹⁵⁶ See supra note 133 and accompanying text.

¹⁵⁷ Gilead, 888 F.3d at 1236.

¹⁶¹ See Gilead, 888 F.3d at 1241-42.

At trial, a jury concluded that Merck's patents weren't invalid, that Gilead infringed, and assessed damages at \$200 million.¹⁶⁴ In a separate bench trial on the unclean hands issue, the district court found unclean hands due to (1) litigation misconduct based on false testimony given by Merck's in-house lawyer-chemist and (2) prelitigation business misconduct involving the teleconference, patent application amendment activities (including the in-house attorney's failure to recuse himself after breach of the firewall).¹⁶⁵ As a consequence, the court barred Merck from asserting its patents against Gilead¹⁶⁶ and awarded Gilead \$14 million in reasonable attorney's fees.¹⁶⁷

On appeal, the Federal Circuit affirmed.¹⁶⁸ Focusing on the business misconduct, the court held that it only needs to have the "objective potential" to "enhance[] the claimant's legal position as to either the creation or the enforcement of the legal rights at issue."¹⁶⁹ Here, the in-house attorney's improper acquisition of knowledge about sofosbuvir and subsequent application amendments "held the potential for expediting patent issuance and for lowering certain invalidity risks" in litigation.¹⁷⁰ Together, these activities provide a

¹⁶⁷ See id. at 1233-34; Order Re Amount of Reasonable Attorneys' Fees, Gilead Scis., Inc. v. Merck & Co., No. 13-cv-04057, 2017 WL 3007071, at *9-10 (N.D. Cal. July 14, 2017). The patent statute states that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." 35 U.S.C. § 285. Whether a plaintiff's unclean hands qualifies as an "exceptional case" falls within the sound discretion of the district court. Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1375 (Fed. Cir. 2001); see also Octane Fitness, LLC v. ICON Health & Fitness, Inc., 572 U.S. 545, 554 (2014) ("[A]n 'exceptional' case is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.").

¹⁷⁰ Id. at 1241. As the court explained:

"[L]imiting the scope" of the claims would mean "fewer opportunities for prior art to . . . present an issue of patentability" under 35 U.S.C. §§ 102 and 103. That would be so during prosecution and also in a litigation challenge. And a narrowing amendment can reduce a patentee's risk on other invalidity issues, such as the risk that breadth can create under the requirement that the "full scope" of a claim be enabled. . . . Such risks can be reduced even if, as here, the resulting claim still covers a large, though less large, number of compounds.

Id. at 1243-44 (alteration in original) (citation omitted).

enablement, § 112 para. 1; derivation of the invention from another, § 102(f); and prior invention by another, § 102(g). *See* Gilead Sciences Inc.'s Renewed Motion for Judgment as a Matter of Law Under Fed. R. Civ. P. 50(b) at 1-10, *Gilead*, 2016 WL 3143943.

¹⁶⁴ *Gilead*, 2016 WL 3143943, at *1.

¹⁶⁵ See Gilead, 888 F.3d at 1240-47.

¹⁶⁶ *Id.* at 1233.

¹⁶⁸ Gilead, 888 F.3d at 1248.

¹⁶⁹ *Id.* at 1240.

"direct connection" to the relief sought (patent enforcement),¹⁷¹ thereby satisfying the Supreme Court's "immediate and necessary relation" standard.¹⁷²

Gilead is significant in several respects. First, it shows that unclean hands isn't an antiquated defense; instead, it's a potent defense that shouldn't be taken lightly.¹⁷³ Second and relatedly, the defense can reach back to prelitigation misconduct as long as there is a "direct connection" to the relief sought.¹⁷⁴ Third, unclean hands can serve as a complete defense to a claim for damages (and prospective relief) and support an award of attorney's fees.¹⁷⁵ But even if *Gilead* might be considered a game changer in patent law remedies,¹⁷⁶ I argue below that it doesn't go far enough.

¹⁷³ See Christa J. Laser, *Equitable Defenses in Patent Law*, 75 U. MIA. L. REV. 1, 47 (2020) (concluding that Federal Circuit "adopted an approach to unclean hands that expands the doctrine beyond its pre-codification roots").

¹⁷⁴ *Gilead*, 888 F.3d at 1241.

¹⁷⁵ One question that arises is whether unclean hands should bar a patentee from asserting a *legal* claim for damages. While a full discussion of the debate is beyond the scope of this Article, views differ among scholars and judges. See DOBBS & ROBERTS, supra note 1, at 67 ("The most orthodox view of the unclean hands doctrine makes it an equitable defense, that is, one that can be raised to defeat an equitable remedy only, but one that is unavailable to those seeking only legal relief."); Samuel L. Bray, The System of Equitable Remedies, 63 UCLA L. REV. 530, 549 (2016) ("[I]n the vast majority of jurisdictions [unclean hands] is an equitable defense good only against equitable claims."); Brief for Samuel L. Bray as Amicus Curiae Supporting Petitioners at 5-10, Merck & Co. v. Gilead Scis., Inc., 139 S. Ct. 797 (2019) (No. 18-00378) (arguing that unclean hands defense shouldn't be available for legal claims); T. LEIGH ANENSON, JUDGING EQUITY: THE FUSION OF UNCLEAN HANDS IN U.S. LAW 148 (2018) ("The defense should at least be considered in actions seeking legal relief and should not be denied solely based on premerger practices."); Byron v. Clay, 867 F.2d 1049, 1052 (7th Cir. 1989) ("[W]ith the merger of law and equity, it is difficult to see why equitable defenses should be limited to equitable suits any more; and of course many are not so limited, and perhaps unclean hands should be one of these."); William J. Lawrence, III, Note, The Application of the Clean Hands Doctrine in Damage Actions, 57 NOTRE DAME L. REV. 673, 681 (1982) ("[I]f a court is going to require clean hands, it should apply the requirement when the facts of the case demand it, regardless of the remedy sought."); Laser, supra note 173, at 66-73 (exploring arguments about how courts should apply equitable defenses in patent cases, including limited "traditional" view and expansive "dynamic" view). Allowing unclean hands to serve as a complete defense avoids inconsistent litigation outcomes involving the same patent. See, e.g., Mas v. Coca Cola Co., 198 F.2d 380, 381 (4th Cir. 1952) (stating "[o]ne who has had the door of a court of equity closed in his face because of his fraud may not have relief by the simple device of beginning again and labeling his suit an action at law for damages" in opinion upholding dismissal of patent suit at law for damages, following dismissal of equitable suit for unclean hands involving same patent).

¹⁷⁶ See, e.g., Dennis Crouch, Unclean Hands Applied to Cancel Legal Damages Award, PATENTLY-O (Apr. 25, 2018), https://patentlyo.com/patent/2018/04/unclean-applieddamages.html [https://perma.cc/8JY2-KCHB]; Francis C. Lynch, Merck Patent Case Supports Use of "Unclean Hands" Defense, LAW360 (July 6, 2018, 1:04 PM),

¹⁷¹ *Id.* at 1241.

¹⁷² *Id.* at 1239-40.

II. REINVIGORATING UNCLEAN HANDS IN PATENT LAW

In this Part, I propose a new theory of unclean hands in patent law. After describing its contours, I use exemplary scenarios to show how the proposed approach expands the scope of impermissible misconduct and ratchets up the consequences for misconduct connected to the patent.

A. Toward a New Theory

1. Universal Unenforceability

Recall the dichotomy in the remedies for unclean hands and inequitable conduct.¹⁷⁷ The remedy for unclean hands is dismissal of the patentee's cause of action, which is equivalent to rendering the patent unenforceable against the defendant-infringer in the instant lawsuit.¹⁷⁸ I call this *relational unenforceability* since it only involves parties in the case-at-bar. The patentee is free to enforce the patent against others in future litigation.¹⁷⁹ By contrast, a finding of inequitable conduct renders the patent unenforceable against the current defendant-infringer and any subsequent accused infringers.¹⁸⁰ This is *universal unenforceability*¹⁸¹ because it's essentially a forfeiture of the patent right.¹⁸² Thus, relational unenforceability serves merely as a personal defense to

https://www.law360.com/articles/1059117/merck-patent-case-supports-use-of-unclean-hands-defense.

- ¹⁷⁷ See supra Section I.B.1.
- ¹⁷⁸ See supra note 144 and accompanying text.
- ¹⁷⁹ See supra notes 145-47 and accompanying text.
- ¹⁸⁰ See supra note 123 and accompanying text.

¹⁸¹ See, e.g., AstraZeneca Pharms. LP v. Teva Pharms. USA, Inc., 583 F.3d 766, 770 (Fed. Cir. 2009) ("Upon determining that there was inequitable conduct in obtaining the patent, the district court may in its discretion declare the patent permanently unenforceable."); Glaverbel Societe Anonyme v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1556-57 (Fed. Cir. 1995) ("Failure to disclose material information during the patent procurement process or the submission of material false information, with the intent to mislead or deceive the patent examiner into granting the patent, may render the patent permanently unenforceable."). Procedurally, the Federal Circuit has explained that a subsequent infringer can take advantage of a prior unenforceability determination under the collateral estoppel doctrine:

The principle of *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313 (1971), respecting collateral estoppel also applies to unenforceability. Thus, there is no risk that others will be subject to infringement suits in the future because the patentee cannot enforce a patent held unenforceable after a full and fair opportunity, as here, to litigate the issue. Nor is there need for the patentee to secure an appellate court's validity determination regarding an unenforceable patent. The patent is simply not enforceable, regardless of its validity.

Gen. Electro Music Corp. v. Samick Music Corp., 19 F.3d 1405, 1413 (Fed. Cir. 1994).

¹⁸² See Scripps Clinic & Rsch. Found. v. Genentech, Inc., 927 F.2d 1565, 1574 (Fed. Cir. 1991) (noting that inequitable conduct results in "forfeiture of all patent rights"); accord Tol-O-Matic, Inc. v. Proma Produkt-Und Mktg. Gesellschaft m.b.H., 945 F.2d 1546, 1554 (Fed. Cir. 1991).

postissuance misconduct whereas misconduct in patent acquisition renders the patent universally unenforceable "against the world."¹⁸³

The rationale for the dichotomy is temporal. When the misconduct occurs during patent acquisition, most notably in dealings with the Patent Office, universal unenforceability is called for because the patent right is tainted ab initio.¹⁸⁴ When the misconduct occurs postissuance and with respect to a *particular defendant*, less severe, relational unenforceability seems appropriate.¹⁸⁵

While the temporal dimension makes sense, *Gilead* shows that the categorical rule that prescribes relational unenforceability as the sole remedy for unclean hands doesn't make sense. Merck's misconduct in breaching the firewall to learn about sofosbuvir and incorporating that information into its patent applications undeniably affected the *acquisition* of the patents at issue. The remedy for this preissuance misconduct should've been universal unenforceability. The broader point is that some types of preissuance misconduct not directly involving the

¹⁸⁴ See supra note 123 and accompanying text.

¹⁸⁵ However, opinions differ. In *Aptix Corp. v. Quickturn Design Systems, Inc.*, 269 F.3d 1369 (Fed. Cir. 2001), a district court dismissed the patentee's complaint and rendered the patent unenforceable after finding that the inventor engaged in litigation conduct involving postissuance forgery of laboratory notebooks. *Id.* at 1371. On appeal, the Federal Circuit affirmed the dismissal but reversed the unenforceability ruling because the district court imposed it as a "penalty" for the misconduct. *Id.* at 1378. This was an abuse of discretion because the doctrine of unclean hands "is not a source of power to punish." *Id.* (citing Feltner v. Columbia Pictures Television, Inc., 523 U.S. 340, 352-53 (1998) ("Remedies intended to punish culpable individuals . . . were issued by courts of law, not courts of equity" (quoting Tull v. United States, 481 U.S. 412, 422 (1987)))). In dissent, Judge Mayer argued that (universal) unenforceability is warranted:

Had Mohsen succeeded, he might unjustly have retained or enlarged the scope of his property right . . . and thus remained the owner of valid patent claims where he should have none. . . [T]he patent would be strengthened through its testing in litigation and in reliance upon the fraudulent documentation and testimony. Aptix would likely be able to command a higher price for it (in license or assignment), and would more readily be able to obtain settlements from potential infringers than if it had not survived a challenge to its validity. This strengthened patent could be helpful in obtaining infringement verdicts in subsequent litigation, resulting in a chain of judgments based on the same fraud. . . . This type of deception taints the patent itself. The documentary record of the invention has been permanently blotched. . . . To permit this . . . is to countenance the continued involvement of the courts in sorting through the muddy morass of Mohsen's forgeries and dishonest testimony. The unclean hands doctrine does not permit this boon to the forger and stain on the courts.

Aptix Corp., 269 F.3d at 1381-82.

¹⁸³ Cf. Qualcomm Inc. v. Broadcom Corp., 548 F.3d 1004, 1009 (Fed. Cir. 2008) (reviewing district court's holding that patents-in-suit were "unenforceable against the world" due to patentee's misconduct in standards-setting organization); Dmitry Karshtedt, *Did Learned Hand Get it Wrong?: The Questionable Patent Forfeiture Rule of* Metallizing Engineering, 57 VILL. L. REV. 261, 309 n.304 (2012).

Patent Office nonetheless taint the property right ab initio.¹⁸⁶ Here the remedy should be universal unenforceability—the same remedy that applies for inequitable conduct. Furthermore, tainting the patent right ab initio due to preissuance misconduct could jeopardize an entire portfolio of related patents by rendering all of them universally unenforceable.¹⁸⁷

But this doesn't mean that the outcome in *all* unclean hands cases should be universal unenforceability.¹⁸⁸ Again, the appropriate remedy should depend on timing. If the alleged misconduct only involves postissuance activities, such as false testimony and other litigation behavior, the remedy should be relational unenforceability. When allegations of both pre- and post-issuance misconduct exist in the same lawsuit (as in *Gilead*),¹⁸⁹ the appropriate remedy will depend on which allegations are proven. In all cases, the alleged infringer bears the burden of proving unclean hands with clear and convincing evidence.¹⁹⁰

2. The Nexus (Relatedness) Requirement and Collateral Misconduct

The courts agree that the unclean hands defense has a relatedness requirement—the plaintiff's misconduct must relate in some significant way to the claim that's the subject matter of the dispute.¹⁹¹ *Gilead* states that unclean hands is only appropriate when the plaintiff's alleged misconduct "has

¹⁸⁶ One might ask if tainting the property right ab initio under the proposed theory would expose the patentee to antitrust liability under *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172, 174 (1965). Probably not. To prevail on a *Walker Process* claim, the accused infringer must show "first, that the [patentee] obtained the patent by knowing and willful fraud on the patent office and maintained and enforced the patent with knowledge of the fraudulent procurement; and second, all the other elements necessary to establish a Sherman Act monopolization claim." TransWeb, LLC v. 3M Innovative Prop. Co., 812 F.3d 1295, 1306 (Fed. Cir. 2016). The behavior I target is pre-issuance misconduct *not* involving the Patent Office. The fraud component of *Walker Process* aligns with inequitable conduct—the two doctrines target the same misconduct and require "nearly identical" showings post-*Therasense. Id.* at 1307.

¹⁸⁷ See supra notes 121-22 and accompanying text. This is because an original patent application (parent), once filed, may disclose multiple inventions or multiple embodiments of an invention. When this happens, the patent statute allows the inventor to file one or more "continuation" applications (children) as long as they are filed before the parent application either issues as a patent or becomes abandoned. 35 U.S.C. § 120. Continuation applications have the identical written description as the parent and enjoy the benefit of the parent's earlier filing date. *Id.*; 37 C.F.R. § 1.53(b) (2018). Thus, a given patent family may consist of a parent, children, and grandchildren. *See* MUELLER, *supra* note 99, at 76-80.

¹⁸⁸ This is because "the remedy imposed by a court of equity should be commensurate with the violation." Core Wireless Licensing S.A.R.L. v. Apple Inc., 899 F.3d 1356, 1368 (Fed. Cir. 2018) (quoting Columbus Bd. of Educ. v. Penick, 443 U.S. 449, 465 (1979)).

¹⁸⁹ See discussion supra Section I.B.2.

¹⁹⁰ See supra note 134 and cases cited therein.

¹⁹¹ DOBBS & ROBERTS, *supra* note 1, at 69; *see also* LAYCOCK & HASEN, *supra* note 129, at 992 (describing this as "bare minimum requirement").

immediate and necessary relation" to the relief sought.¹⁹² This includes "the potential for expediting patent issuance and for lowering certain invalidity risks" in litigation.¹⁹³

Under my proposal, the misconduct must be "sufficiently related" to the patent right.¹⁹⁴ A sufficient nexus must exist between the alleged misconduct and the patent right for a court to render a patent universally unenforceable.¹⁹⁵ Whether a sufficient nexus has been shown will depend on the facts of the case.

But the defense has limits. Not all preissuance misconduct will soil the plaintiff's hands.¹⁹⁶ Misconduct that's too attenuated or otherwise insufficient to show this nexus is *collateral misconduct*.¹⁹⁷ Ignoring collateral misconduct ensures that unclean hands isn't used as a tool to punish bad actors.¹⁹⁸

B. Exemplary Scenarios

Below I illustrate scenarios involving preissuance misconduct that could give rise to an assertion of unclean hands under the proposed regime. These examples show that conduct that's already covered by inequitable conduct wouldn't constitute unclean hands.

¹⁹⁶ Dr. José S. Belaval, Inc. v. Pérez-Perdomo, 488 F.3d 11, 15 (1st Cir. 2007) (citing Texaco P.R. Inc. v. Dep't of Consumer Affs., 60 F.3d 867, 880 (1st Cir. 1995)).

¹⁹⁷ As explained in the Second Restatement of Torts,

The plaintiff's relief will not be jeopardized ... unless his misconduct relates directly to the controversy immediately involved in this ... suit. Collateral misdeeds, no matter how indicative of general unworthiness, are not presently material. Since the rationale of the doctrine of unclean hands is that equity will not aid a person to reap the benefits of his own misconduct, a misdeed is regarded as "collateral" in this context when the right for which the plaintiff seeks protection ... did not accrue to him because of the misdeed.

RESTATEMENT (SECOND) OF TORTS § 940 cmt. c (AM. L. INST. 1979); cf. Republic Molding Corp. v. B.W. Photo Utils., 319 F.2d 347, 349 (9th Cir. 1963) (explaining that in patent infringement suit "misconduct in the abstract, unrelated to the claim to which it is asserted as a defense, does not constitute unclean hands.... The concept invoking the denial of relief is not intended to serve as punishment for extraneous transgressions...").

¹⁹⁸ See supra note 132 and accompanying text.

¹⁹² Gilead Scis., Inc. v. Merck & Co., 888 F.3d 1231, 1239 (Fed. Cir. 2018) (quoting Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 245 (1933)).

¹⁹³ Gilead 888 F.3d at 1241.

¹⁹⁴ DOBBS & ROBERTS, *supra* note 1, at 67.

¹⁹⁵ *Cf. In re* Uwimana, 274 F.3d 806, 810 (4th Cir. 2001) ("A court can deny relief under the doctrine of unclean hands only when there is a close nexus between a party's unethical conduct and the transactions on which that party seeks relief." (citing *Keystone Driller*, 290 U.S at 245)); Mantek Div. of NCH Corp. v. Share Corp, 780 F.2d 702, 707 (7th Cir. 1986) (citing Precision Instrument Mfg. Co. v. Auto Maint. Mach. Co., 324 U.S. 806, 814 (1945)) (adopting "sufficient nexus" requirement).

2022]

1. Fabricating Results

In scientific research, fabrication is defined as "making up data or results."¹⁹⁹ While the rules of scientific research don't permit fabrication,²⁰⁰ an inventor can obtain a patent without actually making and testing everything that's claimed.²⁰¹ As Judge Newman explains:

Unlike the rules for scientific publications, which require actual performance of every experimental detail, patent law and practice are directed to teaching the invention so that it can be practiced. The inclusion of constructed examples in a patent application is an established method of providing the technical content needed to support the conceived scope of the invention.²⁰²

So the Patent Office and the courts permit inventors to include made-up experiments and fictional results in patents.²⁰³ So-called "prophetic examples" are quite prevalent.²⁰⁴ They don't necessarily raise red flags and presumably comply with the disclosure requirements of 35 U.S.C. § 112(a).²⁰⁵ However,

²⁰¹ See In re Chilowsky, 229 F.2d 457, 461 (C.C.P.A. 1956) ("The mere fact that something has not previously been done clearly is not, in itself, a sufficient basis for rejecting all applications purporting to disclose how to do it."). It's well settled in U.S. patent law that the mental act of conception of the idea, rather than any physical act, is the important facet of the inventive process. Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 60-61 (1998).

²⁰² Hoffmann-La Roche, Inc. v. Promega Corp., 323 F.3d 1354, 1377 (Fed. Cir. 2003) (Newman, J., dissenting).

²⁰³ Atlas Powder Co. v. E.I. du Pont De Nemours & Co., 750 F.2d 1569, 1577 (Fed. Cir. 1984); MPEP § 608.01(p) (9th ed. Rev. 10, June 2020).

²⁰⁴ See Janet Freilich, *Prophetic Patents*, 53 U.C. DAVIS L. REV. 663, 697 (2019) (showing empirically that quarter of chemistry and biology patents contain prophetic examples). A key benefit of prophetic examples is their use in provisional patent applications. A provisional application allows an applicant to obtain an early filing date for the invention before the applicant is ready to draft a claim or a full application. *See* 35 U.S.C. § 111(b) (allowing for provisional applications in which no claims are required).

²⁰⁵ Alcon Rsch. Ltd. v. Barr Lab'ys, Inc., 745 F.3d 1180, 1189 (Fed. Cir. 2014) (reiterating that invention can be patented before it's physically made and explaining that "there can be no guarantee that prophetic examples actually work"). The basic idea is that "[t]he invention disclosed in the patent application must be capable of actually working in the real world *if it were built*, but the inventor herself need not have yet built it, practiced it, or otherwise made it work in the real world." John F. Duffy, *Reviving the Paper Patent Doctrine*, 98 CORNELL L. REV. 1359, 1366 (2013).

¹⁹⁹ NAT'L ACAD. OF SCIS., NAT'L ACAD. OF ENG'G & INST. OF MED., ON BEING A SCIENTIST: RESPONSIBLE CONDUCT IN RESEARCH 15 (3d ed. 2009); *see also* DAVID B. RESNIK, THE ETHICS OF SCIENCE: AN INTRODUCTION 49 (1998) (offering same definition).

²⁰⁰ Fabrication suggests dishonesty, which "undermines not only the results of the specific research but also the entire scientific enterprise itself, because it threatens the trustworthiness of the scientific endeavor." NAT'L ACADS. OF SCI., ENG'G & MED., FOSTERING INTEGRITY IN RESEARCH 32 (2017); *see also* RESNIK, *supra* note 199, at 66 (referring to fabrication as one of "cardinal sins of science").

prophetic examples must be written in the present tense to signal that the underlying experiment wasn't actually performed.²⁰⁶

Violating this rule by using the wrong tense or otherwise "stating that an experiment 'was run' or 'was conducted' when, in fact, the experiment was not run or conducted"²⁰⁷ is a factual misrepresentation. This may breach the applicant's duty of candor owed to the Patent Office.²⁰⁸ As such, the governing doctrine is inequitable conduct, not unclean hands.²⁰⁹ For example, in *Cargill, Inc. v. Canbra Foods, Ltd.*,²¹⁰ the Federal Circuit found inequitable conduct for failing to disclose test data inconsistent with data disclosed in the patent document.²¹¹ Misrepresenting research results by fabricating data or concealing adverse data can be material to patentability when the data suggest a similarity between the invention and the prior art (relevant to novelty or nonobviousness)²¹² or show that the invention doesn't work as described (relevant to enablement).²¹³ But, as I show in the next Section, fraud in the

²⁰⁹ See, e.g., Hoffmann-La Roche, Inc. v. Promega Corp., 323 F.3d 1354, 1363 (Fed. Cir. 2003) (upholding conclusion of inequitable conduct based on finding that statement in patent's written description that experiments "were...run" was false material misrepresentation when no test had been run, because the example was "written in the past tense"). *But see* Regents of the Univ. of Cal. v. Eli Lilly & Co., 119 F.3d 1559, 1571 (Fed. Cir. 1997) (concluding that patent applicant didn't engage in inequitable conduct by writing prophetic examples in past tense because examiner wouldn't have made different decision if they were written in present tense).

- ²¹⁰ 476 F.3d 1359 (Fed. Cir. 2007).
- ²¹¹ *Id.* at 1364-68.
- ²¹² See id. at 1362-63 (discussing novelty rejection).

²¹³ See Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc., 326 F.3d 1226, 1234-35 (Fed. Cir. 2003) (finding that withholding of inventor's scientific article showing that some of reactants in claimed process didn't work constituted inequitable conduct); Sean B.

²⁰⁶ See supra note 203. A description of an experiment actually performed might recite: A was mixed with B to make C; whereas a prophetic experiment might recite: A is mixed with B to make C. For several illustrations of prophetic examples in issued patents, see Janet Freilich & Lisa Larrimore Ouellette, Science Fiction: Fictitious Experiments in Patents, 364 SCIENCE 1036, 1037 (2019).

²⁰⁷ MPEP § 2004(8) (9th ed. Rev. 10, June 2020).

²⁰⁸ See id. Relatedly, submitting a patent application with data known to be fraudulent also breaches the duty of candor. For recent, well-publicized examples, see generally Andrew Pollack, *Disgraced Scientist Granted U.S. Patent for Work Found to be Fraudulent*, N.Y. TIMES, Feb. 15, 2014 (reporting issuance of U.S. Pat. No. 8,647,872 to Korean researcher claiming to have created world's first cloned human embryos despite knowledge that work was fraudulent, resulting in researcher's firing from his university and criminal conviction); and Daniel Nazer, Opinion, *Theranos: How a Broken Patent System Sustained Its Decade-Long Deception*, ARS TECHNICA (Mar. 4, 2019, 7:30 AM), https://arstechnica.com/techpolicy/2019/03/theranos-how-a-broken-patent-system-sustained-its-decade-long-deception/ [https://perma.cc/W95Q-R2Y8] (criticizing issuance of patents to inventor who falsely claimed to have developed revolutionary blood tests due to Patent Office's "terrible job of ensuring that applications meet the utility and enablement standards" of patent statute).

creation of a patent right can be embodied in behavior that doesn't constitute inequitable conduct.

2. Fruit of the Poisonous Tree

In early 2020, two professors at major research universities were arrested and charged with making false statements to federal funding agencies.²¹⁴ The charges include the violation of federal laws that require the disclosure of information about active or pending financial support from all foreign and domestic entities.²¹⁵

This type of research misconduct sets the stage for an assertion of unclean hands under the proposed framework. To illustrate, consider the following hypothetical. Professor applies for a federal research grant without disclosing financial support from another entity in the grant proposal (which is required by federal law). The federal agency funds the research project. Professor uses the federal funds to pay for a research project that leads to the invention of *X*. University applies for and obtains a patent on $X^{.216}$ University sues Infringer for making and using *X* without a license.²¹⁷ Infringer asserts unclean hands, arguing that there's a direct connection among Inventor's fraudulent conduct before the federal agency, the issued patent, and the relief sought (patent enforcement).²¹⁸ Accordingly, Infringer argues that this nexus satisfies the Supreme Court's "immediate and necessary relation" standard²¹⁹ and gives the court discretion to render the patent universally unenforceable.

Seymore, *Patenting Around Failure*, 166 U. PA. L. REV. 1139, 1162-65 (2018) (describing how submitting misleading technical information violates patent applicant's duty of disclosure).

²¹⁴ See Ellen Barry, Prosecutors Accuse Harvard Scientist of Lying About Receiving Money from China, N.Y. TIMES, Jan. 29, 2020, at A12; Devlin Barrett, FBI Accuses Harvard Chair of Lying About His China Ties, WASH. POST, Jan. 29. 2020, at A13; Byron Tau & Aruna Viswanatha, Professor Convicted in China-Ties Case, WALL ST. J., Dec. 22, 2021, at A3; Travis Dorman, UT Professor Arrested on Federal Charges, KNOXVILLE NEWS-SENTINEL, Feb. 28, 2020, at A11; Eric Tucker, Justice Dept. Charges Professor with Hiding Ties to China, AP NEWS (Feb. 27, 2020), https://apnews.com/91a976953cf66f4f64c8d6e02bee2a09 [https://perma.cc/E693-RCY2].

²¹⁵ See 42 C.F.R. §§ 50.604, 50.605 (2011) (regulations requiring disclosure of financial conflicts of interest for researchers seeking federal funding); 18 U.S.C. § 1001(a)(2) (federal statute criminalizing intentional false statements made to federal agencies).

²¹⁶ Most research universities require professors, graduate students, postdocs, and other researchers to sign a preinvention assignment contract as a condition of employment or for use of university resources. *See* Rochelle Cooper Dreyfuss, *Collaborative Research: Conflicts on Authorship, Ownership and Accountability*, 53 VAND. L. REV. 1161, 1212-13 (2000).

²¹⁷ See supra notes 22-23 and accompanying text.

²¹⁸ See supra notes 171, 174 and accompanying text.

²¹⁹ See supra note 172.

Let's unpack Infringer's defense. It's actually a "fruit of the poisonous tree" argument.²²⁰ Since the research funding is poisoned by the inventor's fraudulent conduct (the tree), so too is the patent that results from it (the fruit).²²¹ This reasoning aligns with unclean hands principles,²²² and the misconduct clearly establishes the sufficient nexus explained above. Accordingly, the patent should be rendered universally unenforceable for unclean hands.²²³

3. Surreptitious Acquisition of Knowledge About an Invention

An individual or small firm that develops a potentially marketable invention will often pitch it to a manufacturer.²²⁴ Through a license agreement, the inventor will collect royalty payments and the manufacturer will mass produce, advertise, and sell the invention.²²⁵ Sometimes the pitch leads to outright invention theft.²²⁶ Or it could lead to surreptitious behavior that's not theft but is nevertheless misconduct that forms the basis for an allegation of unclean hands.

To illustrate, consider the following hypothetical fact pattern that's loosely based on *Evans Cooling Systems, Inc. v. General Motors Corp.*²²⁷ Inventor approached Automaker about licensing a new radiator specially designed for use in Automaker's cars.²²⁸ Automaker invited Inventor to Automaker's test facility

²²² See LAYCOCK & HASEN, *supra* note 129, at 991 ("Another formulation of the unclean hands rule is that the court will not aid a plaintiff whose claim had its inception in the plaintiff's own wrongdoing, whether the victim is the defendant or a third party.").

²²³ See supra Section II.A.1.

²²⁴ See Ronald Louis Docie, Sr., The Inventor's Bible, Fourth Edition: How to Market and License Your Brilliant Ideas 3 (4th ed. 2015); Stephen Key, One Simple Idea 5 (rev. ed. 2016).

²²⁵ KEY, *supra* note 224, at 24.

²²⁶ "Instead of waiting for the innovator to patent its product and then copy the patented innovation, some firms (or individuals) may copy the innovator's product and then race to the Patent Office in order to claim the invention as their own." Christopher R. Leslie, *Monopolization Through Patent Theft*, 103 GEO. L.J. 47, 48 (2014). For a famous example, see *Lorenz v. Colgate-Palmolive-Peet Co.*, 167 F.2d 423, 428-29 (3d Cir. 1948).

²²⁷ 125 F.3d 1448 (Fed. Cir. 1997).

²²⁸ See id. at 1449.

²²⁰ This doctrine is well known in criminal procedure: if illegally-obtained evidence is poisoned (the tree), so too is what grows from it (the fruit). *See* Nardone v. United States, 308 U.S. 338, 341 (1939); Wong Sun v. United States, 371 U.S. 471, 488 (1963). For an application of the fruit of the poisonous tree doctrine to intellectual property damages, see Mark A. Lemley, *The Fruit of the Poisonous Tree in IP Law*, 103 IOWA L. REV. 245, 248 (2017).

²²¹ See supra note 220; cf. Republic Molding Corp. v. B.W. Photo Utils., 319 F.2d 347, 349 (9th Cir. 1963) (explaining in patent infringement suit involving unclean hands that "[w]hat is material is not that the plaintiff's hands are dirty, but that he dirtied them in acquiring the right he now asserts, or that the manner of dirtying renders inequitable the assertion of such rights").

to install a prototype in one of Automaker's cars and to demonstrate the invention in a sealed room.²²⁹ At day's end, Automaker told Inventor that it wasn't interested in a license and arranged for Inventor to remove the prototype the next day. But overnight (and unbeknownst to Inventor), Automaker's employees unsealed the room and inspected the prototype.²³⁰ The surreptitious inspection inspired Automaker to redesign its own radiators. Automaker subsequently filed a patent application claiming improvements to its own radiators. Inventor learned about Automaker's activities when the patent issued. Because Automaker's claimed invention differed from Inventor's prototype, Inventor had no substantive grounds for seeking inventorship correction.²³¹ Automaker subsequently sued Competitor for patent infringement. During discovery, Competitor learned about Automaker's surreptitious activities, which Automaker didn't deny. Competitor amended its answer to include the defense of unclean hands and urged the court to render the patent universally unenforceable.²³²

Inventor's plight isn't particularly relevant with regard to Competitor's unclean hands defense.²³³ The court must determine if there's a sufficient nexus between Automaker's surreptitious activities and the relief sought (patent enforcement). This might be a close question. But while it's true that "[a]lmost any kind of conduct the [court] may consider to be unethical or improper might suffice to bar plaintiff's claim, even if the conduct is not actually illegal,"²³⁴ the court must remember that the doctrine's purpose isn't to punish bad actors.²³⁵

4. Deceptive Conduct in Standard-Setting Organizations

A standard can be defined as "a common platform that allows products to work together."²³⁶ Industry groups often form standard-setting organizations

²³² The intentional failure to name a joint inventor is material to patentability and may constitute inequitable conduct. PerSeptive Biosystems, Inc. v. Pharmacia Biotech, Inc., 225 F.3d 1315, 1321 (Fed. Cir. 2000). But again, the omitted inventor must have contributed to the conception of at least one claim in the patent-in-suit to support an allegation of inequitable conduct. *See, e.g.*, CertusView Techs., LLC v. S&N Locating Servs., LLC, 107 F. Supp. 3d 500, 510-12 (E.D. Va. 2015), *aff'd without opinion*, 695 F. App'x 574 (Fed. Cir. 2017).

²³³ Inventor could have done more to safeguard (knowledge about) the invention. For example, Inventor could have insisted on a nondisclosure agreement which limited Manufacturer's use of the prototype. *See supra* note 224.

²²⁹ See id. at 1449-50.

²³⁰ See id. at 1454.

²³¹ See 35 U.S.C. § 256 (authorizing inventorship correction). An inventor is one who conceives the claimed subject matter. Burroughs Wellcome Co. v. Barr Lab'ys, Inc., 40 F.3d 1223, 1227-28 (Fed. Cir. 1994). A joint inventor must have conceived the subject matter of at least one claim. Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1359 (Fed. Cir. 2004).

²³⁴ DOBBS & ROBERTS, *supra* note 1, at 67.

²³⁵ See supra note 132 and accompanying text.

²³⁶ MICHAEL A. CARRIER, INNOVATION FOR THE 21ST CENTURY 323 (2009).

("SSOs") to develop a set of common standards in a given area.²³⁷ The goals of these standards (and SSOs) include product interoperability, consumer welfare, safety, market efficiency, and rapid diffusion of new technologies.²³⁸ Famous standards include household electrical outlets, HTML, the OWERTY keyboard layout, and the Microsoft Windows operating system.²³⁹ Many SSOs implement rules to control the use of IP rights among its participants. For example, if adoption of a standard requires the use of an SSO participant's patented technology, the participant must provide open access to it (i.e., a royalty-free license) or only request a reasonable royalty.²⁴⁰ SSO IP rules often require participants to disclose any pending patent applications related to the subject matter of a proposed standard. If a participant strategically breaches the disclosure rule and allows the SSO to adopt a standard that incorporates the participant's patented technology, the participant can "capture"²⁴¹ the industry standard with the resulting patent and "ambush"²⁴² unwitting competitors in an infringement suit.²⁴³ Under my proposal, an accused infringer can possibly assert unclean hands to render the patent universally unenforceable.

To illustrate, consider the following scenario. Participant, an automobile manufacturer, joins an SSO whose purpose is to design a safe(r) accelerator pedal incapable of entrapment by floor mats.²⁴⁴ The SSO's bylaws require members to disclose pending patent applications related to the subject matter of any proposed standards. Despite this obligation, Participant doesn't disclose its pending patent application claiming a rubber accelerator pedal with a Teflon backing (at that time Participant believed that Teflon was the world's best

²³⁷ Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1892 (2002).

²³⁸ See id. at 1897; Thomas A. Hemphill, *Technology Standards Development, Patent Ambush, and US Antitrust Policy*, 27 TECH. SOC'Y 55, 56 (2005); Janice M. Mueller, *Patent Misuse Through the Capture of Industry Standards*, 17 BERKELEY TECH. LJ. 623, 632 (2002).

²³⁹ CARRIER, *supra* note 236, at 325; Lemley, *supra* note 237, at 1896.

²⁴⁰ See Mueller, supra note 238, at 635 (providing examples).

²⁴¹ Id. at 628 (citing Mark A. Lemley, Antitrust and the Internet Standardization Problem, 28 CONN. L. REV. 1041, 1086 (1996)). Capture gives the patent owner significant power, including a demand for excessively high royalties. See CARRIER, supra note 236, at 327-28.

²⁴² M. Sean Royall, Amanda Tessar & Adam Di Vincenzo, *Deterring "Patent Ambush" in Standard Setting: Lessons from* Rambus *and* Qualcomm, ANTITRUST, Summer 2009, at 34, 34; *see also* Hemphill, *supra* note 238, at 56-57.

²⁴³ For patent ambush examples, see generally Union Oil Co. of Cal. v. Atl. Richfield Co., 208 F.3d 989 (Fed. Cir. 2000); Rambus Inc. v. Infineon Techs. AG, 318 F.3d 1081 (Fed. Cir. 2003); Qualcomm Inc. v. Broadcom Corp., 548 F.3d 1004 (Fed. Cir. 2008); and Core Wireless Licensing S.A.R.L. v. Apple Inc., 899 F.3d 1356 (Fed. Cir. 2018).

²⁴⁴ Cf. Toyota to Replace Millions of Its Accelerators; Recall Comes After Pedals Have Gotten Stuck in Floor Mats, WASH. POST, Nov. 26, 2009, at A23; Nick Bunkley, Regulators Examine 2 Ford Sedans After Mats Catch Accelerator Pedals, N.Y. TIMES, June 2, 2010, at B5.

lubricant).²⁴⁵ At the SSO meeting, an engineer presents data on a ceramic alloy that's more slippery than Teflon and incredibly resistant to wear.²⁴⁶ The SSO adopts a standard for accelerator pedals that incorporates the ceramic alloy backing. After leaving the meeting, Participant amends its pending patent application to cover rubber accelerator pedals with the ceramic alloy backing.²⁴⁷ The patent with the captured standard issues a year later. Soon thereafter, Participant sues Competitor (a fellow SSO member) for making rubber accelerator pedals with the criginally filed patent application and the subsequent amendment covering the ceramic alloy backing. Accordingly, Competitor asserts the defense of unclean hands.²⁴⁹ Competitor argues that universal unenforceability is the appropriate remedy because incorporating information about the ceramic alloy into the pending patent application tainted the patent right ab initio.

Here the court should find unclean hands for the reason that Competitor asserts. But for the surreptitious use of knowledge obtained at the SSO meeting, Participant wouldn't have amended its patent application to claim an accelerator pedal with the ceramic alloy backing. This doesn't mean, however, that universal unenforceability is the proper remedy in all patent ambush scenarios.²⁵⁰ For

²⁴⁶ See Kurt Kleiner, *Material Slicker Than Teflon Discovered by Accident*, NEWSCIENTIST (Nov. 21, 2008), http://www.newscientist.com/article/dn16102-material-slicker-than-teflondiscovered-by-accident/; Alan Russell & Bruce Cook, *Wear-Resistant Boride Nanocomposite Coating Exhibits Low Friction*, at 34 MRS BULL. 792, 792 (2009).

²⁵⁰ In *Qualcomm*, the district court rendered the patent universally unenforceable after determining that Qualcomm impliedly waived its right to assert its patents by deliberately breaching its duty of disclosure to the SSO. *Qualcomm*, 548 F.3d at 1008. On appeal, Qualcomm argued that the district court erred because "the rationale for a remedy of [universal] unenforceability for inequitable conduct before the [Patent Office]—that such conduct taints the property right *ab initio*—is simply not present for waiver based on post-[Patent Office] conduct" *Id.* at 1025 (citation omitted). The Federal Circuit disagreed; it

²⁴⁵ See MATTHEW ELKIN, THE 100 INVENTIONS THAT CHANGED THE WORLD 19 (2017) (Matthew Elkin ed.) (discussing "extremely slippery" nature of Teflon and uses that include kitchen utensils, cooking pans, "building materials, space suits, computer chips, and insulating seals"); E. F. Lindsley, *New For Your Home: Super-Slippery Teflon Lubricants*, POPULAR SCI., July 1982, at 100, 104 (describing Teflon as DuPont's "super-slippery polymer that is widely employed wherever extreme lubricity is required—everything from frying pans to powerhouse steam pipes").

²⁴⁷ Cf. Infineon, 318 F.3d at 1085.

²⁴⁸ Cf. id. at 1086.

²⁴⁹ An accused infringer in a patent ambush scenario can raise other remedial defenses. As the Federal Circuit has explained, an SSO member "may be equitably estopped or may have impliedly waived its right to assert infringement claims against standard-compliant products." Hynix Semiconductor Inc. v. Rambus Inc., 645 F.3d 1336, 1347-48 (Fed. Cir. 2011) (citing Qualcomm Inc. v. Broadcom Corp., 548 F.3d 1004, 1022-24 (Fed. Cir. 2008)). In *Hynix*, the alleged infringer asserted fraud under state law, which was proven at trial but reversed on appeal. *See Infineon*, 318 F.3d at 1096-1105.

instance, suppose an SSO member deliberately fails to disclose a pending patent application yet makes no postfiling amendments to capture the adopted standard. Because the misconduct (nondisclosure) is unrelated to acquisition of the patent right, the narrower remedy of relational unenforceability might be appropriate.²⁵¹

5. Corporate Malfeasance

A corporation might engage in false advertising, deception, fraud, or other misconduct involving its patented product.²⁵² If the corporation subsequently asserts the patent against an accused infringer, could that misconduct form the basis for an unclean hands defense?

To explore this question, consider the following hypothetical. Manufacturer makes and sells cigarettes. Manufacturer obtains a patent for an improved cigarette filter "capable of adsorbing a range of chemical compounds without a high degree of specificity."²⁵³ Manufacturer subsequently sues Competitor for patent infringement. Competitor asks the court to take judicial notice²⁵⁴ that Manufacturer was among the tobacco companies successfully sued by the U.S. Department of Justice under the Racketeer Influenced and Corrupt Organizations Act ("RICO")²⁵⁵ for engaging "in a decades-long conspiracy to deceive the American public about the health effects and addictiveness of smoking cigarettes" by "fraudulently den[ying] that smoking causes cancer and

²⁵³ Cigarette Filter, U.S. Patent No. 6,779,529 col. 2 ll. 9-10 (filed Jun. 24, 2002).

concluded that "a district court may *in appropriate circumstances* order patents unenforceable as a result of silence in the face of an SSO disclosure duty, as long as the scope of the district court's unenforceability remedy is properly limited in relation to the underlying breach." *Id.* at 1026 (emphasis added). Simply put, the scope of the unenforceability remedy will vary depending on the egregiousness of the patentee's misconduct.

²⁵¹ See id. at 1024-26 (vacating district court's remedy of rendering patents-at-issue unenforceable "against the world" and remanding with instructions to enter narrower unenforceability remedy).

²⁵² See, e.g., Anahad O'Connor, A Toning Shoe Settlement for Skechers, N.Y. TIMES, May 17, 2012, at B11 (discussing implausible claims that shoes could help persons tone muscles and lose weight); Andrea Peterson & Brian Fung, *Lumosity Firm Settles over Brain-Training Claims in Ads*, WASH. POST, Jan. 6, 2016, at A12 (reporting unfounded claims that app could stave off memory loss, dementia, and Alzheimer's disease); Lynnley Browning, *Artificial Sweetener Makers Reach Settlement on Slogan*, N.Y. TIMES, May 12, 2007, at C3 (discussing Splenda's disputed advertising slogan "made from sugar so it tastes like sugar").

²⁵⁴ See FED. R. EVID. 201(c)(2) ("The court must take judicial notice if a party requests it and the court is supplied with the necessary information.").

²⁵⁵ The Racketeer Influenced and Corrupt Organizations Act ("RICO") makes it unlawful for "any person . . . associated with any enterprise . . . to conduct or participate, directly or indirectly, in the conduct of such enterprise's affairs through a pattern of racketeering activity" 18 U.S.C. § 1962(c). To establish RICO liability, the government must prove the elements of the underlying conduct that constitutes racketeering, such as mail or wire fraud. *See id.* §§ 1341, 1343.

emphysema," that "secondhand smoke causes lung cancer[,]...[and] that nicotine is an addictive drug [that was] manipulated ... to sustain addiction."²⁵⁶ Competitor argues that since the deception involved false claims to the public about the effectiveness of the patented filter, unclean hands should universally bar Manufacturer's right to enforce the patent in order to best serve the public interest. To bolster its argument, Competitor points to language in *Precision Instrument*, where the Supreme Court applied unclean hands to deny relief because "[t]he possession and assertion of patent rights are 'issues of great moment to the public." "The far-reaching social and economic consequences of a patent ... give the public a paramount interest in seeing that patent monopolies *spring from backgrounds free from fraud* or other inequitable conduct"²⁵⁷

There are three reasons why the court shouldn't find unclean hands. First, the requisite nexus is missing.²⁵⁸ But for Manufacturer's corporate malfeasance, it's more likely than not that the patent would've issued anyway. Thus, Manufacturer's malfeasance should be deemed collateral misconduct because it's too attenuated.²⁵⁹ Second, courts shouldn't use unclean hands as a tool to punish bad actors.²⁶⁰ Third, the court should avoid delving into issues that aren't for it (or the Patent Office) to decide.²⁶¹ The veracity of Manufacturer's assertions about the effectiveness of the cigarette filter is irrelevant to patentability.²⁶²

²⁵⁷ Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 815-16 (1945) (emphasis added) (quoting Hazel-Atlas Glass Co. v. Hartford-Empire Co, 322 U.S. 238, 246 (1944)); *see* discussion *supra* Section I.A.

²⁶¹ See MPEP § 2107.03(V) (9th ed. Rev. 10, June 2020) (instructing examiners to "confine [the] review of patent applications to the statutory requirements of the patent law" and noting that "[0]ther agencies of the government have been assigned the responsibility of ensuring conformance to" safety and efficacy standards required by law).

²⁶² See id. The C.C.P.A. addressed the role of safety in the patentability calculus in a pharmaceutical case, *In re* Hartop, 311 F.2d 249 (C.C.P.A. 1962). The court held that neither clinical evidence nor Food and Drug Administration ("FDA") approval should always be a prerequisite for patenting. *Id.* at 257-59; *cf. In re* Krimmel, 292 F.2d 948, 954 (C.C.P.A. 1961) (holding that as to whether claimed drug was safe and effective for humans, "[i]t is not for us or the Patent Office to legislate and if the Congress desires to give this responsibility to the Patent Office, it should do so by statute"). The C.C.P.A. and the Federal Circuit have both explained that no provision in the patent statute establishes safety as a patentability criterion. *In re* Anthony, 414 F.2d 1383, 1393-94 (C.C.P.A. 1969); Scott v. Finney, 34 F.3d 1058, 1063-64 (Fed. Cir. 1994).

²⁵⁶ United States v. Philip Morris USA Inc., 566 F.3d 1095, 1105-06 (D.C. Cir. 2009) (per curiam).

²⁵⁸ See supra Section II.A.2.

²⁵⁹ See supra note 197 and accompanying text.

²⁶⁰ See supra notes 131-32 and accompanying text.

6. Poaching for the Public Good

A major rationale for the U.S. patent system is that legal protection for inventions encourages innovation and promotes technological advances for the public good.²⁶³ In the realm of public health, Congress, the Patent Office, and the courts have taken measures to promote this goal.²⁶⁴ For example, the Patent Office has implemented prioritized patent examination for applications related to treating cancer²⁶⁵ and more recently COVID-19.²⁶⁶ Given the nationwide interest in the COVID-19 pandemic, this raises the question of whether misconduct in patenting COVID-19 products or processes should be subject to an unclean hands defense.

To explore this question, consider the following hypothetical. AlphaPharm was selected as one of five major drug manufacturers to participate in a publicprivate partnership to quickly develop an effective COVID-19 vaccine.²⁶⁷ AlphaPharm soon develops an effective COVID-19 vaccine, but it requires refrigeration at -80°C and two doses.²⁶⁸ Competitor, who wasn't selected for the public-private partnership, has been working on its own COVID-19 vaccine. It's

²⁶⁵ See Cancer Immunotherapy Pilot Program, 81 Fed. Reg. 42328, 42328 (June 29, 2016) (implementing pilot program which offers fast track examination for applications claiming method of treating cancer using immunotherapy).

²⁶⁶ See COVID-19 Prioritized Examination Pilot Program, 85 Fed. Reg. 28932, 28932 (May 14, 2020) (implementing pilot program which offers fast track examination for applications "covering a product or process related to COVID-19...[that's] subject to an applicable FDA approval for COVID-19 use").

²⁶⁷ See Press Release, U.S. Dep't of Health & Hum. Servs., Fact Sheet: Explaining Operation Warp Speed (June 16, 2020), https://web.archive.org/web/20200616164105/https://www.hhs.gov/about/news/2020/06/16/ fact-sheet-explaining-operation-warp-speed.html.

²⁶⁸ See Rebecca Robins & David Gelles, Vaccine Will Travel Complicated Route from Lab to Masses, N.Y. TIMES, Nov. 13, 2000, at A7 (discussing challenges associated with Pfizer's COVID-19 vaccine); David Gelles, Couriers Plan for Difficulties of Shipping Vaccines at -80 °C, N.Y. TIMES, Sept. 19, 2020, at A7.

²⁶³ Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 330-31 (1945); *see also* Brown v. Campbell, 41 App. D.C. 499, 501-02 (D.C. Cir. 1914) ("Over and over has it been repeated that the object of the patent system is, through protection, to stimulate inventions, and inventors ought to understand that this is for the public good.").

²⁶⁴ See, e.g., 35 U.S.C. § 271(e)(1) (creating safe harbor that permits uses of patented invention "for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs"); City of Milwaukee v. Activated Sludge, Inc., 69 F.2d 577, 593 (7th Cir. 1934) (denying injunction, despite finding of patent infringement, to alleviate public health crisis); Vitamin Technologists, Inc. v. Wis. Alumni Rsch. Found., 146 F.2d 941, 945-47 (9th Cir. 1945) (considering effect on public health but disposing of case on ground that patents were invalid); *Ex parte* Scherer, 103 U.S.P.Q. 107, 110 (B.P.A.I. July 23, 1954) (determining that method of treating disease constituted patentable subject matter), overruling Ex parte Brinkerhoff, 24 Off. Gaz. Pat. Office 349 (1883), *reprinted in* 27 J. PAT. OFF. Soc'Y 797, 797-800 (1883) (denying patents on medical techniques).

UNCLEAN PATENTS

on the brink of releasing a highly effective single-dose vaccine that requires no refrigeration. To speed up its method of making the vaccine, Competitor asks AlphaPharm for its "negative know-how"-knowledge about past mistakes, failed tests, and dead ends.²⁶⁹ AlphaPharm is unwilling to share this knowledge. So Competitor poaches (hires away) an AlphaPharm scientist who worked on its COVID-19 vaccine. The poached scientist inevitably uses AlphaPharm's negative know-how to help Competitor rapidly move its COVID-19 vaccine to Food and Drug Administration approval.²⁷⁰ Competitor also obtains a patent claiming a method of making a COVID-19 vaccine that's stable at ambient temperatures. Competitor receives quick approval for its vaccine, which-based on its ease of distribution and administration-rapidly accelerates nationwide efforts to vaccinate the population. Competitor subsequently sues BetaPharm for patent infringement. During discovery, BetaPharm learns about the poaching and acquisition of negative know-how, which Competitor doesn't deny. Although BetaPharm doesn't challenge the patent's validity.²⁷¹ in its answer BetaPharm urges the court to render the patent universally unenforceable based on unclean hands. Competitor argues that: (1) the jurisdiction doesn't recognize negative know-how as a form of intellectual property in the jurisdiction;²⁷² (2) its vaccine has vastly improved and accelerated the nation's COVID-19 response, which wouldn't have happened but for the poaching; and (3) even if AlphaPharm has colorable tort or contract claims, that has nothing to do with patent enforcement.

Here, the court must determine if there's a sufficient nexus between Competitor's preissuance activities (poaching to obtain negative know-how) and the relief sought (patent enforcement).²⁷³ It must consider whether Competitor's

²⁷¹ This is understandable if Competitor used no (positive) data from AlphaPharm to develop its patented process.

²⁶⁹ SI Handling Sys., Inc., v. Heisley, 753 F.2d 1244, 1262 (3d Cir. 1985) (defining "negative know-how").

²⁷⁰ While a full discussion is beyond the scope of this Article, the drafters of the Uniform Trade Secrets Act believed that persons could protect negative know-how as intellectual property. *See* UNIF. TRADE SECRETS ACT § 1 cmt. (UNIF. L. COMM'N amended 1985) (defining "trade secret" to "include[] information that has commercial value from a negative viewpoint, for example the results of lengthy and expensive research which proves that a certain process will *not* work could be of great value to a competitor"). Negative know-how has been described as a "strange[] theory of trade secret law . . . under which an employee who resigns and joins a different business can be liable for not repeating the mistakes and failures of his or her former employer." Charles Tait Graves, *The Law of Negative Knowledge: A Critique*, 15 TEX. INTELL. PROP. L.J. 387, 388 (2007).

²⁷² Only a handful of states recognize negative know-how as a potential trade secret. *See* ROGER MILGRIM & ERIC E. BENSEN, MILGRIM ON TRADE SECRETS § 1.02(1) (2019) (collecting cases).

²⁷³ This can be viewed as a fruit-of-the-poisonous tree scenario, with the acquisition of the negative know-how as the tree and the resulting patent as the poisoned fruit. *See supra* Section II.B.2.

conduct was sufficiently unethical or improper to bar patent enforcement, even if the conduct wasn't illegal.²⁷⁴ This might be a close question that may not turn on the public good but rather on the court's interest in preserving its own integrity.²⁷⁵

III. POLICY CONSIDERATIONS

Reinvigorating unclean hands in patent law raises a host of policy questions. To what extent do traditional normative justifications for the doctrine align with current patent policy? Mindful of the policy norms, how should courts apply the proposed reinvigorated defense? This Part answers these questions.

A. Normative Justifications

Unclean hands is a controversial affirmative defense. Aside from ambiguous standards,²⁷⁶ applying it allows a defendant to get away with wrongful conduct²⁷⁷ and perhaps encourages wrongdoing (e.g., infringement).²⁷⁸ But as I discuss below, there are several normative justifications for applying it.

1. Court Integrity

In *Precision Instrument*, the Supreme Court stated that a court shouldn't be "the abettor of iniquity."²⁷⁹ Court integrity is the dominant goal or norm ascribed to unclean hands.²⁸⁰ Judge Learned Hand explained why:

The doctrine is confessedly derived from the unwillingness of a court, originally and still nominally one of conscience, to give its peculiar relief

²⁷⁹ Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 814 (1945) (quoting Bein v. Heath, 47 U.S. 228, 247 (1848)); *see also* Olmstead v. United States, 277 U.S. 438, 484 (1928) (Brandeis, J., dissenting) (explaining that unclean hands doctrine is applied "in order to maintain respect for law; in order to promote confidence in the administration of justice; in order to preserve the judicial process from contamination").

²⁸⁰ See DOBBS & ROBERTS, supra note 1, at 67; see also Anenson & Mark, supra note 66, at 1479 ("[R]ecent research on the doctrine of unclean hands . . . demonstrates that courts' integrity has been the core motivator in advancing the doctrine in modern jurisprudence."); Hall v. Wright, 240 F.2d 787, 795 (9th Cir. 1957) ("In applying the clean hands maxim, the court is 'concerned primarily with protecting its own integrity from improper action by a party.") (quoting Frank Adam Elec. Co. v. Westinghouse Elec. Mfg. Co., 146 F.2d 165, 167 (8th Cir. 1945)). Court integrity matters in patent cases. See, e.g., Aptix Corp. v. Quickturn Design Sys., Inc., 269 F.3d 1369, 1381 (Fed. Cir. 2001) (Mayer, J., dissenting) (noting that unclean hands maxim "is predicated upon the need to protect the integrity of the judicial system"); *id.* (arguing that universal unenforceability was only way to protect judicial proceedings from patentee's misconduct).

²⁷⁴ DOBBS & ROBERTS, *supra* note 1, at 67.

²⁷⁵ See infra Section III.A.1.

²⁷⁶ See infra note 315 and accompanying text.

²⁷⁷ LAYCOCK & HASEN, *supra* note 129, at 990.

²⁷⁸ *Id.* at 993.

to a suitor who in the very controversy has so conducted himself as to shock the moral sensibilities of the judge. It has nothing to do with the rights or liabilities of the parties; indeed the defendant who invokes it need not be damaged, and the court may even raise it sua sponte.²⁸¹

This moralistic tenor and focus on the courts' *own* protection (rather than the defendants') distinguishes unclean hands from other affirmative defenses.²⁸²

Admittedly, this justification doesn't explain why a finding of unclean hands should render a patent universally unenforceable. However, it may factor into the court's decision regarding whether to invoke the defense.²⁸³

2. Public Interest

Historically, courts applying unclean hands only considered the plaintiff and defendant and ignored any harm to third parties.²⁸⁴ But the "strict duality" view²⁸⁵ evolved to take the public interest into account.²⁸⁶ This is true in patent law, where the Supreme Court noted in *Precision Instrument* that the public interest is "paramount."²⁸⁷ The doctrine "assumes even wider and more

²⁸³ See Ori J. Herstein, A Normative Theory of the Clean Hands Defense, 17 LEGAL THEORY 171, 177 (2011) ("[I]nterests of court integrity still persist and may even prevail in justifying the court in denying the claim by employing the [clean hands defense], thereby washing its hands of a claim tainted with the claimant's iniquity.").

²⁸⁴ DOBBS & ROBERTS, *supra* note 1, at 70-71; FISCHER, *supra* note 131, at 452-53. One commentator argues that courts took the view that defrauding the Patent Office couldn't harm a defendant, which explains the old rule (discussed *supra* note 28) that fraud on the Patent Office couldn't be a defense to patent infringement. Alan G. Greenberg, *Unclean Hands as a Defense to Patent Infringement*, 50 J. PAT. OFF. SoC'Y 12, 15 (1968) (citing Donald C. Keaveney, *Fraud in the Procurement of a Patent as a Defense to Infringement*, 33 J. PAT. OFF. SOC'Y 482 (1951)).

²⁸⁵ FISCHER, *supra* note 131, at 452.

²⁸⁶ DOBBS & ROBERTS, *supra* note 1, at 70.

Simply put, a court may refuse to enforce patent rights in order to avoid an injury to the public....[B]ecause incentivizing or rewarding unlawful conduct is detrimental to the public interest, an invention that involves unlawful conduct should be denied patent protection.

NED SNOW, INTELLECTUAL PROPERTY AND IMMORALITY: AGAINST PROTECTING HARMFUL CREATIONS OF THE MIND 87 (2022).

²⁸¹ Art Metal Works v. Abraham & Straus, 70 F.2d 641, 646 (2d Cir. 1934) (Hand, J., dissenting). *See also supra* note 127 and accompanying text.

²⁸² ANENSON, *supra* note 175, at 186; *see also* FISCHER, *supra* note 131, at 451-52 ("The unclean hands defense is not provided for the benefit of the defendant, but for the protection of the court."); DOUG RENDLEMAN & CAPRICE L. ROBERTS, REMEDIES: CASES AND MATERIALS 429 (9th ed. 2018) ("An aura of moral superiority surrounds the unclean hands maxim. The maxim may focus the judge's attention on a quest for ethical superiority and distract attention from the whole dispute and the consequences of the decision.").

²⁸⁷ Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 816 (1945). The corollary is that unwarranted patent rights are contrary to the public interest. As stated by Ned Snow:

significant proportions"²⁸⁸ in patent cases because patent rights are "issues of great moment to the public."²⁸⁹

The Supreme Court's reasoning comes from the quid pro quo theory of patents previously discussed.²⁹⁰ An oft-touted justification for the patent system is that the public will benefit from granting the inventor the right to exclude in the rights-for-disclosure patent bargain.²⁹¹ But sometimes the public doesn't recoup its end of the bargain due to patentee misconduct—some of which taints the property right ab initio. To illustrate, consider again the facts in *Gilead*,²⁹² where the patentee's misconduct enhanced its legal position with regard to creating and enforcing patent rights on a drug.²⁹³ Specifically, the patentee's improper acquisition of information about the drug and shenanigans with its patent application "held the potential for expediting patent issuance and for lowering certain invalidity risks" in litigation.²⁹⁴ Left unredressed, the public would bear the social costs of the tainted patent—including reduced competition, higher prices, and hindered follow-on innovation.²⁹⁵ So if the court speaks by rendering a tainted patent universally unenforceable, that vindicates the public interest.²⁹⁶

²⁹² Gilead Scis., Inc. v. Merck & Co., 888 F.3d 1231 (Fed. Cir. 2018), discussed *supra* Section I.C.2.

²⁹⁵ FTC REPORT, *supra* note 85, ch. 2, at 8; Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 843 (1990).

²⁸⁸ Precision Instrument, 324 U.S. at 806.

²⁸⁹ Id. (quoting Hazel-Atlas Glass Co. v. Hartford-Empire Co., 322 U.S. 238, 246 (1944)).

²⁹⁰ See supra notes 90-94 and accompanying text.

²⁹¹ Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481 (1974) (explaining that federal government "is willing to pay the high price" of exclusivity conferred by patent for its disclosure, which, "it is assumed, will stimulate ideas and the eventual development of further significant advances in the art"); Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998) (explaining that patent system should be viewed as "carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time").

²⁹³ *Id*. at 1240.

²⁹⁴ *Id*. at 1241.

²⁹⁶ The public interest is also vindicated when a court renders an unwarranted patent invalid. *See* Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 100 (1993) (describing "importance to the public at large of resolving questions of patent validity"); J. Nicholas Bunch, Note, *Takings, Judicial Takings, and Patent Law*, 83 TEX. L. REV. 1747, 1756 n.50 (2005) (arguing that invalidating patent serves public interest because "patent system is designed to protect inventions that meet certain requirements...[so when courts] conclude . . . that a certain patent does not meet the patentability requirements, that decision is in the public interest").

2022]

3. Deterrence of Wrongful Conduct

Finally, unclean hands can be justified for its deterrence function.²⁹⁷ As the argument goes, potential plaintiffs who want access to the courts (perhaps to enforce a patent) will be motivated to avoid conduct that might soil their hands.²⁹⁸ Of course, deterrence only works if the plaintiff is aware of the unclean hands defense and its detrimental implications.²⁹⁹ For example, Inventor who's tempted to surreptitiously inspect Competitor's prototype might think twice if Inventor knows that any resulting patents could be rendered universally unenforceable.³⁰⁰

But applying unclean hands in patent law raises an overdeterrence problem. Patentees might take excessive precautions to avoid misconduct—especially if there's uncertainty about how the doctrine will be applied.³⁰¹ This makes intuitive sense because (1) such efforts might impress a court analyzing an allegation of unclean hands³⁰² and (2) unenforceability is a harsh result.³⁰³ Maybe it's not so much about excessive precautions but just staying clean.³⁰⁴

²⁹⁸ Herstein, *supra* note 283, at 203.

³⁰¹ John E. Calfee & Richard Craswell, *Some Effects of Uncertainty on Compliance with Legal Standards*, 70 VA. L. REV. 965, 965-66 (1984); *see also* ANENSON, *supra* note 175, at 100 ("With any discretionary decision, there is the possibility of uncertain and inconsistent outcomes."); Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 815 (1945) (explaining that unclean hands "necessarily gives wide range to the equity court's use of discretion in refusing to aid the unclean litigant"). But shadowy rules can induce compliance with normative standards. *See infra* note 315 and accompanying text.

³⁰² See Gideon Parchomovsky & Kevin A. Goldman, *Fair Use Harbors*, 93 VA. L. REV. 1483, 1486 (2007) (discussing how ambiguous standards in copyright's fair use doctrine lead potential defendants to overinvest in precautions).

³⁰³ See supra note 26. David Olson has expressed concerns about unenforceability as a remedy, which he argues "create[s] large self-policing and transaction costs" for patentees, who "worry that a minor mistake could forfeit the patent" and may "result in patent defendants spending inordinate time, money, and court resources making assertions" of patentee misconduct in infringement litigation." David S. Olson, *Removing the Troll from the Thicket: The Case for Enhancing Patent Maintenance Fees in Relation to the Size of a Patent Owner's Patent Portfolio*, 68 FLA. L. REV. 519, 557 (2016). Unenforceability has been famously referred to as the "atomic bomb" of patent law. Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1288 (Fed. Cir. 2011) (en banc) (quoting Aventis Pharma S.A. v. Amphastar Pharm., Inc., 525 F.3d 1334, 1349 (Fed. Cir. 2008) (Rader, J., dissenting)).

³⁰⁴ For example, deciding not to steal a competitor's invention, omit an inventor, or misuse federal research funding shouldn't be too burdensome. Whatever costs are involved in staying clean, "[t]hese costs . . . are minuscule compared to losing the enforceability of a valid patent,

²⁹⁷ FISCHER, *supra* note 131, at 452-53; *see also* ANENSON, *supra* note 175, at 192 ("In addition to correcting past wrongs, the deterrence of future behavior is a related, albeit instrumental, aim of unclean hands.").

²⁹⁹ See id. (making this argument but also recognizing that unclean hands isn't common knowledge and rarely guides conduct unless plaintiff is sophisticated or seeks advice of counsel).

³⁰⁰ See supra Section II.B.3 (presenting "invention theft" hypothetical).

That said, it's possible that reinvigorating the doctrine could "deter . . . [some] would-be inventors from patenting altogether"³⁰⁵ or push them to opt for trade secrecy in lieu of patenting³⁰⁶—either of which might "rob[] society of the next great invention or [hide] the details of that invention from the general public."³⁰⁷ It's possible to allay some of these fears because the clear and convincing evidence standard makes unclean hands hard to plead and prove.³⁰⁸ To be sure, allegations of inequitable conduct dropped dramatically after *Therasense* heightened the standard to clear and convincing evidence.³⁰⁹ For these reasons and others set forth below, courts must carefully exercise discretion in rendering a patent universally unenforceable for unclean hands.

B. Discretion-Limiting Principles

How should the reinvigorated unclean hands defense be applied in patent infringement suits? Recall that in *Keystone Driller*, the Supreme Court stated that a judge can apply it when the plaintiff's alleged misconduct "has immediate and necessary relation" to the relief sought.³¹⁰ That's helpful; yet in *Precision Instrument*, the Court stated that, "[a]ny willful act concerning the cause of action which rightfully can be said to transgress equitable standards of conduct is sufficient cause for the invocation of the maxim"³¹¹ What a judge views as inequitable might be idiosyncratic;³¹² thereby giving unclean hands an "amorphous[] and open-ended quality."³¹³ This can cut two ways. On one hand,

³⁰⁵ *Id*. at 773.

³⁰⁶ Without the patent system, inventors would monetize their inventions through trade secrecy, thereby depriving the public of the benefit of a disclosure. J. Jonas Anderson, *Nontechnical Disclosure*, 69 VAND. L. REV. 1573, 1585 (2016). Unlike patents, trade secrets can last forever, as long as secrecy is maintained. *See* Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 YALE L.J. 1590, 1622 (2011) ("[T]rade secrecy protection can theoretically provide even more powerful incentives than patents because trade secrecy rights are potentially infinite in duration.").

³⁰⁷ Cotropia, *supra* note 304, at 773.

³⁰⁸ See supra note 134 and accompanying text.

³⁰⁹ Robert D. Swanson, Comment, *The* Exergen *and* Therasense *Effects*, 66 STAN. L. REV. 695, 717-18 (2014). *But see* Eric E. Johnson, *The Case for Eliminating Patent Law's Inequitable Conduct Defense*, 117 COLUM. L. REV. ONLINE 1, 16 (2017) ("Although *Therasense*[] . . . make[s] the defense harder to win on the merits, . . . [t]he defense may still help many defendants achieve an off-the-merits victory, either by getting a plaintiff to accept a less favorable settlement in anticipation of swollen litigation costs or by tilting the factfinder against the plaintiff at trial by filling the air with allegations of dishonest behavior.").

³¹⁰ Keystone Driller Co. v. Gen. Excavator Co., 290 U.S. 240, 245 (1933).

³¹¹ Precision Instrument Mfg. Co. v. Auto Maint. Mach. Co., 324 U.S. 806, 815 (1945).

³¹² RENDLEMAN & ROBERTS, *supra* note 282, at 429.

³¹³ *Id.* Henry Smith argues that the features of equity—"discretionary decision making, the emphasis on good faith and notice, the employment of moral standards, and equity's inherent

or possibly a whole family of valid patents." Christopher A. Cotropia, *Modernizing Patent Law's Inequitable Conduct Doctrine*, 24 BERKELEY TECH. L.J. 723, 769 (2009).

it raises concerns about unfettered judicial discretion.³¹⁴ On the other hand, somewhat shadowy rules help prevent wrongdoers from securing a road map for how to evade the law.³¹⁵ While both views have merit, below I offer five

³¹⁴ See Doug Rendleman, *The Triumph of Equity Revisited: The Stages of Equitable Discretion*, 15 NEV. L.J. 1397, 1419 (2015) ("The risk of unconfined equitable discretion emerges when the judge's broad personal version of unclean doesn't coincide with positive law."); Zechariah Chafee, Jr., *Coming into Equity with Clean Hands*, 47 MICH. L. REV. 877, 878 (1949) (arguing that unclean hands "is at times capable of causing considerable harm"). These criticisms align with broader concerns about the inability to cabin equity, as noted in Lord Selden's famous criticism:

Equity is a Roguish thing, for Law we have a measure, know what to trust to, Equity is according to the Conscience of him that is Chancellor, and as that is larger or narrower, so is Equity. 'Tis all one as if they should make the Standard for the measure, we call a Chancellors Foot, what an uncertain measure would this be? One Chancellor has a long Foot, another a short Foot, a Third an indifferent Foot: 'Tis the same thing in the Chancellor's Conscience.

JOHN SELDEN, Equity, in TABLE-TALK: BEING THE DISCOURSES OF JOHN SELDEN, ESQ. 18 (London, J.M. Dent & Co. 2d ed. 1689). But equity is necessarily flexible. See Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1, 15 (1971) ("Once a right and a violation have been shown, the scope of a district court's equitable powers to remedy past wrongs is broad, for breadth and flexibility are inherent in equitable remedies."). Concerns about cabining equity might be overblown. See John L. Garvey, Some Aspects of the Merger of Law and Equity, 10 CATH. U. L. REV. 59, 64 (1961) (rejecting free-wheeling critique because equitable decision-making is "[n]ot a personal discretion of the individual judge, not caprice, not sympathy, but a judicial discretion [,]... which enable[s] the court to consider a variety of factors that might be involved in the particular case and evaluate them, weighing one against the other, before coming to its conclusion" (footnote omitted)); Grupo Mexicano de Desarrollo, S.A. v. Alliance Bond Fund, Inc., 527 U.S. 308, 322 (1999) (Scalia, J.) ("We do not question the proposition that equity is flexible; but in the federal system, at least, that flexibility is confined within the broad boundaries of traditional equitable relief."); Shondel v. McDermott, 775 F.2d 859, 868 (7th Cir. 1985) (Posner, J.) (arguing that unclean hands has evolved from being matter of court's conscience and "free-wheeling ethical discretion" to more practical question of "what if any remedy the plaintiff is entitled to").

³¹⁵ ANENSON, *supra* note 175, at 154; *see also* Lionel Smith, *Fusion and Tradition, in* EQUITY IN COMMERCIAL LAW 19, 38 (James Edelman & Simone Degeling eds., 2005) ("Complexity is not always worse than simplicity, if the complexity adds analytical power or permits the enforcement of additional normative standards.").

vagueness"—are necessary to deal with the problem of opportunism. Henry E. Smith, An Economic Analysis of Law Versus Equity 4 (Oct. 22, 2010) (unpublished manuscript) (available at

https://law.yale.edu/sites/default/files/area/workshop/leo/document/HSmith_LawVersusEqu ity7.pdf [https://perma.cc/HY3S-HJWP]); *see also* STORY, *supra* note 124, at 113 n.6 (stating "[f]raud is infinite" given "the fertility of man's invention" (quoting Letter from Lord Hardwicke to Lord Kames (June 30, 1759))); The Earl of Oxford's Case, (1615) 21 Eng. Rep. 485, 486 ("The Cause why there is a Chancery is, for that Mens Actions are so divers and infinite, That it is impossible to make any general Law which may aptly meet with every particular Act, and not fail in some Circumstances.").

discretion-limiting principles³¹⁶ for judges applying the proposed reinvigorated unclean hands defense in patent cases.

First, judges must find a sufficient nexus between the alleged misconduct and acquisition of the underlying patent before applying the doctrine. This is the basic limiting principle of the proposed approach.³¹⁷ Having unclean hands asserted at a matter of course would increase litigation cost and complexity, reduce the likelihood of settlement, burden the courts, and undermine the doctrine.³¹⁸ This is exactly what happened with inequitable conduct before *Therasense* raised the standards for asserting the defense.³¹⁹

Second, judges should be vigilant of the possibility of abusive or distracting assertions of unclean hands. This possibility didn't escape the *Gilead* court:

We are conscious, as any court presented with a defense of unclean hands must be, both of the judicial system's vital commitment to the standards of probity protected by the doctrine and, also, of the potential for misuse of this necessarily flexible doctrine by parties who would prefer to divert attention away from dry, technical, and complex merits issues toward allegations of misconduct based on relatively commonplace disputes over credibility.³²⁰

The possibility of the unclean hands defense being overplayed and appearing in nearly every infringement suit would give the patent system considerable pause and raise concerns about its becoming an "absolute plague"³²¹ like inequitable conduct pre-*Therasense*.³²² Trial judges can rely on fee-shifting

³¹⁶ See Jeffrey S. Sutton, A Review of Richard A. Posner, How Judges Think (2008), 108 MICH. L. REV. 859, 871 (2010) (describing "wide range of discretion-limiting principles" that have constraining effect on appellate judges).

³¹⁷ See ANENSON, *supra* note 175, at 50 ("In fact, the connection component of unclean hands has been the method by which courts typically constrain the defense."); *see also Shondel*, 775 F.2d at 869 ("The linguistically fastidious may shudder at 'nexus,' that hideously overworked legal cliché, but there can be no quarrel with the principle.").

³¹⁸ *Cf.* Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1290 (Fed. Cir. 2011) (en banc).

³¹⁹ *Id.* at 1289 (explaining that "charging inequitable conduct has become a common litigation tactic" and noting its assertion in eighty percent of patent infringement suits (citing Committee Position Paper, *The Doctrine of Inequitable Conduct and the Duty of Candor in Patent Prosecution: Its Current Adverse Impact on the Operation of the United States Patent System*, 16 AIPLA Q. J. 74, 75 (1988))); Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1454 (Fed. Cir. 1984) (explaining that inequitable conduct "has been overplayed, is appearing in nearly every patent suit, and is cluttering up the patent system"); Burlington Indus., Inc. v. Dayco Corp., 849 F.2d 1418, 1422 (Fed. Cir. 1988) ("[T]he habit of charging inequitable conduct in almost every major patent case has become an absolute plague.").

³²⁰ Gilead Scis., Inc. v. Merck & Co., 888 F.3d 1231, 1240 (Fed. Cir. 2018).

³²¹ Burlington, 849 F.2d 1418, 1422 (Fed. Cir. 1988).

³²² Therasense, 649 F.3d 1276, 1289 (Fed. Cir. 2011) (en banc).

mechanisms³²³ or procedural devices like motions to strike, to dismiss, for summary judgment, and under Rule 11 of the Federal Rules of Civil Procedure to deter or sanction abusive behavior.³²⁴

Third, judges shouldn't allow unclean hands to divert attention from the merits—the infringement and potential invalidity of the patent-in-suit.³²⁵ While the alleged misconduct might concern the patent with respect to acquisition of the property right, the substantive issues of infringement and invalidity are irrelevant to the doctrine's application.³²⁶ So, judges should manage the litigation to ensure that the time and energy spent on the defense don't detract from or thwart correct resolution on the merits.³²⁷ Relatedly, the patentee's alleged misconduct shouldn't "cast a dark cloud" over the patent's validity or infringement (which could be the defendant's litigation strategy).³²⁸ Infringement and validity don't depend on the patentee's honesty or lack thereof—to be sure, "an old, useless, or obvious invention is invalid whether the patentee acted honestly or not."³²⁹

Fourth, judges shouldn't allow unclean hands to serve as an end run around the heightened proof required for inequitable conduct. Although the defenses are related,³³⁰ there shouldn't be overlap in the types of alleged misconduct covered by each defense. Inequitable conduct occurs when a patent applicant misrepresents or omits information material to patentability with the specific intent to mislead or deceive the Patent Office.³³¹ Unclean hands encompasses other misconduct,³³² including (in the case of universal unenforceability, as proposed herein) misconduct related to the acquisition of a patent.³³³ Thus, a

³²³ Cf. Kevin Mack, *Reforming Inequitable Conduct to Improve Patent Quality: Cleansing Unclean Hands*, 21 BERKELEY TECH. L.J. 147, 172 (2006) (proposing fee-shifting mechanism to deter defendants in infringement suits from "frivolously pleading inequitable conduct").

³²⁴ Rule 11 allows the court to impose sanctions for asserting frivolous affirmative defenses. *See* FED. R. CIV. P. 11(b)-(c). For commentary on using Rule 11 for baseless assertions of inequitable conduct, see David O. Taylor, *Patent Fraud*, 83 TEMPLE L. REV. 49, 91-92 (2010).

³²⁵ *Cf.* Cotropia, *supra* note 304, at 740 (making this argument for inequitable conduct); Tun-Jen Chiang, *The Upside-Down Inequitable Conduct Defense*, 107 Nw. U. L. REV. 1243, 1258 (2013) (discussing "smear effect" of dishonesty in which "judge who hears about a patentee's dishonesty might thereby become prejudiced against the patentee, and this might make the judge more likely to find the patent invalid rather than waiting to find it unenforceable").

³²⁶ *Cf.* Cotropia, *supra* note 304, at 740.

³²⁷ Id. (citing Goldman, supra note 83, at 89).

³²⁸ Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276, 1288 (Fed. Cir. 2011) (en banc).

³²⁹ Chiang, *supra* note 325, at 1258.

³³⁰ See supra Part I.

³³¹ Therasense, 649 F.3d at 1290-91; see also supra Section I.B.

³³² See supra Section I.C.

³³³ See supra Section II.A.1.

defendant can't successfully prove both inequitable conduct and unclean hands for a given act of putative misconduct. So, an alleged infringer armed with facts that tend to show the patentee's misconduct before the Patent Office—but less than clear and convincing proof of materiality or intent required for inequitable conduct—can't recharacterize that conduct as unclean hands.³³⁴

Fifth, judges must recognize that public policy may warrant reaching the merits—thereby overriding an assertion of unclean hands.³³⁵ In patent cases, there are times when "legislative policy and public interest demand that the action be heard" despite the patentee's misconduct.³³⁶ For example, it might serve the public interest to reach the merits of a case involving the validity of patent covering a COVID-19 vaccine or an alleged infringer's particularly egregious conduct—notwithstanding the patentee's uncleanliness. This would give the unclean patentee a fortuitous reprieve from a court rending the tainted patent universally unenforceable. Such cases will inevitably require judicial balancing.³³⁷

C. Addressing Objections and Criticisms

1. Should the Taint of Unclean Hands Run With the Patent?

I've argued that universal unenforceability is called for if the patent right is tainted ab initio—during its acquisition. This argument raises two objections. First, it seemingly contradicts the historical principle that "equity acts *in personam*... and not *in rem*."³³⁸ A theoretical rationale for this principle is that

[O]nly personae, not res have consciences. A person can be guilty; an object cannot. Imparting a taint to an inanimate object . . . is inconsistent with the basic nature of equity. Similarly, our commonly shared moral and

³³⁴ A litigant shouldn't be allowed to "dress[] up the substance" of one claim in the "garment[]" of another. Laird v. Nelms, 406 U.S. 797, 802 (1972).

³³⁵ Howard W. Brill, *The Maxims of Equity*, 1993 ARK. L. NOTES 29, 36; *see also* ANENSON, *supra* note 175, at 55-57 (explaining importance of public policy in unclean hands cases).

³³⁶ Brill, *supra* note 335, at 36.

³³⁷ See, e.g., Republic Molding Corp. v. B.W. Photo Util., 319 F.2d 347, 350 (9th Cir. 1963) (explaining that when unclean hands is raised in patent infringement suit, "[t]he relative extent of each party's wrong upon the other and upon the public should be taken into account, and an equitable balance struck").

³³⁸ 1 POMEROY, *supra* note 4, § 428, at 469; *see also* Hart v. Sansom, 110 U.S. 151, 154 (1884) (noting in suit to remove cloud upon plaintiff's title that "[g]enerally, if not universally, equity jurisdiction is exercised *in personam*, and not *in rem*, and depends upon the control of the court over the parties, by reason of their presence or residence, and not upon the place where the land lies in regard to which relief is sought").

legal sense cautions that we can only hold a person accountable for his own actions \dots .³³⁹

Second, one might ask if the taint of unclean hands *should* run with the patent.³⁴⁰ For example, consider an unclean patentee who assigns or sells the patent to an innocent third party. If the subsequent owner seeks to enforce the patent, could the accused infringer assert that the patent is universally unenforceable due to the original owner's misconduct?

Regarding the first objection, it's clear that equity has always had the power to act *in rem* (even if rarely exercised long ago).³⁴¹ The principle has loosened;³⁴² equity will act in the fullest sense "in any case in which relief *in rem* may be more effective to accomplish the results which justice demands[.]"³⁴³

The second objection is somewhat more compelling. It gives rise to the bona fide purchaser defense—namely that a bona fide purchaser for value, without notice of any antecedent fraud, can take title to property purged of the taint of the antecedent fraud affecting it.³⁴⁴ While this defense aligns with the notion that equity should avoid punishing the innocent,³⁴⁵ it doesn't work with inequitable conduct³⁴⁶ and shouldn't work for unclean hands either. The basic premise of universal unenforceability in both contexts is that the patent right itself has been *incurably* corrupted. Of course, a bona fide purchaser might be able to bring a tort or contract claim against an unclean patentee.³⁴⁷

2. Can Substantive Patent Validity Doctrines Handle Uncleanliness?

One might ask if a potential infringer can rely on substantive patentability doctrines (novelty, nonobviousness, enablement, written description, claim definiteness)³⁴⁸ to challenge the validity of a patent allegedly tainted with misconduct. The short answer is that 35 U.S.C. § 282(b)(2)-(b)(3) permits a

³³⁹ Adam J. Levitin, *Finding* Nemo: *Rediscovering the Virtues of Negotiability in the Wake* of Enron, 2007 COLUM. BUS. L. REV. 83, 123 n.122.

³⁴⁰ For a discussion of encumbrances that should run with a patent, see Andrew C. Michaels, *Patent Transfer and the Bundle of Rights*, 83 BROOK. L. REV. 933 (2018).

³⁴¹ William F. Walsh, *Development in Equity of the Power To Act* in Rem, 6 N.Y.U. L. REV. 1, 14 (1928).

³⁴² Smith, *supra* note 313, at 22.

³⁴³ Walsh, *supra* note 341, at 14; *see also* Walter Wheeler Cook, *Powers of Courts of Equity (Pt. II)*, 15 COLUM. L. REV. 106, 106-41 (1915) (explaining that modern courts sitting in equity enforce decrees both *in personam* and *in rem* to make them effective).

³⁴⁴ RESTATEMENT (THIRD) OF RESTITUTION & UNJUST ENRICHMENT §§ 66, 68 (Am. L. INST. 2011).

³⁴⁵ Levitin, *supra* note 339.

³⁴⁶ See supra Section II.A.1.

³⁴⁷ Michaels, *supra* note 340, at 938.

³⁴⁸ See supra note 25.

potential infringer to plead and prove invalidity irrespective of unenforceability defenses.³⁴⁹

In some cases the defendant has no basis for an invalidity challenge. Recall the hypothetical above where the patentee poached an employee from a competitor to obtain negative know-how to rapidly obtain a patent on its COVID-19 vaccine.³⁵⁰ The accused infringer didn't challenge the patent's validity because the patentee didn't use any positive information from the competitor in acquiring its patent.³⁵¹ So, unenforceability was the only available defense.

Nonetheless, oftentimes a potential infringer will assert invalidity *and* unenforceability when there's alleged misconduct. Here lies a fork in the road. If the alleged misconduct is material to patentability, inequitable conduct should be asserted. If the alleged misconduct doesn't implicate a substantive patentability doctrine, then asserting unclean hands might be appropriate.

To illustrate the first scenario, recall the aforementioned hypothetical where the patentee misrepresents research results by fabricating data or concealing adverse data.³⁵² Substantively, the data can mask identity or similarity between the putative invention and the prior art (relevant to novelty and nonobviousness)³⁵³ or falsely suggest that the invention works as described (relevant to enablement).³⁵⁴ Here the potential infringer could also assert inequitable conduct by proving that the patentee misrepresented or omitted information material to patentability with the specific intent to mislead or deceive the Patent Office.³⁵⁵

To illustrate the second scenario, consider the facts in *Gilead*.³⁵⁶ Substantively, Gilead challenged the patent's validity for a lack of enablement and a lack of an adequate written description.³⁵⁷ These issues were tried to a jury, which sided with Merck.³⁵⁸ Gilead also asserted unclean hands, which was

³⁵⁴ See Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc., 326 F.3d 1226 (Fed. Cir.

2003).

³⁵⁵ See supra Section I.B.1.

³⁵⁶ Gilead Scis., Inc. v. Merck & Co., 888 F.3d 1231 (Fed. Cir. 2018).

 357 Id. at 1233. Enablement and adequate written description of the invention are two disclosure requirements set forth in 35 U.S.C. § 112(a):

The specification shall contain a *written description of the invention*, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to *enable* any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the *best mode* contemplated by the inventor or joint inventor of carrying out the invention.

35 U.S.C. § 112(a) (emphasis added).

³⁵⁸ See Gilead, 888 F.3d at 1233.

³⁴⁹ See 35 U.S.C. §§ 282(b)(2)-(b)(3).

³⁵⁰ See supra Section II.B.5.

³⁵¹ See supra note 271 and accompanying text.

³⁵² See supra Section II.B.1.

³⁵³ See Cargill, Inc. v. Canbra Foods, Ltd., 476 F.3d 1359 (Fed. Cir. 2007).

UNCLEAN PATENTS

adjudicated in a separate bench trial.³⁵⁹ The district court found unclean hands due to (1) litigation misconduct based on false testimony given by Merck's inhouse lawyer-chemist and (2) prelitigation business misconduct involving the teleconference, patent application amendment activities (including the in-house attorney's failure to recuse after breach of the firewall).³⁶⁰ Note that unclean hands (rather than inequitable conduct) was appropriate in *Gilead* because the alleged misconduct didn't constitute fraud on the Patent Office.³⁶¹

In both scenarios, an invalidity challenge may or may not be successful; bearing in mind that the challenger must prove invalidity with clear and convincing evidence.³⁶² Thus, substantive patentability doctrines alone can't handle uncleanliness. So unclean hands, inequitable conduct, and the invalidity doctrines should all be available in the potential infringer's toolbox.

3. Can a Patent Be Purged of Unclean Hands?

If the patentee's misconduct taints the patent right ab initio, one would expect the taint to run with the patent until it expires, thereby rendering it universally unenforceable.³⁶³ The same rationale exists for inequitable conduct, which also renders a patent universally unenforceable.³⁶⁴ But I will stop short of adopting a bright-line rule that prescribes universal unenforceability as the sole remedy for preissuance misconduct because sometimes it could—albeit rarely—be purged.³⁶⁵

To illustrate, recall the fruit-of-the-poisonous-tree hypothetical where a professor made false statements to a federal agency to secure a grant to pay for a research project that led to the patented invention.³⁶⁶ Under the proposed

³⁶⁵ The notion of purging misconduct comes from the aforementioned post-issuance doctrine of patent misuse. *See* discussion *supra* note 27. As the Federal Circuit has explained,

[T]he patent misuse doctrine is an extension of the equitable doctrine of unclean hands, whereby a court of equity will not lend its support to enforcement of a patent that has been misused. Patent misuse arose, as an equitable defense available to the accused infringer, from the desire "to restrain practices that did not in themselves violate any law, but that drew anticompetitive strength from the patent right, and thus were deemed to be contrary to public policy." When used successfully, this defense results in rendering the patent unenforceable until the misuse is purged.

B. Braun Med., Inc. v. Abbott Lab'ys, 124 F.3d 1419, 1427 (Fed. Cir. 1997) (quoting Mallinckrodt, Inc. v. Medipart, Inc. 976 F.2d 700, 704 (Fed. Cir. 1992), *abrogated by* Impression Prods., Inc. v. Lexmark Intern., Inc., 137 S. Ct. 1523 (2017)).

³⁵⁹ Id.

³⁶⁰ See id. at 1240-47.

³⁶¹ See id. at 1240; Korody-Colyer Corp. v. Gen. Motors Corp., 760 F.2d 1293, 1294 n.1 (Fed. Cir. 1985) (describing "inequitable conduct" as "fraud on the Patent and Trademark Office").

³⁶² See supra note 25.

³⁶³ See discussion supra Section II.A.1.

³⁶⁴ See supra note 122 and accompanying text.

³⁶⁶ For a discussion of judicial integrity, see *supra* Section II.B.2.

framework for preissuance misconduct, the professor's conduct could render the patent universally unenforceable for unclean hands. But suppose the professor voluntarily admits the fraudulent conduct to the federal agency before filing the patent application. The agency instructs the professor to file a revised (i.e., truthful) grant application and decides to reduce subsequent funding when the grant is up for renewal. If the patent is subsequently enforced, a judge considering an unclean hands defense could find that the professor purged the patent of the taint of uncleanliness.³⁶⁷ This finding reinforces the court's integrity³⁶⁸ and advances the strong public interest in encouraging researchers who fraudulently obtain or use federal funds to come clean.³⁶⁹

4. Should Patent Law Tolerate Some Uncleanliness?

Recall that the unclean hands doctrine is rooted in conscience and morality.³⁷⁰ It denies relief to a plaintiff who commits a willful act "tainted with inequitableness or bad faith relative to the matter" for which relief is sought.³⁷¹ This raises the normative question of whether the plaintiff's moral repugnance in acquiring the patent *should* universally bar its enforcement. Interestingly, in earlier times morality played a substantive role in patentability. This occurred through the utility requirement, now codified in Section 101 of the patent statute, which states in part that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter ... may obtain a patent."372 Throughout most of the history of U.S. patent law, utility was viewed as a de minimis requirement-some beneficial use of the invention was sufficient.³⁷³ But in the 1817 case Bedford v. Hunt,³⁷⁴ Justice Story wrote that an invention's asserted utility couldn't be "injurious to the morals, the health, or the good order of society."375 During the early part of the twentieth century, the Patent Office and the courts relied on Justice Story's language to craft what came to be known as the "moral utility" doctrine.³⁷⁶ Patentable inventions had to meet

³⁶⁷ In the patent misuse context, effective purging requires that (1) the misconduct has been completely abandoned; and (2) the consequences of the misconduct have fully dissipated. 6A CHISUM, *supra* note 110, § 19.04[4].

³⁶⁸ See supra Section III.A.1.

³⁶⁹ For a discussion of the public interest, see *supra* Section III.A.2.

³⁷⁰ See supra notes 1-6 and accompanying text.

³⁷¹ Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co., 324 U.S. 806, 814 (1945).

³⁷² 35 U.S.C. § 101 (emphasis added).

³⁷³ See Sean B. Seymore, Making Patents Useful, 98 MINN. L. REV. 1046, 1051 (2014).

³⁷⁴ 3 F. Cas. 37 (Story, Circuit Justice, C.C.D. Mass. 1817) (No. 1,217).

³⁷⁵ *Id.* at 37.

³⁷⁶ Margo A. Bagley, *Patent First, Ask Questions Later: Morality and Biotechnology in Patent Law*, 45 WM. & MARY L. REV. 469, 489 (2003); *see also* 2 CHISUM, *supra* note 110, § 4.02 ("For many years, the Story view of utility . . . was generally accepted by the courts."). The doctrine allowed courts to exercise moral discretion under this interpretation of *useful* to

certain Office or court-identified standards of morality. This was done, at least in part, to protect the public and potential investors from unscrupulous patentees.³⁷⁷

The moral utility doctrine has since been squarely rejected.³⁷⁸ The doctrine took a devastating blow in *Ex parte Murphy*,³⁷⁹ a 1977 case in which the Board of Patent Appeals and Interferences reversed the examiner's Section 101 rejection of a slot machine.³⁸⁰ The final, decisive blow came nearly two decades later in *Juicy Whip*, *Inc. v. Orange Bang*, *Inc.*,³⁸¹ where the Federal Circuit had to decide if an invention with a deceptive purpose—designed to appear to be something that it's not—could satisfy the utility requirement.³⁸² The court answered in the affirmative, noting that Justice Story's forbidden class of inventions isn't a part of modern utility doctrine.³⁸³ So now the Patent Office and the courts "apply the statutory standards without regard to the moral implications of the underlying invention."³⁸⁴

³⁷⁸ For a detailed discussion, see Laura A. Keay, *Morality's Move Within U.S. Patent Law: From Moral Utility to Subject Matter*, 40 AIPLA Q.J. 409, 411-29 (2012).

³⁷⁹ 200 U.S.P.Q. 801 (B.P.A.I. Apr. 29, 1977).

³⁸⁰ *Id.* at 802. An applicant whose claims have been twice rejected by the examiner can appeal to an intraoffice tribunal, which, at the time of *Murphy*, was known as the Board of Patent Appeals and Interferences. The Board reviews adverse decisions of examiners and can affirm a rejection or reverse and remand to the examining corps. *See* 35 U.S.C. §§ 6(b), 134(a); 37 C.F.R. § 1.197 (2019). Since the passage of the America Invents Act in 2011, the tribunal has been known as the Patent Trial and Appeal Board. *See* Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 135(j), 125 Stat. 284, 290 (2011) (codified in scattered sections of 35 U.S.C.).

³⁸¹ 185 F.3d 1364 (Fed. Cir. 1999).

³⁸² See id. at 1365.

 383 *Id.* at 1366-68. The court explained that imposing a moral component to Section 101 should be left to Congress. *Id.* at 1368.

³⁸⁴ Holbrook, *supra* note 377, at 602. This demise of moral utility is in complete accord with the Supreme Court's "anything under the sun made by man" interpretation of patent-

make "subjective decisions about whether inventions were good for society." SNOW, *supra* note 287, at 141.

³⁷⁷ See Isenstead v. Watson, 157 F. Supp. 7, 9 (D.D.C. 1957) (contending that patent grant "gives a kind of official imprimatur to the [invention] in question on which as a moral matter some members of the public are likely to rely"). One fear is that some might view the patent grant, albeit improperly, as the government's endorsement of the technology. *See* Cynthia M. Ho, *Splicing Morality and Patent Law: Issues Arising from Mixing Mice and Men*, 2 WASH. U. J.L. & POL'Y 247, 253 n.29 (2000) (noting patents covering controversial technologies might be viewed as governmental endorsement); Timothy R. Holbrook, *The Expressive Impact of Patents*, 84 WASH. U. L. REV. 573, 599-600 (2006) (explaining governments may choose to deny patents on certain inventions in order to eliminate signal of perceived endorsement or encouragement). *But see In re* Hartop, 311 F.2d 249, 263 (C.C.P.A. 1962) ("[T]he issuance of a patent is not in fact an 'imprimatur' as to … safety and effectiveness … [A patent] is no guarantee of anything … The public, therefore, is in no way protected either by the granting or withholding of a patent.").

The demise of moral utility means that morality and conscience no longer play a role in *substantive* patent law—at least with respect to patentability. But even if all agree that patent law "need not evaluate inventions at any level beyond the technological,"³⁸⁵ patent *enforcement* is different because the patent owner is calling upon the courts for relief. Over the past fifteen years, one theme of Supreme Court patent cases is that patent cases aren't exceptional³⁸⁶—that is, different from other areas of law.³⁸⁷ Traditional equitable principles that apply to other areas of the law apply to patent law as well.³⁸⁸ So unclean hands should be available in a patent case just as in any other case.

But reinvigorating unclean hands in patent law need not raise major concerns about litigation costs, abuses, and the doctrine's amorphous nature. Recall that the clear and convincing evidence standard makes unclean hands hard to plead and prove.³⁸⁹ Also, the judge will take lots of things into account—including the

³⁸⁶ See Paul R. Gugliuzza, *The Federal Circuit as a Federal Court*, 54 WM. & MARY L. REV. 1791, 1817-18 (2013); Greg Reilly, *Decoupling Patent Law*, 97 B.U. L. REV. 551, 610 (2017); Tejas N. Narechania, *Certiorari, Universality, and a Patent Puzzle*, 116 MICH. L. REV. 1345, 1388-90 (2018) (discussing decline of patent law exceptionalism and Supreme Court's "strong interest in universal rules"). *But see* David O. Taylor, *Formalism and Antiformalism in Patent Law Adjudication: Rules and Standards*, 46 CONN. L. REV. 415, 474 (2013) (discussing Federal Circuit judges who endorse patent-specific rules given "unique," "particular," and "special" issues that arise in patent law (quoting Howard T. Markey, *The Court of Appeals for the Federal Circuit: Challenge and Opportunity*, 34 AM. U. L. REV. 595, 595 (1985))).

³⁸⁷ See, e.g., WesternGeco LLC v. ION Geophysical Corp., 138 S. Ct. 2129, 2136 (2018) (rejecting Federal Circuit's extraterritorial application of U.S. patent law and reaffirming presumption against extraterritoriality); Octane Fitness, LLC v. Icon Health & Fitness, Inc., 572 U.S. 545, 550-53 (2014) (admonishing Federal Circuit to use general equitable principles for determining "exceptional" cases for award of attorney's fees); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 128-134 (2007) (rejecting Federal Circuit's patent-specific test for declaratory judgments). See also Timothy R. Holbrook, *Explaining the Supreme Court's Interest in Patent Law*, 3 IP THEORY 62, 71-72 (2013); Peter Lee, *The Supreme Assimilation of Patent Law*, 114 MICH. L. REV. 1413, 1425-50 (2016) (discussing Supreme Court's rejection of patent exceptionalism interest in universality and assimilation of patent law into other areas of law).

³⁸⁸ See, e.g., eBay Inc. v. MercExchange LLC, 547 U.S. 388, 391-92 (2006) (rejecting Federal Circuit's patent-exceptional rule for granting injunctive relief).

³⁸⁹ See supra note 134.

eligible subject matter set forth in *Diamond v. Chakrabarty*. Bagley, *supra* note 376, at 492 (quoting Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980)); *see also* SNOW, *supra* note 287, at 141 ("Read together, *Chakrabarty* and *Juicy Whip* serve to negate the socially beneficial interpretation of 'useful'").

³⁸⁵ John R. Thomas, *The Question Concerning Patent Law and Pioneer Inventions*, 10 HIGH TECH. L.J. 35, 64 (1995). This aligns with the view that technology is "essentially amoral, a thing apart from values, an instrument which can be used for good or ill" *Id.* (quoting ROBERT A. BUCHANAN, TECHNOLOGY AND SOCIAL PROGRESS 163 (1965)).

UNCLEAN PATENTS

court's integrity, the public interest, and deterrence.³⁹⁰ This Article also offers discretion-limiting principles for judges applying the defense—including countervailing policy considerations.³⁹¹ So reinvigorating unclean hands as proposed herein would tolerate some uncleanliness. Given the equitable nature of the defense, its evaluation requires a fact-intensive inquiry and full development of the parties' positions.

CONCLUSION

The Federal Circuit has rightly resurrected the unclean hands doctrine in patent law. Allowing patentees to take advantage of their own wrongdoing contravenes the public interest, jeopardizes the legitimacy of the courts, and ultimately undermines the integrity of the patent system. But the traditional remedy for unclean hands in patent cases—dismissal of the plaintiff's lawsuit—doesn't go far enough. This Article argues that if the misconduct occurred during acquisition of the patent, the misconduct taints the property right ab initio and warrants rendering the patent universally unenforceable.³⁹² While that's a harsh result, this Article offers a set of principles to limit and guide the court's discretion in applying the doctrine.

Unclean hands can be viewed as a way to let a defendant off the hook despite the merits of the lawsuit.³⁹³ That's true; but reinvigorating the unclean hands doctrine as proposed in the Article would have much broader implications for the patent system. Rendering tainted patents universally unenforceable would help ensure that patentees live up to—and the public gets the benefit of—the patent bargain.³⁹⁴

³⁹⁰ See supra Section III.A.

³⁹¹ See supra Section III.B.

³⁹² See supra Section II.A.

³⁹³ See supra note 277 and accompanying text.

³⁹⁴ See supra Setion III.A.2.