Avoiding Responsibility: The Case for Amending the Duty to Disclose Prior Art in Patent Law

John O. Curry

Follow this and additional works at: https://digitalcommons.law.uw.edu/wlr

Recommended Citation
Available at: https://digitalcommons.law.uw.edu/wlr/vol95/iss2/12

This Comment is brought to you for free and open access by the Law Reviews and Journals at UW Law Digital Commons. It has been accepted for inclusion in Washington Law Review by an authorized editor of UW Law Digital Commons. For more information, please contact jafrank@uw.edu.
AVOIDING RESPONSIBILITY: THE CASE FOR AMENDING THE DUTY TO DISCLOSE PRIOR ART IN PATENT LAW

John O. Curry*

Abstract: Federal regulation requires patent applicants in the United States to disclose to the United States Patent and Trademark Office (USPTO) a wide range of references that might be material to their invention’s patentability. Applicant disclosure of prior art currently plays a large role in the prosecution and litigation of patents. The effects are quite deleterious, resulting in the filing of unnecessary references that go unreviewed in the USPTO and providing plausible grounds for the assertion of inequitable conduct defenses in patent infringement actions. This Comment looks at the history of the laws that evolved into the codified duty to disclose prior art and finds that the historical rationales no longer justify such an imposition. It also examines several foreign jurisdictions that differ from the United States in their mandates to disclose prior art, ultimately recommending the adoption of the standard used by the European Patent Office as a way to resolve both the administrative and legal challenges posed by the current standard.

INTRODUCTION

The year 2017 marked the fiftieth anniversary of President Lyndon Johnson’s Commission on the Patent System, created to conduct the first comprehensive reconceptualization of patent law in the United States since 1836.1 The Commission’s Report (“Report”) has had significant influence on the patent laws in the years since its introduction,2 and over the years, many of its recommendations have found a place in American patent law.3 But one change that followed the Report has grown to have

* J.D. Candidate, University of Washington School of Law, Class of 2020. I would like to thank Hayley J. Talbert for allowing me to pursue my individual interest in beginning this research, and my colleagues on Washington Law Review for their work in making this Comment worthy of publication.

an altogether deleterious effect: the codified duty to disclose prior art to the United States Patent and Trademark Office (USPTO), as set forth in 37 C.F.R. § 1.56.\textsuperscript{4} This rule requires applicants to submit any reference they know to be material to the patentability of their application, and carries an exceedingly harsh penalty for failure under the judicial doctrine of inequitable conduct.\textsuperscript{5} Searching for, gathering, and submitting such a tremendous amount of information imposes vast costs on applicants seeking to comply with USPTO regulations, and the USPTO’s own guidelines suggest submission of anything that could possibly be characterized as prior art.\textsuperscript{6} Recent scholarship has largely focused on judicial standards surrounding inequitable conduct and whether those benchmarks set by the Federal Circuit’s landmark decision in \textit{Therasense, Inc. v. Becton, Dickinson & Co.}\textsuperscript{7} can alleviate these problems.\textsuperscript{8} This Comment proposes that the true problem may be further upstream, and that what needs reform is not the inequitable conduct doctrine, but rather the codified disclosure requirements that constitute a portion of the duty of candor placed on patent applicants.\textsuperscript{9} Approaching the problem from this direction has several advantages. Not only will removing the statutory duty to disclose prior art block the simplest avenue to spurious inequitable conduct claims, it will also save applicants the expense of compiling the required references and spare the examiner the exhaustion of sorting through references of debatable relevance. This solution is easier to implement than modifying the judicial standard, as Congress or the USPTO can alter the relevant rules.


\textsuperscript{5} See DAVID HRICK & MERCEDES MEYER, PATENT ETHICS 129–34 (2009) (discussing the difficulty of complying with this requirement while avoiding charges of inequitable conduct).

\textsuperscript{6} Id. “When in doubt, it is desirable and safest to submit information. Even though the attorney, agent, or applicant doesn’t consider it necessarily material, someone else may see it differently and embarrassing questions can be avoided.” U.S. PATENT & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, MANUAL OF PATENT EXAMINATION PROCEDURE § 2004(10) (9th ed. 2017).

\textsuperscript{7} 649 F.3d 1276 (Fed. Cir. 2011). \textit{Therasense Inc. v. Becton, Dickinson & Co.} raised the threshold required to prove inequitable conduct by applicants in patent prosecution. \textit{See infra} section III.C.


\textsuperscript{9} \textit{See} 37 C.F.R. § 1.56 (2019).
Part I of this Comment addresses the role that disclosure of prior art plays in patent law, both in theory and in practice. Part II discusses the origins of the inequitable conduct doctrine and the development of unenforceability as a remedy for fraud in patent law. Part III concerns the origin of the codified duty to disclose prior art to the USPTO, and the responding evolution of inequitable conduct through the United States Court of Appeals for the Federal Circuit into its current form. Part IV looks to foreign jurisdictions for alternative approaches to the duty to disclose and finds a wide variety of practices among countries with advanced research sectors. Part V makes the case that it would be best to follow those countries that have done away with this duty entirely.

I. THE ROLE OF DISCLOSURE IN PATENT LAW

A. Statutory Requirements in Patent Law in Theory

Patent law is, at its heart, all about disclosure: the essential public function of a patent is to disclose the invention to the world. The United States, like countries across the world, grants a legal monopoly on an invention to an inventor in exchange for disclosure of that invention to the public. The United States Code’s Title 35 (the U.S. patent code) requires that a patent be “new and useful,” and (relatedly) that it not be “obvious” in the light of “prior art.” Both novelty and non-obviousness presuppose some existing technology already patented or in the public domain: the “prior art” that is central to determining whether a person’s invention is entitled a patent.

Both the examiner and the applicant have incentives to find and submit prior art. For the applicant, it has been shown that any post-issuance challenge to the patent’s novelty or non-obviousness is much less likely to achieve success if the applicant cited the key references during prosecution. Similarly, the examiner and the office can better perform

11. See id.
12. 35 U.S.C. §§ 101–103 (2018). Modern patent law contains many features similar to the first patent system promulgated in Venice in 1474, such as requirements that the invention be both novel and useful. See Giulio Mandich, Venetian Patents (1450-1550), 30 J. PAT. OFF. SOC’Y 166, 177 (1948).
15. John R. Allison & Mark A. Lemley, Empirical Evidence on the Validity of Litigated Patents，“
their duties if they are fully informed as to the state of the art.\textsuperscript{16} More information will generally result in patent claims that accurately reflect the scope of the invention.\textsuperscript{17} This will result in patents that not only withstand scrutiny, but are also not overly broad and leave space for future innovation.\textsuperscript{18}

Such reasoning grounds the presumption of validity, a central premise of the United States’s patent system.\textsuperscript{19} The presumption, in the context of patent infringement cases, requires courts to defer to the USPTO’s determinations of patent validity unless the defendant can show error by “clear and convincing” evidence.\textsuperscript{20} This presumption of validity permeates the patent system, making it easy for patentees to assert their rights, and correspondingly difficult for infringers to avoid penalties by requiring them to prove invalidity by a clear and convincing standard.\textsuperscript{21} It is premised on the “administrative correctness” of the USPTO—the idea that, because actions within the USPTO are efficient and accurate, clear and convincing evidence is necessary to overturn its judgements.\textsuperscript{22} One component of this is the idea that the examiner should have the best possible picture of the state of the art—something that has traditionally been seen as the applicant’s responsibility to ensure.\textsuperscript{23}

\section*{B. Statutory Requirements in Patent Law in Practice}

At present, it is the applicant’s duty to ensure that the Patent Examiner is provided with all information “known [by the applicant] to be material


\footnotesize{16.} See Kesan & Banik, supra note 14, at 36–37.

\footnotesize{17.} See id.

\footnotesize{18.} See id.

\footnotesize{19.} See Allison & Lemley, supra note 15, at 231 (“The rationale is that the trier of fact will be reluctant to second-guess the Examiner about an art reference that the Examiner has already considered, but that the trier of fact may be willing to invalidate a patent based on information that was not available to the Examiner.”).


\footnotesize{21.} 35 U.S.C. § 282 (2018) (“A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. . . . The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.”).


\footnotesize{23.} Panel Discussion: Recent Developments in Patent Law, in PATENT PROCUREMENT AND EXPLOITATION 266–67 (Virginia Shook Cameron ed., 1966).}
to patentability.” If an applicant fails to perform this duty, they can be considered to have failed to prosecute their application with candor and good faith—and may lose their patent rights under the doctrine of inequitable conduct. The effect is to place the burden of providing evidence against the applicant’s patent application on the applicant. This requirement has been criticized as encouraging flawed performance of the duty of disclosure it seeks to enforce.

In practice, the duty of candor imposes a far greater burden on the applicant than simply communicating to the office information to aid in prosecuting the patent. First, the applicant has to gather from any individual involved in the invention, or the application, any references that could be construed (by the courts, or by an examiner) as being “material” to the patentability of the application. Then they must submit these references to the office, taking care to walk the line between filing too many references—burying the more material references among the less—and filing too few. Worse still are the costs of failing to adequately discharge this difficult and confusing duty, as the courts have long held that withholding information material to patentability constitutes inequitable conduct, or fraud on the USPTO. A court finding such inequitable conduct will render the patent unenforceable and therefore worthless. An electronics company that owns thousands of patents, for example, will need to draw attention to all of its patents that are remotely relevant to the current application, without submitting so many that a court might find they intended to camouflage the truly relevant references within this deluge.

II. THE ORIGINS OF INEQUITABLE CONDUCT

Part II presents the origin of the inequitable conduct doctrine as an extension of common law equity principles regarding fraud, and its subsequent evolution into a specialized remedy of patent invalidation for fraud on the USPTO.

27. 37 C.F.R. § 1.56 (2019).
28. HRICK & MEYER, supra note 5, at 129.
29. See J.P. Stevens & Co. v. Lex Tex Ltd., 747 F.2d 1553, 1561 (Fed. Cir. 1984) (“Once a court concludes that inequitable conduct occurred, all the claims—not just the particular claims to which the inequitable conduct is directly connected—are unenforceable.”).
30. See id.
A. Fraud Comes to Patent Law

What is today called inequitable conduct began as a simple extension of equity jurisdiction to revoke patents obtained by fraud. The United States Supreme Court’s first reference to this doctrine appears in Railroad Company v. Dubois, a 1870 infringement case involving a plan for building a bridge. Knowing that he had infringed the patent, the defendant in that case attempted to use allegations of fraud on the part of the patentee as a defense. While the Supreme Court did not accept the defendant’s reasoning, it did acknowledge that fraud on the patent could constitute a defense against infringement claims, asserting that “[i]t is impossible . . . to discover how the plaintiff’s silence on the occasion mentioned tended at all to show a fraud upon the Patent Office, much less that it constituted a fraud in law, so as to justify the court in ruling that he could not maintain his action.” This decision was followed by the lower courts, one of which noted that because the statutes did not authorize independent challenges to validity on these grounds, “a patent procured by fraud and collusion or by illegal procedure [could] be attacked only by the government.” In other words, a court could refuse to enforce a patent it knew to be procured by fraud, but a court could not invalidate the patent itself.

This judicial neutering of patents obtained by fraud was affirmed by the Supreme Court in Keystone Driller Co. v. General Excavator Co., which held that the principles of equity did apply to fraud in patent law. A patentee had contracted with a prior user of his technology to keep that prior use secret and suppress the evidence, enabling him to obtain a

32. 79 U.S. 47 (1871).
33. Id. at 50.
34. Id.
35. Id. at 63–64.
36. Id.
37. W. Glass Co. v. Schmertz Wire-Glass Co., 185 F. 788, 791 (7th Cir. 1911). The Western Glass Court followed the Supreme Court’s position at the time that the United States government had the sole power to invalidate or vacate patents. See United States v. Am. Bell Tel. Co., 128 U.S. 315, 366 (1888).
38. See Goldman, supra note 25, at 43. The current Patent Code allows for the presumption of validity to be rebutted by a showing that the patent failed to comply with the statutory requirements for patentability. 35 U.S.C. § 282 (2018). This can be asserted as a defense in an infringement suit, as well as in administrative post-grant proceedings in the USPTO. Paul J. Korniczky & Elias P. Soupos, Considerations for Using Post-Grant Proceedings to Attack Patent Validity, 7 LANDSLIDE 34 (2014).
40. Id. at 247.
favorable judgment in an earlier infringement case. Even though this misbehavior had occurred in a previous case, the Court agreed with the dismissal of the infringement claims, emphasizing that “[t]he equitable powers of this court can never be exerted in behalf of one who has acted fraudulently or who by deceit or any unfair means has gained an advantage.” Fraud became a permanent consideration of patent law, and succeeding years would see it evolve into an independent doctrine within patent law.

B. Inequitable Conduct Evolves as a Doctrine

While Keystone merely affirmed the dismissal of an infringement suit, the case stood for the proposition that fraudulent patentees could not enforce their patent rights. The Court extended this holding to cases of fraud committed upon the USPTO in Hazel-Atlas Glass Co. v. Hartford-Empire Co. Hazel-Atlas involved applicants who committed an extremely brazen form of fraud: they had found a suitably pliant expert who agreed to sign an article—written by the applicants—stating that their putative invention was “revolutionary.” This ensured its publication in a reputable trade journal, which was then submitted to the office as material in support of patentability. While the patent did issue, an ensuing infringement suit went against the patentees, as the defendants became suspicious and initiated an investigation that uncovered the fraud. The Supreme Court relied on Keystone in refusing to enforce the patent, but went further, suggesting that the patent be vacated (although precedent prevented the Court from doing so itself). Even if not vacated, however, the Court had established that a patent obtained by fraud was unenforceable.

The Supreme Court fully characterized inequitable conduct a year later in Precision Instrument Manufacturing Co. v. Automotive Maintenance

41. Id.
42. Id. at 245.
43. Id.
44. 322 U.S. 238 (1944).
45. Id. at 240.
46. Id.
47. Id. at 242.
48. Id. at 250. The Court had taken the position that because the United States had the sole power to grant patents, it had the sole power to take them away from their lawful holders. United States v. Am. Bell Tel. Co., 128 U.S. 315, 366 (1888).
Machinery Co.,\(^{50}\) noting that applicants had “an uncompromising duty to report . . . all facts concerning possible fraud or inequitableness underlying the applications in issue.”\(^{51}\) The Court’s language concerning this new duty in Kingsland v. Dorsey,\(^ {52}\) laid down the rules by which applicants would now find themselves playing: applicants would henceforth be held to “the highest degree of candor and good faith” in their dealings with the office, a moral standard that would guide future developments in the law.\(^ {53}\)

III. THE DISCLOSURE REQUIREMENT AND ITS EFFECT ON PATENT PROSECUTION

Part III concerns the gradual establishment of codified requirements for the disclosure of prior art, and how those duties became wrapped within the duty of candor enforced by the courts through the inequitable conduct doctrine. This Part will also address the current relation between inequitable conduct and the duty to disclose prior art within the United States.

A. The Lack of an Initial Disclosure Requirement

Just as the inequitable conduct doctrine was not fully formed by the courts until the postwar era,\(^ {54}\) the codified duty to disclose prior art was also late to evolve. For most of its existence, the USPTO did not require that the applicant disclose any prior art.\(^ {55}\) In 1974, the handbook used to examine patents advised examiners that the applicants would usually submit a “background of the invention,” ordinarily comprising a statement of the field of art and a description of the prior art, which included references to specific prior art “where applicable.”\(^ {56}\) However, all that was required to be disclosed was “a complete revelation or disclosure of the invention.”\(^ {57}\) Given the incentives discussed in Part I, such would seem reasonable: applicants had every reason to disclose prior art to best ensure

---

50. 324 U.S. 806 (1945).
51. Id. at 818.
52. 338 U.S. 318 (1949).
53. Id. at 319.
54. Id.
56. U.S. PATENT & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, MANUAL OF PATENT EXAMINATION PROCEDURE § 608.01(c) (3d ed. 1974) (Background of the Invention [R–41]).
the strengths of their patents, and the courts could handle what few cases of genuine fraud occurred.\textsuperscript{58}

However, the very broad guidance given by the Supreme Court towards inequitable conduct posed new challenges.\textsuperscript{59} The various independent determinations of the lower courts as to what precisely constituted “candor and good faith” left patent practitioners unsure of what their responsibilities were in the disclosure of prior art.\textsuperscript{60} One federal district court stated that an applicant who knew of a printed publication plainly describing or anticipating the claimed invention but did not disclose it would not be excused from assertions of inequitable conduct.\textsuperscript{61} However, that court then noted that the applicant had no duty to cite every publication they knew of, even if such a publication was likely to be referred to by a vigilant examiner or an opposing party in a third-party proceeding.\textsuperscript{62} Other courts applied different standards, from requiring “fault, willfulness, or bad faith,”\textsuperscript{63} to exempting practitioners who demonstrated good faith.\textsuperscript{64}

Contemporary authorities saw these inconsistent standards as posing a challenge to patent practitioners of the time.\textsuperscript{65} As one practitioner noted, “[t]he best solution would appear to be to disclose and make of record all pertinent prior art. Yet [this practice] might, it itself, be hazardous,” because accidental omission of earlier work could also constitute misrepresentation, leading the contemporaneous attorney vulnerable to fraud claims from that angle.\textsuperscript{66} This confusion led to calls for standardization in the coming years.

\textbf{B. The Institution of a Disclosure Requirement: Why?}

Confusion persisted over what prior art applicants were obligated to provide.\textsuperscript{67} In 1963, the Commissioner for Patents (at the time the agency

\textsuperscript{58} See Kesan & Banik, \textit{supra} note 14, at 36–37.


\textsuperscript{60} \textit{Id.} at 91–92.


\textsuperscript{62} \textit{Id.}

\textsuperscript{63} See \textit{In re Coordinated Pretrial Proceedings in Antibiotic Antitrust Actions}, 538 F.2d 180, 195 (8th Cir. 1976).

\textsuperscript{64} See Oetiker v. Jurid Werke GMBH, 671 F.2d 596, 600 (D.C. Cir. 1982) (“A good faith judgment not to cite prior art to the PTO, even if erroneous, cannot be fraud.”).

\textsuperscript{65} See Malley, \textit{supra} note 59, at 92–93.

\textsuperscript{66} \textit{Id.}

\textsuperscript{67} D. Carl Richards, \textit{Recent Developments}, in \textit{PATENT LAW DEVELOPMENTS} 59 (LaDoris Morgan Whitney ed., 1964).
head of the USPTO) proposed a new rule that would have required applicants to cite any known published art that the applicant believed to be “significantly pertinent” to the application. However, objections caused the Office to back down, and instead merely “advise” that applicants inform it of any art that would be “helpful to the Office” during examination. The asserted reasoning for this request was to aid the USPTO in dealing with the volume of prior art that must be searched, indicating that practical considerations, as well as legal, motivated the Office’s decision.

The USPTO’s 1963 attempts at instituting a mandatory duty to disclose prior art may have failed, but the goal received a significant shot in the arm from the 1967 Report of the President’s Commission on the Patent System. The Report had several broad goals, namely: (1) raising the quality and reliability of U.S. Patents; (2) shortening the period of pendency for applications; (3) accelerating the public disclosure of technological innovations; (4) reducing the expense of obtaining and litigating a patent; (5) making U.S. patent practice more compatible with the rest of the world; and (6) preparing the patent system for an explosion of new technology. The Report was, in many ways, remarkably prescient: it recommended the implementation of a first-to-file system, provisional applications, and published applications. The Report did not, however, recommend amending the patent regulations to require further disclosure of relevant art by the applicant.

Following on Congress’s inability to pass a patent act incorporating these recommendations, the USPTO’s parent agency, the Department of Commerce, used its institutional authority change the patent laws itself.

69. See Richards, supra note 67.
70. Id. at 59; see also Samuel M. Mims, Jr., et al., Panel Discussion: Recent Developments in Patent Law, in 1966 PATENT LAW ANNUAL 266 (Virginia S. Cameron ed., 1966) (expressing hope that voluntary reporting of prior art would preserve the presumption of validity, another possible rationale for making mandatory such disclosure).
72. Id. at 11–12.
This included a key change not recommended by the President’s Commission: the institution of a codified duty to disclose prior art.\textsuperscript{76} Under the guise of “codifying the existing Office policy on fraud and inequitable conduct,” the Department amended 37 C.F.R. § 1.56 to require the inventor, each attorney or agent, and every other individual “substantively involved” in the preparation or prosecution of the application “to disclose to the Office information they are aware of which is material to the examination of the application.”\textsuperscript{77} Whether or not information was material was essentially left in the hands of the examiners and the courts. The new rule defined materiality as “where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.”\textsuperscript{78}

This rule has been revisited—it was rewritten in 1992 in order to better formalize the system for disclosure by providing a streamlined process for submitting the required references\textsuperscript{79}—but the overall duty has not changed.\textsuperscript{80} The applicant is required to disclose information material to patentability of pending claims, and specifically encouraged to examine foreign search reports.\textsuperscript{81} Information “material to patentability” is defined as information “not cumulative to information already of record or being made of record in the application” and creating “by itself or in combination with other information, a prima facie case of unpatentability of a claim,” or contrary to an applicant’s argument of patentability.\textsuperscript{82} But these changes are relatively minor in their effect on practitioners when

\textsuperscript{76} Id.
\textsuperscript{78} Id. at 5593.
\textsuperscript{80} It has been suggested that a significant motivation for this change was the “plague” of inequitable conduct defenses in the patent courts of the time. See Mammen, supra note 8, at 1336.
\textsuperscript{81} Compare 37 C.F.R. § 1.56 (2019) (“Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability”), with 37 C.F.R. § 1.56 (1977) (“All such individuals have a duty to disclose to the Office information they are aware of which is material to the examination of the application.”).
compared to the decisions of the courts, particularly the Court of Appeals for the Federal Circuit.

C. The Rise of The Federal Circuit as a Response to Confusion in the Circuit Courts

Over the years, the courts had developed a test for inequitable conduct claims centered on the materiality of the omitted references, and the intent (or absence thereof) of the solicitor in omitting them.\(^83\) However, absent guidance from the Supreme Court, the lower courts had reached different conclusions regarding the thresholds for these findings.\(^84\)

With regards to materiality, the simplest and most difficult for infringers to show was but-for materiality: where the patent “would not have issued” had the misrepresentation not occurred.\(^85\) However, given the difficulty of proving what an examiner would have done had they known of the reference, other circuits adopted a more objective material or relevant test, where materiality would be found if the misrepresentation “would affect the [e]xaminer’s evaluation” of patentability.\(^86\) Still others, harkening back to the origins of unclean hands in equity law, held that any misconduct, even if completely nonmaterial to whether the patent issued, warranted invalidation of the patent.\(^87\)

By contrast, intent was a simpler matter, with only two conflicting interpretations: some courts endorsed a deliberate intent requirement, again holding true to doctrine’s origins in equitable fraud, while others allowed even gross negligence to serve as requisite intent.\(^88\) Nonetheless, the different standards for intent, like those for materiality, caused confusion on a national level.


\(^84\) Id.

\(^85\) Id. (quoting Pfizer Co. v. FTC, 401 F.2d 574 (6th Cir. 1968)).

\(^86\) CTS Corp. v. Pihler Int’l Corp., 527 F.2d 95, 100 (7th Cir. 1975); see also SCM Corp. v. Radio Corp. of Am., 318 F. Supp. 433 (S.D.N.Y. 1970) (rejecting application of the “but for” test due to impracticability).

\(^87\) Honeywell Inc. v. Sperry Rand Corp., No. 4-67 C.I.V. 138, 1973 WL 903, at *7 (D. Minn. Oct. 19, 1973) (“Whether the applicant’s misconduct was material in the procurement of the patent is of no consequence. If the conduct of the applicant is reprehensible, it matters not that it was really unnecessary, and the patent is unenforceable.”).

\(^88\) Compare Scott Paper Co. v. Fort Howard Paper Co., 432 F.2d 1198, 1204 (7th Cir. 1970) (requiring deliberate misrepresentation), with Norton v. Curtiss, 433 F.2d 779, 796 (C.C.P.A. 1970) (“Where public policy demands a complete and accurate disclosure it may suffice to show nothing more than that the misrepresentations were made in an atmosphere of gross negligence as to their truth.”).
This confusion coincided with a widespread lack of uniformity in how the courts treated patent law. The lack of uniformity was addressed in the creation of the Federal Circuit, a single court of appeals for all patent cases (as well as other subjects that required national uniformity of jurisdiction). In its first cases involving inequitable conduct and the duty of candor, the Circuit seemed content with the more lax standards applied by one of its predecessor courts, the Court of Customs and Patent Appeals, which used gross negligence as an intent threshold. This measured inequitable conduct on a sliding scale of intent versus materiality, where a stronger showing of one requirement could compensate for weaker evidence of the other. Under this weak standard, assertions of inequitable conduct soon swamped the federal courts, and the Federal Circuit attempted to discourage claims of inequitable conduct to stem the tide.

For decades, the Federal Circuit attempted to “cure the plague” of spurious inequitable conduct allegations, which were cropping up in almost every major case because of the unclear standards as to what constituted inequitable conduct. The Federal Circuit raised the threshold to require both materiality (of the inequitable conduct, for example, of an omitted reference) and intent to deceive to be proven by clear and convincing evidence. When that failed to sufficiently cut off pleading of inequitable conduct, the court threw up procedural hurdles, holding that “[i]nequitable conduct, while a broader concept than fraud, must be pled with particularity” under Rule 9(b). Pleading with particularity required the party alleging a failure to cite prior art to allege what prior art had been intentionally omitted. Most recently, Therasense, Inc. v. Becton, 89

93. Robert D. Swanson, The Exergen and Therasense Effects, 66 STAN. L. REV. 695, 703; see also Mammen, supra note 8, at 1338–39 (concerning the USPTO’s efforts to combat the “plague”).
94. See Mammen, supra note 8, at 1338.
97. Id.
Dickinson & Co. further heightened the burdens for proving that inequitable conduct had occurred, holding that “the materiality required to establish inequitable conduct is but-for materiality.” The court defined “but-for material” undisclosed prior art as that which “the PTO would not have allowed a claim had it been aware.” In doing so, the Federal Circuit explicitly criticized the USPTO’s materiality standard, noting that “reliance on this standard has resulted in the very problems this court sought to address” with regards to the flood of questionable references.

D. The Current State of Prior Art Disclosure

The combination of the particularity requirement, and the heightened standards of Therasense, seem to have finally cut off the plague of inequitable conduct. As commentator Robert D. Swanson has noted, “[t]he prevalence of inequitable conduct claims has decreased from 17% to 8% of patent cases.” However, the debate has not ended. Indeed, some argue that the Circuit has gone too far, as the doctrinal duty of candor can now be reasonably characterized as excluding some actions that would fall afoul of 37 C.F.R. § 1.56. It is arguable that some actions the USPTO would legitimately consider misconduct will nonetheless go unpunished, because the Federal Circuit, and thus the Federal Courts, do not have the same definitions for misconduct.

Unfortunately, the second-order effects of the inequitable conduct plague persist. Because the failure to disclose prior art remains a very plausible ground for inequitable conduct claims, practitioners are still required to make difficult decisions about what art is known by all parties

---

98. 649 F.3d 1276 (Fed. Cir. 2011).
99.  Id. at 1291.
100.  Id.
101.  Id. at 1294.
102.  Swanson, supra note 93, at 724.
103.  Id.
104.  See generally John M. Golden, Patent Law's Falstaff: Inequitable Conduct, the Federal Circuit, and Therasense, 7 WASH. J.L. TECH. & ARTS 353 (2012) (casting doubt on whether the Therasense effects will solve keep inequitable conduct from being a further thorn in the side of the Federal Circuit); Johnson, supra note 8 (arguing that the inequitable conduct defense should be eliminated).
105.  Swanson, supra note 93, at 724.
within the ambit of 37 C.F.R. § 1.56. The USPTO’s Manual of Patent Examining Procedure offers some guidelines but errs, like many practitioners, on the side of submitting all known references if they could be even remotely characterized as prior art. In contrast, it has in the past been suggested by the USPTO that citing too many references without identifying those of particular importance could itself constitute inequitable conduct, if the intent was to “bur[y]” a material reference amidst hundreds of irrelevant documents.

This has resulted in confusion among patent attorneys. Practitioners concerned with possible inequitable conduct charges are incentivized to file any reference that could be construed as relevant in any sense—a “blizzard” of prior art filings. Moreover, the provided references do not seem to be helping the USPTO to determine either novelty or nonobviousness. Where applicant submissions accounted for 76% of references cited in a sample of patent applications, only 2% of applicant-cited references were cited in rejections by the USPTO—compared to nearly 40% of examiner-cited references. Michael Frakes and Melissa Wasserman have suggested that examiners choose to focus their prior art comparisons on what they find themselves, trusting those references to provide them with the most insight in the limited time they have to examine the patent. This, however, undermines the purpose of prior art disclosure and threatens the presumption of validity that such disclosure was instituted to protect.

IV. DISCLOSURE REQUIREMENTS IN OTHER JURISDICTIONS

The United States is not unique in its duty of disclosure, but it is the only one of the world’s five busiest offices to impose this duty. Most foreign patent offices either require no duty of disclosure, or only require

107. See id.
113. The others being China, Japan, Korea, and Europe. Patents, WORLD INTELLECTUAL PROPERTY INDICATORS 2017, 30 (2017).
114. See infra sections IV.A–C.
disclosure upon the request of the examiner. In general, they approach prior art disclosure in one of three ways. Some countries, like the United States, impose a duty on applicants to provide their office with all known prior art. Other countries require more limited forms of disclosure, such as merely identifying material references (rather than requiring their submission), or only requiring the submission of the search reports carried out (and reported to the applicant) by other countries’ offices. Last, some national patent offices have done away entirely with the duty to disclose prior art, placing this duty on the office and the examiner. In this part, I will examine the practices of several foreign patent offices, all in countries with advanced research sectors like that of the United States.

A. Full Disclosure

Israel has similar disclosure rules to the United States. The examiner can require the applicant to submit any art obtained in foreign prosecution as well as publications “which are known to the applicant and directly relate to the invention.” Furthermore, applicants also need to provide the counterpart foreign applications, and even “publications and references referred to in publications and references which the applicant is required to provide under this Article, where the examiner so demands.” Penalties are correspondingly harsh—not only can the Israeli Office cancel the patent, but they can also simply assign it to another party, and impose sanctions on any practitioner who knowingly did not keep the Office informed of a substantive change in the list of references and publications.

China, meanwhile, requires the submission of “reference materials relating to the invention,” and their patent office can require the

116. The six countries chosen rank within the top twenty-five of WIPO’s 2019 Global Innovation Index. “Europe” as a whole is not ranked, but European countries constitute fifteen of the top twenty-five. CORNELL UNIV. ET AL., THE GLOBAL INNOVATION INDEX 2019: CREATING HEALTHY LIVES—THE FUTURE OF MEDICAL INNOVATION xxxiv (Soumitra Dutta et al. eds., 12th ed. 2019) [hereinafter GII 2019]. The GII defines an innovation as “a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process).” Id. at 205. Crucially, this takes into account both patent and nonpatent innovations, which the patent system is also designed to encourage.
119. Id.
120. Id. § 18C.
submission of any patent searches carried out by a foreign office.\textsuperscript{121} The Chinese Patent Office defines the required reference materials as those “which can be regarded as useful for the understanding, searching and examination of the invention or utility model.”\textsuperscript{122} The penalty for failing to do so is invalidation of the patent.\textsuperscript{123}

B. Partial Disclosure

Other foreign offices require a limited form of prior art disclosure, with requirements more specific than those of the United States.\textsuperscript{124} Japan, for example, requires identification (though not submission) of any known art “related to the [] invention, that has been known to the public through publication at the time of filing of the patent application.”\textsuperscript{125} A more limited form of disclosure can be found in the European Patent Office, which formerly maintained no such requirement, relying solely on its own examiners to find and compare art with the application at hand.\textsuperscript{126} Today, the code has been amended to require a limited disclosure: “the results of any search carried out by the authority with which [a] previous application was filed” with a foreign office.\textsuperscript{127} The EU’s rule is still far clearer than any comparable rule, as it requires no exercise of discretion on the part of the practitioner, and is quite simple to fulfill—all that need be reported is the results of searches by other offices.\textsuperscript{128} A similar requirement can be found in the Canadian Patent Rules, where examiners may request from applicants any prior art cited in a counterpart foreign application, but does not require any submission beyond that.\textsuperscript{129}


\textsuperscript{122} Implementing Regulations of the Patent Law of the People’s Republic of China, Rule 18(2).


\textsuperscript{124} See generally Bicknell, supra note 55.


\textsuperscript{127} European Patent Convention, Implementing Regulations to the Convention on the Grant of European Patents, Rule 141 (2016).

\textsuperscript{128} Id.

\textsuperscript{129} Patent Rules, SOR/96-423, § 29.
C. No Disclosure

Other countries do not even bother to require the applicant to report the result of counterpart searches, even upon instruction by the office. In South Korea, even the requirement that applicants submit the results of counterpart searches does not exist.130 If necessary, the Patent Commissioner can assign an institution to conduct a prior art search themselves, but the law also leaves open the possibility of the examiner calling on other experts within the government for technical issues.131 Finally, Australia provides an example of a country which has revised its patent laws frequently and moved wholly away from mandating applicant disclosure of prior art.132 Australia first imposed a duty to disclose prior art in 2001, but lessened this requirement over the years, until now there is no duty whatsoever.133

Foreign patent offices feature a wide spectrum of disclosure requirements, from the strict standards of China and Israel to the more relaxed approach of South Korea and Australia. Yet more onerous disclosure requirements do not seem to have resulted in a higher-performing innovation sector in those countries. For instance, Israel and South Korea’s Global Innovation scores, as ranked by the World Intellectual Property Organization, are nearly identical.134

V. WHY THE UNITED STATES SHOULD AMEND THE DUTY OF DISCLOSURE

There is a lesson to be learned from these comparisons: other countries have not imposed a duty upon the applicant to submit prior art, or have moved away from such a duty, and yet still maintain thriving innovation sectors. Meanwhile, the United States maintains its duty to disclose at great cost to both patentholders and the public. Following the method used by the European Patent Office would solve two big problems in patent law: the uncertain standards for inequitable conduct promulgated by the Federal Circuit, and the inefficiency in patent examination caused by the filing of needless references.

Looking at the numerous Federal Circuit cases addressing inequitable conduct, it is no surprise that considerable ink has been spilled on the

131. Id.
133. See Patents Act 1990, compilation No. 42 (2018), for the current law governing patents in Australia; see also Bicknell, supra note 55, at 458 n.180.
134. See GII 2019, supra note 116, at xxxiv.
matter in various law journals, nor that the Federal Circuit sought to solve the problem by making the intent and materiality standards prohibitively high in *Therasense*.

Yet perhaps it is not the inequitable conduct doctrine that was, or is, the problem. Punishing fraud in patent prosecution would seem to be an unalloyed good, as such fraud undermines the presumption of validity at the heart of our patent system. Whether the failure to disclose references to the patent office should even constitute fraud is another question, as courts have become decreasingly likely to allow for claims of fraud for the failure to disclose information (rather than for misrepresentations). That inequitable conduct became so central to patent litigation may indicate that the duties the office imposes on practitioners are impossible to conform to with any degree of certainty.

The United States is not unique in its duty of disclosure, but it is unusual. The vast majority of the world’s patent offices either require no duty of disclosure or have a much more limited form of the duty in comparison to the United States, such as the requirement of search reports from other patent offices in counterpart foreign applications. These offices primarily rely on their examiners to find prior art, yet in the United States, the duty of disclosure places responsibility on the applicant. This rule was an attempt to codify existing Office policies and court doctrines, and in doing so to provide consistency and guidance to applicants and patentees. Yet its effect has been to create an epidemic of fraud allegations in the patent courts, and to impose on practitioners a confusing, costly, and ineffective duty to provide the office with any information material to the patentability of an application. American patent attorneys must inform the USPTO of all material art throughout the examination process, or risk claims of inequitable conduct. Furthermore, a diligent attorney in the United States must also take care

135. See Swanson, *supra* note 93, at 696.
138. See HRICIK & MEYER, *supra* note 5.
139. See Erstling *supra* note 115, at 356.
140. See Bicknell *supra* note 55, at 436.
142. 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.”).
144. See HRICIK & MEYER, *supra* note 5, at 111.
that their clients follow suit and disclose all information they know of, else they may be vulnerable to the same claims and risk invalidation of their patents.\textsuperscript{145}

This has caused a separate plague upon patent law: the “burying” of the USPTO in references impose tremendous costs on the patent system.\textsuperscript{146} Attorneys have every incentive to file a copy of every reference they are aware of with the USPTO. There is no penalty for doing so, and they risk danger—however difficult the courts make it to prove—in omitting a reference and opening themselves up to inequitable conduct allegations.\textsuperscript{147} Similarly, there is no incentive to indicate which references are material to which claims, as it runs the risk of implying that other references could not be as material.\textsuperscript{148} Lastly, the benefits of providing the examiner with any references at all seems insignificant. This is borne out by the examiners themselves, who have claimed to prefer the applicant provide no references at all rather than burden them with “boxloads” of art that they are then obliged to read through.\textsuperscript{149}

As these floods of references have become increasingly ordinary, an unscrupulous attorney could choose to file hundreds of irrelevant references alongside a truly material, possibly invalidating reference, and hope the examiner would be unable to pick out the materiality.\textsuperscript{150} While this would seem to fit the definition of inequitable conduct, the heightened standards imposed by \textit{Therasense} make it unlikely an infringer could effectively prove these claims as a defense. The Federal Circuit’s definition of “materiality” is far stricter than that used by the USPTO.\textsuperscript{151} Proving by “clear and convincing” evidence that an attorney meant to deceive the patent office in this manner would be practically impossible absent a smoking gun.\textsuperscript{152} The examiner therefore could be induced to miss

\begin{footnotesize}
\begin{enumerate}
\item See Taylor \textit{supra} note 110, at 114–20.
\item See HRICIK & MEYER, \textit{supra} note 5, at 129–30.
\item Id. at 133.
\item Id.
\item For example, a letter from the client instructing the attorney to bury a newly-discovered reference. Intent to deceive can be inferred from circumstance, but not if “there are multiple
a reference that, while not dispositive, would affect the scope of granted claims. Yet an inequitable conduct defense would likely be unable to prove this, as the but-for materiality standard would require the defendant to show that if a reasonable examiner had seen the reference, they would not have granted that claim. Inequitable conduct has its purpose in patent infringement suits: it is to punish those who have committed fraud in fact on the USPTO, not to serve as a plausible defense to every claim of infringement.

Some have proposed that these problems would best be remedied by eliminating the inequitable conduct defense altogether. However, a better idea would be to instead eliminate the duty of candor as it currently exists, and to adopt the European standard—for instance, no duty to disclose whatsoever, save for search reports issued by other countries. This would serve examiners better, because all references provided by applicants would be deemed relevant by another patent office, making it far more likely that another examiner would see them similarly. More importantly, it clearly indicates to the patent prosecutor which references need to be provided and relieves them of the need to do any inquiries themselves. Under this proposal, even the most diligent attorney would only need to forward foreign search reports to fully discharge their duty under the law.

This would be a drastic step, but neither as drastic nor as foreign as it might seem at first. The Federal Circuit itself indicated that the USPTO’s standards for disclosure were too broad when they declined to adopt their materiality standards in Therasense. The USPTO claimed to have looked to the 1967 Report of the President’s Commission on the Patent System when creating the initial duty of disclosure, yet a reading of that document recommends no such creation. The innovations proposed by the commission included provisional applications, published applications, and a first-to-file system. These were aimed at raising the quality and reliability of patents, shortening the period of pendency, accelerating the disclosure of technological advances, reducing the expense of obtaining and litigating a patent. These changes made U.S. patent practice more

reasonable inferences that may be drawn.” Therasense, 649 F.3d at 1290.

153. See Regeneron Pharm., Inc. v. Merus B.V., 144 F. Supp. 3d 530, 572 (S.D.N.Y. 2015), aff’d sub nom. Regeneron Pharm., Inc. v. Merus N.V., 864 F.3d 1343 (Fed. Cir. 2017) (finding that withheld references which disclose “the same benefits and results” would have prevented a reasonable examiner from finding certain claims patentable).

154. See Therasense, 649 F.3d at 1294–95 (noting that the Federal Circuit’s decision was motivated in part with the goal of preventing inequitable conduct from becoming a rote defense to infringement).

155. See generally Johnson, supra note 8.

156. See Therasense, 649 F.3d at 1294–95.
compatible with that of other major countries and preparing the patent system to cope with new technologies. Easing prior art disclosure requirements would have a very similar effect. Removing the specter of inequitable conduct allegations from ordinary (non-fraudulent) patent practice will raise the reliability of patents because a diligent attorney will no longer be confused as to what constitutes their duty of disclosure. Furthermore, placing the responsibility of the patent search solely on the examiner will shorten the period of pendency, as the examiner will no longer need to consider applicant-submitted references of dubious relevancy. This itself will accelerate the disclosure of technological advances. In combination with the elimination or reduction in the filing of references, this will reduce the expense of obtaining a patent. Finally, conforming to the disclosure rules applicable in most of the world will make U.S. practice more compatible with those countries and will recognize modern technologies that have placed the world’s information at the fingertips of the examiner.

CONCLUSION

The current patent system in the United States is not fatally flawed. Yet while the current duty of disclosure may not be a malignant tumor, and Therasense may have alleviated the epidemic of inequitable conduct, our system is still far weaker than it could be. No party benefits from the current duty of disclosure. It has resulted in wasted money, confused practitioners, and a less predictable system than the alternative systems practiced by the United States’s economic partners across the globe. Removing the duty to disclose from our patent regulations would not just lift the remaining sickness from our patent laws: it would also place us in better harmony with the international community and recognize the technological advancements that have placed the world’s prior art at the fingertips of the patent examiner. These effects, salutary on their own, are also fully in accord with the motivations of the 1967 President’s Commission, which has been the guide for so many of our advances in the patent laws. For as the Commission recognized, the mission of the United States patent system is not simply to grant quality patents, or to reject those that are unworthy: it is to promote the progress of useful arts, translate that progress into better living standards, and in doing so, make the world a better place. The rules as they exist do not serve that function—indeed, they hinder it—and so they should be changed.

158. Id. at 2.