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Patent Reform and Best Mode: A Signal to the Patent Office or a Step Toward Elimination?

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PATENT REFORM AND BEST MODE: A SIGNAL TO THE
PATENT OFFICE OR A STEP TOWARD ELIMINATION?

*Ryan Vacca**

ABSTRACT

On September 16, 2011, President Obama signed the America Invents Act (“AIA”) the first major overhaul of the patent system in nearly sixty years. This article analyzes the recent change to patent law’s best mode requirement under the AIA. Before the AIA, patent applicants were required, at the time of submitting their application, to disclose the best mode of carrying out the invention as contemplated by the inventor. A failure to disclose the best mode was a basis for a finding of invalidity of the relevant claims or could render the entire patent unenforceable under the doctrine of inequitable conduct. The AIA still requires patent applicants to disclose the best mode but has removed the traditional enforcement mechanisms—declarations of invalidity and unenforceability—as defenses to patent infringement. In this article, I propose and explore several innovative techniques that could be used to add teeth to the seemingly toothless best mode requirement. Ultimately, I reject these proposals as not being workable solutions and suggest that Congress’s resolution of the best mode problem is nonsensical and that it should completely eliminate the requirement rather than send mixed signals to the Patent Office and patent practitioners.

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I. INTRODUCTION

The best mode requirement of patent law has been the proverbial redheaded stepchild with respect to disclosures. Its sibling, enablement, is seen as the core component of the bargain between the inventor and the public.¹ Without enablement, we would be thrust back into seventeenth century England, where state-sanctioned monopolies were commonly granted at the expense of the public.² But best mode has struggled to find its place. Is it central to the goals of the patent system? Is it uniquely American? Does it benefit the public? If so, is this benefit worth the costs? These questions have plagued best mode for years. With passage of the AIA,³ Congress has partially answered these lingering questions. But, by definition, when questions are only partially answered additional unanswered questions remain. This article examines the AIA's changes to the best mode, evaluates what impact those

¹ See, e.g., Sean B. Seymore, *Heightened Enablement in the Unpredictable Arts*, 56 UCLA L. REV. 127, 167 (2008).

² Michael J. Madison, *Beyond Invention: Patent as Knowledge Law*, 15 LEWIS & CLARK L. REV. 71, 79 (2011); see Statute of Monopolies, 1623, 21 Jac. 1, c. 3 (Eng.), available at <http://www.legislation.gov.uk/aep/Ja1/21/3/contents>; see also Mark D. Janis, *On Courts Herding Cats: Contending with the "Written Description" Requirement (and Other Unruly Patent Disclosure Doctrines)*, 2 WASH. U. J.L. & POL'Y 55, 55 & n.4 (2000) (citation omitted) (highlighting enablement's genesis in the Statute of Monopolies).

³ 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.).

changes will have and what problems or questions have been raised as a result, and then sets forth and assesses possible solutions.

Part II reviews the early history of the best mode, its culmination in the 1952 Patent Act, and the critiques made to the 1952 Act's best mode requirement. Part III discusses the AIA's best mode compromise, including the legislative history leading up to the AIA's enactment, and the potential concern resulting from this compromise—a lack of means of enforcement. Part IV builds upon this concern by illustrating how enforcement of the best mode at the Patent and Trademark Office is nonexistent. Part V describes how the AIA's best mode reform could be seen as a Congressional step towards complete elimination of best mode or an opportunity for the United States Patent and Trademark Office (“PTO”) to use innovative methods to enforce it. Finally, Part V discusses the limitations of these innovative methods of enforcement and concludes that these methods are unlikely to be effective at encouraging best mode disclosures.

II. BEST MODE BEFORE THE AIA

A. *Early History*

The origins of best mode stem back to the nation's first patent act—the Patent Act of 1790.⁴ Section 2 of the 1790 Act required the patentee to deliver a specification that was sufficiently particular:

[N]ot only to distinguish the invention or discovery from other things before known and used, but also to enable a workman or other person skilled in the art or manufacture . . . to make, construct, or use the same, to the end that the public may have the *full benefit* thereof, after the expiration of the patent term.⁵

Similarly, section 6 of the 1790 Act contained the “whole of the truth” defense.⁶ This defense permitted an alleged infringer to prevail in the event the patentee's specifications either did not contain all of the information about the invention or contained more information than “necessary to produce the effect described.”⁷

⁴ Patent Act of 1790, ch. 7, 1 Stat. 109 (repealed); Jerry R. Selinger, *In Defense of “Best Mode”: Preserving the Benefit of the Bargain for the Public*, 43 CATH. U. L. REV. 1071, 1072 (1994).

⁵ Patent Act of 1790, ch. 7, § 2, 1 Stat. 109, 110 (emphasis added).

⁶ *Id.* § 6, 1 Stat. at 111–12.

⁷ *Id.*

Furthermore, this defense required either that the concealment or surplus information actually mislead the public so the described effect could not be produced by the means specified or that the patentee intended this to be so.⁸ Read together, these provisions of the 1790 Act imposed a requirement that patentees come forward with all of the relevant detail about their inventions and conceal nothing from the public, which would lead to full enjoyment of their inventions after the patents expired.

Three years later, Congress repealed the 1790 Act and replaced it with the Patent Act of 1793.⁹ The 1793 Act required patentees to set forth a written description of their inventions “in such full, clear and exact terms, as to distinguish the same from all other things before known, and to enable any person skilled in the art . . . to make, compound, and use the same.”¹⁰ This change continued to increase the chasm between enablement and what would become best mode. Importantly, the 1793 Act also mandated that “in the case of any machine, [the patentee] shall fully explain the principle, and the several modes in which he has contemplated the application of that principle or character, by which it may be distinguished from other inventions”¹¹

The 1793 Act also modified the “whole of the truth” defense.¹² Section 6 of the 1793 Act permitted an alleged infringer to assert the “whole of the truth” defense and, if successful, would require the court to declare the patent void.¹³ To succeed, the alleged infringer only needed to prove that the specification did “not contain the whole truth relative to [the patentee’s] discovery, or that it contain[ed] more than [was] necessary to produce the described effect, which concealment or addition shall fully appear to have been made, for the purpose of deceiving the public.”¹⁴ The 1793 Act removed the burden on the alleged infringer to show that the described effect could not be achieved through the specified means.¹⁵ Thus, the focus on the “whole of the truth” defense was now squarely focused on the patentee’s intent to mislead the public.¹⁶

⁸ *See id.*

⁹ Patent Act of 1793, ch. 11, 1 Stat. 318.

¹⁰ *Id.* § 3, 1 Stat. at 321.

¹¹ *Id.* § 3, 1 Stat. at 321–22.

¹² Selinger, *supra* note 4, at 1074.

¹³ Patent Act of 1793 § 6, 1 Stat at 322.

¹⁴ *Id.*

¹⁵ Selinger, *supra* note 4, at 1074.

¹⁶ *See id.*

The Patent Act of 1836¹⁷ largely left the enablement requirement unchanged, but it did modify the “whole of the truth” defense to remove the consequence that the patent be declared void upon a successful assertion of the defense.¹⁸ One of the first cases to interpret the 1836 Act as calling for a best mode is *Page v. Ferry*.¹⁹ In *Page*, the alleged infringer asserted that the patentee had withheld a description of the best mode of effectuating the patented machine.²⁰ The court stated that “[t]he patentee is bound to disclose in his specifications the best method of working his machine known to him at the time of his application. An infringement will not have taken place, unless the invention can be practiced completely by following the specifications.”²¹ The court in *Page* continued on to explain that “[t]he specification is intended to teach the public the improvement patented; it must fully disclose the secret; must give the best mode known to the inventor, and contain nothing defective, or that would mislead artists of competent skill in the particular manufacture.”²² The court’s discussion of the best mode was distinct from its earlier discussion regarding enablement.²³ The best mode requirement had now developed a life of its own, although not yet codified in the Patent Act.²⁴

Although recognized in *Page v. Ferry*, the Patent Act of 1870²⁵ was the first time the phrase “best mode” was used in patent legislation.²⁶ In particular, section 26 of the 1870 Act required the applicant, in the case of a patent for a machine, to “explain the principle hereof, and the best mode in which he has contemplated applying that principle so as to distinguish it from other inventions.”²⁷ Of course, the main restriction of this best mode requirement was that it only applied to patent applications

¹⁷ Patent Act of 1836, ch. 357, 5 Stat. 117, 117–25.

¹⁸ Selinger, *supra* note 4, at 1075.

¹⁹ *Page v. Ferry*, 18 F. Cas. 979 (C.C.E.D. Mich. 1857) (No. 10,662).

²⁰ *Id.* at 984.

²¹ *Id.*

²² *Id.*

²³ *See id.* at 983; *see also* Selinger, *supra* note 4, at 1079 (explaining that in *Page* the court charged the jury separately on best mode and enablement).

²⁴ *But see* Sewall v. Jones, 91 U.S. 171, 185–86 (1875) (analyzing novelty, but stating “[t]he omission to mention in the specification something which contributes only to the degree of benefit, providing the apparatus would work beneficially and be worth adopting without it, is not fatal, while the omission of what is known to be necessary to the enjoyment of the invention is fatal.”).

²⁵ Patent Act of 1870, ch. 230, 16 Stat. 198.

²⁶ *Id.* § 26, 16 Stat. at 201; *see also* 3 DONALD S. CHISUM, CHISUM ON PATENTS § 7.05 (Matthew Bender 2010).

²⁷ Patent Act of 1870 § 26, 16 Stat. at 201.

regarding machines.²⁸ Interestingly, the 1870 Act preserved the “whole of the truth” defense, which had served as the basis for a separate best mode requirement until 1870.²⁹

B. *The 1952 Patent Act*

In 1952, Congress again amended the Patent Act³⁰ and codified best mode in section 112. The relevant portion of section 112 states:

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 of carrying out his invention.*³¹

Importantly, best mode was now required for all inventions, not just machines.³² Also codified was that failure of the inventor to comply with any of the requirements of section 112, including best mode, would be a basis for invalidity.³³ Missing from the 1952 Act was the “whole of the truth” defense.³⁴

Initially, courts tended to analyze enablement and best mode together rather than consider them as distinct requirements.³⁵ However, the Court of Customs and Patent Appeals (“CCPA”) soon clarified that the two requirements were different. In *In re Gay*,³⁶ the CCPA explained the two requirements as follows:

The essence of [the enablement requirement] is that a specification shall disclose an invention in such a manner as will enable one skilled in the art to make and utilize it. *Separate and distinct* from [enablement] is [the best mode requirement], the essence of which requires an inventor to disclose the best mode *contemplated by him*, as of the time he executes the application, of carrying out his invention.

²⁸ *Id.*

²⁹ *Id.* § 61.

³⁰ Patent Act of 1952, Pub. L. No. 593, 66 Stat. 792.

³¹ 35 U.S.C. § 112 (2010) (emphasis added).

³² See *In re Honn*, 364 F.2d 454, 461 n.7 (C.C.P.A. 1966) (“[T]he requirement for disclosing the best mode of carrying out the invention is stated as generally applicable to all types of invention.”); Selinger, *supra* note 4, at 1080–81.

³³ 35 U.S.C. § 282 (2010).

³⁴ 3 CHISUM, *supra* note 26, § 7.05.

³⁵ See, e.g., *Zoomar, Inc. v. Paillard Prods., Inc.*, 152 F. Supp. 328, 334 (S.D.N.Y. 1957); *Lamm v. Watson*, 138 F. Supp. 219, 220 (D.D.C. 1955).

³⁶ *In re Gay*, 309 F.2d 769 (C.C.P.A. 1962).

Manifestly, the sole purpose of this latter requirement is to restrain inventors from applying for patents while at the same time concealing from the public preferred embodiments of their inventions which they have in fact conceived.

. . . The question of whether an inventor has or has not disclosed what he feels is his best mode is, however, a question separate and distinct from the question of the *sufficiency* of his disclosure to satisfy the requirements of [enablement].³⁷

Later, the Federal Circuit, echoing the CCPA's explanation in *In re Gay*, explained:

Enablement looks to placing the subject matter of the claims generally in the possession of the public. If, however, the applicant develops specific instrumentalities or techniques which are recognized at the time of filing as the best way of carrying out the invention, then the best mode requirement imposes an obligation to disclose that information to the public as well.³⁸

The policy rationale underlying best mode is based on the *quid pro quo* basis of patent law.³⁹ The Federal Circuit has described the purpose of best mode as requiring "that [the] patent applicant play[] 'fair and square' with the patent system,"⁴⁰ meaning that the patentee should not receive from the public the right to exclude "while at the same time *concealing* from [it the] preferred embodiments of the[] invention."⁴¹ In other words, the patentee should not be able to obtain the benefits of a patent while maintaining part of the invention as a trade secret—the antithesis of a patent. The Court of Appeals for the Seventh Circuit articulated a variation of this policy rationale—to create a level playing field so the public (via competitors) can compete fairly after the patent expires.⁴²

As noted, under earlier patent acts, failure to satisfy the best mode was a basis for refusing to grant a patent and could also be asserted as a defense to infringement and as a basis for a finding of invalidity.⁴³ The 1952 Patent Act carried this forward; section 282

³⁷ *Id.* at 772.

³⁸ *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1532 (Fed. Cir. 1987).

³⁹ 3 CHISUM, *supra* note 26, § 7.05[1][a].

⁴⁰ *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209–10 (Fed. Cir. 1991).

⁴¹ *Wahl Instruments, Inc. v. Acvious, Inc.*, 950 F.2d 1575, 1579 (Fed. Cir. 1991).

⁴² *See Christianson v. Colt Indus. Operating Corp.*, 870 F.2d 1292, 1302 n.8 (7th Cir. 1989).

⁴³ *See supra* Part II.A.

provided for invalidity of the patent or any claim in suit for failure to comply with any requirement of section 112.⁴⁴ Although distinct from invalidity, failure to satisfy the best mode also served as a basis for inequitable conduct, which would render the patent unenforceable.⁴⁵

To determine whether best mode has been complied with, the Federal Circuit established a two-prong inquiry.⁴⁶ The first part is a subjective inquiry.⁴⁷ It must be determined whether the inventor, at the time the patent application was filed, “knew of a mode of practicing [the] claimed invention that [the inventor] considered to be better than any other.”⁴⁸ If the first prong is satisfied, then the second prong is considered.⁴⁹ The second prong is objective.⁵⁰ This prong asks whether what the inventor knew under the first prong was adequately disclosed so as “to enable one skilled in the art to practice the [best] mode.”⁵¹

Over the last couple of decades, issues regarding interpretation of the best mode have arisen and the courts (primarily the Federal Circuit) have been called upon to clarify (sometimes unsuccessfully) these issues.⁵² One early question that arose was whether an employer, who was the assignee of the patent, would have its knowledge of a preferred embodiment imputed to the employee/inventor and therefore violate the best mode if this preferred embodiment was not adequately disclosed.⁵³ The Federal Circuit rejected the imputation theory, holding that “[t]he statutory language [of section 112] could not be clearer” and that what must be disclosed is the best mode contemplated by the inventor.⁵⁴

A second issue involving best mode concerned whether the

⁴⁴ 35 U.S.C. § 282 (2010).

⁴⁵ See *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1321–22 (Fed. Cir. 2006) (holding that intentionally concealing the mode used to make the invention may provide a basis for finding inequitable conduct).

⁴⁶ 3 CHISUM, *supra* note 26, at § 7.05[1]; *Chemcast Corp. v. Arco Indus. Corp.*, 913 F.2d 923, 927–28 (Fed. Cir. 1990).

⁴⁷ *Chemcast*, 913 F.2d at 928.

⁴⁸ *Id.* at 928.

⁴⁹ See *id.*

⁵⁰ *Id.* (“Assessing the *adequacy* of the disclosure, as opposed to its *necessity*, is largely an objective inquiry that depends upon the scope of the claimed invention and the level of skill in the art.”).

⁵¹ *Id.*

⁵² See Matthew H. Solomson, *Patently Confusing: The Federal Circuit’s Inconsistent Treatment of Claim Scope as a Limit on the Best Mode Disclosure Requirement*, 45 IDEA 383, 387 (2005).

⁵³ *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1049 (Fed. Cir. 1995).

⁵⁴ *Id.*

applicant was required to specifically signify which mode of the several listed is the best.⁵⁵ In *Randomex, Inc. v. Scopus Corp.*, the Federal Circuit held that the indiscriminate disclosure of the best mode along with other possible modes satisfied the best mode requirement.⁵⁶

A third issue that arose concerned the scope of the best mode.⁵⁷ In other words, is best mode limited to the elements listed in the claims or does it require the inventor to disclose the best mode relating to unclaimed elements of the invention?⁵⁸ Although addressing it frequently, the Federal Circuit has failed to answer this question with any certainty and the question still lingers today.⁵⁹

In sum, based on the statutory language of section 112 and courts' interpretations of it, it is clear that best mode comprises a subjective and objective inquiry, must be examined at the time the patent application is filed rather than when the patent is issued, is solely examined from the perspective of the inventor, and does not have to be specifically labeled in the patent application.⁶⁰ However, much confusion still exists regarding the scope of the best mode.

C. Critiques of Best Mode

In addition to some of the confusion surrounding its requirements, best mode has come under attack as a matter of policy on multiple fronts. These critiques of best mode can be broken down into three categories: (1) failure to achieve its purpose, (2) litigation costs, and (3) international harmonization. Each will be discussed in turn.

The first critique of best mode is that the way the rule is written and has been interpreted does not necessarily achieve the ends it seeks to accomplish. As described earlier, one purpose of best mode is to ensure that the public is put on a level playing field with the

⁵⁵ See *Randomex, Inc. v. Scopus Corp.*, 849 F.2d 585, 589 (Fed. Cir. 1988).

⁵⁶ *Id.*

⁵⁷ See Solomson, *supra* note 52, at 387.

⁵⁸ Melissa N. McDonough, Note, *To Agree, or Not to Agree: That is the Question When Evaluating the Best Mode Preferences of Joint Inventors After Pannu v. Iolab Corp.*, 80 S. CAL. L. REV. 151, 158 (2006).

⁵⁹ McDonough, *supra* note 58, at 158; see *Bayer AG v. Schein Pharm., Inc.*, 301 F.3d 1306, 1316–20 (Fed. Cir. 2002) (describing instances when the best mode has been lacking despite a claim not existing to that element); see generally Solomson, *supra* note 52, at 387–420 (explaining the different approaches used by the Federal Circuit and CCPA and how they do not set forth a consistent standard for analyzing the scope of best mode).

⁶⁰ 35 U.S.C. § 112 (2010).

patentee upon expiration of the patent.⁶¹ Yet the best mode does not necessarily reach that goal for a variety of reasons. As discussed, best mode is subjective—only the best mode contemplated by the inventor needs to be divulged.⁶² Therefore, even if the inventor complies and discloses the best mode known to the inventor, this does not necessarily mean that the best mode, in an objective sense, will be revealed to the public.⁶³ Similarly, because knowledge cannot be imputed from the inventor's employer,⁶⁴ this limits the assurance that the best mode will in fact be disclosed.⁶⁵ Likewise, because best mode only requires the best mode to be disclosed if the inventor has a best mode in mind, if an inventor is ambivalent towards multiple modes, then no best mode needs to be disclosed.⁶⁶

Another reason best mode does not necessarily achieve its goal of putting the public on a level playing field is that changes in technology may result in an outdated best mode before the end of the patent term.⁶⁷ This is especially true in industries such as computer software and hardware where technology advances so quickly that even if the inventor disclosed the best mode at the time the application was filed it is quite likely, if not inevitable, that by the time the patent expires the technology will have changed dramatically and rendered the disclosed best mode a relic.⁶⁸

The second critique of best mode is that it drives up the costs of litigation while failing to provide a commensurate benefit. In 1992, the Advisory Commission on Patent Law Reform published a report to the Secretary of Commerce, which proposed eliminating best mode.⁶⁹ The committee laudably noted the goals of best mode, but expressed doubt as to whether best mode achieves these goals and whether the costs of best mode outweigh the benefit it actually

⁶¹ See *supra* note 42 and accompanying text.

⁶² 35 U.S.C. § 112 (2010).

⁶³ THE ADVISORY COMMISSION ON PATENT LAW REFORM, A REPORT TO THE SECRETARY OF COMMERCE 102 (1992) [hereinafter 1992 REPORT]; see also McDonough, *supra* note 58, at 177 (arguing that the best mode requirement is subjectively based on the inventor's opinion on what is the best mode).

⁶⁴ *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1049 (Fed. Cir. 1995).

⁶⁵ NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES, A PATENT SYSTEM FOR THE 21ST CENTURY 121 (Stephen A. Merrill et al. eds., 2004) [hereinafter NRC REPORT].

⁶⁶ McDonough, *supra* note 58, at 177; see also 3 CHISUM, *supra* note 26, § 7.05[1][c][i][B] (“[Courts] find no violation if there is no evidence that the inventor subjectively preferred any one of several possible implementations of the invention.”).

⁶⁷ See 1992 REPORT, *supra* note 63, at 102; McDonough, *supra* note 58, at 179.

⁶⁸ 1992 REPORT, *supra* note 63, at 102.

⁶⁹ *Id.* at 102.

provides.⁷⁰ One such cost of best mode the committee noted was the cost of discovery in trying to uncover the subjective beliefs of the inventor.⁷¹ In 2004, the National Research Council (“NRC”), as part of the National Academies, published a report recommending changes to the patent system.⁷² Echoing the recommendation of the 1992 Advisory Commission report, one recommendation made by the NRC was the elimination of best mode.⁷³ The report noted that one factor which increased the costs of patent litigation (via expensive pretrial discovery) was the existence of legal issues which depend on a party’s state of mind.⁷⁴ These additional costs, the NRC opined, were not outweighed by the benefits provided by applicants complying with the best mode, especially in light of the enablement requirement which already obligated the inventor to disclose how to make and use the invention (albeit not necessarily the best mode of making and using the invention).⁷⁵

The final critique of best mode deals with international harmonization. The NRC report notes that best mode is unique to the United States.⁷⁶ Because of this, it is thought to be unfair to foreign applicants who file for a patent in their home countries where best mode is not required and who then must amend their U.S. patent application to comply with an additional requirement.⁷⁷ Moreover, foreign inventors may be prejudiced by best mode in that it may restrict their ability to claim priority using their previously filed foreign application.⁷⁸ To establish priority rights under a previously filed foreign application the applicant must have fully complied with the U.S. disclosure provisions, including best mode.⁷⁹ A failure to do so results in a later effective filing date, which could result in the loss of U.S. patent rights that, but for the failure to

⁷⁰ See *id.* at 101.

⁷¹ *Id.*

⁷² NRC REPORT, *supra* note 65.

⁷³ *Id.* at 121.

⁷⁴ *Id.* at 117.

⁷⁵ *Id.* at 120–21. Later, the NRC noted that between willful infringement, inequitable conduct, and best mode as the upward drivers of litigation costs, “[b]est mode ranked a distant third.” *Id.* at 123.

⁷⁶ *Id.* at 121; but see Dale L. Carlson et al., *Patent Linchpin for the 21st Century?—Best Mode Revisited*, 45 IDEA 267, 283–84 (2005) (listing countries beyond the United States that require a best mode disclosure).

⁷⁷ NRC REPORT, *supra* note 65, at 121.

⁷⁸ See Donald S. Chisum, *Best Mode Concealment and Inequitable Conduct in Patent Procurement: A Nutshell, a Review of Recent Federal Circuit Cases and a Plea for Modest Reform*, 13 SANTA CLARA COMPUTER & HIGH TECH. L.J. 277, 282 (1997).

⁷⁹ *Id.*

disclose the best mode, would have been granted.⁸⁰

To be sure, best mode supporters have challenged each of these critiques.⁸¹ Nonetheless, the critics prevailed (at least partially) and persuaded Congress to change best mode as a result of patent reform.

III. THE AIA'S CHANGES TO BEST MODE

Underlying the AIA is six years of patent reform history, which played a fundamental role in shaping the AIA's best mode amendments. In 2005, the House of Representatives proposed a bill that would have eliminated best mode.⁸² This bill was referred to the Judiciary Committee, but never made it out of committee.⁸³ The next year the Senate proposed its own reforms, which made no modifications to best mode.⁸⁴ As with the House bill from the previous year, the Senate bill was referred to the Judiciary Committee, but never made it out.⁸⁵

In 2007, the House proposed another patent reform bill, but this time the bill kept best mode a requirement for patentability while removing it as a defense in litigation and cancellation of claims.⁸⁶ The House Judiciary Committee Report reflected concerns that best mode was unique to the United States, inherently subjective, and often technologically irrelevant.⁸⁷ This bill was passed by the House, but was never voted on by the Senate.⁸⁸ The Senate also

⁸⁰ See McDonough, *supra* note 58, at 176.

⁸¹ See generally Carlson, *supra* note 76, at 273–283 (identifying several criticisms of best mode and addressing each in turn); Selinger, *supra* note 4 (defending best mode against critiques specifically made within the 1990 Advisory Commission on Patent Law Reform); see generally Wesley D. Markham, *Is Best Mode the Worst? Dueling Arguments, Empirical Analysis, and Recommendations for Reform*, 51 IDEA 129 (2011) (evaluating the arguments for and against best mode).

⁸² Patent Reform Act of 2005, H.R. 2795, 109th Cong. § 4(d) (2005); Markham, *supra* note 81, at 157.

⁸³ See *H.R. 2795: Patent Act of 2005*, GOVTRACK.US, <http://www.govtrack.us/congress/bill.xpd?bill=h109-2795> (last visited Dec. 30, 2011).

⁸⁴ See Patent Reform Act of 2006, S. 3818, 109th Cong. (2006); Markham, *supra* note 81, at 157.

⁸⁵ See *S. 3818: Patent Reform Act of 2006*, GOVTRACK.US, <http://www.govtrack.us/congress/bill.xpd?bill=s109-3818> (last visited Dec. 30, 2011).

⁸⁶ Patent Reform Act of 2007, H.R. 1908, 110th Cong. §§ 6(f)(1), 13 (2007); Markham, *supra* note 81, at 157.

⁸⁷ See H.R. REP. NO. 110-314, at 43–44 (2007); Markham, *supra* note 81, at 157–58. A best mode could be technologically irrelevant because “best mode applies only to what the inventor knew at the time of filing, not modes of practice that may be created or refined thereafter. Accordingly, by the time of patent litigation, the best mode may already be obsolete.” H.R. REP. NO. 110-314, at 44 (2007).

⁸⁸ See *H.R. 1908: Patent Reform Act of 2007*, GOVTRACK.US, <http://www.govtrack.us/>

introduced a patent reform bill in 2007, which again was silent on best mode.⁸⁹ Yet as discussion and debate on the Senate bill moved forward, members of the Judiciary Committee noted in a press release that they were working with interested parties to develop a workable solution to best mode.⁹⁰ Pressures by competing interests groups had caused Congress to give serious considerations to best mode.⁹¹ Nonetheless, this Senate bill was never voted on by the Senate.⁹²

In 2009, the Senate introduced patent reform legislation with a compromised best mode requirement—required for obtaining a patent, but not a defense in litigation or a basis for cancellation.⁹³ The Senate Judiciary Committee Report was nearly identical to the report accompanying the AIA in that it cited the same critiques of best mode while recognizing the importance of disclosure to the patent system.⁹⁴ Despite the Senate coming around to the proposal originally made by the House in 2007, the House's 2009 patent reform bill did not eliminate best mode as a defense in litigation.⁹⁵ The Senate bill was never voted on by the Senate⁹⁶ and the House bill was referred to committee but never made it out.⁹⁷

Finally, after several years of attempted compromise, patent reform measures were agreed to and the AIA was passed. The change to best mode is found in section 15 of the AIA. This section provides:

(a) In General.—Section 282 of title 35, United States Code, is amended in the second undesignated paragraph by striking paragraph (3) and inserting the following:

“(3) Invalidity of the patent or any claim in suit for failure to comply with—

congress/bill.xpd?bill=h110-1908 (last visited Dec. 30, 2011).

⁸⁹ See Patent Reform Act of 2007, S. 1145, 110th Cong. (2007); Markham, *supra* note 81, at 158.

⁹⁰ Markham, *supra* note 81, at 158–59.

⁹¹ See *generally id.* at 133–35 (noting the split of opinion on best mode between brand name and generic pharmaceutical companies).

⁹² See *S. 1145: Patent Reform Act of 2007*, GOVTRACK.US, <http://www.govtrack.us/congress/bill.xpd?bill=s110-1145> (last visited Dec. 30, 2011).

⁹³ Patent Reform Act of 2009, S. 515, 111th Cong. §§ 5(f), 14 (2009); Markham, *supra* note 81, at 159.

⁹⁴ S. REP. NO. 111-18, at 24–25 (2009); Markham, *supra* note 81, at 159.

⁹⁵ Patent Reform Act of 2009, H.R. 1260, 111th Cong. § 6(h) (2009); Markham, *supra* note 81, at 160.

⁹⁶ See *S. 515: Patent Reform Act of 2009*, GOVTRACK.US, <http://www.govtrack.us/congress/bill.xpd?bill=s111-515> (last visited Dec. 30, 2011).

⁹⁷ See *H.R. 1260: Patent Reform Act of 2009*, GOVTRACK.US, <http://www.govtrack.us/congress/bill.xpd?bill=h111-1260> (last visited Dec. 30, 2011).

“(A) any requirement of section 112, except that the failure to disclose the best mode shall not be a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable; or

“(B) any requirement of section 251.”

(b) Conforming Amendment.—Sections 119(e)(1) and 120 of title 35, United States Code, are each amended by striking “the first paragraph of section 112 of this title” and inserting “section 112(a) (other than the requirement to disclose the best mode)”.

(c) Effective Date.—The amendments made by this section shall take effect upon the date of the enactment of this Act and shall apply to proceedings commenced on or after that date.⁹⁸

In short, as of September 16, 2011, section 15 eliminated best mode as a basis for asserting invalidity, inequitable conduct, or cancellation of any or all claims in a patent while at the same time leaving best mode in section 112 untouched.⁹⁹ As a result, patent applicants must disclose the best mode to receive a patent, but in the event a patent is obtained despite a failure to comply with section 112’s best mode requirement no challenge to the patent rights can be made based on this failure.¹⁰⁰

The legislative history of the AIA’s best mode amendment is relatively sparse, but builds upon the years of unsuccessful attempts at patent reform discussed earlier.¹⁰¹ The House Judiciary Committee Report indicates that the elimination of best mode as a defense to patent infringement was decided based on best mode being unique to the United States, inherently subjective, and often technologically irrelevant.¹⁰² Thus, Congress bought into the

⁹⁸ Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 15, 125 Stat. 284, 328 (2011).

⁹⁹ Compare Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 15, 125 Stat. 284, 328 (2011) (eliminating best mode as a basis for asserting invalidity), with 35 U.S.C. § 112 (2010) (“The specification . . . shall set forth the best mode contemplated by the inventor . . .”).

¹⁰⁰ Paragraph (b) of section 15 makes two conforming amendments to sections 119 and 120 of the Patent Act. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 15, 125 Stat. 284, 328 (2011). The change to section 119 eliminates compliance with the best mode for purposes of priority with a provisional application. *Id.* The change to section 120 eliminates best mode as a requirement for priority in continuing applications. *Id.*

¹⁰¹ See *supra* notes 82–97 and accompanying text.

¹⁰² STAFF OF H. COMM. ON THE JUDICIARY, 112TH CONG., REP. ON THE AMERICA INVENTS ACT 52 (Comm. Print 2011). For support, the committee report cites to arguments made by the National Academy of Sciences, the Biotechnology Industry Organization, the American Intellectual Property Law Association, the Intellectual Property Owners Association, and Pharmaceutical Research and Manufacturers of America. *Id.* at 53 n.54. With respect to technological irrelevance, the report states that “the best mode contemplated at the time of

arguments made by best mode critics, but compromised and refused to go as far as many requested¹⁰³ because Congress also recognized that the required disclosures, including best mode, are an “important tradeoff that underlies the patent laws: the grant of a limited-term monopoly in exchange for disclosure of the invention.”¹⁰⁴

Before passage of the AIA, a patent applicant could file a patent application, conceal the best mode, and if the PTO caught the error, then the application could be rejected.¹⁰⁵ If the PTO failed to catch the concealment, then the risk of having the claims declared invalid or unenforceable during litigation remained.¹⁰⁶

With the AIA’s amendment to best mode, a patent applicant who conceals the best mode runs the same risk of the PTO catching the error and rejecting the application.¹⁰⁷ But if the applicant successfully avoids having this error caught by the PTO, the applicant no longer faces the looming risks of invalidity or unenforceability.¹⁰⁸ As a result, there may now be an incentive to actively conceal the best mode as long as the risks of PTO detection are sufficiently low.

IV. BEST MODE AT THE PTO

The risk of detection by the PTO of a best mode omission is a key component in determining whether applicants will voluntarily

invention may not be the best mode for practicing or using the invention years later.” *Id.* at 52. Of course, as is clear from section 112’s language, the relevant time period for best mode is not the time of invention, but rather the time the patent application is filed. *Id.*; 35 U.S.C. § 112 (2010).

¹⁰³ See 1992 REPORT, *supra* note 63, at 100–01 (urging elimination of best mode); NRC REPORT, *supra* note 65, at 121 (urging same).

¹⁰⁴ STAFF OF H. COMM. ON THE JUDICIARY, 112TH CONG., REP. ON THE AMERICA INVESTS ACT 52 (Comm. Print 2011).

¹⁰⁵ See *id.*

¹⁰⁶ See *id.*

¹⁰⁷ See *id.* (explaining that the best mode requirement is retained for patent prosecution and eliminated only as a defense to invalidity).

¹⁰⁸ One could argue that inequitable conduct based on a failure to disclose the best mode to the PTO is still a viable defense in litigation. The argument is that section 15 of the AIA only prohibits failure to disclose the best mode to be a basis for invalidity or unenforceability and that a defendant is not asserting failure to disclose the best mode as the direct basis; instead, the defendant is asserting inequitable conduct before the PTO as the direct basis. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 15, 125 Stat. 284, 328 (2011). This argument is unlikely to prevail. First, section 15 does not draw a distinction between failure to disclose the best mode as a direct basis and as an indirect basis. See *id.* Second, Congress was aware that best mode violations were frequently styled as inequitable conduct claims and this likely serves as the reason why section 15 prohibits not just invalidity based on best mode violations, but also unenforceability—the result of a finding of inequitable conduct.

comply with section 112's best mode requirement. But the risk of rejection at the PTO for failure to disclose the best mode is almost nonexistent.¹⁰⁹

The difficulty of detection at the PTO is the subjective prong of the two-part best mode test.¹¹⁰ Rarely is there evidence before the patent examiner that would permit the examiner to conclude that the inventor, at the time of filing the application, actually knew of a better mode of practicing the claimed invention.¹¹¹ In fact, the Manual of Patent Examining Procedure ("MPEP") tells examiners that they "should assume that the best mode is disclosed in the application, unless evidence is presented that is inconsistent with that assumption"¹¹² and notes that "[i]t is extremely rare that a best mode rejection properly would be made in ex parte prosecution."¹¹³

This presumption of compliance with the best mode is not to say that a rejection for failure to disclose the best mode is impossible.¹¹⁴ In theory, this type of evidence could be discovered during prosecution while making an argument to the examiner about the underlying technology or in reference to an office action concerning another requirement of patentability.¹¹⁵

However, a recent study reviewed published decisions of the Board of Patent Appeals and Interferences ("BPAI") from 1981 through 2009.¹¹⁶ The author found only six BPAI decisions involving an examiner rejecting claims because of a failure to satisfy the best mode.¹¹⁷ Of those six cases, the BPAI reversed the examiner's best mode rejection in five cases and did not reach the issue in the sixth case.¹¹⁸ Of course, the limitation of this study is

¹⁰⁹ Matthew J. Dowd et al., *Nanotechnology and the Best Mode*, 2 NANOTECHNOLOGY L. & BUS. 238, 249 (2005) ("The PTO rarely issues a rejection for failure to comply with the best mode.").

¹¹⁰ *Id.* at 244–45 ("[A]scertaining the best mode or even the existence of a best mode, poses difficulties—especially years later.").

¹¹¹ U.S. DEP'T OF COMMERCE, U.S. PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 2165.03 (8th ed., 8th rev. 2010) ("The information that is necessary to form the basis for a rejection based on the failure to set forth the best mode is rarely accessible . . .").

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.* ("The information that is necessary to form the basis for a rejection . . . is generally uncovered during discovery procedures in . . . *inter partes* proceedings.").

¹¹⁵ Steven B. Walmsley, *Best Mode: A Plea to Repair or Sacrifice This Broken Requirement of United States Patent Law*, 9 MICH. TELECOMM. & TECH. L. REV. 125, 158 (2002) ("Such evidence . . . might emerge during prosecution of the application, perhaps in a technical argument to the examiner . . .").

¹¹⁶ Markham, *supra* note 81, at 152.

¹¹⁷ *Id.*

¹¹⁸ *Id.*

that not every rejection by an examiner is appealed to the BPAI.¹¹⁹ Nonetheless, given the presumption of compliance with the best mode in the MPEP¹²⁰ and the infrequent number of appeals relating to best mode it is not a large leap of faith to presume that the risk of detection at the PTO for failure to disclose the best mode is, for all intents and purposes, nonexistent.

V. EXTINCTION OR INNOVATIVE ENFORCEMENT?

Given that enforcement of best mode is now off the table for purposes of invalidity, unenforceability, and cancellation and there is essentially no risk of detection at the PTO for failure to disclose the best mode, the obvious question is: What is best mode's fate? We are at a fork in the road of best mode's journey. One path leads to the complete elimination of best mode; the other leads to innovative means of enforcement.

A. Complete Elimination of the Best Mode

Presumably Congress realized that the PTO had effectively abandoned best mode during examination and that the AIA's best mode amendments would leave this requirement without any teeth.¹²¹ Given the several years of back and forth proposals between the House and Senate about whether to completely eliminate best mode or remove the commonly used enforcement mechanisms, it could be that the AIA was simply the first step in a two-step reform.

The second step in this process is to completely eliminate best mode as a requirement for patentability. Giving the stakeholders an opportunity to digest the changes made by the AIA may make eventual elimination easier to accept down the road.

Of course—knowing that the PTO does not actually enforce best mode—it seems odd that best mode proponents would have been satisfied with the AIA's compromise. There are other points along the spectrum of best mode reform that would perhaps have been

¹¹⁹ *Id.* (acknowledging the study's limitation to appellate data because the PTO does not specifically track best mode rejections by examiners).

¹²⁰ MANUAL OF PATENT EXAMINING PROCEDURE, *supra* note 111, § 2165.03.

¹²¹ See A. Christal Sheppard, *Because Inquiring Minds Want to Know—Best Mode—Why is it One-Sided?*, PATENTLY-O BLOG (Sept. 28, 2011), <http://www.patentlyo.com/patent/2011/09/guest-post-because-inquiring-minds-want-to-know-best-mode-why-is-it-one-sided-.html> (“This result was absolutely contemplated by the decision makers.”).

more palatable to best mode supporters.¹²² Under this interpretation, advocates of eliminating best mode have achieved—as a practical matter—what they set out to accomplish, while letting best mode supporters preserve best mode as a mere keepsake.

B. Innovative Enforcement

Congress's piecemeal elimination of best mode is an unsatisfying explanation. If Congress really intended to abolish best mode, then it easily could have done so, especially given how close the AIA comes to this. Another possible interpretation of what Congress was doing in the AIA is that it was sending a signal to the PTO to be more diligent about examining the best mode in patent applications. To do so, the PTO will need to create new methods of enforcement or use existing tools that have been underutilized.

1. The Basis—Rule 1.105

One tool the PTO could employ to enforce best mode is to use Requirements for Information (“RFIs”) under Rule 1.105.¹²³ Rule 1.105 provides, in relevant part, that in the course of examining an application, the examiner may require the applicant, patent attorney or agent, and associates to submit “such information as may be reasonably necessary to properly examine or treat the matter.”¹²⁴

The bounds of the RFIs have been liberally construed by the Federal Circuit.¹²⁵ In *Star Fruits S.N.C. v. U.S.*, the Federal Circuit held an RFI sent to an applicant seeking “any information available regarding the sale or other public distribution of the claimed plant variety anywhere in the world” was proper.¹²⁶ The applicant refused to provide the information because it believed the information requested “was ‘not material to the patentability of the [plant] variety.’”¹²⁷ As a result, the application was deemed abandoned and the applicant brought suit alleging that the director of the PTO abused his discretion in denying the applicant's

¹²² For example, best mode reform could have: (1) eliminated it for invalidity, but not inequitable conduct; (2) allowed best mode to be used in cancellations; (3) required applicants to update the best mode before the patent issued; or (4) required patentees to update the best mode upon renewal.

¹²³ 37 C.F.R. § 1.105 (2011).

¹²⁴ *Id.* § 1.105(a)(1).

¹²⁵ See *Star Fruits S.N.C. v. United States*, 393 F.3d 1277, 1281–83 (Fed. Cir. 2005).

¹²⁶ *Id.* at 1280.

¹²⁷ *Id.*

challenge to the RFI.¹²⁸ The Federal Circuit rejected the applicant's argument and held that the PTO can request information under Rule 1.105 "that does not directly support a rejection."¹²⁹ In fact, the court continued in its explanation of the scope of RFIs and stated "that 'such information as may be reasonably necessary to properly examine or treat the matter,'" as specified in Rule 1.105 "contemplates information relevant to examination either procedurally or substantively. It includes a zone of information beyond that defined by section 1.56 as material to patentability, and beyond that which is directly useful to support a rejection or conclusively decide the issue of patentability."¹³⁰ Thus, *Star Fruits* gives the PTO wide authority to inquire into areas that otherwise might appear to be tangential to patentability.

Armed with this broad authority, the PTO could, as a standard practice, request an applicant or patent attorney (or agent) to indicate whether the inventor had a best mode, and if so, to point out what particular language in the specification discloses it. Although this runs counter to the decisions in cases holding that the applicant need not specifically identify the best mode,¹³¹ this type of RFI would not necessarily run afoul of the PTO's power under 1.105 because this information could be useful in concluding that the objective prong of the best mode test was satisfied.

Perhaps knowing that the PTO will specifically inquire into best mode via an RFI will alleviate the problem of applicants failing to disclose the best mode. If applicants, their patent attorneys, or agents know that they will be asked about whether best mode has been complied with, then they may be more willing to initially disclose because of the possible sanctions for failing to disclose, which are discussed in the following sections.¹³²

Also, in theory, with this additional information provided to the PTO, the examiner could engage in a more thorough best mode analysis (i.e. determining whether the disclosed best mode satisfies the objective prong of the test). Of course, for the dishonest applicant, patent attorney, or agent, this latter result is most certainly unlikely to occur. For them, the means of enforcement described below could apply.

¹²⁸ *Id.*

¹²⁹ *Id.* at 1281–82.

¹³⁰ *Id.* at 1282.

¹³¹ *See, e.g.,* *Randomex, Inc. v. Scopus Corp.*, 849 F.2d 585, 589 (Fed. Cir. 1988).

¹³² *See infra* Parts V.B.2 and V.B.3.

2. Criminal Means

One method of enforcing best mode could be through the federal False Statements Statute (“FSS”). The FSS provides, in relevant part:

[W]hoever, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowingly and willfully . . . makes any materially false, fictitious, or fraudulent statement or representation . . . shall be fined under this title, imprisoned not more than 5 years . . . or both.¹³³

If the patent examiner submits an RFI to the patent applicant requesting that the applicant indicate whether he or she has a best mode, and if so, to particularly point out where in the specification it is, then falsely stating that no best mode exists or that the referenced language in the specification is the best mode would constitute a violation of the FSS. The response to the RFI would constitute a false statement.

Materiality is determined by whether the statement is capable of influencing or affecting a federal agency.¹³⁴ The false statement about the best mode or lack thereof would be material in that disclosure of the best mode is still a requirement for patentability under section 112 and a false statement to avoid making a required disclosure would certainly be capable of influencing or affecting the PTO’s decision to grant or reject a patent application.

The knowledge requirement for a violation of the FSS “relates only to the defendant’s knowledge and intent that the statements [the defendant] made to a government entity were false or were made with the conscious purpose of evading the truth.”¹³⁵

With respect to best mode disclosures, an applicant who falsely responded to an RFI, indicating that the applicant did not know of a best mode while in fact having one or by pointing out inferior modes in the specification would, by definition, demonstrate knowledge that the statement was false. This is in contrast to the scenario in which the applicant files the patent application and simply fails to disclose the best mode or to specifically point out where in the specification it lies. In that case, the applicant would be in a better

¹³³ 18 U.S.C. § 1001(a)(2) (2010).

¹³⁴ *See, e.g.*, *United States v. Serv. Deli Inc.*, 151 F.3d 938, 941 (9th Cir. 1998) (discussing what constitutes materiality); *United States v. Puente*, 982 F.2d 156, 159 (5th Cir. 1993) (discussing same); *U.S. v. Brittain*, 931 F.2d 1413, 1415 (10th Cir. 1991) (discussing same).

¹³⁵ *U.S. v. Lupton*, 620 F.3d 790, 806 (7th Cir. 2010).

position to assert that the applicant did not make a false statement at all or that the application itself, even if a statement, was not made with a conscious purpose of evading the truth because the applicant was simply complying with existing patent law.¹³⁶

The final requirement for a violation of the FSS requires that the statement be made in any matter within the jurisdiction of the executive, legislative, or judicial branch of the U.S. government.¹³⁷ This jurisdictional requirement is satisfied when the federal agency “has the power to exercise authority in a particular situation,” as opposed to “matters peripheral to the business of that body.”¹³⁸ The PTO is certainly an executive branch agency¹³⁹ and undoubtedly the PTO has the power to exercise authority to grant patents.¹⁴⁰

In sum, if the PTO were to use RFIs to inquire into the best mode, then this would provide a foundation for referring criminal prosecutions to the Department of Justice. There are, of course, limitations to this method of enforcement,¹⁴¹ but even the threat of criminal prosecution may help chill failures to disclose the best mode.

3. Ethical Means

In addition to criminal prosecutions under the FSS, enforcement of best mode concealments might be done via disciplinary action against the applicant’s patent attorney or agent. In short, this technique would shift the risk from the applicant to the patent attorney or agent and force that individual to risk his or her license to practice before the PTO or, in the case of patent attorneys, to practice law generally. Presumably, most patent attorneys or agents would be unwilling to take this risk on behalf of their clients’ abilities to keep the best mode a secret.

Patent Office Rule 1.56 states that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith.”¹⁴² This duty requires the individual to

¹³⁶ See *Randomex, Inc. v. Scopus Corp.*, 849 F.2d 585, 589 (Fed. Cir. 1988) (failing to specifically point out which mode is the best is not a violation of section 112).

¹³⁷ 18 U.S.C. § 1001(a) (2010).

¹³⁸ *U.S. v. Davis*, 8 F.3d 923, 929 (2nd Cir. 1993) (quoting *U.S. v. Rodgers*, 466 U.S. 475, 479 (1984)).

¹³⁹ Clarisa Long, *The PTO and the Market for Influence in Patent Law*, 157 U. PA. L. REV. 1965, 1973-74 (2009).

¹⁴⁰ 35 U.S.C. §§ 1-2 (2010).

¹⁴¹ See *infra* Part V.B.4.

¹⁴² 37 C.F.R. § 1.56(a) (2011).

disclose to the PTO all information known to that individual to be material to patentability.¹⁴³ Failure to do so constitutes a violation of the patent attorney's or patent agent's ethical duty not to "engage in disreputable or gross misconduct," "conduct involving dishonesty, fraud, deceit, or misrepresentation," or "conduct that is prejudicial to the administration of justice."¹⁴⁴

A violation of the duty of candor under Rule 1.56, like with a violation of the FSS, may result if a patent attorney or patent agent knows the applicant has a best mode, but fails to disclose it or fails to specifically designate it in response to an RFI.¹⁴⁵ This violation may subject the patent attorney or patent agent to discipline before the Office of Enrollment and Discipline.¹⁴⁶

Beyond the duty of candor in Rule 1.56, other PTO rules could be used by the PTO in an attempt to enforce best mode disclosures. For example, Rule 10.85 prohibits patent attorneys and agents from "[k]nowingly making a false statement of law or fact"¹⁴⁷ or counseling or assisting a client in conduct known to be fraudulent.¹⁴⁸ Moreover, patent attorneys and agents have a duty to promptly call upon the client to rectify a fraud perpetrated upon the PTO and if the client fails to do so, then to reveal the fraud to the PTO, in the event the attorney or agent receives information clearly establishing such fraudulent conduct.¹⁴⁹ These PTO disciplinary rules also have similar counterparts under the state disciplinary rules, which would be relevant if the PTO were to refer a matter to the relevant jurisdiction.¹⁵⁰

If the PTO were to use RFIs as described above,¹⁵¹ this would force patent attorneys and agents to consult with their clients and

¹⁴³ *Id.*

¹⁴⁴ *Id.* §§ 10.23(a), (b)(4)–(5).

¹⁴⁵ See Tamsen Valoir & David Hricik, *Patents and Trademarks: The Duty of Good Faith*, 89 J. PAT. & TRADEMARK OFF. SOC'Y 287, 292 (2007).

¹⁴⁶ See *id.* at 293; 37 C.F.R. §§ 10.20(b), 10.23(a), (c)(10) (2011).

¹⁴⁷ 37 C.F.R. § 10.85(a)(5) (2011).

¹⁴⁸ *Id.* § 10.85(a)(7).

¹⁴⁹ *Id.* § 10.85(b)(1).

¹⁵⁰ See MODEL RULES OF PROF'L CONDUCT R. 3.3(a)(1) (2011) (prohibiting false statements of material fact); *id.* R. 3.3(a)(3) (prohibiting an attorney from offering evidence known to be false); *id.* R. 3.3(b) (requiring an attorney who knows the client is engaging or has engaged in fraudulent conduct in an adjudicative proceeding to take reasonable remedies, including disclosure if necessary); *id.* R. 3.3(d) ("[A] lawyer shall inform the tribunal of all material facts known to the lawyer that will enable the tribunal to make an informed decision, whether or not the facts are adverse."); see also *id.* R. 1.13(a)–(b) (requiring attorneys representing organizations to report to a higher authority any conduct that could result in a violation of a legal obligation or that could result in substantial injury to the organization).

¹⁵¹ See *supra* Part V.B.1.

attempt to force them to confront the best mode issue specifically or at least make it more difficult to bury their heads in the sand. And similar to enforcement in the criminal context, if the PTO were to use RFIs to inquire into best mode, then this would provide a foundation for disciplining patent attorneys and agents who knew about the applicant's attempts to conceal the best mode and conspired with them or failed to take corrective action. As with the criminal prosecution method of enforcement, there are, of course, limitations to this method,¹⁵² but the threat of disciplinary action against patent attorneys or agents may help reduce concealment of the best mode.

4. Limitations

Despite the potential for the PTO to use RFIs in conjunction with criminal and ethical techniques to enforce best mode, there are several limitations to these techniques, which render them ineffective or otherwise unwise options for enforcement.

The first limitation on both the criminal and ethical methods of enforcement is the difficulty of discovering evidence of a violation. Under the FSS, knowledge of the false statement is a necessary element.¹⁵³ Under the disciplinary rules, the attorney's or agent's knowledge about the applicant's knowledge is required.¹⁵⁴ Before the AIA, discovery of best mode violations were uncovered in the pretrial discovery process during litigation, as defendants would seek to invalidate claims for failure to disclose the best mode.¹⁵⁵

Upon passage of the AIA, failure to disclose the best mode is no longer a basis to assert invalidity or unenforceability.¹⁵⁶ As a result, a defendant's ability to seek information related to the best mode is severely hampered. Given that one of the purposes of the AIA was to reduce the costs of litigation, it seems entirely possible that a patentee could successfully object to discovery requests relating to best mode and obtain a protective order limiting discovery.¹⁵⁷ Therefore, the likelihood of the PTO, its Office of Enrollment and Discipline, the DOJ, or a state disciplinary board being made aware of the violation is quite low.¹⁵⁸

¹⁵² See *infra* Part V.B.4.

¹⁵³ See *supra* note 135 and accompanying text.

¹⁵⁴ See *supra* notes 143–49 and accompanying text.

¹⁵⁵ See NRC REPORT, *supra* note 65, at 121.

¹⁵⁶ Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 15, 125 Stat. 284, 328 (2011).

¹⁵⁷ See H.R. REP. NO. 112-98, at 40 (2011).

¹⁵⁸ It would not be impossible to discover this information. Discovery of best mode

The second limitation to the criminal and ethical methods of enforcement is the statutes of limitation. Prosecution for a violation of the FSS must commence within five years after the offense has been committed.¹⁵⁹ Therefore, even if evidence were uncovered to show that the applicant, patent attorney, or agent had knowingly made a materially false statement regarding best mode, it very well might be too late to be useful. Moreover, an argument to toll the statute of limitations until discovery of the false statement will not succeed. In *U.S. v. Dunne*, the Tenth Circuit rejected such an argument by the government and held that “[t]he ability of the government . . . to learn of a particular offense is not a relevant factor.”¹⁶⁰

The statute of limitations for the ethical method of enforcement is less problematic, but still poses a problem. The AIA amends the limitations period so that any disciplinary actions must be brought before the earlier of ten years from the date of the misconduct or one year after the date the misconduct is made known to the PTO.¹⁶¹ Although the limitations period is longer for disciplinary actions and contains a discovery rule provision, the discovery rule provision is capped at ten years after the misconduct.¹⁶² As a result, unless discovery of evidence of a best mode concealment takes place relatively quickly, the applicable statutes of limitation will severely limit the criminal and ethical methods of enforcement.

The third limitation relates to ethical enforcement. The threat of disciplinary sanctions from the PTO’s Office of Enrollment and Discipline or state disciplinary commission is limited to lawyers (and patent agents in the case of the PTO) who *know* of their client’s false statement in response to the RFIs.¹⁶³ For those attorneys who legitimately have no knowledge of the applicant’s belief about the best mode or those who strategically position themselves to avoid such knowledge the threat of disciplinary action is ineffective at

violations could be found in connection with a claim for a Walker Process violation of the antitrust laws or through inadvertent disclosure in connection with legitimate discovery on another issue of patentability or claim interpretation. *See generally* Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172 (1965).

¹⁵⁹ *See* 18 U.S.C. § 3282(a) (2010); *United States v. Smith*, 740 F.2d 734, 736 (9th Cir. 1984).

¹⁶⁰ *United States v. Dunne*, 324 F.3d 1158, 1165 (10th Cir. 2003).

¹⁶¹ Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(a)(6) 125 Stat. 284, 291 (2011). Previously, ethical violations before the PTO was subject to the five-year statute of limitations of 28 U.S.C. § 2462. *See Scheinbein v. Dudas*, 465 F.3d 493, 496 (Fed. Cir. 2006).

¹⁶² Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(a)(6) 125 Stat. 284, 291 (2011).

¹⁶³ *See supra* notes 142-50 and accompanying text.

forcing the best mode to be disclosed.¹⁶⁴

The fourth limitation is the chilling effect that the threat of enforcement may have on legitimate conduct. This limitation applies to both methods of enforcement. The heart of enforcement by criminal prosecution or ethical disciplinary action lies with the power of these sanctions to chill criminal or unethical conduct and cause actors to err on the side of disclosing rather than concealing. And although it may be that some less desirable behavior will be chilled by these threats of enforcement, these threats may also tend to chill legitimate conduct. Over-enforcement or even the threat of criminal prosecution or ethical disciplinary action could result in fewer applications (and consequently less disclosure). Depending on the balance struck, these enforcement measures could undermine the very purpose of the patent system—disclosure to promote the progress of the useful arts.¹⁶⁵

Finally, although not really a limitation on the criminal and ethical methods of enforcement, is the point that even in the absence of any enforcement mechanism many applicants may still disclose the best mode.¹⁶⁶ For example, although prior user rights have been strengthened under the AIA,¹⁶⁷ an applicant may still want to disclose their best mode so it will serve as prior art to prevent a subsequent applicant from being able to obtain a patent claiming that mode.¹⁶⁸ In addition, applicants may voluntarily disclose the best mode so they can attempt to narrow their claims in the event their broader claims are later invalidated.

In sum, although there may be some attractive features of using criminal or ethical means to enforce best mode disclosures, the limitations of these means, the costs of implementing them, and the already existing incentives to disclose render both methods largely ineffective.

VI. CONCLUSION

The erosion of best mode has been in the works for a number of

¹⁶⁴ The Model Rules of Professional Conduct state that knowledge may be inferred from the circumstances. MODEL RULES OF PROF'L CONDUCT R. 1.0 (2010) (defining "knowingly," "known," and "knows"). Knowledge inferred from the circumstances could, in theory, be used to prevent an attorney from avoiding discipline by strategically positioning themselves to avoid actual knowledge. In reality, however, this is difficult to effectuate.

¹⁶⁵ U.S. CONST., art. I, § 8, cl. 8.

¹⁶⁶ Chisum, *supra* note 78, at 318 n.186.

¹⁶⁷ Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(a)(6), 125 Stat. 284, 292 (2011).

¹⁶⁸ See Chisum, *supra* note 78, at 318 n.186.

years. The AIA has resulted in best mode remaining as a requirement for patentability, but has eliminated the commonly used means of enforcement—litigation to show invalidity or unenforceability. Up until now, and for good reason, the PTO has failed to take on the responsibility of policing best mode disclosures.

But by removing the invalidity, unenforceability, and cancellation arrows from the quiver of best mode enforcement while still keeping best mode as a requirement for patentability, Congress may have been attempting to shift the responsibility of enforcement to the PTO. And although tools exist for the PTO to enforce best mode—criminal and ethical means of enforcement—these are ineffective methods and will likely not result in additional best mode disclosures. In fact, if these measures were adopted, a potential may exist for less disclosure than what would otherwise result.

In the end, if Congress believes it made the right decision in the AIA concerning best mode, then Congress should simply bite the bullet and formally eliminate best mode as a requirement for patentability. Of course it is difficult to jettison such a long-held requirement, but in the end, keeping the requirement without effective enforcement mechanisms does not make much sense.