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Is "Best Mode" the Worst? Dueling Arguments, Empirical Analysis, and Recommendations for Reform

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ABSTRACT

The “best mode” requirement, which mandates that an inventor disclose in her patent application the best way to practice her invention, has become a polarizing force as Congress endeavors to comprehensively revamp U.S. patent law. In this article, I examine the “best mode” requirement through a variety of lenses. In doing so, my ultimate goal is to recommend the ideal course of action for “best mode” reform – to fix “best mode,” if it is indeed broken, or to scuttle it if it is beyond repair. To begin, I set forth and evaluate the arguments advanced by both proponents and opponents of the “best mode” requirement, paying particular attention to the viewpoints of neutral parties such as academics, governmental actors, and quasi-governmental actors. I find that a significant majority of both interested and neutral parties favor eliminating or substantially modifying the “best mode” requirement. I then shift from the realm of the qualitative to that of the quantitative, analyzing recent decisions in patent cases from U.S. District Courts, the Court of Appeals for the Federal Circuit, and the Board of Patent Appeals and Interferences. Unfortunately for “best mode” supporters, my analysis shows that, in practice, “best mode” only plays an important role in a small percentage of patent lawsuits and has de minimis impact on the patent procurement process. I conclude by recommending a radical change to the “best mode” requirement: simultaneously strengthening “best mode” and eliminating it as a defense in patent lawsuits. This solution provides the optimal incentives to minimize strategic behavior by both patentees and accused infringers, reduce litigation costs, and improve meaningful disclosure in patent applications, thereby promoting innovation.
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I. INTRODUCTION

The Constitution of the United States empowers Congress “[t]o promote the Progress of Science and useful Arts..., by securing for limited Times to...Inventors the exclusive Right to their...Discoveries.”1

In pursuit of that goal, Congress is currently working to reform the patent system in the United States, “both to correct flaws in the system that have become unbearable, and to accommodate changes in the economy and litigation practices in the patent realm,” so that the United States can “maintain its competitive edge in the global economy.”2

As part of this comprehensive patent reform effort, Congress is reevaluating the “best mode” requirement,3 which mandates that patent specifications “set forth the best mode contemplated by the inventor of carrying out his invention.”4 At this time, it remains unclear whether

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1 U.S. CONST. art. I, § 8.


3 See S. REP. NO. 111-18, at 24-25.

Congress will keep the “best mode” requirement intact, eliminate it entirely, or alter the requirement in some substantial way. The goal of this article is to evaluate the merits of the “best mode” requirement using a variety of methods, including empirical analysis, and to recommend to Congress an ideal course of action with respect to “best mode.”

The policy rationale underlying the “best mode” requirement is straightforward. It purportedly “creates a statutory bargained-for-exchange, in which the patentee obtains the right to exclude others from practicing the claimed invention for a certain period of time, and the public receives knowledge of the preferred embodiments for practicing the claimed invention.”5 By forbidding inventors from disclosing only their second-best embodiment and keeping the best for themselves,6 the “best mode” requirement realizes basic notions of fairness.

By way of example, suppose a chemist develops a new method of making a particular drug. Based on her research, she knows that adding water to the drug production process increases both the amount and quality of the resulting drug. In other words, the process works fine without water, but adding water yields the best results. If the chemist applies for a patent on her drug production process, “best mode” requires her to disclose the “add water” step in her patent application. The chemist has a strong incentive to keep the “add water” step secret, namely to gain a competitive advantage in the pharmaceutical manufacturing marketplace. The “best mode” requirement counteracts

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5 Eli Lilly & Co. v. Barr Labs., Inc., 251 F.3d 955, 963 (Fed. Cir. 2001).

that incentive. Additionally, disclosure of the “best mode” benefits the public because it provides a strong platform for future innovation. By reading the inventor’s patent, other chemists will learn that adding water might boost drug production and will focus their future research accordingly. Without the “best mode” requirement, the original chemist might deprive these second generation inventors of valuable knowledge, thus inducing the second generation inventors to waste time and money to learn what the first chemist already knows.

With the ultimate fate of “best mode” hanging in the balance, industry leaders, interest groups, and academics have hotly debated the merits of the “best mode” requirement. Two diametrically opposed


camps have emerged from this debate. On the one hand, a group I shall call “pro-big business” advocates eliminating the “best mode” requirement altogether. On the other, a group spearheaded by generic pharmaceutical manufacturers strongly supports retaining “best mode” in its current form. I shall call this group of “best mode” supporters “generic plus others.”

Led by multinational behemoths including Eli Lilly, General Electric, and 3M, the “pro-big business” camp complains that litigation over “best mode,” especially pre-trial discovery, is too costly because it focuses on the inventor’s state of mind.

To be sure, patent litigation is expensive and the cost keeps rising. The median litigation cost for a patent infringement suit in 2009 was $2.5 million if $1 to $25 million was at risk and $5.5 million if more than $25 million was at risk, up from $2.0 million and $4.5 million, respectively, in 2005. Additionally, there is some evidence that

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14 *AIPLA, REPORT OF THE ECONOMIC SURVEY 29* (2009)
litigants may be using “best mode” as a procedural tactic to enlarge the scope of discovery in patent lawsuits. In *Phillip M. Adams & Assocs. v. Dell, Inc.*, Dell used a “best mode” defense to force Adams to turn over its trade secret source code. The court denied Adams’ request for a protective order, ruling that “Adams’ source code is also relevant to the issue of whether a best mode exists and was disclosed in Adams’ patents.” Similarly, in *Memry Corp. v. Kentucky Oil Tech*, Memry claimed that KOT’s trade secrets inherently overlapped with the “best mode” of practicing KOT’s patented inventions and therefore the trade secrets should be discoverable. The court credited this argument, granting Memry’s motion to compel and denying KOT’s motion for a protective order. These recent cases lend credence to the proposition that some litigants use “best mode” as a tool to abuse discovery in patent lawsuits.

The “pro-big business” group also claims that the “best mode” provision is redundant because it provides minimal incentive for inventors to disclose more than that which is already required by the “written description” and “enablement” provisions of 35 U.S.C. § 112. If patent applicants disclose the invention “in such full, clear, concise,

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16 *Id.* at *23.


18 *See Id.*

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” it, as necessitated by the “written description” and “enablement” prongs of 35 U.S.C. § 112, shouldn’t that be a good enough starting point for the next generation of inventors?

Finally, the “pro big business” camp hangs its hat on harmonization, noting that other countries do not have a “best mode” requirement in their patent laws. If other countries don’t require patent applicants to disclose the best way they know how to practice their inventions, why should we?

On the other side of the coin, the “generic plus others” group extols the virtues of “best mode.” Led by generic giants such as Barr Laboratories, as well as the Generic Pharmaceutical Association, this pro-“best mode” camp focuses on the value of “best mode” in promoting disclosure and innovation. According to this group, the public benefits from knowing the “best mode” because it does not have to “reinvent” a patented invention after the patent expires.

The “generic plus others” group also warns that eliminating

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23 See id.
“best mode” will lead to undesirable strategic behavior. In particular, the “best mode” requirement guards against any undeserved extension of the patentee’s monopoly,\textsuperscript{24} prevents companies from keeping the “best mode” a secret for commercial or strategic reasons,\textsuperscript{25} and ensures that patent applicants act in good faith when filing an application.\textsuperscript{26} Finally, and not surprisingly, the “generic plus others” group candidly argues that eliminating “best mode” will have a detrimental effect on the generic drug industry. Specifically, generic drug companies rely on brand patent disclosures to develop generic drugs, and eliminating the “best mode” requirement could reduce disclosure and have a negative impact on generic drug development.\textsuperscript{27} Of course, it is quite possible that the motives of the generic drug industry are not so pure. For example, during a patent litigation dispute over a branded drug, generic drug companies may try to invalidate the branded drug patent by proving that the patent holder did not comply with the “best mode” requirement, thus clearing the way for early generic market entry.

So what should Congress do about the “best mode” requirement? Both the “pro-big business” and “generic plus others”

\begin{footnotesize}
\begin{enumerate}
\item See id.

\item Perspective on Patents, Harmonization and Other Matters: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary, 109th Cong. (2005) (statement of Christine J. Siwik, Outside Counsel, Barr Laboratories, Inc.).

\item See Patent Revision: Hearing on H.R. 1908 Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 110th Cong. (2007) (statement of Anthony Peterman, Director, Dell, Inc.).

\item See Perspective on Patents, Harmonization and Other Matters: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary, 109th Cong. (2005) (statement of Christine J. Siwik, Outside Counsel, Barr Laboratories, Inc.).
\end{enumerate}
\end{footnotesize}
camps seem to present persuasive arguments that cut in completely different directions, so how can Congress determine the optimal course of action?

In this article, I suggest using empirical analysis to help point Congress in the right direction. Recognizing that the “best mode” requirement has both costs and benefits, but that those costs and benefits are largely immeasurable, I seek to evaluate the practical significance of the “best mode” requirement in both patent prosecution and patent litigation. Based on a study by John Allison and Mark Lemley, as well as my own independent research and analysis of recent U.S. District Court decisions, Federal Circuit decisions, and United States Patent and Trademark Office (USPTO) Board of Patent Appeals and Interferences (BPAI) decisions, it appears that legitimate “best mode” disputes are relatively rare, “best mode” challenges typically fail at the district court level, the Federal Circuit is extremely unlikely to find a “best mode” violation, and enforcement of the “best mode” requirement by the USPTO during the patent examination process is essentially unheard of. In other words, “best mode” has relatively little practical impact on the outcome of patent lawsuits and de minimis impact on patent prosecution. These results strongly suggest that Congress should, at the very least, modify the “best mode” requirement in some fashion.

In examining various options for “best mode” reform, I place particular emphasis on each option’s potential to discourage strategic behavior by both a patentee and an accused infringer, minimize litigation costs, and promote meaningful disclosure by the patentee to the public,

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thereby spurring innovation. I conclude that keeping the “best mode” requirement as presently formulated, i.e., the position taken by the “generic plus others” camp, is the worst course of action because it encourages strategic behavior by both patentees and accused infringers, does nothing to curtail high litigation costs, and only marginally enhances effective disclosure. However, getting rid of “best mode” entirely, i.e., the option supported by the “pro-big business” camp, is also undesirable because doing so would likely increase strategic behavior on the part of patentees and eliminate whatever minimal disclosure benefits “best mode” currently provides. If Congress’ primary concern is maximizing disclosure to facilitate innovation, it should strengthen the “best mode” requirement in order to materially improve the quality of disclosure in patent applications. Alternatively, if Congress’ primary concern is reducing litigation costs, it should keep the “best mode” requirement on the books to discourage strategic behavior and simultaneously remove “best mode” as a defense in patent litigation. Recognizing that these two admirable goals are not mutually exclusive, I recommend simultaneously strengthening the “best mode” requirement and eliminating it as a defense in patent litigation.

The article proceeds as follows. Section II presents a brief overview of the “best mode” requirement as it currently stands in U.S. patent law. Section III elaborates on the major arguments made by proponents of “best mode” to keep the requirement and by opponents of “best mode” to eliminate it. While I consider arguments by interested parties, i.e., companies and individuals who actively participate in obtaining and/or litigating patents, and the organizations and lawyers who represent them, I pay particular attention to the views of neutral
parties such as academics, governmental actors, and quasi-governmental actors. Although the “best mode” requirement has a substantial number of supporters, the majority of both interested and neutral parties advocate either eliminating or significantly altering “best mode.” In other words, “pro-big business” appears to be winning the “best mode” debate over “generic plus others.” Section IV posits additional arguments that might be made in favor of keeping the “best mode” requirement, focusing on the legitimate benefits of “best mode” in patent litigation such as keeping the patentee honest, building a valid and understandable theme, and reminding the judge and the jury that the USPTO is not perfect. Section V discusses the results of my empirical study on the practical effects of “best mode” in which I conclude that “best mode” plays only a small role in both patent prosecution and patent litigation. Section VI includes an evaluation of potential avenues for “best mode” reform, as well as the rationale behind my radical suggestion to simultaneously strengthen “best mode” and eliminate it as a defense in patent lawsuits. Section VII tracks the confused evolution of congressional views on “best mode,” beginning with the failed Patent Reform Act of 2005\(^\text{29}\) and concluding with both the House version\(^\text{30}\) and the Senate version\(^\text{31}\) of the failed Patent Reform Act of 2009. As evidenced by Congress’ ever-changing position on “best mode,” the ultimate fate of the requirement is anything but settled.


II. "BEST MODE" AS IT CURRENTLY STANDS

35 U.S.C. § 112, first paragraph, sets out the “best mode” requirement of U.S. patent law:

“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” (emphasis added).

Section 112 contains both an “enablement” requirement and a separate “best mode” requirement. While the “enablement” requirement “ensures that a specification shall disclose an invention in such a manner as will enable one skilled in the art to make and utilize it,” “best mode” requires an “inventor to disclose the best mode contemplated by him, as of the time he executes the application, of carrying out the invention.”

The Federal Circuit has articulated, and recently affirmed, a two-pronged test to determine whether an inventor has complied with the “best mode” requirement. The first prong is subjective, inquiring whether the inventor, in fact, possessed a best mode of carrying out the invention at the time of filing the application. The second prong is objective, asking whether “the written description disclosed the best

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32 Bayer AG v. Schein Pharms., Inc., 301 F.3d 1306, 1314 (Fed. Cir. 2002).

33 Id.


35 Id.
mode such that one reasonably skilled in the art could practice it.\textsuperscript{36}

Unfortunately, the Federal Circuit has not always been consistent when analyzing and resolving “best mode” disputes, leading some commentators to complain that current “best mode” doctrine is muddy at best.\textsuperscript{37} For example, Steven Walmsley suggests that as of 2002, the Federal Circuit had used \textit{seven different standards} to assess what disclosure was required to comply with the “best mode” requirement: the “claims only” standard, the “essentiality” standard, the “essentiality and novelty” standard, the “necessity” standard, the “necessary and nonobvious” standard, the “material effect” standard, and the “relation” standard.\textsuperscript{38}

While neither the Supreme Court nor the Federal Circuit sitting \textit{en banc} has specifically addressed the scope of disclosure necessary to comply with the “best mode” requirement,\textsuperscript{39} a Federal Circuit three judge panel attempted to clarify the doctrine in 2002.\textsuperscript{40} In \textit{Bayer AG v. Schein Pharmaceuticals}, the court noted that the “best mode disclosure requirement only refers to the invention defined by the claims,” but a “best mode” violation may also be found in two limited circumstances when the inventor fails to disclose unclaimed subject matter: failure to disclose a preferred embodiment and failure to disclose a preference that

\textsuperscript{36}Id.


\textsuperscript{38}See \textit{id.} at 153.

\textsuperscript{39}See \textit{id.} at 157.

\textsuperscript{40}See \textit{Bayer AG v. Schein Pharmas., Inc.}, 301 F.3d 1306 (Fed. Cir. 2002).
materially affected making or using the invention.\textsuperscript{41} Whether this clarification will lead to a more consistent “best mode” standard, or alternatively create more confusion in the doctrine, remains to be seen.

It is important to note that, under current best mode doctrine, an inventor has no obligation to identify which “mode” or embodiment he considers to be the best. He may describe, in the patent specification, a number of different “modes” for practicing the claimed invention without pointing out the “best” one.\textsuperscript{42} Therefore, an unscrupulous inventor may choose to bury his “best mode” among an avalanche of embodiments in the specification, in effect denying the public the enhanced disclosure that “best mode” is designed to generate. Additionally, an inventor is not required to update his “best mode” either during the application process or after his patent issues.\textsuperscript{43}

In the litigation context, failure to comply with the “best mode” requirement is currently a defense in patent infringement actions, and the penalty is severe. A patentee who failed to disclose her “best mode” can have her patent invalidated. Specifically, 35 U.S.C. § 282 states that invalidity of a patent or claim for lack of compliance with any requirement of Section 112 (including the “best mode” requirement) shall be a defense in any action involving the validity or infringement of a patent (emphasis added). Much of the controversy surrounding the “best mode” requirement stems from a concern that litigants are using the

\textsuperscript{41} See id. at 1315-16.


\textsuperscript{43} KIMBERLY A. MOORE ET AL., PATENT LITIGATION AND STRATEGY 570 (West 3rd ed. 2008).
“best mode” defense as a procedural tactic to open the door to wide ranging discovery on an inventor’s subjective beliefs, thereby increasing the cost of patent litigation.44

III. DUELING “BEST MODE” ARGUMENTS: “PRO-BIG BUSINESS” VS. “GENERIC PLUS OTHERS”

The Senate Judiciary Committee has candidly admitted that it considered the concerns of both interested parties, e.g., the Biotechnology Industry Organization, AIPLA, IPO, and the Pharmaceutical Research and Manufacturers of America, and neutral parties, e.g., the National Academy of Sciences, when making a recommendation to Congress about how to deal with the “best mode” requirement.45 Because these parties clearly influence policymaking decisions, evaluating their arguments may provide guidance on how Congress will, and perhaps should, resolve the “best mode” debate.

A. “Pro-Big Business” and Arguments Against “Best Mode”

As discussed in Section I, the “pro-big business” faction wants to eliminate the “best mode” requirement from U.S. patent law. Members of this group include IPO,46 a trade association for owners of patents,


45 See S. REP. NO. 111-18, at 24-25.

46 IPO, PATENT REFORM (111TH CONGRESS): A COMPARISON OF H.R. 1260 (AS INTRODUCED IN THE HOUSE) AND S. 515 (AS REPORTED OUT BY THE SENATE JUDICIARY
trademarks, copyrights and trade secrets;\textsuperscript{47} The Coalition for 21st Century Patent Reform, an organization comprising companies from eighteen different industry sectors;\textsuperscript{48} AIPLA,\textsuperscript{49} a national bar association consisting primarily of intellectual property lawyers;\textsuperscript{50} Eli Lilly;\textsuperscript{51} Wisconsin Alumni Research Foundation, the patent management organization for the University of Wisconsin-Madison;\textsuperscript{52} General Electric Company.\textsuperscript{53}


\textsuperscript{50} The History of AIPLA, http://www.aipla.org/Content/NavigationMenu/About_AIPLA/History/History.htm (last visited Feb. 27, 2010).

\textsuperscript{51} Perspectives on Patents: Hearing Before the Subcomm. on Intellectual Prop. of the S. Comm. on the Judiciary, 109th Cong. (2005) (statement of Robert A. Armitage, Senior Vice President and General Patent Counsel, Eli Lilly & Co.).


InterDigital Communications Corporation;\textsuperscript{54} the Biotechnology Industry Organization;\textsuperscript{55} 3M Innovative Properties Company;\textsuperscript{56} and the Intellectual Property Law Section of the American Bar Association.\textsuperscript{57} Many prominent academics and patent scholars, including Donald Chisum,\textsuperscript{58} Richard Levin,\textsuperscript{59} Mark Myers,\textsuperscript{60} Mark Lemley,\textsuperscript{61} and John R. Thomas\textsuperscript{62} also support modifying or eliminating the “best mode” requirement.


\textsuperscript{56} Patent Revision: Hearing on H.R. 1908 Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 110th Cong. (2007) (statement of Gary Griswold, President and Chief IP Counsel, 3M Innovative Properties Co.).


\textsuperscript{60} Id.


To support their anti-“best mode” agenda, these parties essentially argue that “best mode” is expensive and useless, and eliminating it will help harmonize U.S. patent law with that of the rest of the world.

1. Cost: Litigating “Best Mode” is Expensive

In 1990, the Secretary of Commerce established the Advisory Commission on Patent Law Reform to advise him on “the need for any reform of the patent system of the United States.”63 In its 1992 report, the Commission recommended eliminating the “best mode” requirement to reduce the costs of patent litigation, asserting that the “best mode” requirement does not “provide a corresponding public benefit.”64 Not surprisingly, the Commission did not provide any evidence to support its contentions that “best mode” increases the cost of patent litigation and does not provide a corresponding benefit to the public. This underscores a problem that continues to plague the “best mode” debate. The “best mode” requirement likely entails both costs, e.g., increased litigation costs, and benefits, e.g., increased disclosure to the public, but the costs and benefits are largely immeasurable. It is impossible to determine the incremental costs and benefits of the “best mode” requirement because it cannot be disentangled from all the other variables that also affect very same costs and benefits. Regarding costs, innumerable factors contribute to litigation expenses, and “best mode” is just one of many affirmative


64 See id. at 14.
defenses that a litigant might use as an excuse to expand the scope of
discovery. Regarding benefits, the “best mode” requirement arguably
incentivizes disclosure, but so do the “written description” and
“enablement” requirements of 35 U.S.C. § 112. One cannot accurately
calculate how much disclosure is attributable to “best mode” versus
“written description” and “enablement.”

In 1997, well-known patent law scholar Donald Chisum succinctly
laid out the “best mode is expensive” argument. Chisum recognized that
accused infringers with weak technical cases turned to “best mode” as a
“last resort” defense. He argued that “best mode” doctrine led to
uncertainty and expense in patent procurement and litigation because the
contours of “best mode” “(1) are not precise, (2) are subject to continuing
judicial interpretation, and (3) depend on facts and states of mind at precise
points of time, usually many years before the date of litigation.” In 2005,
Levin and Myers echoed Chisum’s concern and advocated significantly
modifying or eliminating the “best mode” requirement to reduce subjective
and expensive pre-trial discovery and increase the predictability of patent
disputes.

A 2004 report by the National Research Council (NRC) provides a
relatively thorough treatment of the “best mode is expensive” argument. In

65 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

66 Id. at 279.

67 See id.

68 A Patent System for the 21st Century: Hearing Before the S. Comm. on the Judiciary,
109th Cong. (2005) (statement of Richard C. Levin, President, Yale University, and
Mark B. Myers, Wharton School, University of Pennsylvania).
the report, the NRC, an organization created by the National Academy of Sciences in 1916 to “associate the broad community of science and technology with the Academy’s purposes of furthering knowledge and advising the federal government,” evaluated the “best mode” requirement in some detail and determined that it should be eliminated or significantly modified. The NRC report contended that the “best mode” defense depends on the inventor’s state of mind, which usually can only be determined from circumstantial evidence. Therefore, litigating “best mode,” especially during pre-trial discovery, can be expensive and time consuming.

At this point, it is worth mentioning several counterarguments to the “best mode is expensive” position taken by the NRC and many other opponents of “best mode.” First, neither the NRC, nor any other party, has provided evidence definitively linking a “best mode” defense to increased patent litigation costs. Some “best mode” proponents argue that routine discovery will likely encompass facts relevant to a “best mode” violation, so eliminating the “best mode” requirement will not reduce discovery costs. In fact, the NRC’s own study suggests that patent practitioners see willful infringement and inequitable conduct as the main litigation cost drivers, with “best mode” falling far behind. Finally, if “best mode” is truly valuable to U.S. patent law, there are

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70 See id. at 121.


72 See A Patent System for the 21st Century at 123.
many options to reduce litigation costs short of eliminating “best mode.”


Lemley states the simple proposition that the “enablement” and “written description” requirements facilitate sufficient disclosure to benefit the public. The 2004 NRC report elaborated slightly, contending that “best mode” provides only limited motivation for inventors to disclose more than what is required by the “enablement” provisions of 35 U.S.C. § 112 because there is no obligation to update the “best mode,” and the “best mode” of a company cannot be imputed to the inventor.

This “best mode is useless” argument suffers from several flaws. First, there is no empirical evidence suggesting that “best mode” does, or does not, lead to disclosure above and beyond the enablement requirement. However, no one argues that eliminating “best mode” from U.S. patent law will actually enhance disclosure. Such a step will either have no effect on disclosure or will eliminate whatever disclosure benefits “best mode” currently provides. Second, if maximum disclosure is the chief concern, and “best mode” is not doing the job, a better solution may be to strengthen

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73 See generally American College of Trial Lawyers, Joint Project of the American College of Trial Lawyers Task Force on Discovery and the Institute for Advancement of the American Legal System, Final Report (2009).


75 See A Patent System for the 21st Century at 121.
the “best mode” requirement so that it materially improves the quality of disclosure by patent applicants.


According to Chisum, “best mode” has no counterpart in other major patent systems and therefore poses a special hardship on foreign inventors and companies seeking U.S. patent protection.76 Similarly, the 2004 NRC report stated that the “best mode” requirement has “no analog in foreign patent law” and “imposes an additional burden and element of uncertainty on foreign patentees in the United States.”77 Thus, harmonizing the U.S., European, and Japanese patent systems is an additional justification for eliminating the “best mode” requirement from U.S. patent law.78

There are strong counterarguments one can make to rebut the “harmonization” argument. As a preliminary matter, it appears that the NRC was incorrect in stating that the “best mode” requirement is unique to U.S. patent law. As of 2005, at least twenty-four countries required disclosure of the “best mode.”79 One commentator suggested that even


77 A PATENT SYSTEM FOR THE 21ST CENTURY at 127.

78 See id. at 123, 127.

Japan has a form of “best mode” built into its patent system. Taking the desirability of patent law harmonization as a given, the U.S. may be better served trying to convince other countries to adopt a “best mode” provision as opposed to sacrificing its own. Of course, this is only true if “best mode” provides some benefits to the patent system as a whole.

To summarize, “pro-big business” opponents of “best mode” stress that the subjective nature of the “best mode” inquiry increases discovery and litigation costs, the “enablement” and “written description” requirements ensure adequate disclosure to the public, and the U.S. “best mode” requirement is an outlier that should be eliminated as part of global patent law harmonization efforts.

B. “Generic Plus Others” and Arguments in Favor of “Best Mode”

As noted in Section I, the “generic plus others” camp favors retaining the “best mode” requirement. This group includes entities such as the Generic Pharmaceutical Organization;\(^{81}\) Barr Laboratories;\(^{82}\) University of California;\(^{83}\) Dell;\(^{84}\) and the Professional Inventors Alliance, a group of

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\(^{80}\) See id. at 284-85.


\(^{83}\) Patent Revision: Hearing on H.R. 1908 Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 110th Cong. (2007) (statement of William T. Tucker, Executive Director, Research Administration and Technology Transfer, University of California Office of the President).
independent inventors that support strong patent protections. Notably, this pro-“best mode” faction cannot claim significant support from neutral parties such as academics, governmental agencies, and quasi-governmental agencies.

In broad strokes, “best mode” proponents claim that the “best mode” requirement leads to enhanced disclosure and innovation, minimizes strategic behavior by patentees, and is beneficial to the generic pharmaceutical industry.

1. Disclosure / Innovation

The Generic Pharmaceutical Organization takes the position that the public benefits from knowing the “best mode” because it does not have to “reinvent” a patented invention after the patent expires. Similarly, The Patent Office Professional Association (POPA), an organization that represents USPTO employees, strongly defended the “best mode” requirement, arguing that “best mode” drives innovation and facilitates disclosure to the public. Mirroring POPA’s concern about adequate


disclosure in our patent system, Jon Dudas, then Director of the USPTO, testified in 2007 that U.S. patent law contains a “best mode” requirement because “an emphasis on full disclosure…will ensure a vibrant, modern patent system.”\(^{88}\)

The relationship between “best mode,” disclosure, and innovation has been discussed \textit{supra} in Sections I and III(A)(2). Here, it is enough to say that “best mode” may enhance disclosure in patent applications and it may not.

2. \textit{Preventing Strategic Behavior}

According to the Generic Pharmaceutical Organization, the “best mode” requirement guards against any undeserved extension of the patentee’s monopoly.\(^{89}\) Christine Siwik, outside counsel for Barr Labs, elaborated on this theory by proposing that the “best mode” requirement prevents companies from keeping the “best mode” a secret for commercial or strategic reasons.\(^{90}\) In a similar vein, Anthony Peterman, a Dell Director,


indicated support for the “best mode” requirement because it ensures that patent applicants act in good faith when filing an application.\(^9^1\)

Of course, an inventor who withholds her “best mode” from the public only acts strategically or in bad faith if there is, in fact, a requirement to disclose the “best mode.” If Congress were to eliminate the “best mode” requirement, as urged by the “pro-big business” faction, the strategic behavior argument would disappear. Thus, this argument is somewhat circular.

3. “Best Mode” Benefits the Generic Pharmaceutical Industry

This argument is relatively straightforward. Generic drug companies rely on brand patent disclosures to develop generic drugs, and eliminating the “best mode” requirement could reduce disclosure and have a negative impact on generic drug development.\(^9^2\)

There is one glaring flaw in the argument. Namely, it would be unwise for Congress to base a patent policy decision, which affects all industries, on whether or not the proposed law is beneficial to a particular industry, in this case the generic pharmaceutical industry. As evidenced by the wide variety of economic actors that oppose the “best mode” requirement, e.g., General Electric, 3M, and Eli Lilly, eliminating “best

\(^9^1\) See Patent Revision: Hearing on H.R. 1908 Before the Subcomm. on Courts, the Internet, and Intellectual Prop. of the H. Comm. on the Judiciary, 110th Cong. (2007) (statement of Anthony Peterman, Director, Dell, Inc.).

mode” might benefit certain industries just as much as, or more than, it would hurt the generic pharmaceutical industry.

In summary, “best mode” supporters insist that the requirement does, in fact, incentivize disclosure above and beyond the written description and enablement requirements, “best mode” is necessary to prevent strategic behavior by patent applicants, and eliminating “best mode” would harm the generic pharmaceutical industry.

IV. OTHER ARGUMENTS IN FAVOR OF “BEST MODE”?

LEGITIMATE BENEFITS OF “BEST MODE” IN PATENT LITIGATION

Many “best mode” critics claim that the inherently subjective “best mode” defense increases litigation costs. Still, some might argue that “best mode” plays an important, legitimate role in patent litigation. Specifically, the availability of a “best mode” defense keeps the patentee honest, helps the accused infringer build a valid theme, and reminds the jury that the USPTO is not perfect.

A. Keeping the Patentee Honest

During the patent examination process, the USPTO has no effective way to monitor a patent applicant’s compliance with the “best mode” requirement because the patent examiners who review the applications are not mind readers. Simply put, the examiners cannot know what the “best mode” is unless the inventors disclose it. The USPTO acknowledges this limitation with respect to “best mode.” According to the Manual of Patent Examining Procedure (MPEP), “[t]he
examiner should assume that the best mode is disclosed in the application, unless evidence is presented that is inconsistent with that assumption. It is extremely rare that a best mode rejection properly would be made in *ex parte* prosecution. 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 to the examiner, but is generally uncovered during discovery procedures in interference, litigation, or other *inter partes* proceedings.”

Essentially, if a dishonest inventor decides to obtain a patent while keeping the best part of the claimed invention for himself, discovery during an adversarial proceeding such as litigation provides the only check on this strategic behavior. This kind of strategic behavior is not just a hypothetical concern. For example, in *Glaxo, Inc. v. Novopharm, Ltd.*, an assignee deliberately failed to disclose the preferred process for converting a compound into the claimed pharmaceutical composition based on advice of counsel that such disclosure was not necessary under the U.S. “best mode” requirement. Without an effective mechanism, e.g., the “best mode” defense in patent litigation, to police strategic behavior, self-interested patent applicants may be tempted to hide important parts of the claimed invention from the public. This tactic potentially reduces disclosure and, correspondingly, innovation.

This line of reasoning is similar to the “preventing strategic

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behavior” argument addressed supra in Section III(B)(2). To counter the argument, a “best mode” critic would point out that the only reason failing to disclose “best mode” is dishonest is because of the “best mode” requirement. Eliminating the “best mode” requirement will eliminate the dishonesty.

B. Building a Valid Theme: The Patentee Can’t Be Trusted

Patent litigation is challenging because it involves highly technical subject matter and aspects of law that are unfamiliar to jurors and many judges. Therefore, developing a compelling theme is one of the keys to winning a patent lawsuit. A theme “reduces the case or the issue to its essence,” and brings complex cases back to earth. A good theme simplifies issues, unifies case presentation, and persuades the judge or jury to rule in one’s favor.

One persuasive theme anyone can understand is “the patentee can’t be trusted.” If a patentee intentionally failed to describe the “best mode” of the invention, an accused infringer can, and should, paint the patentee as dishonest and withholding. Judges and juries are unlikely to favor those who appear to have lied or concealed information, and for good reason.

The accused infringer should stress that the patentee failed to


96 See id. at 62.

97 See id. at 65-66.

98 See id.
uphold his end of the bargain – full disclosure for a limited monopoly. By failing to disclose the “best mode,” the patentee cheated the USPTO and the public, and the judge and jury should take that fact into account. Without the “best mode” defense, litigants would have a harder time constructing this completely legitimate theme.

By now, it should be obvious that this argument suffers from the same circularity problem that plagues the “preventing strategic behavior” and “keeping the patentee honest” arguments discussed supra. A patentee does not cheat the USPTO and the public by keeping her “best mode” secret unless there is a requirement to disclose the “best mode.”

C. Reminding the Jury that the USPTO is not Perfect

Juries tend to be “impressed with the fact that the United States Government issued a patent to reward the inventor’s hard work.” This may be one reason that juries are so pro-patentee, as evidenced by a 69% patentee win rate in infringement suits. An accused infringer faces an uphill battle to prove that a patent issued by the USPTO is invalid, and using a “best mode” defense is one good way to remind the jury of the USPTO’s limitations.

The USPTO officially recognizes that it cannot effectively monitor compliance with the “best mode” requirement during the patent

99 See id. at 80.


101 See id. at 134.
examination process. If an accused infringer brings that fact to the jury’s attention, the jury may weigh the issue more evenhandedly instead of being overly deferential to the USPTO’s judgment of validity and patentability. Thus, the “best mode” defense might be a way to level the patent litigation playing field which is currently tilted in favor of patentees.

Put another way, exposing the USPTO’s weakness in one area, i.e., its inability to enforce the “best mode” requirement, would permit a jury to infer that the USPTO has other limitations as well, which it certainly does.

V. ANALYSIS OF EMPIRICAL DATA ON “BEST MODE”

Opponents of “best mode” routinely condemn the “best mode” defense as too costly, but they rarely provide empirical data on the real-life impact of “best mode” on patent litigation. If “best mode” substantially affects the outcome of a large proportion of patent cases, one might infer that “best mode” plays an important role in enhancing disclosure in patent applications and preventing strategic behavior by patentees. If that is the case, perhaps the benefits of “best mode” outweigh its litigation costs.


Unfortunately for “best mode” supporters such as the “generic plus others” faction, the evidence suggests that “best mode” only plays a decisive role in a small percentage of patent lawsuits, “best mode” claims usually fail at the district court level, and the Federal Circuit is extremely wary of finding a patent invalid for a “best mode” violation.

In the author’s study of reported U.S. district court patent cases from 2005 through 2009,\textsuperscript{104} the court discussed a “best mode” challenge in only 50 out of 7,891 cases, or 0.6% of the cases.\textsuperscript{105} In other words, the outcome of a patent lawsuit only depends on “best mode” issues in a small fraction of cases. This suggests that accused infringers either don’t often raise a “best mode” defense, or raise a “best mode” defense but don’t press it very hard.

Even when litigants do press a “best mode” defense, it is usually unsuccessful. Of the 50 reported U.S. district court patent cases from 2005 through 2009 in which the court ruled on “best mode,” the “best mode” challenge failed 37 times, or 74.0% of the time, and prevailed only 9 times, for a success rate of 18.0%.\textsuperscript{106} According to a prior study of all written, final validity decisions by either district courts or the Federal Circuit reported in the \textit{United States Patent Quarterly} from 1989 through 1996, the “best mode” defense succeeded in 16 out of 45 cases, or 35.6%

\textsuperscript{104} Research was conducted using the “US District Court Cases” files in the LEXIS database. Raw data is on file with the author.

\textsuperscript{105} The total number of patent cases, 7,891, was generated by searching the “US District Court Cases” files in the LEXIS database for the term “patent!” in the “CORE-TERMS” field. Of course, not all of these patent cases discuss validity issues.

\textsuperscript{106} In the other 4 cases (8% of the time), the “best mode” challenge survived a motion for summary judgment or a motion to dismiss.
of the time. Both studies show that “best mode” is not typically a winning defense, particular when compared to the success rates of other common defenses in patent litigation. For example, the success rates for the invalidity defenses of double patenting, anticipation under 35 U.S.C. § 102, lack of enablement, and obviousness, have been measured at 71.4%, 49.4%, 36.1%, and 36.3%, respectively.108

No common thread between the successful “best mode” challenges at the district court level is readily apparent. In some instances, courts stressed the patentees’ bad faith when holding patents invalid for failing to comply with the “best mode” requirement.109 In another instance, the court found a “best mode” violation without any evidence of bad faith at all.110

The Federal Circuit is even more hostile to “best mode” challenges than the district courts are. In 2002, the Federal Circuit noted that, “[i]n the history of this court and our predecessor courts, we have held claims invalid for failure to satisfy the best mode requirement on

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108 Id.


“only seven occasions” (emphasis added).111 According to my research on more recent reported decisions, the Federal Circuit has addressed the “best mode” requirement thirteen times from 2002 to 2009.112 Of those thirteen cases, the court affirmed a district court’s holding that there was a “best mode” violation only once. Of the remaining twelve cases, the Federal Circuit affirmed a district court’s finding that there was no “best mode” violation five times; reversed a district court’s finding that there was a “best mode” violation five times; and never reversed a district court’s holding that no “best mode” violation had occurred.113

Based on these statistics, even if an accused infringer puts on a substantial “best mode” defense, which is rare, and wins on “best mode” at trial, which is unlikely, the probability that the Federal Circuit will affirm a finding of invalidity based on “best mode” is low. Therefore, the “best mode” requirement does not play a significant role in the outcome of patent cases as a whole.

Turning to the patent procurement process, the “best mode” requirement has absolutely no effect on whether or not the USPTO grants

111 *Bayer AG v. Schein Pharms., Inc.*, 301 F.3d at 1316. The author’s research uncovered one additional pre-2002 case in which the Federal Circuit found a “best mode” violation. See *Consolidated Aluminum Corp. v. Foseco Int’l, Ltd.*, 910 F.2d 804, 811 (Fed. Cir. 1990).

112 Research was conducted using the LEXIS database. Raw data is on file with the author.

113 Of the two remaining Federal Circuit cases from 2002 through 2009 discussing “best mode,” one involved a Federal Circuit ruling that a patent was not entitled to filing date of a parent application because the parent did not disclose the patented invention in a manner that satisfied “best mode.” The other involved a Federal Circuit decision to vacate a district court’s judgment as a matter of law that there was no “best mode” violation, but the Federal Circuit did not affirmatively determine that a “best mode” violation occurred.
a patent. As mentioned earlier in this paper, a patent examiner has no way to determine whether a patent applicant disclosed the “best mode” because the information needed to evaluate “best mode”, e.g., the inventor’s state of mind at the time he filed the application, is not available to the examiner.\textsuperscript{114} Although the USPTO does not track the number of “best mode” rejections examiners make, the author reviewed published decisions of the USPTO Board of Patent Appeals and Interferences (BPAI) from 1981 through 2009.\textsuperscript{115} Only six BPAI decisions involved an examiner’s attempt to reject claims because of an inventor’s alleged failure to disclose the “best mode.” The BPAI reversed the examiner’s “best mode” rejection in five of the cases and did not reach the issue in the sixth case. In other words, in nearly thirty years, the BPAI has never affirmed an examiner’s “best mode” rejection in a “precedential” or “informative” decision. This confirms that “best mode” has no bite during patent examination.

Even though “best mode” arguments rarely win in court and the USPTO cannot prevent “best mode” violations during the patent examination process, it is still possible that “best mode” plays a significant role in the U.S. patent system. Specifically, one would expect “best mode” litigation to be infrequent if inventors routinely comply with the “best mode” requirement. This hypothesis is consistent with a “best mode” requirement that both enhances public knowledge and rarely serves as a winning defense in patent lawsuits.


\textsuperscript{115} Research was conducted using the “USPTO Board of Patent Appeals & Interferences Decisions” file in the LEXIS database. Raw data is on file with the author.
VI. RECOMMENDATIONS FOR REFORM

Things look bleak for “best mode” supporters. Most interested parties, including big business, want Congress to eliminate “best mode” entirely. The vast majority of neutral parties, including government agencies, quasi-governmental actors such as the NRC, and academics, also favor eliminating or substantially reworking the “best mode” requirement so that it cannot be used as a defense in litigation. The empirical data suggests that “best mode” does not make much difference in most patent lawsuits, and the USPTO has no way to ensure compliance with “best mode” during the patent examination process.

Despite all this, no one knows whether eliminating the “best mode” requirement from U.S. patent law will do more harm than good. This ambiguity is due to the inherent uncertainty about the costs and benefits of “best mode.” How much meaningful disclosure does “best mode” produce? How many dollars does “best mode” add to patent litigation costs? These questions cannot be answered with any confidence.

Therefore, in deciding how to proceed, Congress should focus on each option’s potential to achieve desirable results, since the results themselves will always be hazy. In particular, Congress should focus on each option’s potential to discourage strategic behavior by both a patentee and an accused infringer, minimize litigation costs, and enable meaningful disclosure by the patentee to third parties in order to promote innovation.

Four alternatives Congress may choose to pursue are retaining the “best mode” requirement as-is (the “generic plus others” position);
eliminating the “best mode” requirement altogether (the “pro-big business” position); strengthening “best mode” by requiring inventors to update their “best mode” until a patent is granted and explicitly point out which mode described in the specification is the “best;” or retaining “best mode” as a statutory requirement for patentability but removing it as a defense in patent litigation and post-grant opposition proceedings.

Although both polar opposite positions (keeping “best mode” without change and entirely eliminating “best mode”) are popular, these two options have the least capacity to generate desirable results. As such, Congress should not adopt either one. If enhanced disclosure is more important than litigation costs, then Congress should strengthen the “best mode” requirement. On the other hand, if Congress is more concerned with litigation costs than full disclosure, then it should remove “best mode” as a defense in patent litigation. When deciding how to best reform the “best mode” requirement, it is critical that Congress recognizes these admirable goals of maximum disclosure and cost reduction are not mutually exclusive. In order to achieve the optimal balance of reducing litigation costs, maximizing disclosure and innovation, and discouraging strategic behavior, Congress should simultaneously strengthen “best mode” and eliminate it as a potential defense in patent lawsuits.

A. Keeping the “Best Mode” Requirement Without Change

In theory, the “best mode” requirement aims to discourage patent applicants from behaving strategically, e.g., obtaining a broad
patent while keeping the best part of the invention for themselves. In practice, the currently formulated “best mode” requirement actually encourages strategic behavior by both patent applicants and accused infringers. Since a patent applicant does not have to point out which “mode” he believes to be the best, he may choose to bury the “best mode” in a specification filled with many inferior embodiments and let the public sort it out. Accused infringers might also abuse “best mode,” for example by alleging a “best mode” violation with minimal supporting evidence as a tactical ploy to expand the scope of discovery in a patent lawsuit.

Because a patent applicant can obscure the “best mode” by essentially hiding it in plain sight, the “best mode” requirement has limited potential to incentivize real, meaningful disclosure that actually benefits the public and spurs innovation. For example, assume a patent application discloses several hundred similar chemical compounds, one of which is significantly more effective than the rest. The inventor knows this, but does not acknowledge which compound is superior. The inventor has fulfilled his duty to disclose the “best mode,” but it could take months, or years, for anyone to figure out which compound to use (if the patent has expired) or design around (if the patent is still in force). Thus, any possible disclosure benefits to the public are minimal.

Finally, maintaining the status quo does nothing to reduce the litigation costs that may be attributable to the use of the “best mode”

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defense in patent lawsuits.

In summary, current “best mode” law gives the U.S. patent system the worst of both worlds: all of the potential costs, e.g., uncertainty and increased litigation expenses, with none of the potential benefits, e.g., increased public disclosure.

B. Eliminating the “Best Mode” Requirement Entirely

By discarding the “best mode” requirement, Congress would conceivably solve two problems. First, it would deter litigants from abusing the “best mode” defense in patent litigation because the defense would not exist. In other words, this option has the capacity to reduce strategic behavior by the accused infringer. Second, getting rid of “best mode” would have the related benefit of eliminating any incremental litigation costs associated with the “best mode” defense.

However, eliminating “best mode” entirely comes at a high price. First, it would incentivize, and in fact authorize, strategic behavior by patent applicants. Inventors would have free reign to knowingly and willfully withhold the best way to practice their claimed inventions and still obtain a patent. The pressure to compete in the cutthroat business world may drive even honest patent applicants to decide against including their “best mode” when filing a patent application. After all, why give the competition a leg up by disclosing information when disclosure is not legally required? Second, it follows that eliminating the “best mode” requirement would also eliminate any incremental, but unquantifiable, disclosure benefits that are tied to “best mode.”
C. Strengthening the “Best Mode” Requirement

Congress could bolster the “best mode” requirement by, for example, mandating that inventors update the “best mode” throughout the patent examination process and particularly point out which mode described in the specification is the “best.” Although Congress has not yet considered this option, it does have some advantages over the status quo.

Strengthening the “best mode” requirement would limit the ability of patent applicants to act strategically because they could no longer conceal their “best mode” among various other lesser disclosed embodiments. It would also encourage real, meaningful disclosure that may have tangible benefits to the public. If the public can easily see which mode the inventor deems to be the “best,” no time or money is wasted sifting through the lesser modes. The public has a clear starting point from which to innovate.

Of course, extending the “best mode” requirement in this manner does nothing to prevent accused infringers from abusing the “best mode” defense in patent litigation or to reduce whatever litigation costs are associated with “best mode.” In fact, it may even encourage more strategic behavior by accused infringers, who would likely claim that the patentee incorrectly identified the “best mode,” or did not sufficiently update the “best mode” when new information came to light.
D. Retaining “Best Mode” as a Patentability Requirement but Eliminating it as a Litigation Defense

As discussed supra in Section B, eliminating “best mode” from the realm of patent litigation would discourage accused infringers from acting strategically and reduce any litigation costs attributable to “best mode.”

At first glance, it appears that keeping “best mode” as an affirmative requirement for patentability would be a nullity if “best mode” cannot be a defense in patent lawsuits. As acknowledged by the USPTO and suggested by my empirical research, there is no way to enforce the “best mode” requirement during patent examination. Therefore, it is up to litigants to police “best mode” violations. If “best mode” is not available as a litigation defense, then no one can effectively monitor a patentee’s compliance with the “best mode” requirement.

However, upon deeper consideration of the issue, it is apparent that the “best mode” requirement may promote disclosure even if “best mode” is unenforceable. Consider two groups of inventors, those who are honest and those who are self-interested or dishonest. If the law requires “best mode” disclosure, the honest inventors will comply because they do not want to break the law, even if they will not get caught. Self-interested inventors will also comply, but for entirely different reasons. First, they will continue to disclose the “best mode” out of concern that, should they abuse the system by obtaining and enforcing patents while concealing the “best mode,” Congress may amend the law to once again permit “best mode” invalidity defenses in patent litigation. Stated another way, “self-interested” inventors will
disclose the “best mode” because, even if the law is unenforceable today, it may be enforceable tomorrow.

Second, if a dishonest patent applicant decides not to include the “best mode” in her patent application, even though the law requires it, because she believes the law cannot be enforced, a court would likely find her patent unenforceable due to inequitable conduct. The inequitable conduct doctrine, originally called “fraud on the patent office,” is a defense to a patent infringement charge. If a defendant can prove that the patentee “withheld material information from the [US]PTO during prosecution of the patent with an intent to deceive,” the patent will be held unenforceable. An inventor willfully withholding her “best mode” from the USPTO because she believes she will not be caught or punished for the violation seems to be a classic case of inequitable conduct. In effect, eliminating “best mode” as a defense in patent litigation would fold any “best mode” related issues that arise into a court’s general inequitable conduct analysis.

E. The Best Option for “Best Mode”: Strengthening “Best Mode” While Removing it From Litigation

Congress would be wise to consider simultaneously strengthening the “best mode” requirement and preventing its use in litigation. This option has more upside than any alternative previously considered by either Congress or those who have commented on “best mode.” First,


119 Id.
requiring inventors to both explicitly identify and update their “best mode” potentially enhances the quality of disclosure in patent applications, which promotes innovation. Second, keeping the “best mode” requirement for patentability may discourage strategic behavior by patent applicants, even if enforcing “best mode” as such is practically impossible. Honest inventors will disclose their “best mode” because the law requires it, and dishonest inventors will do the same because they fear both inequitable conduct charges and future “best mode” challenges to their patents should Congress change its mind and permit “best mode” as a litigation defense. Finally, removing “best mode” from the realm of litigation eliminates any possible “best mode” related litigation costs and prevents strategic behavior by accused infringers who would otherwise assert a spurious “best mode” defense to improperly broaden the scope of discovery.

VII. WHAT WILL CONGRESS DO? THE CONFUSED HISTORY OF “BEST MODE” IN PATENT REFORM

An examination of Congress’ patent reform proposals from 2005 through 2009 reveals wide ranging views on how to deal with the “best mode” requirement. Section VI, supra, discusses what Congress should do about “best mode,” but what will it do? If the past is any indication, the ultimate fate of “best mode” is hazy at best.

In 2005, the House of Representatives proposed comprehensive patent reform legislation that would have, in part, completely eliminated the “best mode” requirement from U.S. patent law.\textsuperscript{120} Not to be outdone,

the Senate put forth its own Patent Reform Act in 2006.\textsuperscript{121} However, the Senate bill did not mention the “best mode” requirement at all, in essence proposing to keep the “best mode” requirement without change.\textsuperscript{122} Thus, the Senate bill staked out a polar opposite position from the House bill regarding “best mode.”

Efforts at patent reform continued in 2007, and the tide quickly turned in both the House and Senate. The House version of the Patent Reform Act of 2007 took a compromise position by retaining the “best mode” requirement for patentability but removing “best mode” as a defense in patent litigation and as a basis for requesting post-grant review of a patent.\textsuperscript{123} The Judiciary Committee Report accompanying the House bill provides insight into the reasoning behind this congressional proposal.\textsuperscript{124} In particular, Congress recognized three areas of growing criticism of the “best mode” requirement in recent years: because of the subjective nature of the inquiry, a “best mode” defense significantly increases the cost and complexity of litigation; since the “best mode” requirement only applies to what the inventor knew at the time of filing, the “best mode” disclosed in a patent may be obsolete by the time litigation occurs; and the “best mode” requirement adds additional expense to international filings because foreign applicants seeking to protect their inventions in the U.S. must amend their applications to


\textsuperscript{122} See id.


comply with a “best mode” requirement unnecessary anywhere else.\textsuperscript{125} These concerns mirror the “best mode is costly,” “best mode is useless,” and “harmonization” arguments espoused by the “pro-big business” group. In response to this criticism, the Committee recommended eliminating “best mode” as a defense to infringement in patent litigation in order to reduce litigation-related costs and minimize “the incentive to engage in speculative analysis.”\textsuperscript{126} On the other hand, the Committee also suggested retaining the “best mode” requirement to promote “full disclosure of the invention, which can later be used by the public.”\textsuperscript{127} Therefore, it is clear that the House, in addressing the “best mode” problem, hoped to reduce litigation costs, discourage strategic behavior, and promote disclosure for the benefit of the public.

Like its 2006 predecessor, the Senate’s Patent Reform Act of 2007 did not mention the “best mode” requirement.\textsuperscript{128} However, the senators were sharply divided over the issue.\textsuperscript{129} On July 19, 2007, Senator Specter offered an amendment that would have eliminated “best mode” as grounds for invalidating a patent, but the amendment was narrowly rejected, ten to nine, on a roll call vote in the Senate Judiciary Committee.\textsuperscript{130} Early in 2008, several prominent Committee members

\textsuperscript{125} Id.

\textsuperscript{126} Id.

\textsuperscript{127} Id.


\textsuperscript{130} See Id. Senators Brownback (Kan.), Feinstein (Calif.), Kyl (Ariz.), Coburn (Okla.), Graham (S.C.), Sessions, J. ( Ala.), Cornyn (Texas), Hatch (Utah), and Specter (Pa.) supported the amendment. Senators Biden (Del.), Grassley (Iowa), Schumer (N.Y.),
suggested that the Senate would be amenable to significantly amending the “best mode” requirement. Specifically, according to a March 12, 2008, press release, Senators Leahy, Specter, and Hatch outlined fifteen possible amendments to S. 1145, in an effort to “address the concerns of the wide cross-section of interested parties with whom they have been meeting since the bill was reported out of the Senate Judiciary Committee last July.”\textsuperscript{131} One of the amendments eliminated “best mode” as a defense in patent litigation, but maintained it as a requirement of patentability during the initial examination by the USPTO.\textsuperscript{132} In other words, it appears that public pressure convinced at least some senators to press for “best mode” reform along the lines advocated by the House version of the Patent Reform Act of 2007.

By 2009, the Senate came full circle and endorsed the compromise position originally proposed by the House in 2007. If enacted, the Senate version of the Patent Reform Act of 2009 would keep the “best mode” requirement for patentability but prohibit litigants from asserting “best mode” as a defense in patent litigation or using “best mode” as a basis to request post-grant review of a patent.\textsuperscript{133}

According to the Judiciary Committee Report accompanying the bill, the Committee decided to eliminate “best mode” as a litigation defense “in response to concerns,” specifically citing arguments by the

\begin{thebibliography}{9}
\footnotesize
\item Cardin (Md.), Kennedy (Mass.), Whitehouse (R.I.), Durbin (Ill.), Kohl (Wis.), Feingold (Wis.), and Leahy (Vt.) opposed it.
\item Id.
\end{thebibliography}
National Academy of Sciences (NAS), the Biotechnology Industry Organization, the American Intellectual Property Law Association (AIPLA), the Intellectual Property Owners Association (IPO), and the Pharmaceutical Research and Manufacturers of America, that the “best mode requirement, which is unique to American patent law, is counterproductive.”\textsuperscript{134} In particular, the Committee gave weight to a concern that “challenges to patents based on best mode are inherently subjective and not relevant by the time the patent is in litigation because the best mode contemplated at the time of the invention may not be the best mode for practicing the invention years later.”\textsuperscript{135} However, since the Committee “views public disclosure as an important part of the patent system,” it kept “best mode” as a requirement for patentability and a basis for rejecting a claim during patent prosecution.\textsuperscript{136} Thus, the Senate in 2009, like the House in 2007, sought to amend the “best mode” requirement to remove an inherently subjective inquiry from patent litigation while continuing to incentivize full disclosure by patent applicants.

With the Senate essentially adopting the House’s 2007 compromise position on “best mode,” agreement appeared imminent, but it was not to be. The House version of the Patent Reform Act of 2009 would keep the “best mode” requirement for patentability and prohibit post-grant review based on “best mode,” but apparently would not

\textsuperscript{134} See S. REP. NO. 111-18, at 24-25.

\textsuperscript{135} Id.

\textsuperscript{136} Id.
eliminate “best mode” as a defense in patent lawsuits.\textsuperscript{137} According to my research, the House has not yet officially explained its seemingly significant change in position.

All of this back-and-forth over the “best mode” requirement in Congress’ prior patent reform efforts sheds some light on the future of “best mode.” Most importantly, it is obvious that both the House and Senate want “best mode” reform that incentivizes disclosure and reduces litigation costs. My proposal to simultaneously strengthen “best mode” while removing it as a patent litigation defense would achieve these goals.

Secondarily, the “pro-big business” group seems to be getting the best of the “generic plus others” group in the “best mode” debate. A 2009 Senate Judiciary Committee Report cited concerns about “best mode” voiced by the Biotechnology Industry Organization, the American Intellectual Property Law Association (AIPLA), the Intellectual Property Owners Association (IPO), and the Pharmaceutical Research and Manufacturers of America.\textsuperscript{138} In contrast, the Report did not mention any members of the “generic plus others” group which supports a strong “best mode” requirement.

Recent actions and statements by the executive branch suggest that the Obama administration also backs “pro-big business” in the “best mode” debate. On June 18, 2009, President Obama nominated David Kappos as the Director of the USPTO.\textsuperscript{139} Kappos represents the epitome of big


\textsuperscript{138} See S. REP. NO. 111-18, at 24-25.

\textsuperscript{139} Press Release, The White House Office of the Press Secretary, President Obama Announces More Key Administration Posts, June 18, 2009.
business, having served as Assistant General Counsel at IBM and Vice President of IPO.\textsuperscript{140} In an October 5, 2009, letter to the Senate Judiciary Committee, Secretary of Commerce Gary Locke stated that there should be no sanctions for failing to comply with the “best mode” requirement.\textsuperscript{141} With both congressional and executive backing, the “pro-big business” camp wields significant influence and will probably play an important role in determining the fate of “best mode.” Since “pro-big business” is anti-“best mode,” the odds that the “best mode” requirement will emerge unscathed after any significant patent reform legislation are slim.

VIII. CONCLUSION

Congress faces a difficult task when reforming the U.S. patent system, including the “best mode” requirement. Numerous interest groups push Congress in different directions, largely to advance their own personal agendas. When deciding which path to choose, Congress should give significant weight to the viewpoints expressed by neutral parties who do not have a personal interest in the outcome of patent reform, other than seeing the U.S. patent system flourish. The fact that the vast majority of neutral parties favor eliminating or amending the “best mode” requirement indicates that some kind of change in “best mode” law is desirable.

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\textsuperscript{140} See \textit{id.}\textsuperscript{.}

\textsuperscript{141} See letter from Gary Locke, Secretary of Commerce, to the Senate Judiciary Committee (Oct. 5, 2009) (on file with author).
My empirical research suggests that “best mode” only affects the outcome in a small fraction of patent lawsuits. Substantial “best mode” challenges are rare and typically fail at both the district court level and the Federal Circuit. Additionally, the evidence supports what the USPTO freely admits, namely that “best mode” cannot be enforced during the patent examination process. Since the practical effect of the “best mode” requirement on the outcome of both patent litigation and patent prosecution is small, changing the “best mode” requirement should not place a substantial burden on either patentees or accused infringers.

Despite all this, the effect of changing or eliminating the “best mode” requirement remains unknown because the costs and benefits of “best mode” cannot be quantified. In light of this uncertainty, Congress should adopt a law that has the potential to do the most good. Specifically, Congress should (1) strengthen “best mode” by requiring inventors to specifically identify and update their “best mode” during the application process, and (2) eliminate “best mode” as a defense in litigation. This option will minimize “best mode” related litigation costs, maximize disclosure and innovation, and discourage strategic behavior by accused infringers and patentees alike.