

# The Pseudo-Elimination of Best Mode: Worst Possible Choice?



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## INTRODUCTION

Even as it is hailed as the most significant legislative change to patent law in a half-century, some of the changes the U.S. Congress made in the Leahy-Smith America Invents Act<sup>1</sup> are surprisingly equivocal. One provision captures this aspect of the Act particularly well: the pseudo-elimination of the best mode requirement. In this Essay, we develop the concern that by equivocating on the best mode requirement, Congress may have failed to achieve the goal of leveling the playing field between U.S. and foreign applicants. In fact, Congress may have tilted the playing field from uneven in one direction, if it ever was uneven, to uneven in the other.

### I. BEST MODE AND FOREIGN INVENTORS

The best mode requirement holds that a patent applicant must disclose in a patent specification the best embodiment or “mode” of practicing the invention claimed by the patent.<sup>2</sup> Before the America Invents Act, if an applicant knew of a best mode of practicing the invention and failed to disclose that mode in the patent, courts were required to declare the patent invalid.<sup>3</sup>

Commentators have long and stridently argued that the best mode requirement should be abolished. Perhaps the most common argument for eliminating best mode was that it disadvantaged foreign inventors.<sup>4</sup> The argument went like this: Most foreign countries do not have a best mode requirement, so a foreign inventor seeking a patent in her home country may not include the best mode in her patent application. When the foreign inventor seeks to secure a patent for her invention in the United States, she may need to rely on the filing date of the application she filed in her home country to avoid prior art<sup>5</sup> that would bar her entitlement to a U.S. patent.<sup>6</sup> Relying on a foreign filing date was possible under

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1. Pub. L. No. 112-29, 125 Stat. 284 (2011) (to be codified in various sections of 35 U.S.C.).

2. 35 U.S.C. § 112 (2006).

3. See *Chemcast Corp. v. Arco Industries Corp.*, 913 F.2d 923 (Fed. Cir. 1990).

4. See NAT'L RESEARCH COUNCIL, A PATENT SYSTEM FOR THE 21ST CENTURY 121 (Stephen A. Merrill et al. eds., 2004); Donald S. Chisum, *Best Mode Concealment and Inequitable Conduct in Patent Procurement: A Nutsbell, A Review of Recent Federal Circuit Cases and a Plea for Modest Reform*, 13 SANTA CLARA COMPUTER & HIGH TECH. L.J. 277, 279 (1997).

5. Prior art is all information relevant to a patent claim's originality that is publicly available before a statutorily defined date.

6. See 35 U.S.C. § 102 (2006).

U.S. law,<sup>7</sup> but only if the application the inventor filed in her home country included the best mode.<sup>8</sup> Thus, if a foreign inventor did not include a best mode in a foreign-filed application she could not perfect her priority claim and might be barred from obtaining a patent in the United States. Moreover, if she nonetheless obtained a patent, because, for example, the patent office was unaware of the defect,<sup>9</sup> its claims could be invalidated if challenged in litigation. Commentators long imagined that this chain of events affected a substantial margin of foreign inventors.<sup>10</sup>

The America Invents Act reflects Congress's desire to protect foreign inventors from this eventuality. It both strips courts of the power to declare patents either invalid or unenforceable for failure to disclose a best mode<sup>11</sup> and gives foreign inventors a right of priority in their foreign-filed applications that is exempt from a requirement to disclose the best mode.<sup>12</sup> The Act practically eliminated best mode from patent law because the failure to disclose it no longer holds any substantive legal consequences.

But Congress hedged. The statutory provisions that mandate the content of U.S. patent applications still order applicants to "set forth [in the application] the best mode contemplated by the inventor of carrying out the invention."<sup>13</sup> Accordingly, both U.S.-originated applications and foreign-originated applications that come to be filed in the U.S. are still technically supposed to disclose a best mode. In an important sense, therefore, the elimination of the best mode requirement is not entirely genuine.

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7. *See id.* § 119.

8. *See In re Gosteli*, 872 F.2d 1008, 1010–11 (Fed. Cir. 1989).

9. *Accord* Wesley D. Markham, *Is Best Mode the Worst? Dueling Arguments, Empirical Analysis, and Recommendations for Reform*, 51 *IDEA* 129, 152 (2011) (finding only six Board of Patent Appeals and Interferences decisions involving an examiner rejecting claims because of a failure to satisfy the best mode requirement from 1981 through 2009).

10. *Accord* NAT'L RESEARCH COUNCIL, *supra* note 4, at 121 (arguing that foreign patent applicants cannot simply translate foreign filed applications for filing in the United States without "attending to this unusual additional requirement").

11. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 15(a), 125 Stat. 284, 328 (2011) (codified at 35 U.S.C. 282(b)(3)).

12. Section 119(a) mandates that foreign-filed applications "shall have the same effect as the same application would have if filed in" the United States. 35 U.S.C. § 119(a) (2006). Amended section 120 gives applications filed in the United States a right of priority that is exempt from best mode. Leahy-Smith America Invents Act § 15(b), 125 Stat. at 328 (codified at 35 U.S.C. §§ 119(e)(1), 120).

13. 35 U.S.C. § 112(a), *amended by* Leahy-Smith America Invents Act § 4, 125 Stat. at 293–96.

## II. THE CONSEQUENCES OF PSEUDO-ELIMINATION

The pseudo-elimination of best mode holds the potential to create two distinct patent systems within the U.S. patent system. One system will be for foreign-originated applications that may not disclose best modes and the other system will be for U.S.-originated applications that are likely to continue to include best modes. How could that happen?

Foreign inventors may stop disclosing best modes in their U.S. patent applications because when Congress enacted the America Invents Act it did so in the shadow of the main argument against best mode: that the requirement as it existed disadvantaged foreign applicants. The implication could not be clearer. To help foreign applicants that are supposedly disadvantaged by the substantive effects of best mode, Congress developed a right of priority in foreign-filed applications exempt from the requirement. Another reason not to expect foreign applicants to continue to disclose best modes stems from the reason the best mode requirement supposedly disadvantaged them. Namely, foreign applicants had little familiarity with the requirement because it was not part of their domestic law; it was a trap for the unwary.<sup>14</sup> If Congress relieved foreign applicants from the legal consequences of failing to disclose best modes because foreign applicants were unfamiliar with the requirement, it makes little sense to conclude now that foreign applicants will become much more familiar. There seems to be little reason for a foreign practitioner to take much account of best mode when drafting an application.

At the same time, although no U.S. inventor or patent attorney needs to worry about a U.S.-originated application being invalidated or declared unenforceable for failing to disclose a best mode, there is reason to believe that applications drafted by U.S. patent attorneys and originating in the United States will still contain best modes. Probably every living U.S. patent attorney has been indoctrinated with the best mode requirement by teachers, mentors, and colleagues. Habits, culture, and perhaps even norms of U.S. patent application

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14. See, e.g., NAT'L RESEARCH COUNCIL, *supra* note 4, at 121 (noting that only the United States has a best mode requirement and characterizing it as an "unusual additional requirement"); Chisum, *supra* note 4, at 279 (arguing that best mode is "especially vexing for foreign inventors and companies who seek U.S. patents" because, inter alia, the standard is "virtually unique to U.S. law"); Matthew J. Dowd, *Elimination of the Best Mode Requirement: Throwing the Baby Out With the Bathwater?*, A.B.A. IPL NEWSL., Fall 2005, at 8, available at <http://64.237.99.107/media/pnc/0/media.760.pdf> (referencing the argument that "the best mode requirement is a trap for the unwary foreign patent applicant"); Ryan Vacca, *Patent Reform and Best Mode: A Signal to the Patent Office or a Step Toward Elimination?*, 75 ALB. L. REV. 279, 289 (2012).

drafting and prosecution have evolved that favor disclosure of best mode. Applications, for example, may be drafted using templates that encourage the disclosure of a best mode by inviting the drafter to complete a section entitled “the preferred embodiment.” Earning a registration number—a license to practice before the patent office—is a special accomplishment that U.S. practitioners hold dear. The consideration for the privilege is a promise to obey the rules of practice.<sup>15</sup> The obligation is as much a moral one as it is a legal one, and the rules U.S. practitioners have promised to follow unequivocally require them to include in a specification a disclosure of a best mode of practicing the claimed invention.<sup>16</sup>

So whether the proper label to affix is norms, habit, culture, inertia, or just a penchant for rule following, the risk is that U.S. practitioners will practice the way they were taught and in a way that comports with conventional understandings about what is required to deal in a fair and forthright way with the American public.<sup>17</sup> That means many of them will continue consciously or unconsciously to disclose best modes when they prepare applications even though the America Invents Act makes it unlikely their clients would suffer any legal consequences if they stopped.

### III. WHAT DOES IT MATTER?

The fact that Congress’s equivocation might have created two patent systems within the US patent system—one for U.S. inventors who are likely to feel obliged to continue to observe the best mode requirement and a second for foreign inventors who are likely to abandon efforts to comply with it—may seem at first glance to be of small moment. But there is reason to think it may not be. As we explain below, the differential treatment of the best mode requirement defining the two patent systems may have tilted the playing field from uneven in one direction, if it ever was uneven, to uneven in another, disadvantaging American innovators and American consumers vis-à-vis foreign innovators.

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15. In theory, the office could use its disciplinary powers to enforce the best mode requirement by sanctioning, even perhaps to the extent of revoking the registration numbers, agents or attorneys who refuse to disclose best modes in applications.

16. *Accord* Memorandum From Robert W. Bahr, Senior Patent Counsel, U.S. Trademark & Patent Office, to Patent Examining Corps (Sept. 20, 2011), *available at* [http://www.uspto.gov/aia\\_implementation/best-mode-memo.pdf](http://www.uspto.gov/aia_implementation/best-mode-memo.pdf) (indicating that the patent office will not change best mode examination practice).

17. John Villasenor, *Patent Reform: Five Things Technology Companies Need to Know*, FORBES, May 14, 2012, <http://www.forbes.com/sites/johnvillasenor/2012/05/14/patent-reform-five-things-technology-companies-need-to-know> (suggesting that companies “should do the right thing and continue to disclose the best mode when applying for patents”).

Best mode plays a crucial role in establishing the level of inventiveness legally required for a patent. It helps a person having ordinary skill in an art see further into the future each time a patent is issued or a patent application published than he or she might see without the requirement.<sup>18</sup> This greater vision increases the predictability of future advances, which, in turn, increases the likelihood that a future advance will be seen as merely obvious and therefore unpatentable. A patent system with a best mode requirement thus establishes public domain at the very edge of technological advancement that is larger than the public domain that would be established in a patent system without a best mode. On its own, the abolition of the best mode requirement is likely to present thorny problems for innovation and competition policy.<sup>19</sup> Effectively creating two patent systems by abolishing the best mode requirement for some patent-seeking innovators but not for others raises additional concerns because it creates different benefit and cost possibilities for different applicants.

If foreign innovators do not disclose best modes, then they can enjoy an advantage over U.S. innovators. Unbound from a best mode requirement, foreign applicants can secure more patents directed to the same invention or to inventions that differ by only small increments from previous inventions. To coin a phrase: The absence of a best mode requirement allows for more compacted patent protection.

Sometimes a withheld best mode can be characterized as a patentable improvement over the very invention that the best mode embodies, in which case a patentee may secure an additional patent for an invention.<sup>20</sup> Similarly, what would have been impermissible statutory-type double patenting under a law with an enforceable best mode requirement—because the best mode would have been disclosed and presumptively<sup>21</sup> claimed—can be converted into a situation of obviousness-type double patenting,<sup>22</sup> which is legally permissible with a terminal disclaimer.<sup>23</sup> In addition, because the horizon of obvious subject matter can

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18. See, e.g., Lee Petherbridge & Jason Rantanen, *In Memoriam Best Mode*, 64 STAN. L. REV. ONLINE 125, 127 (2012), <http://www.stanfordlawreview.org/sites/default/files/online/articles/64-SLRO-125.pdf>.

19. See *id.* at 127–30.

20. For example, an inventor might claim an invention generically, and then attempt to separately patent species within the genus that were especially effective, especially commercially valuable or that worked especially well in certain contexts, that is, the best mode. See *id.* at 128.

21. *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996) (explaining that a claim construction that excludes a preferred embodiment is rarely, if ever, correct).

22. *In re Vogel*, 422 F.2d 438 (C.C.P.A. 1970).

23. *In re Robeson*, 331 F.2d 610 (C.C.P.A. 1964). Obvious variants of an invention can be the subject of separate patents as long as the term of exclusivity of such patents does not extend beyond the term of the first patent to the invention. A terminal disclaimer is the document a patent applicant

be reduced in a system without a best mode requirement, patents generally may be available for smaller incremental advances. Without a best mode, then, patentees are more likely to be able to obtain multiple patents to the same invention, or to inventions that differ from one another by only small increments.

Compacting patent protection with multiple patents separated by only small innovative increments permits patents to be more effective tools for excluding competitors from the economic space around an innovation. Patent enforcement is probabilistic. Having more patents and more claims directed to an innovation increases the probability that at least some patents and claims are not found invalid. Patentees also have more opportunity to draft claim language that might encompass a competitor's products or services.<sup>24</sup> The smaller incremental space between patents offered by a system without a best mode also makes the doctrine of equivalents<sup>25</sup> more effective, as the doctrine has less territory to address before another patent claim literally reads on to a competitor's products or services.

In contrast, if U.S. innovators obey the best mode requirement, they will be limited in their ability to take advantage of the compacting and evergreening (the securing of additional patents that expire after the expiration of the original patent for an invention) opportunities described above. Relative to the system described above, a patent system with a robust best mode requirement may produce fewer patents per unit of innovation, and U.S. innovators will thus be unable to patent as compactly around their innovations. The larger incremental space between patents directed to American innovations will weaken the effectiveness of the doctrine of equivalents. The larger public domain that results can mean that patents in a system that includes a best mode requirement are less effective at excluding competitors from economic space close to an innovation.

U.S. innovators are further disadvantaged because the best mode requirement compels them to reveal information that could otherwise have been maintained as a trade secret. By requiring them to disclose commercially valuable information

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files in connection with an application that acknowledges an expiration date for the patent that may be different than what would generally be statutorily required. 35 U.S.C. § 253 (2006).

24. This is possible under general principles of patent law because a patentee may have established priority in an invention, and thus the right to attempt to have patent claims issued to the invention, at a time when a competitor's product was not prior art to the invention. With the application alive at the patent office, a patentee can watch the market and attempt to have claims issued that read on competitor's products. *See, e.g., Kingsdown Med. Consultants, Ltd. v. Hollister, Inc.*, 863 F.2d 867, 874 (Fed. Cir. 1988) (making clear that there is nothing improper about this strategy).
25. The doctrine of equivalents is a doctrine in patent law that allows patent owners to hold competitors liable for infringement even where a competitor's product or service does not literally meet the terms of a patent's claims. It thus permits liability in some instances where a competitor's products and services differ only modestly from those of the patentee.

not generally known to or ascertainable by their industries, American innovators will be less able to appropriate the value of information that is often costly to develop and competitively important. Meanwhile, foreign innovators, not so handicapped, can obtain even more rents over their U.S. competitors just by keeping the details of best modes a secret. U.S. firms, moreover, might be unable to compete fairly with foreign innovators *even after* foreign innovators' patents expire, because once the patent falls into the public domain, U.S. firms will still have to work out the details crucial to the most commercially valuable forms of the invention, that is, how to practice the best mode.<sup>26</sup>

The result is that American innovators may experience less pricing power and a more difficult time recouping investments made in innovation than their foreign counterparts will. A more difficult time recouping investment could, over time, translate into a lack of competitiveness, suggesting the possibility that at least some American innovators may conclude that resources are better committed to opportunities that do not emphasize patentable innovation.

American consumers should expect to experience an effect as well. In some cases there will be less competition around foreign innovations and lower output of goods that embody such innovations, for which consumers may also have to pay more. Some of the resources that consumers could have devoted to other innovations or pursuits will instead be needlessly lost to firms that control intellectual property.

In sum, Congress's decision to eliminate the legal consequences of failing to disclose a best mode might address concerns about trapping unwary foreign inventors. At the same time, however, by effectively creating two patent systems—one without a best mode requirement for foreign innovators and one retaining a best mode requirement for U.S. innovators—Congress may have left foreign innovators better off than their U.S. counterparts, tilting the playing field from uneven in one direction to uneven in the other.

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26. Encouraging foreign innovators to withhold best modes as trade secrets in this way also effects a de facto extension of the patent term granted to (just) foreign innovators. In this way, the pseudo-elimination of best mode further frustrates the incentive structure imposed by the patent system.