# COMPLETING THE PICTURE OF UNCERTAIN PATENT SCOPE

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#### I. INTRODUCTION

Uncertain patent scope is perhaps the most significant problem facing the patent system.<sup>1</sup> Uncertainty in patent rights leads to avoidable infringement; suppressed competition; inefficient innovation, investment, and licensing decisions; increased business costs; and unnecessary litigation.<sup>2</sup> This uncertainty has long been blamed on the Federal Circuit's rules for interpreting claims, the short summaries at the end of the patent that define the patentee's exclusive rights.<sup>3</sup>

Near the end of this Term, the Supreme Court tackled uncertain patent scope in *Nautilus, Inc. v. Biosig Instruments, Inc.*,<sup>4</sup> but not by addressing interpretation of patent claims (known as claim construction). Instead, the Supreme Court addressed the standard for determining whether patent claims are invalid as indefinite for failing to "particularly point[] out and distinctly claim[]" the invention.<sup>5</sup> Suddenly, large segments of the patent community blamed uncertain patent scope on the Federal Circuit's lax indefiniteness standard, which only invalidated a claim "when it is not amenable to construction or insolubly ambiguous."<sup>6</sup> Tightening the indefiniteness standard—whether by rendering a claim indefinite when it "is susceptible of more than one reasonable interpretation," as Nautilus and some *amici* proposed,<sup>7</sup> or only when it is not "reasonably clear" to

1. See JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK 10 (2008).

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<sup>2.</sup> See Fed. TRADE COMM'N., THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE & REMEDIES WITH COMPETITION 76–80 (2011) [hereinafter FTC REPORT].

<sup>3.</sup> See, e.g., Jeffrey A. Lefstin, Claim Construction, Appeal, and the Predictability of Interpretive Regimes, 61 U. MIAMI L. REV. 1033, 1033–36 (2007).

<sup>4. 542</sup> U.S. \_\_; No. 13-369, slip op. (June 2, 2014).

<sup>5. 35</sup> U.S.C. § 112(b) (2012).

<sup>6.</sup> Biosig Instruments, Inc. v. Nautilus, Inc., 715 F.3d 891, 898 (Fed. Cir. 2013) (quotations omitted), *cert. granted*, 134 S. Ct. 896 (2014).

<sup>7.</sup> Brief for Petitioner at 2, *Nautilus*, No. 13-369, 2014 WL 768314, at \*2 (U.S. Feb. 24, 2014) [hereinafter *Nautilus* Br.]; *see also* Brief of Amazon.com, Inc., et al. as *Amici Curiae* in Support of Petitioner at 16, *Nautilus*, No. 13-369, 2014 WL 828060, at \*16 (U.S. Mar. 3, 2014) [hereinafter *Amazon* Br.]; Brief *Amicus Curiae* of Professor Peter S. Menell in Support of Neither Party at 38–39, *Nautilus*, No. 13-369, 2014 WL 880962, at \*38–39 (U.S. Mar. 3, 2014) [hereinafter *Menell* Br.].

people working in the field, as other *amici* proposed<sup>8</sup>—was said to be a panacea that would provide "competitors and the public with clear guidance on what is and is not prohibited."<sup>9</sup>

The well-established problems with the Federal Circuit's claim construction rules were almost entirely ignored in the materials submitted to the Supreme Court. Rather, the Court was incorrectly told that claim construction has "no bearing on whether the boundaries of the claim itself are definite to a skilled artisan";<sup>10</sup> that indefiniteness is resolvable without the need for claim construction;<sup>11</sup> and even that claim construction is "a task that courts are well-equipped to undertake using existing law."<sup>12</sup> As a result, the Supreme Court resolved *Nautilus* with only a partial view of uncertain patent scope, a view that did not include what was widely seen as the source of the problem until the Court granted certiorari in *Nautilus*.

In doing so, the Supreme Court held "that a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention," without providing any further guidance as to what constituted "reasonable certainty."<sup>13</sup> Early commentary has been critical of this lack of guidance, with one commentator concluding, "we know very little more about the subject now that we've seen the opinion than we did before."<sup>14</sup>

This Commentary completes the picture by addressing the intertwined relationship of claim construction, indefiniteness, and uncertain patent scope. Claim construction is a necessary threshold step and, if effective, can resolve uncertainties in claim scope, reducing the need to invalidate claims as indefinite, as discussed in Part II. Part III demonstrates how the Federal Circuit's failed claim construction rules accentuate, rather than

<sup>8.</sup> Brief of Amicus Curiae Am. Intellectual Property Owners Ass'n in Support of Neither Party at 4, *Nautilus*, No. 13-369, 2014 WL 891766, at \*4 (U.S. Mar. 3, 2014) [hereinafter *IPO* Br.]; *see also, e.g.*, Brief of Amicus Curiae AARP in Support of Petitioner at 7, *Nautilus*, No. 13-369, 2014 WL 880961, at \*7 (U.S. Mar. 3, 2014) [hereinafter AARP Br.]; Brief of Yahoo! Inc. as *Amicus Curiae* in Support of Reversal at 5, *Nautilus*, No. 13-369, 2014 WL 880959, at \*5 (U.S. Mar. 3, 2014) [hereinafter *Yahoo*! Br.].

<sup>9.</sup> Brief of Nova Chems. Inc. et al. as Amici Curiae Supporting Petitioner at 21, *Nautilus*, No. 13-369, 2014 WL 880957, at \*21 (U.S. Mar. 3, 2014).

<sup>10.</sup> Nautilus Br., supra note 7, at 46.

<sup>11.</sup> Amazon Br., supra note 7, at 18–19.

<sup>12.</sup> Brief of the Am. Bar Ass'n as *Amicus Curiae* in Support of Neither Party at 5, *Nautilus*, No. 13-369, 2014 WL 880963, at \*5 (U.S. Mar. 3, 2014) [hereinafter *ABA* Br.].

<sup>13.</sup> Nautilus, No. 13-369, slip op. at 1.

<sup>14.</sup> Ronald Mann, Opinion analysis: Justices take blue pencil to Federal Circuit opinions on definiteness, SCOTUSBLOG (June 3, 2014, 10:49 AM), http://www.scotusblog.com/2014/06/opinion-analysis-justices-take-blue-pencil-to-federal-circuit-opinions-on-definiteness/.

resolve, ambiguities in claim scope. Part IV explains how the ineffectiveness of claim construction increases the need for an effective indefiniteness doctrine, but, perversely, both decreased the effectiveness of the Federal Circuit's pre-*Nautilus* standard and renders any stricter standard too draconian. Part IV proposes that the best way to address uncertain claim scope is to make claim construction more effective, while, surprisingly, largely retaining the Federal Circuit's pre-*Nautilus* indefiniteness standard.

## II. CLAIM CONSTRUCTION AND INDEFINITENESS

# A. Claim Construction as Threshold Step

Since "[n]either written words nor the sounds that the written words represent have any inherent meaning," words only acquire meaning from context.<sup>15</sup> In patent law, claim construction is the process of determining meaning from the relevant context,<sup>16</sup> including the rest of the claim language, the written description of the invention in the patent specification, the Patent Office record, and technical texts or expert testimony about the background understanding in the field.<sup>17</sup>

Context is necessary to determine meaning, even for technically-savvy people reading technical terms.<sup>18</sup> As a result, claim construction does not just occur *ex post* in litigation to help lay juries, as suggested in the *Nautilus* briefing.<sup>19</sup> "Claim construction is conducted by all players in the patent system," including the Patent Office, competitors, investors, and researchers.<sup>20</sup> Even in litigation, claims are construed to have "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention,"<sup>21</sup> which is not necessarily understandable to lay people.<sup>22</sup>

<sup>15.</sup> ANTONIN SCALIA & BRYAN A. GARNER, READING LAW: THE INTERPRETATION OF LEGAL TEXTS, at xxvii, 33, 167 (2012).

<sup>16. 5</sup>A DONALD S. CHISUM, CHISUM ON PATENTS § 18.03[2] (2006).

<sup>17.</sup> See Phillips v. AWH Corp., 415 F.3d 1303, 1314–19 (Fed. Cir. 2005) (en banc).

<sup>18.</sup> See, e.g., Dan L. Burk & Mark A. Lemley, Fence Posts or Sign Posts? Rethinking Patent Claim Construction, 157 U. PA. L. REV. 1743, 1752–53 (2009).

<sup>19.</sup> See Nautilus Br., supra note 7, at 46 ("Many claim-construction disputes do not involve real disagreement over a claim's *scope*, but only over the manner in which the words of the claim should be described in laypersons' terms for the jury.").

<sup>20.</sup> R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY AND THE COMMON LAW 123, 125 (Shyamkrishna Balganesh ed., 2013).

<sup>21.</sup> *Phillips*, 415 F.3d at 1312–13.

<sup>22.</sup> See, e.g., Butamax<sup>™</sup> Advanced Biofuels LLC v. Gevo, Inc., 746 F.3d 1302, 1313-14 (Fed.

Thus, claim terms cannot be unambiguous on their face without resort to context through claim construction, as proposed by some in *Nautilus*.<sup>23</sup> To the contrary, the Supreme Court and other courts have consistently evaluated indefiniteness only after looking to context for meaning, *i.e.*, after claim construction.<sup>24</sup> Despite the suggestions in the *Nautilus* briefing,<sup>25</sup> this does not mean that litigation is necessary to ascertain claim scope. In theory, observers *ex ante* should be able to "understand what is the scope of the patent owner's rights by obtaining the patent and prosecution history . . . and applying established rules of construction" and "be able to rest assured . . . that a judge . . . will similarly analyze the text of the patent and its associated public record and apply the established rules of construction" to reach the same construction.<sup>26</sup>

#### B. Claim Construction's Impact on Patent Uncertainty

Claim construction is crucial to the certainty of patent scope. As is true of all words,<sup>27</sup> "claims which on first reading—in a vacuum, if you will—appear indefinite may upon a reading of the specification disclosure or prior art teachings become quite definite."<sup>28</sup> For example, a claim may use an unusual word or words in an unusual way or combination, which, in the abstract, would make claim scope uncertain. No uncertainty exists, however, if the specification expressly defines the term<sup>29</sup> or uses it in a way that makes its meaning clear.<sup>30</sup>

Cir. 2014) (construing term to mean "an enzyme, whether naturally occurring or otherwise, known by the EC number 1.1.1.86 that catalyzes the conversion of acetolactate to 2,3-dihydroxyisovalerate"); Pfizer Inc. v. Teva Pharm. USA, Inc., et al., No. 2012-1576, slip op. at 10; 2014 WL 463757, at \*3 (Fed. Cir. 2014) (finding term "was correctly construed to include 3-isobutylGABA regardless of its enantiomeric forms . . . ").

<sup>23.</sup> See Amazon Br., supra note 7, at 18–19 (arguing that clarity of a patent's scope should be required when the patent issues).

<sup>24.</sup> *See, e.g.*, United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 233–36 (1942) (looking to specification and testimony of skilled person); Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001); *In re* Merat, 519 F.2d 1390, 1394 (C.C.P.A. 1975); Ga.-Pac. Corp. v. U.S. Plywood Corp., 258 F.2d 124, 136 (2d Cir. 1958).

<sup>25.</sup> See Amazon Br., supra note 7, at 18–19.

<sup>26.</sup> Markman v. Westview Instruments, Inc., 52 F.3d 967, 978–79 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996) (citation omitted).

<sup>27.</sup> SCALIA & GARNER, *supra* note 15, at 32–33.

<sup>28.</sup> Merat, 519 F.2d at 1394 n. 2 (quotations omitted).

<sup>29.</sup> See Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705–06 (Fed. Cir. 1998) (term lacking well-understood meaning not indefinite because of express specification definition).

<sup>30.</sup> See Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp., 493 F.3d 1358, 1362 (Fed. Cir. 2007) (specification "clearly communicates" that claim used "heading" to mean "bearing").

Claim construction's impact on uncertain patent scope depends on how effective its rules are at leading different observers to reach the same conclusion on claim meaning, which in turn depends both on whether the rules for claim construction are well-established and indisputable and whether the substance of those rules is likely to generate a single meaning, rather than a range of possible meanings.<sup>31</sup> The more effective the claim construction rules, the fewer uncertain patents will remain to which indefiniteness could apply. Conversely, the less effective the claim construction rules, more uncertain patents will remain for potential invalidation for indefiniteness.

#### III. CLAIM CONSTRUCTION AND UNCERTAIN CLAIM SCOPE

## A. Blaming Claim Construction for Uncertain Patent Scope

Unsurprisingly, large segments of the patent community sought to tighten the indefiniteness standard in *Nautilus*. The Federal Circuit's claim construction rules are a complete mess, increasing the need for indefiniteness to invalidate uncertain patents and protect public notice. Surprisingly, though, the "broken" claim construction rules that have "engross[ed]" commentators and Federal Circuit judges in the past<sup>32</sup> received only passing and vague reference in the *Nautilus* briefing.<sup>33</sup>

Instead, the Supreme Court was told that the failure of patents to "reasonably inform those skilled in the art about the invention's scope,"<sup>34</sup> which undermines their "public-notice function"<sup>35</sup> of identifying "the metes and bounds of the claimed invention," was caused by the Federal Circuit's lax indefiniteness standard.<sup>36</sup> The consequences of this weak indefiniteness doctrine were said to include: (1) a range of possible claim scopes, rather than a single discernible scope;<sup>37</sup> (2) "changing, even

<sup>31.</sup> Christopher A. Cotropia, Patent Claim Interpretation Methodologies and Their Claim Scope Paradigms, 47 WM. & MARY L. REV. 49, 99–100 (2005).

<sup>32.</sup> Lefstin, *supra* note 3, at 1033–1035.

<sup>33.</sup> See Brief of Microsoft Corp. as Amicus Curiae in Support of Petitioner at 24–25, Biosig Instruments, Inc. v. Nautilus, Inc., 542 U.S. \_\_; No. 13-369, slip op. (June 2, 2014), 2014 WL 880964, at \*24–25 (U.S. Mar. 3, 2014) [hereinafter *Microsoft* Br.] (mentioning panel-dependence and high reversal rates of claim construction); see also AARP Br., supra note 8, at 6 (noting that claim construction is confusing and difficult); *Menell* Br., supra note 7, at 9–10 (briefly identifying four problems previously attributed to claim construction); Yahoo! Br., supra note 8, at 15 (noting in passing that some uncertainties "are best redressed by proper claim construction").

<sup>34.</sup> See Yahoo! Br., supra note 8, at 3.

<sup>35.</sup> Id. at 10.

<sup>36.</sup> Id. at 5.

<sup>37.</sup> Nautilus Br., supra note 7, at 33.

inconsistent positions" by the patentee;<sup>38</sup> (3) claim scope that is only knowable after litigation and appeal to the Federal Circuit;<sup>39</sup> (4) exploitation of ambiguous claims to expand patent scope beyond the patentee's actual invention;<sup>40</sup> (5) incentives to draft ambiguous patent claims;<sup>41</sup> (6) chilling of follow-on innovation and competition;<sup>42</sup> (7) increased cost and risk for competitors;<sup>43</sup> (8) increased disputes and litigation over claim scope;<sup>44</sup> and (9) greater difficulty for courts in discerning claim scope.<sup>45</sup>

Yet, before *Nautilus*, the indefiniteness doctrine was largely an afterthought in the debate over uncertain patent scope,<sup>46</sup> and the Federal Circuit's claim construction jurisprudence was blamed for the failure of public notice: "uncertainty over the proper procedure for claim construction has led to uncertainty in patent scope, which in turn negates the notice and boundary-staking functions to be performed by the patent claim."<sup>47</sup> Indeed, each of the consequences of poor notice now attributed to indefiniteness has been blamed in the past on claim construction.<sup>48</sup> Thus, the myopic focus on the indefiniteness doctrine in *Nautilus* left the Supreme Court with imperfect information on the source of uncertainty in claim scope, contributing to a sub-optimal resolution.

## B. Claim Construction's Contribution to Uncertain Claim Scope

For good reason, uncertain claim scope has long been associated with failed claim construction rules. The Federal Circuit's claim construction jurisprudence creates uncertainty in at least two, and perhaps three, ways.

*First*, the rules for claim construction are unpredictable. A persistent methodological split exists in the Federal Circuit as to whether claim

43. *Id.* at 28–29.

<sup>38.</sup> Id. at 47.

<sup>39.</sup> *Id.* at 30–31.40. *Id.* at 38–39.

<sup>41.</sup> *Id.* at 30–32.

<sup>42.</sup> *Id.* at 29–30

<sup>44.</sup> *Microsoft* Br., *supra* note 33, at 31–33.

<sup>45.</sup> See Nautilus Br., supra note 7, at 33–34.

<sup>46.</sup> A search of SSRN on April 11, 2014 for the terms "indefiniteness" and "patent" yielded four results, but a search for "claim construction" and "patent" yielded 101.

<sup>47.</sup> Kristen Osenga, Linguistics and Patent Claim Construction, 38 RUTGERS L.J. 61, 64 (2006).

<sup>48.</sup> See BESSEN & MEURER, supra note 1, at 57–58 (patentee inconsistency); Burk & Lemley, supra note 18, at 1762 (incentives to draft and exploit ambiguous claims); William R. Hubbard, Efficient Definition and Communication of Patent Rights: The Importance of Ex Post Delineation, 25 SANTA CLARA COMPUTER & HIGH TECH. L.J. 327, 338 (2009) (chills innovation and competition; increases business costs, claim construction disputes, litigation, and costs of determining scope); Lefstin, supra note 3, at 1062–63 (range of meanings; uncertainty until appellate construction).

construction focuses on a term's general meaning in the field of the invention (as evidenced through expert testimony or technical publications), with only limited resort to the description in the patent itself, or on the term's use in the patent itself, with only limited resort to extrinsic evidence for background.<sup>49</sup> These divergent methodologies generally lead to different claim scope and "appear[] to be the genesis of almost all disputes" over the meaning of patent claims.<sup>50</sup> This methodological split is one of, if not the, major causes of uncertainty in patent scope.<sup>51</sup> Pre-litigation, each party can adopt the approach that best suits its interests, undermining licensing efforts and encouraging litigation. Neither party can reliably predict the actual claim scope, which depends on the district judge's choice of methodological approach and (absent settlement) whether this choice is the same as that of two of the three judges on the Federal Circuit panel.<sup>52</sup>

*Second*, uncertainty exists because some Federal Circuit cases continue to emphasize the general meaning in the field, as evidenced by extrinsic texts or expert testimony. Due to the difficulty of identifying the precise field and skill level of the invention and finding a source in the precise field and at the precise skill level and time, there is likely to be a variety of equally plausible sources, often with varying meanings, undermining efforts to accurately predict claim scope *ex ante* and encouraging gamesmanship in litigation.<sup>53</sup> Although a few commentators continue to believe that the general meaning approach best promotes predictability,<sup>54</sup> there is growing recognition that focusing on how a claim term is used in the publicly-available patent and Patent Office record puts all consumers of claim construction on the same footing and increases the chances that different observers will reach the same construction, enhancing certainty in claim scope.<sup>55</sup>

*Third*, for years, large segments of the patent community contended that the Federal Circuit's *de novo* review of district court claim

<sup>49.</sup> See Cotropia, supra note 31, at 82-93.

<sup>50.</sup> R. Polk Wagner & Lee Petherbridge, Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance, 152 U. PA. L. REV. 1105, 1144 (2004); see also id. at 57, 105–115.

<sup>51.</sup> *See, e.g.*, Lighting Ballast Control LLC v. Phillips Elecs. N. Am. Corp., No. 2012-1014, slip op. at 27 (Fed. Cir. Feb. 21, 2014) (en banc) (quoting amicus brief of Google, Amazon, Hewlett-Packard, Red Hat and Yahoo!); Osenga, *supra* note 47, at 71–73.

<sup>52.</sup> Osenga, *supra* note 47, at 71–72.

<sup>53.</sup> See Greg Reilly, Judicial Capacities and Patent Claim Construction: An Ordinary Reader Standard, 20 MICH. TELECOMM. & TECH. L. REV. 243, 271–77 (2014).

<sup>54.</sup> See, e.g., Wagner & Petherbridge, supra note 20, at 144.

<sup>55.</sup> See, e.g., FTC REPORT, supra note 2, at 102.

constructions was the primary cause of uncertainty.<sup>56</sup> I previously questioned this view because *de novo* review only affects *ex post* certainty of the few patents litigated to a district court claim construction, not the far more important *ex ante* predictability of claim scope pre-litigation,<sup>57</sup> a position that was recently endorsed by the en banc Federal Circuit.<sup>58</sup> Regardless, many respected observers have blamed uncertainty on *de novo* review of claim construction, but virtually no mention was made of it in the *Nautilus* briefing.

# IV. OPTIMIZING CLAIM CONSTRUCTION AND INDEFINITENESS

# A. Indefiniteness in the Time of Claim Construction Uncertainty

The pervasive problems with the Federal Circuit's claim construction rules have perverse effects. They increase the need for indefiniteness to police uncertainty in claim scope, while at the same time rendering the Federal Circuit's pre-*Nautilus* indefiniteness standard less effective *and* the consequences of tightening the standard untenable.

The ineffectiveness of the Federal Circuit's claim construction jurisprudence reduces the number of patent claims whose scope is predictable *ex ante* through resort to contextual information, increasing the problem of uncertain patent scope. This imposes a greater need to invalidate patents as indefinite to protect public notice, a need that played out in *Nautilus*.

At same time, the claim construction problems undermined the effectiveness of the Federal Circuit's pre-*Nautilus* indefiniteness standard—whether a claim is not amenable to construction or insolubly ambiguous—at weeding out uncertain patent claims. Courts had two equally plausible methodologies with which to "solve" any ambiguity. If the patent-focused approach did not yield a clear answer, the court could turn to the general-meaning-focused approach, and vice-versa. Moreover, current doctrine allows a construction based on extrinsic evidence of the supposed general meaning in the field, even if not tied to the patent itself. Almost always, there will be some text or expert witness to support a

<sup>56.</sup> Lefstin, *supra* note 3, at 1034–35.

<sup>57.</sup> See Greg Reilly, Improvidently Granted: Why the En Banc Federal Circuit Chose the Wrong Claim Construction Issue, 80 U. CHI. L. REV. DIALOGUE 43 (2013), available at https://lawreview.uchicago.edu/sites/lawreview.uchicago.edu/files/uploads/Dialogue/Reilly\_Online\_Final.pdf.

<sup>58.</sup> See, e.g., Lighting Ballast, slip op. at 26–30. The Supreme Court recently granted certiorari to address the proper standard of review for claim construction, albeit not in the Lighting Ballast case. See Teva Pharm. USA, Inc. v. Sandoz, Inc., 134 S. Ct. 1621, 2014 WL 1516642 (2014).

supposed general meaning, no matter how obscure. Indefiniteness was therefore a rare outcome<sup>59</sup> because virtually any claim will be amenable to construction and any ambiguity "solvable" *ex post* in litigation due to open-ended claim construction rules. Of course, the open-ended nature of claim construction rules also means that this "solution" often will not be predictable *ex ante*, resulting in rampant uncertainty of claim scope.

In light of the increased need for indefiniteness and decreased effectiveness of the Federal Circuit's doctrine, many in *Nautilus* logically sought to tighten the indefiniteness standard. Unfortunately, the claim construction problems also make it nearly impossible to tighten indefiniteness without gutting the patent system. *Nautilus's* proposed "more than one reasonable interpretation" standard would leave virtually every patent susceptible to invalidation, as many *amici* argued even without raising claim construction problems.<sup>60</sup> The two competing methodologies, each equally reasonable under existing law, often lead to different interpretations, while parties normally can identify more than one reasonable meaning from extrinsic texts or expert testimony.

Even the more moderate proposal for a "reasonable certainty" standard, ultimately adopted by the Supreme Court, could imperil a substantial number of patents under the current state of claim construction. How many claims can be said to be "reasonably certain" *ex ante* when a court is equally justified in choosing between two different methodologies that lead to different substantive interpretations? Or when an observer cannot reliably predict *ex ante* what obscure technical text or self-interested expert testimony a court will rely upon in adversarial litigation? In fact, under current rules, an observer cannot even be confident that courts will honor the patent's *express definition* of a term if it departs from the supposed "plain and ordinary meaning."<sup>61</sup>

Thus, in the face of pervasive uncertainty in claim construction, tightening the indefiniteness standard to resolve uncertain patent scope comes at the cost of imperiling large swaths of patents, patents that would be at risk largely because the Federal Circuit has failed at claim construction. Faced with these consequences, it is not surprising that the Federal Circuit considered a claim definite as long as it could "be given *any* reasonable meaning."<sup>62</sup>

<sup>59.</sup> Amazon Br., supra note 7, at 14–15 (noting that "fewer than 6% of patent invalidations are based on indefiniteness").

<sup>60.</sup> See, e.g., Yahoo! Br., supra note 8, at 5.

<sup>61.</sup> *Butamax*<sup>TM</sup>, slip op. at 10–18.

<sup>62.</sup> Hearing Components, Inc. v. Shure Inc., 600 F. 3d 1357, 1366 (Fed. Cir. 2010) (emphasis

### B. Solving the Uncertainty of Patent Scope?

The Supreme Court faced the unenviable choice in *Nautilus* of either affirming the Federal Circuit's indefiniteness standard and endorsing rampant uncertainty in patent scope or tightening the standard and imperiling large numbers of patents. The result was an opinion that did not say particularly much. There has to be a better way to combat uncertain patent scope.

An obvious first step is to correct the Federal Circuit's claim construction failures. Simply adopting a single methodology would create "an inherent certainty."<sup>63</sup> Choosing the patent-focused methodology is even more promising "[f]rom a notice perspective," as this "material is easily identifiable by, and accessible to, third parties" *ex ante*, whereas observers "cannot know in advance what external evidence will be utilized" under a general-meaning-focused approach.<sup>64</sup> Unfortunately, the Supreme Court has repeatedly declined to review claim construction problems,<sup>65</sup> leaving the Court in the position it faced in *Nautilus*.

Under well-functioning claim construction rules, an indefiniteness standard is still needed to address uncertain scope not resolved by resort to context. The "more than one reasonable interpretation" standard would remain overbroad. Even with optimal claim construction rules, there will often be multiple *reasonable*, even if not likely, interpretations, sometimes because of the patentee's strategic drafting but often because of the inherent shortcomings of language or the skills and incentives of litigators. When a competitor applying well-functioning claim construction rules can predict two possible constructions, with say one seventy-five percent likely and the other twenty-five percent likely, claim scope is sufficiently predictable and the possibility of a wrong prediction is part of ordinary business risk that can be factored into an activity's cost-benefit analysis.<sup>66</sup> Invalidating the patent as indefinite in such circumstances is a draconian remedy in pursuit of unobtainable absolute certainty.

added; quotations omitted).

<sup>63.</sup> Cotropia, *supra* note 31, at 99.

<sup>64.</sup> See FTC REPORT, supra note 2, at 102.

<sup>65.</sup> *See, e.g.*, Mirowski Family Ventures, LLC v. Medtronic Inc., 134 S. Ct. 1022 (2014) (denying certiorari); Retractable Technologies Inc. v. Becton, Dickinson & Co., 133 S. Ct. 833 (2013) (denying certiorari).

<sup>66.</sup> *Cf.* Brief of Biotechnology Indus. Org. as Amici Curiae in Support of Respondent at 27–28, Biosig Instruments, Inc. v. Nautilus, Inc., 542 U.S. \_; No. 13-369, slip op. (June 2, 2014), 2014 WL 1348469, at \*27–28 (Apr. 2, 2014).

By contrast, the more moderate "reasonable certainty" standard adopted by the Supreme Court is consistent with a pursuit of predictability, not absolute certainty. If claim scope is "reasonably clear," competitors can reliably predict the likelihood of a particular scope and evaluate the risk of a wrong prediction. At the same time, it is odd to address an uncertainty problem with a vague standard like "reasonable certainty." How likely must a particular interpretation be to be "reasonable certain"? Fifty-five percent? Eighty percent? The vagueness of "reasonable certainty" could undermine efforts to predict claim scope, as it would be difficult to know when a claim had valid scope and when it was invalid as indefinite.<sup>67</sup> This could encourage disputes over indefiniteness, hindering licensing and settlement efforts and increasing litigation. Likewise, parties could be encouraged to more vigorously dispute claim construction, knowing that even a clear losing argument could be deemed sufficiently strong to invalidate the claim as not "reasonably certain."

Surprisingly, with improved claim construction rules, the most sensible indefiniteness standard would be a clarified version of the Federal Circuit's pre-Nautilus standard. In most cases, the improved claim construction rules would make claim scope sufficiently predictable ex ante. Only in limited cases would resort to context fail to "solve" the ambiguity in claim scope, which could occur in two ways under the preferred patent-focused methodology. First, the patent may provide insufficient contextual information to solve the ambiguity by, for example, not using a claim term in the rest of the patent or doing so only vaguely or in passing. Second, a term could be used in different, inconsistent, or ambiguous ways in different parts of the patent, giving rise to two equally plausible interpretations. Invalidation for indefiniteness would be appropriate in these circumstances where the claim term "is not amenable to construction" because there is insufficient contextual information or is "insolubly ambiguous" because the contextual information leads to two equally plausible interpretations.<sup>68</sup> This is essentially the Federal Circuit's pre-Nautilus standard, except clarifying "insolubly ambiguous" to include two equally plausible interpretations, not just the absence of any plausible interpretation.

Thus, the indefiniteness doctrine would play a crucial role in protecting public notice even with a better claim construction process by invalidating

<sup>67.</sup> See Mann, *supra* note 14 (suggesting Supreme Court "reasonable certainty" standard "will turn out to have made the boundary between definite and indefinite even less clear than it was before the Court addressed the question").

<sup>68.</sup> Biosig Instruments, Inc. v. Nautilus, Inc., 715 F.3d 891, 898 (Fed. Cir. 2013).

the limited patent claims that remain ambiguous or vague even after applying the improved claim construction rules. More importantly, it would incentivize patent drafters to provide sufficient, and sufficiently clear, contextual information in the first place, increasing claim construction's effectiveness at providing public notice ex ante and decreasing the need to protect public notice only ex post through invalidation. Admittedly, as compared to a "reasonable certainty" standard, the Federal Circuit's pre-Nautilus standard would not eliminate as many close calls on claim construction (e.g., where one construction is fifty-five percent likely and the other is forty-five percent likely) or provide as strong incentives for clear drafting, at least in theory. But "equally plausible" is a clearer rule than "reasonable certainty," improving the predictability of the indefiniteness determination and better facilitating planning, licensing, and settlement. Any need for clearer drafting could be satisfied by new requirements for patent applications, such as glossaries of key terms.<sup>69</sup>

# V. CONCLUSION

The Supreme Court backed itself into a corner in *Nautilus* by choosing to address uncertain patent scope through indefiniteness, not claim construction. Likely seeking any result that will combat so-called "patent trolls,"<sup>70</sup> the patent community exacerbated the problem by failing to inform the Court of the well-recognized problems with claim construction. Unfortunately, there was no clear path to a good result in *Nautilus*. The only sensible approach is to first fix the Federal Circuit's failed claim construction jurisprudence.

<sup>69.</sup> See FTC REPORT, supra note 2, at 107–12.

<sup>70.</sup> See, e.g., Amazon Br., supra note 7, at 2-3; Microsoft Br., supra note 33, at 4-5.