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PATENTS

The authors review district court and Federal Circuit decisions in challenges to patent claim definiteness since the Supreme Court's June 2 decision in *Nautilus v. Biosig*.

Less Than a Year Later, *Nautilus's* Impact on Claim Definiteness Is Already Being Felt



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Section 112 of the Patent Act provides that “[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.”¹ The purpose of the definiteness requirement is to “clearly distinguish what is claimed from what went before in the art

¹ 35 U.S.C. § 112(b) (emphasis added).

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and clearly circumscribe what is foreclosed from future enterprise.”²

Until recently, the U.S. Court of Appeals for the Federal Circuit applied a fairly lenient test for assessing definiteness, finding claims deficient only if they were “insolubly ambiguous” or “not amenable to construction.”³ Under the Federal Circuit's old test, even vague claims could meet the definiteness requirement.

In June 2014, however, a unanimous Supreme Court in *Nautilus v. Biosig Instruments* discarded these tests for definiteness, and replaced them with a stricter, “reasonable certainty” standard.⁴ Under this new standard, patent claims, when read in conjunction with the specification and prosecution history, must “inform, with reasonable certainty, those skilled in the art about the scope of the invention.”⁵ *Nautilus* represents a major change in the law of indefiniteness—one that makes it easier for accused infringers to invalidate imprecise claims.

The patent claim at issue in *Nautilus* required that a live electrode and a common electrode be “mounted . . . in spaced relationship with each other.” The term “spaced relationship” was treated as a term of degree because the claim contained no upper or lower bound as to the exact spacing relationship between the two

² *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942).

³ See, e.g., *Exxon Research and Engineering v. United States*, 265 F.3d 1371, 1375, 60 U.S.P.Q.2d 1272 (Fed. Cir. 2001) (62 PTCJ 498, 9/28/01) (“If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite.”)

⁴ *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2125, 2014 BL 151635, 110 U.S.P.Q.2d 1688 (2014) (88 PTCJ 373, 6/6/14).

⁵ *Id.* at 2129 (emphasis added).

electrodes.⁶ The district court entered summary judgment of invalidity for indefiniteness, concluding that the patent's written description failed to provide any guidance for determining what the spatial relationship must be between the two electrodes.⁷ Arguably, any two electrodes mounted on a substrate are in a spaced relationship with each other.

On appeal, the Federal Circuit applied its “insolubly ambiguous” standard to the claims, and reversed the indefiniteness finding.⁸ The appellate court concluded that the spaced relationship limitation was susceptible to a concrete definition and that an ordinary artisan would understand—based on the patent specification—the minimum and maximum distances required between the two electrodes.⁹

The Supreme Court granted certiorari. It began its analysis by noting that definiteness must be evaluated from the perspective of an ordinary artisan who has read the patent specification and prosecution history.¹⁰ Next, the Court turned to how much imprecision the definiteness requirement will tolerate. While recognizing the inherent imprecision involved in using language to define an invention, the Court stressed the importance of requiring enough precision “to afford clear notice of what is claimed, thereby ‘apprais[ing] the public of what is still open to them.’”¹¹ The Court contrasted this statutory requirement for clarity and precision with the Federal Circuit’s “insolubly ambiguous” and “amenable to construction” tests for definiteness, which it concluded permitted too much imprecision.¹² According to the Court, to tolerate imprecision just short of that rendering a claim “insolubly ambiguous” would diminish the public notice function of the claims and foster an innovation-discouraging “zone of uncertainty,” in which competitors would fear to tread.¹³

In articulating the new “reasonable certainty” standard, the Court looked to the practical and policy considerations underlying the statutory definiteness requirement. It noted that, without a meaningful check on vague patents, “patent applicants face powerful incentives to inject ambiguity into their claims.”¹⁴ “Eliminating that temptation is in order,” the Court concluded, “and the patent drafter is in the best position to resolve the ambiguity in patent claims.”¹⁵ Accordingly, the Court vacated the Federal Circuit decision and remanded the case for reconsideration.¹⁶

Federal Circuit Confirms that the Standard for Definiteness in the Wake of *Nautilus* Is Stricter.

While it is too early to assess the full impact of *Nautilus*, decisions issued since *Nautilus* suggest that the lower courts are indeed applying the definiteness re-

quirement more rigorously. Several reported decisions, including a Federal Circuit decision, have relied on *Nautilus* in finding patent claims to be indefinite.

In *Interval Licensing v. AOL*, the Federal Circuit applied the new definiteness standard for the first time and signaled a shift in favor of accused infringers.¹⁷ The patents at issue in *Interval* were drawn to an “attention manager for occupying the peripheral attention of a person in the vicinity of a display device.”¹⁸ The patents described a system that acquires data from a content provider, schedules the display of the content data, generates images from the content data, and then displays the images on a device.

The principal issue raised in the case addressed the claim requirement that an “attention manager” display images “in an unobtrusive manner that does not distract a user.”¹⁹ The district court held that the phrases “in an unobtrusive manner” and “does not distract” were indefinite because the patents “fail[ed] to provide an objective standard by which to define the scope of [‘in an unobtrusive manner’]” and because whether an accused product met the claim limitations (i.e., did not distract the user) was highly dependent on the circumstances under which the accused product was used.²⁰

The Federal Circuit affirmed, finding the claim language to be “highly subjective.” According to the court, “whether something distracts a user from his primary interaction depends on the preferences of the particular user and the circumstances under which any single user interacts with the display.”²¹ Moreover, the phrase “in an unobtrusive manner” was a term of degree, the meaning of which was not reasonably certain from the specification. The court noted that, while not all terms of degree are inherently indefinite, the definiteness requirement cannot be satisfied “merely because a court can ascribe some meaning to a patent’s claims.”²² Thus, where a term of degree is overly subjective, or has “too uncertain a relationship to the patent’s embodiments,” it will not satisfy the definiteness requirement.²³ The court held that the particular term before it—“unobtrusive manner”—failed to meet the definiteness requirement because there was no “objective standard by which to define the scope.”²⁴

Notably, although the court relied heavily on pre-*Nautilus* case law to support its indefiniteness finding, its opinion suggests that the Federal Circuit has recalibrated its approach to indefiniteness in light of *Nautilus*. For example, the court rejected *Interval*’s argument that the specification provided an example of how information could be presented “in an unobtrusive manner,” explaining that a mere example, as opposed to an explicit definition or other clear guidance, lacked the requisite clarity to satisfy the definiteness requirement.²⁵ Prior to *Nautilus*, an example provided in the specification may have sufficed to support a finding of definiteness. Under the pre-*Nautilus* indefiniteness standard, a

⁶ *Id.* at 2127.

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.* at 2128.

¹¹ *Id.* at 2129 (quoting *Markman v. Westview Instruments Inc.*, 517 U.S. 370, 373, 38 U.S.P.Q.2d 1461 (1996)).

¹² *Id.* at 2129-30.

¹³ *Id.*

¹⁴ *Id.* at 2129 (citing an FTC report concluding that the patent system fosters “an incentive to be as vague and ambiguous as you can with your claims” and “defer clarity at all costs”).

¹⁵ *Id.* (citation omitted).

¹⁶ *Id.* at 2131.

¹⁷ *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 112 U.S.P.Q.2d 1188 (Fed. Cir. 2014) (88 PTCJ 1172, 9/12/14).

¹⁸ *Id.* at 1366.

¹⁹ *Id.* at 1367-68.

²⁰ *Id.* at 1369.

²¹ *Id.* at 1371.

²² *Id.* (quoting *Nautilus*, 134 S. Ct. at 2130) (emphasis added).

²³ *See id.*

²⁴ *Id.*

²⁵ *Id.* at 1373-74.

patentee was required to show only that a claim limitation was “amenable to construction” or not “insolubly ambiguous.” But instead of limiting the claim language to the example in the specification, the court opted to invalidate the claims. Citing *Nautilus*, the court noted that “[w]ith this lone example, a skilled artisan is still left to wonder what other forms of display are unobtrusive and non-distracting.”²⁶ Thus, despite the claim limitation being amenable to at least one construction—which may have been sufficient to support a finding of definiteness pre-*Nautilus*—the court found the claim to be indefinite.

Another more recent decision from the Federal Circuit, however, reached a different conclusion on an indefinite issue. In *Eidos Display v. AU Optronics*, the court found disputed claim language to be sufficiently definite under the *Nautilus* standard and reversed the district court’s summary judgment determination of indefiniteness.²⁷ The patent addressed manufacturing processes for electro-optical devices, like a liquid crystal display (LCD). The limitation at issue recited forming “a contact hole for source wiring and gate wiring connection terminals.”

During *Markman* proceedings before the district court the parties offered different constructions of the limitation, but the district court declined to construe the limitation, concluding that the issue was not ripe due to indefiniteness concerns. Later, in connection with summary judgment briefing on noninfringement and indefiniteness, the parties offered two additional proposed constructions for the disputed limitation. Ultimately, the court rejected both parties’ proposed constructions and found the claims indefinite because it was “unable to arrive at a construction that would allow a person of ordinary skill in the art to determine what is claimed when the claim is read in light of the specification.”²⁸

Applying the Supreme Court’s more strict standard for definiteness from *Nautilus*, the Federal Circuit nevertheless disagreed with the district court’s conclusion and found that the limitation provided the requisite “reasonable certainty” as to the scope of the claim. The court stressed that patent claims are construed from the perspective of a person of ordinary skill in the art—here, someone with knowledge of LCD manufacturing.²⁹ Both parties agreed that a skilled artisan would have assumed different contact holes, and the court noted that, had *Eidos* “wanted to deviate from the standard practice and claim a novel shared contact hole, some teaching of how to depart from the common practice would not only be expected, but is required.”³⁰ On the contrary, the court held, “the specification makes clear that the limitation-at-issue requires formation of separate contact holes.”³¹ Because the specification was so clear, the court had little difficulty concluding that the limitation was definite, even under the *Nautilus* standard.

²⁶ *Id.*

²⁷ *Eidos Display LLC v. AU Optronics Corp.*, No. 2014-1254, 2015 BL 63147 (Fed. Cir. Mar. 10, 2015) (89 PTCJ 1271, 3/13/15).

²⁸ *Id.* at 8.

²⁹ *Id.* at 10.

³⁰ *Id.* at 11.

³¹ *Id.*

District Courts Are Also Closely Scrutinizing Patent Claims for Compliance With *Nautilus*’s New “Reasonable Certainty” Standard.

Like the Federal Circuit, district courts are taking heed of *Nautilus* and invalidating claims that might have survived prior to the Supreme Court’s decision. For example, in *Loyalty Conversion Systems v. American Airlines*, Judge Bryson of the Federal Circuit, sitting by designation in the U.S. District Court for the Eastern District of Texas, found the claim limitation “the at least one of the one or more computers” to be indefinite. The court concluded that the only plausible construction of this limitation directly conflicted with a corresponding dependent claim.³² According to Judge Bryson, under the Federal Circuit’s pre-*Nautilus* test, he might have been “inclined to disregard the incoherent language of the ‘the at least one of the one or more computers’ limitation” and craft a claim construction that resolved the conflict with the dependent claim. Judge Bryson concluded, however, that post-*Nautilus*, he could not “ignore the patentee’s obviously conscious decision” to draft the claims as it did.³³ “In the end, the Court is left to guess at the meaning of claim 31,” and thus “the meaning of that claim, in the Court’s view, would not ‘inform those skilled in the art about the scope of the invention with reasonable certainty.’”³⁴

Similarly, in *Regeneron v. Merus*, Judge Forrest of the Southern District of New York cited *Nautilus* in striking down plaintiff’s genetic modification method claims, reciting the term “endogenous mouse immunoglobulin locus” as indefinite.³⁵ Judge Forrest noted that “[t]he specification never uses the term ‘endogenous mouse immunoglobulin locus’ and never informs the reader how to find the immunoglobulin locus.”³⁶ As such, “[o]ne would have had to guess and be lucky to get it right,” and thus “the ‘reasonable certainty’ required by the Supreme Court [in *Nautilus*] is lacking.”³⁷

Likewise, in *Light Transformation Technologies v. Lighting Science Group*, the Eastern District of Texas ruled that the claim limitation “axis of light” was indefinite under *Nautilus* since there were an infinite number of possible axial directions and the specification did not provide guidance as to which was claimed.³⁸ At the *Markman* hearing, the patentee had proffered dictionary definitions in support of its proposed construction, but the court rejected these definitions as unsupported by the specification.³⁹ Moreover, the court found that expert testimony was not necessary.⁴⁰

³² *Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, No. 2:13-cv-655, 2014 BL 375793, at 5-7 (E.D. Tex. Sept. 2, 2014).

³³ *Id.* at 6.

³⁴ *Id.* (emphasis added).

³⁵ *Regeneron Pharm., Inc. v. Merus B.V.*, No. 14 1650 (KBF), 2014 BL 329370, at 17-19 (S.D.N.Y. Nov. 21, 2014) (citing *Nautilus*, 134 S.Ct. at 2124).

³⁶ *Id.* at 18.

³⁷ *Id.* at 19.

³⁸ *Light Transformation Techs. LLC v. Lighting Sci. Grp. Corp.*, No. 2:12-cv-826-MHS-RSP, 2014 BL 192279 (E.D. Tex., July 11, 2014).

³⁹ *Id.*

⁴⁰ *Id.* at *9; but see *Hand Held Prods. v. Amazon.com, Inc.* No. 12-768-RGA-MPT, 2014 BL 175317, at 12 (D. Del., June 24, 2014) (finding that Amazon had failed to prove that certain terms were indefinite, and noting that Amazon had provided

And in a series of pre-*Nautilus* cases brought by Adaptix in the Eastern District of Texas, the defendants' motions for summary judgment on grounds that the term "each cluster" was indefinite were denied.⁴¹ However, later that year a new subset of defendants filed a similar motion for summary judgment and, based on the Supreme Court's intervening decision in *Nautilus*, the court found the same term indefinite and granted summary judgment in favor of the defendants.⁴² In a third case decided earlier this year, a court in the Northern District of California similarly found the term indefinite under the *Nautilus* "reasonable certainty" standard, and entered summary judgment of invalidity.⁴³

Terms of Degree Are Receiving Particularly Close Scrutiny Post-*Nautilus*.

As the foregoing cases demonstrate, *Nautilus* has signaled a change in how district courts evaluate claim definiteness under 35 U.S.C. § 112(b). Patent claims that recite or rely on ill-defined terms of degree, such as "substantially" or "effectively," are especially vulnerable to the new definiteness standard. Although the Federal Circuit in *Interval Licensing* noted that *Nautilus* did not hold such terms to be "inherently indefinite,"⁴⁴ there is no doubt that the Supreme Court's decision puts such terms at serious risk. Several district court decisions handed down in the months since *Nautilus* issued suggest that terms of degree are subject to particularly close scrutiny.

For example, in *Abdou v. Alphatec Spine*, Judge Benitez of the Southern District of California found that, "under [the] new and more rigorous standard imposed by the Supreme Court [in *Nautilus*]," the following terms of degree in plaintiff's medical device patent claims were indefinite: "defined anatomical position," "defined anatomical relationship," "defined spatial relationship," and "in proximity to the first vertebral bone."⁴⁵ The court held that these "relationship terms lack any quantitative parameters or a range of distance between the mount or anchor and a target or disc space."⁴⁶ Notably, Judge Benitez held that, while the claims would likely have survived pre-*Nautilus*, they could not meet the Supreme Court's more rigorous "reasonable certainty" standard: "These claims all have some meaning and are not insolubly ambiguous, but they do fall short of the new, more rigorous reasonable certainty standard for indefiniteness. The lack of clarity in these claims leaves the next inventor in the 'zone of uncertainty,' not knowing what is claimed and what is still open."⁴⁷

"no expert testimony in support of its indefiniteness argument," and instead relied on attorney argument).

⁴¹ See *Adaptix, Inc. v. AT&T Mobility LLC*, No. 6:12-cv-17 (E.D. Tex. March 24, 2014).

⁴² See *Adaptix, Inc. v. Huawei Techs. Co.*, No. 6:13-cv-438, 2014 BL 330696, at 14 (E.D. Tex. Sept. 19, 2014); *Adaptix, Inc. v. Huawei Techs. Co.*, No. 6:13-cv-438, 2014 BL 328520, at 9 (E.D. Tex. Nov. 20, 2014).

⁴³ See *Adaptix, Inc. v. Apple, Inc.*, No. 5:13-cv-01776-PSG, 2015 BL 17903 (N.D. Cal. Jan. 23, 2015).

⁴⁴ 766 F.3d at 1371.

⁴⁵ *Abdou v. Alphatec Spine, Inc.*, No. 12-cv-1804 BEN (RBB), 2014 BL 328486, at 8-10 (S.D. Cal. Nov. 19, 2014).

⁴⁶ *Id.* at 9.

⁴⁷ *Id.*

In *Harcoll Research v. Europea Sports Products*, the claims at issue similarly recited a term of degree—"large and rapid energy supply."⁴⁸ The term appeared in both the product and method claims directed to sports energy drinks. The *Harcoll* court reached different conclusions on indefiniteness for the product and method claims. In finding the product claims definite, the court held that the language was directed at identifying specific situations, generally strenuous physical activity, which demand a "large and rapid energy supply" and that the specification made it clear that the claimed energy drink was to be used where people were "undergoing significant physical exertion whether for athletic or other purposes."⁴⁹ However, as used in the method claims, "large and rapid energy supply" referred to the beverage itself providing energy to a user.⁵⁰ The court found this latter use of the phrase to be indefinite because the specification did not teach one of ordinary skill how much that energy supply should be, or what makes it a rapid supply of energy.⁵¹

Finally, in *Broussard v. Go-Devil Manufacturing*, the Middle District of Louisiana invalidated plaintiff's boat motor patent claims as indefinite. The court construed the limitation "elongated drive housing" to mean "a drive housing that is greater in measurement in one axis than in the other two axes," and it construed the term "drive shaft" to mean "shafts comprised of segments connected by universal joints."⁵² The court found that these constructions, combined with the patents' lack of maximum length limitation, expanded the reach of the patents beyond the scope of the invention to include traditional long-tail motors. Moreover, "[t]his ambiguity regarding the scope of the [patents] remains even when the patents' claims are read in light of their respective specifications." As such, the court found the claims "invalid for lack of definiteness under the newly minted test announced by the Supreme Court in [*Nautilus*]."

It should be noted that not all challenged claims reciting terms of degree have been invalidated post-*Nautilus*, particularly where the specification provides clear guidance as to the parameters of such terms. In *In re Maxim Integrated Products*, on a motion for reconsideration, the Western District of Pennsylvania found the phrase "substantially unique electronically readable identification number" to be sufficiently definite where the specification provided specific criteria for an ordinary artisan to determine whether an identification number is substantially unique.⁵³ Similarly, in *Endo Pharmaceutical v. Watson Labs*, the Eastern District of Texas found the phrases "with increased penetration" and "reducing inflammation" to be sufficiently objective and definite since any increase in penetration and any amount of reduction would meet the limitations, respectively.⁵⁴ These cases serve to illustrate that terms of

⁴⁸ *Harcoll Research LLC v. Europea Sports Prods. Inc.*, No. 2:13-CV-228-JRG-RSP, 2014 BL 310286 (E.D. Tex. Nov. 03, 2014).

⁴⁹ *Id.* at 6-8.

⁵⁰ *Id.* at 8.

⁵¹ *Id.*

⁵² *Broussard v. Go-Devil Mfg. Co.*, 29 F. Supp. 3d 753 (M.D. La. 2014).

⁵³ *In re Maxim Integrated Prods. Inc.*, No. 12-244, 2014 BL 203770, at 7-9 (W.D. Pa. July 23, 2014).

⁵⁴ *Endo Pharma., Inc. v. Watson Labs., Inc.*, No. 2:13-cv-192, 2014 BL 173773, at 4-9 (E.D. Tex. June 23, 2014).

degree are much more likely to survive a definiteness challenge post-*Nautilus* where the specification provides specific, objective criteria for assessing their meaning and scope.

Conclusion

In the eight months since *Nautilus* issued, the Federal Circuit and district courts have applied the Supreme Court's new test for definiteness to invalidate patent

claims that might have survived under the previous regime. Even claim terms susceptible to a reasonable construction and not insolubly ambiguous are vulnerable if there is enough uncertainty as to the specific boundaries of the claim. Moreover, terms of degree are particularly susceptible where the specification does not provide a definition of the term, or at least specific, objective guidance for determining their meaning.