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2014 Patent Law Decisions on Key Issues at the Federal Circuit

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2014 Patent Law Decisions on Key Issues at the Federal Circuit				

AREA SUMMARIES

2014 PATENT LAW DECISIONS ON KEY ISSUES AT THE FEDERAL CIRCUIT*



^{*} This summary of patent law decisions reflects the authors' current thoughts on the subject matter and should not be attributed, in whole or in part, to their respective law firms, any of their attorneys, or any of their clients. This summary of patent law decisions is not meant to convey legal opinions or legal advice of any kind.

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INTRODUCTION

In 2014, the U.S. Court of Appeals for the Federal Circuit (Federal Circuit) continued to wrestle with issues including standing, deference, laches, fee shifting, inducement, indefiniteness, claim construction, patentability, anticipation, and obviousness. This article highlights the key cases that the Federal Circuit considered in 2014 in those areas, many of which were also considered or may be considered by the Supreme Court of the United States.

I. CHANGES TO THE COURT

On May 30, 2014, Chief Judge Rader stepped down as Chief Judge of the Federal Circuit.¹ Circuit Judge Prost assumed the vacated position on May 31, 2014 as the seventh Chief Judge of the Federal Circuit.² Judge Rader retired from the Federal Circuit on June 30, 2014.³

In addition to Judge Rader's retirement, 2014 brought voices of three new judges sworn onto the bench in 2013 (Richard G. Taranto, Raymond T. Chen, and Todd M. Hughes). On November 12, 2014, President Barack Obama also announced the nomination of Kara Farnandez Stoll to the bench.

^{1.} Chief Judge Randall R. Rader to Step Down as Chief Judge on May 30, 2014, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/2014/chief-judge-randall-rader-to-step-down-as-chief-judge-on-may-30-2014.html (last visited Apr. 21, 2015).

^{2.} Circuit Judge Sharon Prost Assumed the Position of Chief Judge of the Federal Circuit on May 31, 2014, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/announcements/circuit-judge-sharon-prost-assumed-the-position-of-chief-judge-of-the-federal-circuit-on-may-31-2014.html (last visited Apr. 21, 2015).

^{3.} Circuit Judge Rader to Retire, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/2014/circuit-judge-rader-to-retire.html (last visited Apr. 21, 2015).

^{4.} Richard G. Taranto Sworn in as Federal Circuit Judge on Friday, March 15, 2013, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/2013/richard-g-taranto-sworn-in-as-federal-circuit-judge-on-friday-march-15-2013.html (last visited Apr. 21, 2015).

^{5.} Raymond T. Chen Sworn in as Federal Circuit Judge on Monday on August 5, 2013, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/2013/raymondt-chen-sworn-in-as-federal-circuit-judge-on-monday-on-august-5-2013.html (last visited Apr. 21, 2015).

^{6.} Todd M. Hughes Sworn in as Federal Circuit Judge on Monday September 30, 2013, U.S. CT. APPEALS FOR FED. CIR., http://www.cafc.uscourts.gov/2013/todd-m-hughes-sworn-in-as-federal-circuit-judge-on-monday-september-30-2013.html (last visited Apr. 21, 2015).

^{7.} Press Release, White House, President Obama Nominates Two to Serve on the United States Courts of Appeals (Nov. 12, 2014), available at http://www.whitehouse.gov/the-press-office/2014/11/12/president-obama-nominates-two-serve-united-states-courts-appeals.

II. ATTORNEY DISCIPLINE

On November 5, 2014, the Federal Circuit published an unusual order regarding the discipline of an attorney. The eleven active judges of the Federal Circuit reprimanded Mr. Edward Reines for attempting to solicit clients with a laudatory email that he received from then-Chief Judge Rader.⁸ Although the Federal Circuit did not sanction Mr. Reines beyond the public reprimand, Mr. Reines may still face actions by the California Bar.⁹

III. PROCEDURAL ISSUES

A. Standing

To meet the constitutional minimum for standing, the party seeking to invoke federal jurisdiction must satisfy three requirements. First, the party must show that it suffered an "injury in fact," which the court defined as "an invasion of a legally protected interest which is (a) concrete and particularized; and (b) actual or imminent" (as opposed to "conjectural or hypothetical"). Second, it must show that the injury is "fairly... trace[able] to the challenged action." Third, the party must show that it is "likely," as opposed to merely 'speculative,' that the injury will be 'redressed by a favorable decision." This year, the Federal Circuit showed a heightened interest in Article III standing requirements with its decisions in Consumer Watchdog v. Wisconsin Alumni Research Foundation, MadStad Engineering Inc. v. USPTO, 15 and Sandoz Inc. v. Amgen Inc. 16

Consumer Watchdog is a non-profit charity "dedicated to providing a voice for taxpayers and consumers in special interest-dominated public discourse, government and politics," which filed for an *inter partes* reexamination of U.S. Patent No. 7,029,913 ("'913 patent") owned by Wisconsin Alumni Research Foundation ("WARF") in 2006.¹⁷ While Consumer Watchdog had the right to request the

^{8.} In re Reines, 771 F.3d 1326, 1328 (Fed. Cir. 2014) (per curiam).

^{9.} Id. at 1334.

^{10.} Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992).

^{11.} Id. (citations omitted) (internal quotation marks omitted).

^{12.} *Id.* at 560–61 (alterations in original) (quoting Simon v. E. Ky. Welfare Rights Org., 426 U.S. 26, 41–42 (1976)).

^{13.} Id. at 561 (quoting Simon, 426 U.S. at 38, 43).

^{14. 753} F.3d 1258 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 1401 (2015).

^{15. 756} F.3d 1366 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 1398 (2015).

^{16. 773} F.3d 1274 (Fed. Cir. 2014).

^{17.} Consumer Watchdog, 753 F.3d at 1260.

reexamination at the United States Patent and Trademark Office ("USPTO"), which granted the request, it did not have standing to appeal to the Federal Circuit after the USPTO affirmed the four claims at issue.¹⁸ Under 35 U.S.C. §§ 311(a) and 314(b)(2), a third party can request reexamination and participate in the proceedings. 19 However, "[f]ederal courts do not have authority to entertain every The courts are limited to actual "Cases" "Controversies" under Article III of the U.S. Constitution.²¹ Consumer Watchdog failed to show that it had suffered an injury in fact.²² It did not allege "any involvement in research or commercial activities involving human embryonic stem cells."23 It did not allege that "it is an actual or prospective competitor of WARF or licensee of the '913 patent."24 Rather, it merely stated "it was concerned that the '913 patent allowed WARF to completely preempt all uses of human embryonic stem cells, particularly those for scientific and medical research."25

The Federal Circuit held that Consumer Watchdog lacked standing to appeal the Board's decision because it failed to identify "a particularized, concrete interest in the patentability of the '913 patent, or any injury in fact flowing from the Board's decision." The court reiterated the Article III standing requirements under Lujan v. Defenders of Wildlife? an injury-in-fact that is (1) "concrete and particularized, and actual or imminent"; (2) "fairly traceable to the challenged action"; and (3) likely to be redressed by a favorable judicial decision. ²⁸

On October 31, 2014, Consumer Watchdog filed a petition to the Supreme Court for a writ of certiorari, challenging the Federal Circuit's dismissal and presenting the following question: "Does a statute that expressly provides a requester of agency action a right to appeal any dissatisfactory decision of the agency on her request to the

^{18.} *Id.* at 1262–63.

^{19.} Id. at 1262 (citing 35 U.S.C. §§ 311(a), 314(b) (2) (2006)).

^{20.} Id. at 1260.

^{21.} U.S. CONST. art. III, § 2.

^{22.} Consumer Watchdog, 753 F.3d at 1263.

^{23.} Id. at 1260.

^{24.} Id.

^{25.} Id.

^{26.} Id. at 1263.

^{27. 504} U.S. 555 (1992).

^{28.} Consumer Watchdog, 753 F.3d at 1260-61.

courts provide sufficient Article III standing for the appeal, or must additional requirements be satisfied above and beyond the statute?"29

Consumer Watchdog cites *Lujan* in support of its Petition,³⁰ but its position was also in conformity with other cases not considered by the Federal Circuit, such as *NLRB v. Robbins Tire & Rubber Co.*³¹ and *Public Citizen v. DOJ.*³² Petitioner argues that normal standing rules do not apply for a statutory action which provides a right of appellate review of an agency decision.³³ However, the Supreme Court denied certiorari on February 23, 2015.³⁴

The Federal Circuit reviewed the Lujan standing requirements again in MadStad.³⁵ In MadStad, the appellant, an engineering firm that has filed and received U.S. patents, claimed that the "firstinventor-to-file" provision of the Leahy-Smith America Invents Act (AIA) is unconstitutional.³⁶ MadStad argued that it had been forced to increase computer security and divert its business resources to prepare more patent applications and file at a faster rate; was at a competitive disadvantage against larger companies; and had lost business and investment opportunities due to the AIA provision.³⁷ Indeed, the Supreme Court addressed the constitutionality of two government regulations in 2013. In Clapper v. Amnesty International USA, 38 the Supreme Court held that Amnesty International USA ("Amnesty") did not have standing to assert a constitutional challenge to the Foreign Intelligence Surveillance Act (FISA) because its argument rested on speculative and subjective fear.³⁹ The district court in MadStad cited the Clapper decision when dismissing MadStad's requests for a declaratory judgment that the "first-

^{29.} Petition for Writ of Certiorari at i, Consumer Watchdog v. Wis. Alumni Research Found., 135 S. Ct. 1401 (2015) (No. 14-516), 2014 WL 5659398.

^{30.} Id. at 7-8 (citing Lujan, 504 U.S. at 560).

^{31. 437} U.S. 214, 216, 221 (1978) (holding that absent a statutory exemption, requests under the Freedom of Information Act (FOIA) requires that agencies disclose records and materials).

^{32. 491} U.S. 440, 449 (1989) (refusal to permit scrutinizing of "the ABA Committee's activities to the extent FACA allows constitutes a sufficiently distinct injury to provide standing to sue").

^{33.} Petition for Writ of Certiorari, supra note 29, at 8-9.

^{34.} Consumer Watchdog v. Wis. Alumni Research Found., 135 S. Ct. 1401, 1401 (2015).

^{35.} Madstad Eng'g, Inc. v. USPTO, 756 F.3d 1366, 1371 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 1398 (2015).

^{36.} Id. at 1368.

^{37.} Id. at 1372, 1375.

^{38. 133} S. Ct. 1138 (2013).

^{39.} *Id.* at 1148 (refusing to grant standing that rested on speculation about possible future harms).

inventor-to-file" provision is unconstitutional and a permanent injunction barring enforcement of the AIA. Reviewing standing de novo, the Federal Circuit affirmed the district court's dismissal for lack of standing and found that MadStad lacked a concrete and particularized injury, thereby, failing the first *Lujan* prong. Although MadStad argued that it suffered threats of harm less speculative than those in *Clapper* and faced "a sufficient 'substantial risk' of suffering the injuries," the Federal Circuit found that each of MadStad's arguments failed and held that MadStad lacked standing.

A different standing issue considered by the Federal Circuit in 2014 (later denied on en banc review) is whether a party can maintain standing where there is a non-party, co-owner of a patent who had not voluntarily joined as a co-plaintiff and could not be involuntarily joined.⁴⁴

STC.UNM ("STC") sued Intel Corporation for infringement of U.S. Patent No. 6,042,998 ("'998 patent").⁴⁵ The district court dismissed the case because, "as a matter of substantive patent law, all co-owners must ordinarily consent to join as plaintiffs in an infringement suit," but Sandia, co-owner of the patent, had not joined voluntarily and could not be joined involuntarily under Federal Rule of Civil Procedure 19.⁴⁶

There were four inventors of U.S. Patent No. 5,705,321 ("'321 patent").⁴⁷ While three inventors were employed by the University of New Mexico ("UNM"), the fourth was employed by Sandia.⁴⁸ An assignment erroneously defined all four inventors as employees of UNM and named UNM as the assignee of the '321 patent.⁴⁹ When UNM later executed an assignment to Sandia to correct the error, the assignment explicitly transferred to Sandia "those rights and interests previously assigned to [UNM] by Bruce Draper... and to any and all

^{40.} MadStad Eng'g, Inc. v. USPTO, No. 8:12-cv-1589, 2013 WL 3155280, at *4-7 (M.D. Fla. May 8, 2013), aff'd, 756 F.3d 1366 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 1398 (2015).

^{41.} MadStad, 756 F.3d at 1371, 1379-81.

^{42.} Id. at 1373.

^{43.} Id. at 1381.

^{44.} STC.UNM v. Intel Corp., 754 F.3d 940, 941 (Fed. Cir. 2014), reh'g en banc denied, 767 F.3d 1351, and cert. denied, 83 U.S.L.W. 3562 (2015).

^{45.} Id.

^{46.} *Id.* (quoting Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1468 (Fed. Cir. 1998)).

^{47.} Id.

^{48.} Id.

^{49.} Id. at 942.

Patents which may be issued thereon . . . and to any and all divisions, reissues, continuations, and extensions." Two of the inventors filed an application that led to the '998 patent.⁵¹ The application referenced the '321 patent without claiming priority.⁵² During prosecution of the '998 patent, the USPTO "twice rejected its claims for double patenting over the '321 patent, which shared two common inventors." UNM filed a terminal disclaimer to overcome the double patenting rejections, stating that "any patent granted on this instant application shall be enforceable only for and during such period that the '998 and '321 patents are commonly owned." UNM also stated that it was the owner of record and had a 100% interest in the application.⁵⁵

UNM later assigned its interest in the patents to STC—"a wholly-owned licensing arm of UNM." 56 STC subsequently added two other UNM employees as inventors of the '998 patent and also had the USPTO correct that the '998 was a continuation-in-part of the '321 patent. 57

When STC sued Intel for patent infringement, Sandia did not join. The district court granted Intel's motion to dismiss for lack of standing because a co-owner seeking to enforce the patent must join all other co-owners as plaintiffs to establish standing. Without this joinder, the plaintiff cannot pursue an infringement suit. In Ethicon, Inc. v. U.S. Surgical Corp., the court examined two limited circumstances where a co-owner can be involuntarily joined, but those circumstances were not applicable in STC. UNM.

STC appealed "whether Sandia can be involuntarily joined under Rule 19(a) as well as the district court's partial grant of summary judgment on the timing of Sandia's co-ownership." Citing its

^{50.} Id. (alterations in original) (internal quotation marks omitted).

^{51.} Id.

^{52.} Id.

^{53.} Id. (internal quotation marks omitted).

^{54.} Id. (internal quotation marks omitted).

^{55.} Id.

^{56.} Id.

^{57.} *Id*.

^{58.} Id. at 942-43.

^{59.} Id. at 943-44.

^{60.} Id. at 944 (citing Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1468 (Fed. Cir. 1998)).

^{61. 135} F.3d 1456 (Fed. Cir. 1998).

^{62.} Id. at 1468 & n.9; id. at 1469-72 (Newman, J., dissenting).

^{63.} STC. UNM, 754 F.3d at 944.

^{64.} Id.

holding in *Ethicon* that substantive patent law ordinarily requires coowners to consent to suit, the Federal Circuit held that STC lacked standing because Sandia had not voluntarily joined the suit and that no exception was valid, the general substantive rule applied.⁶⁵ The exceptions include (1) "when any patent owner has granted an exclusive license, he stands in a relationship of trust to his licensee and can be involuntarily joined as a plaintiff," and (2) "[i]f, by agreement, a co-owner waives his right to refuse to join suit, his coowners may subsequently force him to join in a suit against infringers."⁶⁶ The full Federal Circuit voted 6–4 not to conduct an en banc review of the decision.⁶⁷ The concurring judges contended that the substantive patent law affirmatively requires consent among all co-owners of a patent before suit can be brought and that Rule 19 did not obligate a co-owner to join.⁶⁸

It is substantive patent law, not Rule 19, that answers the dispositive question here: whether one co-owner may unilaterally enforce a patent, without the consent of other co-owners.

As to that underlying substantive-rights question, precedent has long provided a clear answer. This court has consistently recognized that the substantive right to enforce the patent does not belong unilaterally to each co-owner, but requires all of the co-owners' agreement, so that each co-owner has a substantive right not to be involuntarily joined in a patent infringement suit without such agreement.⁶⁹

In contrast, the dissenting judges argued that according to Rule 19(a) of the Federal Rules of Civil Procedure, when one necessary party has not joined a suit, courts "must order" that party to join involuntarily. Judge Pauline Newman wrote that the court's holding that Rule 19 "uniquely does not apply in patent cases" removed patent litigation "from the mainstream of the law. The Essentially, she claimed that parties like STC are being improperly denied access to the courts for resolving its dispute. Such disparity among the Federal Circuit judges may make this issue ripe for Supreme Court review. The petition for certiorari was filed on December 16, 2014.

^{65.} Id. at 946.

^{66.} *Id.* (alteration in original) (quoting *Ethicon*, 135 F.3d at 1468 n.9) (internal quotation marks omitted).

^{67.} STC.UNM v. Intel Corp., 767 F.3d 1351, 1352 (Fed. Cir. 2014) (per curiam).

^{68.} Id. at 1352-53 (Dyk, J., concurring) (quoting FED. R. Crv. P. 19(a)(1)).

^{69.} Id. at 1353.

^{70.} Id. at 1355 (Newman, J., dissenting).

^{71.} Id.

In Azure Networks, LLC v. CSR PLC,⁷² the Federal Circuit's examination of standing focused on the importance of effective patent assignment.⁷³ Azure Networks ("Azure") and Tri-County Excelsior Foundation ("Tri-County") together sued CSR PLC and seven other defendants for patent infringement of U.S. Patent No. 7,756,129 ("the '129 patent").⁷⁴ However, "[t]he district court granted the Appellees' motion to dismiss Tri-County for lack of standing, finding that Tri-County had effectively assigned Azure the [']129 patent."⁷⁵

Azure, which owned the '129 patent, donated it to Tri-County. A few weeks later, Azure and Tri-County entered into an "Exclusive Patent License Agreement" which transferred numerous rights in the '129 patent back to Azure. Specifically, the agreement "granted Azure the exclusive, worldwide, transferable right to (i) make, have made, use, sell, offer to sell, import, and lease any products, (ii) use and perform any method, process, and/or services, and (iii) otherwise practice any invention in any manner under the [']129 patent." It also granted Azure the "full right to enforce or and/or sublicense" the '129 patent, "including the authority to reach settlements without Tri-County's consent." Moreover, Azure could assign the entire agreement or any of its rights under the agreement without Tri-County's consent, including "the exclusive right... to control future prosecution or pay maintenance fees related to the [']129 patent family." **80**

The Federal Circuit held that Tri-County had no rights to sue as coplaintiff because the Agreement conferred those rights to Azure alone.⁸¹ The Federal Circuit looked to the parties' intent,⁸² as well as

^{72. 771} F.3d 1336 (Fed. Cir. 2014), vacated, 83 U.S.L.W. 3683 (2015).

^{73.} Id. at 1339.

^{74.} Id.

^{75.} Id.

^{76.} Id. at 1341.

^{77.} Id.

^{78.} Id.

^{79.} Id. (internal quotation marks omitted).

^{80.} Id

^{81.} *Id.* at 1342 ("[W]hichever party has all, or substantially all, rights in the patent 'alone has standing to sue for infringement." (quoting Morrow v. Microsoft Corp., 499 F.3d 1332, 1340 (Fed. Cir. 2007))).

^{82.} *Id.* ("To determine whether an exclusive license is tantamount to an assignment, we must ascertain the intention of the parties [to the license agreement] and examine the substance of what was granted." (alteration in original) (quoting Alfred E. Mann Found. for Scientific Research v. Cochlear Corp., 604 F.3d 1354, 1359 (Fed. Cir. 2010)) (internal quotation marks omitted)).

a non-exhaustive list of rights to determine whether a licensor has transferred all substantial rights to the licensee.⁸³ After weighing all the factors, the Federal Circuit affirmed the district court's determination that Tri-County had transferred all substantial rights in the '129 patent to Azure, "making Azure the effective owner for purposes of standing."⁸⁴

The Federal Circuit addressed standing again in *Sandoz Inc.*, which is a declaratory judgment action. Amgen's rheumatoid arthritis product named Enbrel® contains the active ingredient etanercept. Etanercept is covered by two patents exclusively licensed to Amgen by Hoffman-La Roche (U.S. Patent Nos. 8,063,182 and 8,163,522). Sandoz began developing its own etanercept drug and needed FDA approval to enter the market. In 2010, however, Congress enacted the Biologics Price Competition and Innovation Act of 2009 ("BPCIA"), which established "an FDA regulatory-approval process... for biological products that are shown to be 'biosimilar' to a 'reference product' already approved by the FDA."

While Amgen met with the FDA to plan for an application based on biosimilarity to Enbrel®, it did not file the application for FDA approval or followed the procedures established by the BPCIA before filing a complaint against Amgen and Hoffman-LaRoche for declaratory judgment.⁹¹ The district court dismissed the case, determining that there was no Article III controversy between the

^{83.} Id. at 1343 (citing Alfred E. Mann Found., 604 F.3d at 1360–61) ("(1) the nature and scope of the right to bring suit; (2) the exclusive right to make, use, and sell products or services under the patent; (3) the scope of the licensee's right to sublicense; (4) the reversionary rights to the licensor following termination or expiration of the license; (5) the right of the licensor to receive a portion of the proceeds from litigating or licensing the patent; (6) the duration of the license rights; (7) the ability of the licensor to supervise and control the licensee's activities; (8) the obligation of the licensor to continue paying maintenance fees; and (9) any limits on the licensee's right to assign its interests in the patent.").

^{84.} Id. at 1347.

^{85.} Sandoz Inc. v. Amgen Inc., 773 F.3d 1274, 1276 (Fed. Cir. 2014).

^{86.} Id. at 1275-76.

^{87.} Id.

^{88.} Id. at 1276.

^{89. 42} U.S.C. § 262 (2012).

^{90.} Sandoz Inc., 773 F.3d at 1276 (citing 42 U.S.C. § 262(k)).

^{91.} *Id.* at 1276 (explaining that Sandoz sought a declaratory judgment that "the manufacture, use, sale, offering for sale, or importation of its etanercept product will not infringe, directly or indirectly, any valid claim of either the [']182 or the [']522 patent, that both patents are unenforceable due to prosecution laches, and that both patents are invalid" (internal quotation marks omitted)).

parties and that the BPCIA barred the suit.⁹² The Federal Circuit reviewed the case de novo and affirmed the dismissal; however, it did not address the district court's interpretation of the BPCIA.⁹³

Under the Declaratory Judgment Act, "[i]n a case of actual controversy within its jurisdiction,... any court of the United States... may declare the rights and other legal relations of any interested party seeking such declaration, whether or not further relief is or could be sought." The "case of actual controversy' [phrase] in the Act refers to the type of 'Cases' and 'Controversies' that are justiciable under Article III." Thus, the Federal Circuit concluded that Sandoz's complaint, as in Consumer Watchdog, did not present a case or controversy necessary under Article III.

B. Deference Due to District Courts

Fifteen years ago, the Federal Circuit resolved an ambiguity plaguing its jurisprudence after the Supreme Court's decision in *Markman v. Westview Instruments, Inc.*, 97 by definitively holding that the standard of review of district court decisions concerning claim construction is de novo. 98 Since *Cybor Corp. v. FAS Technologies, Inc.* 99 was decided, the de novo standard has been applied in a myriad of decisions by the Federal Circuit, but not without some friction. 100 This tension finally came to a tipping point in 2014 when the Federal Circuit decided *Lighting Ballast Control LLC v. Philips Electronics North America Corp.* 101 (*Lighting Ballast III*), and *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* 102

^{92.} Id. at 1275.

^{93.} Id. at 1277, 1282.

^{94. 28} U.S.C. § 2201(a).

^{95.} Sandoz, Inc., 773 F.3d at 1277 (quoting MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 127 (2007)).

^{96.} Id. at 1278.

^{97. 517} U.S. 370 (1996).

^{98.} Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454-56 (Fed. Cir. 1998).

^{99. 138} F.3d 1448 (1998).

^{100.} See Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1350–51 (Fed. Cir. 2010) ("Despite the Supreme Court's emphasis on the trial court's central role for claim construction, including the evaluation of expert testimony, this court may not give... the slightest iota of deference."); Amgen, Inc. v. Hoechst Marion Roussel, Inc., 469 F.3d 1039, 1040 (Fed. Cir. 2006) (Michel, J., dissenting) (arguing that an en banc rehearing "would have enabled us to reconsider Cybor's rule of de novo review for claim construction").

^{101. 744} F.3d 1272 (Fed. Cir. 2014), vacated, 135 S. Ct. 1173 (2015).

^{102. 723} F.3d 1363 (Fed. Cir. 2013), vacated, 135 S. Ct. 831 (2015). The Supreme Court has since issued its decision in Teva Pharm. USA, Inc. v. Sandoz Inc., 135 S. Ct.

The Federal Circuit addressed appellate review in the Lighting Ballast line of cases. In Lighting Ballast Control LLC v. Philips Electronics North America Corp. 103 (Lighting Ballast I), the defendant Universal Lighting Technologies (ULT) moved for summary judgment in the district court, arguing in part that "voltage source means" is a "meansplus-function limitation" that would require a corresponding structure in the specification pursuant to 35 U.S.C. § 112(f) and The district court initially accepted the ULT's § 112(b).104 construction but reversed it upon a motion for reconsideration. 105 The district court found that the means-plus-function limitation did not apply and construed the claim according to its "ordinary meaning in the art" to correspond to a "class of structures: a rectifier for common applications in which the claimed device is used with an AC power line; and a battery or the like for less commonly used applications in which a DC power line is used."106

On appeal, the Federal Circuit reviewed the district court's ultimate finding de novo and originally reversed, holding that "voltage source means" does indeed invoke means-plus-function limitation and require a corresponding structure under § 112(f) and § 112(b).¹⁰⁷ Failing to find such a structure, the original panel held the claims "invalid for indefiniteness." Lighting Ballast then requested a rehearing, "stating that on deferential appellate review the district court would not or should not have been reversed." In its rehearing, the Federal Circuit considered three questions:

^{831 (2015),} raising the standard of review for factual findings underlying claim construction rulings to "clear error." Granting greater deference to district court factual findings could have a significant impact upon patent litigation by heightening the importance of expert testimony. For the perspectives of various patent law practitioners and scholars on the potential repercussions of this discussion see Dennis Crouch, Giving Deference to the Supreme Court in Teva v. Sandoz, PATENTLY-O (Jan. 21, 2015), http://patentlyo.com/patent/2015/01/deference-supreme-sandoz.html.

^{103.} No. 7:09-CV-29-O, 2010 WL 4946343 (N.D. Tex. Dec. 2, 2010), rev'd, 498 F. App'x 986 (Fed. Cir. 2013), rev'd en banc, 744 F.3d 1272 (Fed. Cir. 2014), vacated, 135 S. Ct. 1173 (2015).

^{104.} Id. at *9-13.

^{105.} Lighting Ballast Control L.L.C. v. Philips Elecs. N. Am. Corp. (*Lighting Ballast II*), 498 F. App'x 986, 988 (Fed. Cir. 2013), rev'd en banc, 744 F.3d 1272 (Fed. Cir. 2014), vacated, 135 S. Ct. 1173 (2015).

^{106.} Id.

^{107.} Lighting Ballast Control L.L.C. v. Philips Elecs. N. Am. Corp. (*Lighting Ballast III*), 744 F.3d 1272, 1276 (Fed. Cir. 2014), vacated, 135 S. Ct. 1173 (2015).

^{108.} Id.

^{109.} Id.

- (1) Should this court overrule Cybor [Corp.]?
- (2) Should this court afford deference to any aspect of a district court's claim construction?
- (3) If so, which aspects should be afforded deference?¹¹⁰

In addition to the parties' arguments, the court received supplemental briefing and participation from thirty-eight amici curiae, including companies such as Google and Microsoft, bar associations such as the American Bar Association and the American Intellectual Property Law Association, and other authorities such as former Chief Judge Paul R. Michel and the United States.¹¹¹ The Federal Circuit divided these entities into three groups: the first believing that *Cybor Corp.* is "incorrect and should be entirely discarded," the second favoring a "fusion or hybrid of de novo review and deferential review," and the third arguing against changing the *Cybor Corp.* standard.¹¹²

The first group, which supported the reversal of the *Cybor Corp*. standard and consisting solely of Lighting Ballast, reasoned that the Federal Circuit misinterpreted the Supreme Court's guidance in *Markman* which had been limited to determining whether questions of patent claim construction should be decided by a judge or a jury but "did not address the standard of appellate review." Therefore, the first group argued that, taking into account Federal Rule of Civil Procedure 52(a)(6),¹¹⁴ appellate deference should be afforded to findings of fact made at the trial level. Through this approach, the first group opined that restoring deference in the appellate review of claim construction would "respect the traditional trial/appellate relationship" and likely increase the weight given in the review process to the credibility of witnesses. 116

The second group, which favored a fusion or hybrid of de novo and deferential review, consisted primarily of bar associations, academic institutions, scholars, and the United States.¹¹⁷ The group

^{110.} Id. at 1277.

^{111.} Id. at 1277 n.2.

^{112.} Id. at 1277-79.

^{113.} *Id.* at 1277–78.

^{114.} FED. R. CIV. P. 52(a) (6) ("Findings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court's opportunity to judge the witnesses' credibility.").

^{115.} Lighting Ballast III, 744 F.3d at 1278.

^{116.} Id.

^{117.} *Id.*; Rodger Sadler, *A Look at the Arguments in Lighting Ballast Rehearing*, Law360 (Aug. 30, 2013, 12:01 PM), http://www.law360.com/articles/468444/a-look-at-the-arguments-in-lighting-ballast-rehearing.

recognized that the interpretation of patent claims is a "purely legal" matter but divorced the completely factual aspects from de novo review, arguing instead that those issues should be reviewed under the clearly erroneous standard, "while the final conclusion receives review as a matter of law."118 Anticipating the Federal Circuit's wariness of the practicability of such a hybrid standard, this group advocated "a solution whereby the standard of review would depend on whether the district court's claim construction drew solely from the record of the patent and its prosecution history (called 'intrinsic evidence'), or whether external information or witness testimony was presented in the district court (that is, 'extrinsic evidence')." Claim constructions grounded in an analysis of the intrinsic evidence would thus continue to receive de novo review, and those based on extrinsic evidence would be reviewed for clear error. 119 This second group also argued that its hybrid approach would respect the traditional roles of the trial and appellate courts and that it was consistent with the "review of the determination of obviousness under 35 U.S.C. § 103." 120

The final group, which argued against deviating from the *Cybor Corp*. standard, was composed mostly of corporations.¹²¹ The group reasoned that the de novo standard was both "reasonable and correct" in view of *Markman* as the Supreme Court had explicitly stated "that claim construction [was] a 'purely legal' matter and that 'the interpretation of a so-called patent claim . . . is a matter of law.'"¹²² Given the lack of motivation to change fifteen years of jurisprudence, this third group advocated continuing to review claim construction decisions de novo.¹²³

Faced with these three disparate viewpoints, the Federal Circuit looked to various sources, such as the reasoning of *Markman* and its citations; the practical effects of imposing "a new and uncertain contentious inquiry into which aspects of a particular construction fall on which side of the fact-law line;" and the principle of stare decisis.¹²⁴ It is this final idea "that courts will stand by things decided" that swayed the judges to side with the third group's viewpoint and to

^{118.} Lighting Ballast III, 744 F.3d at 1278 (quoting Markman v. Westview Instruments, Inc., 517 U.S. 370, 391(1996)).

^{119.} Id. at 1278-79.

^{120.} Id. at 1279.

^{121.} Id. at 1279, 1287 n.4; Sadler, supra note 117.

^{122.} Lighting Ballast III, 744 F.3d at 1279 (second alteration in original) (quoting Markman, 517 U.S. at 372, 391).

^{123.} Id. at 1279.

^{124.} Id. at 1279-86.

continue de novo review of district court decisions concerning claim construction.¹²⁵ The theoretical underpinnings of stare decisis are the "enhance[ment] [of] predictability and efficiency in dispute resolution and legal proceedings, by enabling and fostering reliance on prior rulings."126 The court emphasized that the stability provided by "stare decisis is the foundation of a nation governed by law." 127 With these principles in mind, the Federal Circuit looked back through its own history to its formation. 128 The Federal Circuit was created to have exclusive jurisdiction over the appeals of district court decisions relating to patent law in order to promote consistency and stability in the area of practice.¹²⁹ Recognizing these goals to be the same as those underlying stare decisis, the court held that the Cybor Corp. standard should not be changed. 130 The Federal Circuit recognized that the nature of patent litigation today, which often involves multiple cases and multiple forums, especially lends itself to a hierarchal system where "this court [will] be able to resolve claim construction definitely as a matter of precedent, rather than allow differing trial court constructions of the same patent, as may result from deferential review of close questions."131 Rather than "restore the forum shopping that the Federal Circuit was created to avoid," the court opted to maintain the status quo. 132

The court also noted that, beyond the merits of stare decisis, among all of the arguments presented by critics of *Cybor Corp.*, there was a marked dearth of genuine motivation to change the standard. ¹³³ For instance, the court did not find any evidence that the de novo standard was unworkable, especially after fifteen years of its application. ¹³⁴ Neither did it find any showing of an increase in "the burdens on the courts or litigants conducting claim construction." ¹³⁵ Moreover, the court identified that the critics' arguments for changing the standard were based on "concerns for judicial roles and relationships" rather than the actual incorrectness of the de novo

^{125.} Id. at 1281 (internal quotation marks omitted).

^{126.} Id. (citing CSX Transp., Inc. v. McBride, 131 S. Ct. 2630, 2641 (2011)).

^{127.} Id.

^{128.} Id. at 1282-83.

^{129.} Id. at 1282; see also 28 U.S.C. § 1295(a) (2012) (giving the Federal Circuit with exclusive jurisdiction over patent law).

^{130.} Lighting Ballast III, 744 F.3d at 1282-83.

^{131.} Id. at 1280, 1286.

^{132.} Id. at 1286.

^{133.} Id. at 1283-84.

^{134.} Id. at 1283.

^{135.} Id.

standard.¹³⁶ The court further noted the lack of congressional intervention, "despite extensive patent-related legislative activity during the entire period of *Cybor* [*Corp*.]'s existence."¹³⁷ Finally, the court could not find evidence that changing the *Cybor Corp*. standard would affect the outcome of many cases, despite soliciting the amici curiae for such proof.¹³⁸

With respect to the argument that claim construction decisions often hinge on findings of fact, the court clarified:

Claim construction is a legal statement of the scope of the patent right; it does not turn on witness credibility, but on the content of the patent documents. The court may indeed benefit from explanation of the technology and the instruction of treatises, but the elaboration of experts or tutorial explanation of technical subject matter does not convert patent claim construction into a question of fact. The type of evidence that may assist a lay judge in determining what a technical term meant to one of skill in the art does not transform that meaning from a question of law into a question of fact. Reference to technical understanding and usage at the time of enactment does not convert statutory interpretation from law to fact.¹³⁹

Therefore, the Federal Circuit decided 6–4 not to depart from the *Cybor Corp*. de novo standard of review of district court decisions regarding claim construction. The court (1) determined that the consistency and stability underlying stare decisis harmonized with the rationale behind the creation of the Federal Circuit; (2) failed to find any cogent points in favor of changing the *Cybor Corp*. standard, and (3) affirmed that claim construction is a question of law that is not converted into a question of fact merely because of the consideration of some specific types of evidence. 141

In his concurrence, Judge Lourie added several points to the majority's analysis. He stated that affording deference to a district court's factual findings would be "an attempt to partially retreat" from the Supreme Court's instruction in *Markman* to put claim

^{136.} Id. at 1281.

^{137.} Id. at 1283.

^{138.} *Id.* at 1285 ("In response to a question at the hearing, amicus curiae United States could not identify any case that would have come out differently under the modified (hybrid) standard of review it proposed.").

^{139.} Id. at 1284.

^{140.} Id. at 1276 & n.*, 1286 (Judges Chen and Hughes did not take part in the consideration or decision of the case).

^{141.} *Id*.

^{142.} *Id.* at 1292–95 (Lourie, J., concurring).

construction in the hands of the court rather than the jury.¹⁴³ He also distinguished the types of factual issues that are normally decided by a district court judge from historical fact-finding (which would be treated deferentially).¹⁴⁴ Finally, Judge Lourie reasoned that while the law might state that "no deference" is given in the appellate review, in practice, the Federal Circuit "notes and considers how the district court construed the claims," and even when disagreeing, "it is not without a degree of informal deference." ¹⁴⁵

In the dissent penned by Judge O'Malley, in which former Chief Judge Rader and Judges Revna and Wallach joined, the judges expressed that the legal community would be "surprised" by the majority's opinion and that the doctrine of stare decisis did not mandate that the court ignore its conviction that Cybor Corp. was wrongly decided.146 The dissent reiterated several instances in Markman where the Supreme Court "acknowledged the factual component of claim construction."147 It also pointed to several "undesired consequences" that would flow from the majority's decision. 148 The dissent noted the disservice to stare decisis because of the lack of stability and predictability in district court decisions; the difficulty the appellate court would face when reviewing cases with an "expurgated record"; the heightened impetus for appeal and corresponding discouragement of settlement; ineffectiveness of transposing the construction of a claim term in one patent case in another. 149

No doubt motivated at least in part by the chasm that divided the majority and the dissent, the Supreme Court granted certiorari to review the decision in *Teva Pharmaceuticals* one month after the Federal Circuit's decision in *Lighting Ballast III.*¹⁵⁰ In *Teva Pharmaceuticals*, the patents-in-suit covered a product called copolymer-1, which consists of four different amino acids in a certain

^{143.} Id. at 1292.

^{144.} Id. at 1293.

^{145.} Id. at 1294.

^{146.} Id. at 1296 (O'Malley, J., dissenting).

^{147.} *Id.* at 1296–97 (suggesting that district courts should receive some deference on factual determinations and credibility claims).

^{148.} Id. at 1309-15.

^{149.} Id.

^{150.} Teva Pharm. USA, Inc. v. Sandoz, Inc., 723 F.3d 1363 (Fed. Cir. 2013), vacated, 135 S. Ct. 831 (2015). The Supreme Court granted certiorari on March 31, 2014, Teva Pharm. USA, Inc. v. Sandoz Inc., 134 S. Ct. 1761 (2014), and Lighting Ballast III was decided on February 21, 2014. Lighting Ballast III, 744 F.3d 1272.

ratio, and methods for making the same.¹⁵¹ Because "[a] sample of polymeric material like copolymer-1 typically consists of a mixture of individual polymer molecules that have varying molecular weights," one way to accurately describe the material is by specifying the distribution of molecular weight.¹⁵² There are several different ways to describe distributions of molecular weight, including statistical measures such as the peak average molecular weight (*Mp*), number average molecular weight (*Mn*), and weight average molecular weight (*Mw*).¹⁵³ One could alternatively describe "how many molecules in a polymer sample have molecular weights that fall within an arbitrarily set range."¹⁵⁴ In the claim language of the patents-in-suit, one set of claims described the molecular weight of copolymer-1 using statistical measures, and the other used the second range approach.¹⁵⁵

In construing the term "molecular weight," the district court rejected the defendants' argument that the term was insolubly ambiguous because it could refer to any number of methods of measuring average molecular weight. It then construed "molecular weight" to mean Mp and held that the claims were not indefinite. 157

On appeal, the Federal Circuit reviewed the district court's construction of "molecular weight" de novo per the *Cybor Corp*. standard. The Federal Circuit agreed with the district court's determination that the second set of claims that described the molecular weight using the range approach was not indefinite. However, the court reversed the district court's holding with respect to the first set of claims that used statistical measures. The Federal Circuit reasoned that, beyond the incongruity between the two sets of claims, the prosecution history of the patents-in-suit was also so inconsistent as to make it difficult to conclude whether *Mw*, *Mp*, or some other measure of average molecular weight was intended and "render the ambiguity insoluble."

^{151.} Teva Pharm., 723 F.3d at 1367.

^{152.} Id.

^{153.} Id.

^{154.} Id.

^{155.} Id.

^{156.} Id.

^{157.} Id.

^{158.} Id. at 1368.

^{159.} Id. at 1369.

^{160.} Id. at 1366, 1369.

^{161.} Id. at 1369.

In its petition for a writ of certiorari, Teva presented the following question which closely matches the issue debated in Lighting Ballast III:

Whether a district court's factual finding in support of its construction of a patent claim term may be reviewed *de novo*, as the Federal Circuit requires (and as the panel explicitly did in this case), or only for clear error, as Rule 52(a) requires. ¹⁶²

Many of the same amici curiae who filed briefs in *Lighting Ballast III* also submitted briefs. ¹⁶³ Oral argument was heard on October 15, 2014. ¹⁶⁴ Since certiorari was granted in *Teva Pharmaceuticals* in March 2014, parties in several other cases have also petitioned for certiorari on the same issue:

- On April 22, 2014, Gevo, Inc. submitted a petition for a writ of certiorari challenging the Federal Circuit's decision in *Butamax(TM) Advanced Biofuels L.L.C. v. Gevo, Inc.*¹⁶⁵ The case was vacated and remanded back to the Federal Circuit for reconsideration.¹⁶⁶
- On June 20, 2014, Lighting Ballast also submitted a petition for a writ of certiorari to the Supreme Court. This case was scheduled for conference on September 29, 2014. 168
- On August 18, 2014, Shire Development, LLC petitioned for a writ of certiorari challenging the Federal Circuit's decision in *Shire Development, LLC v. Watson Pharmaceuticals, Inc.*¹⁶⁹ Certiorari was granted on January 26, 2015 and the case was vacated and remanded to the Federal Circuit.¹⁷⁰
- On August 22, 2014, Takeda Pharmaceutical Company Ltd. petitioned for a writ of certiorari challenging the Federal Circuit's decision in Takeda Pharmaceutical Co. v. Zydus

^{162.} Petition for Writ of Certiorari at i, Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831 (2015), 2014 WL 230926.

^{163.} No. 13-854, SUP. Ct. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/13-854.htm (last visited Apr. 20, 2015).

^{164.} *Id*

^{165. 746} F.3d 1302 (Fed. Cir. 2014), vacated, 135 S. Ct. 1173 (2015); No. 13-1286, SUP. CT. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/13-1286.htm (last visited Apr. 20, 2015).

^{166.} Gevo, Inc. v. Butamax Advanced Biofuels LLC, 135 S. Ct. 1173, 1173 (2015).

^{167.} No 13-1536, SUP. CT. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/13-1536.htm (last visited Apr. 20, 2015).

^{168.} Id.

^{169. 746} F.3d 1326 (Fed. Cir. 2014), vacated, 135 S. Ct. 1174 (2015); No. 14-206, SUP. Ct. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-206.htm (last visited Apr. 20, 2015).

^{170.} Shire Dev., LLC v. Watson Pharm., Inc., 135 S. Ct. 1174, 1174 (2015).

- Pharmaceuticals USA, Inc.¹⁷¹ The petition was denied on December 1, 2014.¹⁷²
- On September 23, 2014, Stryker Corp. submitted its petition for a writ of certiorari challenging the Federal Circuit's decision in *Hill-Rom Services*, *Inc. v. Stryker Corp.*¹⁷³ The petition was denied on December 1, 2014.¹⁷⁴
- On October 20, 2014, Apple, Inc. submitted its petition for a writ of certiorari challenging the Federal Circuit's decision in *Ancora Technologies, Inc. v. Apple, Inc.*¹⁷⁵ This petition was denied on January 12, 2015.¹⁷⁶
- On October 30, 2014, Braintree Laboratories, Inc. submitted its petition for a writ of certiorari challenging the Federal Circuit's decision in *Braintree Laboratories*, Inc. v. Novel Laboratories, Inc. ¹⁷⁷ The petition was denied on December 8, 2014. ¹⁷⁸
- The Supreme Court vacated and remanded the cases to which it granted certiorari with instructions for the Federal Circuit to reconsider in light of its decision in decision *Teva Pharmaceuticals USA*, *Inc. v. Sandoz*, *Inc.*¹⁷⁹ on January 26, 2015. 180

^{171. 743} F.3d 1359 (Fed. Cir.), cert. denied, 135 S. Ct. 711 (2014); No. 14-217, SUP. CT. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-217.htm (last visited Apr. 20, 2015).

^{172.} Takeda Pharm. Co. v. Zydus Pharm. USA, Inc., 135 S. Ct. 711, 711 (2014).

^{173. 755} F.3d 1367 (Fed. Cir.), cert. denied, 135 S. Ct. 719 (2014); No. 14-358, SUP. Ct. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-358.htm (last visited Apr. 20, 2015).

^{174.} Stryker Corp. v. Hill-Rom Servs., Inc., 135 S. Ct. 719, 719 (2014).

^{175. 744} F.3d 732 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 957 (2015); No. 14-469, SUP. CT. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-469.htm (last visited Apr. 20, 2015).

^{176.} Apple, Inc. v. Ancora Techs., Inc., 135 S. Ct. 957, 957 (2015).

^{177. 749} F.3d 1349 (Fed. Cir.), cert. denied, 135 S. Ct. 764 (2014); No. 14-499, SUP. CT. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-499.htm (last visited Apr. 20, 2015).

^{178.} Braintree Labs., Inc. v. Novel Labs., Inc., 135 S. Ct. 764, 764 (2014).

^{179. 135} S. Ct. 831 (2015).

^{180.} Shire Dev., LLC v. Watson Pham., Inc., 135 S. Ct. 1174 (2015); Lighting Ballast Control LLC v. Universal Lighting Techs., Inc., 135 S. Ct. 1173 (2015); Gevo, Inc. v. Butamax(TM) Advanced Biofuels L.L.C., 135 S. Ct. 1173 (2015).

C. Laches as a Defense to Patent Infringement Claims

In A.C. Aukerman Co. v. R.L. Chaides Construction. Co., ¹⁸¹ the Federal Circuit held that laches was a valid defense and compatible with federal statutory law, ¹⁸² which states that "no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint." The Federal Circuit harmonized the doctrine of laches with the statutory provision by arguing that the six-year limitation on damages was not a statute of limitations in the sense of barring an infringement suit. Rather, it merely set a limit for recovering damages up to six years prior to the filing of the complaint. ¹⁸⁵

Recently in *Petrella v. Metro-Goldwyn-Mayer, Inc.*, ¹⁸⁶ the U.S. Supreme Court reversed the Ninth Circuit holding that the doctrine of laches could not provide a valid defense to a copyright infringement claim that was brought within the statutorily allowed three-year period from the date of infringement. ¹⁸⁷ The opinion emphasized that the Supreme Court has "never applied laches to bar in their entirety claims for discrete wrongs occurring within a federally prescribed limitations period." ¹⁸⁸ Rather, the Court stated that laches is a "gap-filling, not legislation-overriding" measure that is appropriate when there is no explicit statute of limitations. ¹⁸⁹ The Supreme Court also noted the Patent Act's six-year limitation on damages and acknowledged the co-existing trademark laches doctrine, but it stated that its decision did not address laches in the patent context. ¹⁹⁰

In light of *Petrella*, two cases have questioned the availability of laches as a defense in patent case—*SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*¹⁹¹ and *Reese v. Sprint Nextel Corp.*¹⁹² The appellants in both cases argued that the Federal Circuit should overrule *Aukerman's* laches holding in light of *Petrella*, while the

^{181. 960} F.2d 1020 (Fed. Cir. 1992) (en banc).

^{182.} Id. at 1028.

^{183. 35} U.S.C. § 286 (2012).

^{184.} Aukerman, 960 F.2d at 1030.

^{185.} Id.

^{186. 134} S. Ct. 1962 (2014).

^{187.} *Id.* at 1974 (reversing the Ninth Circuit's ruling that affirmed the decision of the district court, which dismissed the action on the basis of laches).

^{188.} Id. at 1974-75.

^{189.} *Id*.

^{190.} Id. at 1974 n.15 ("We have not had occasion to review the Federal Circuit's position.").

^{191. 767} F.3d 1339 (Fed. Cir. 2014), vacated, No. 2013-1564, 2014 WL 7460970 (Fed. Cir. Dec. 30, 2014) (per curiam).

^{192.} No. 2:13-cv-03811, 2014 WL 3724055 (C.D. Cal. July 24, 2014).

appellees argued that *Aukerman*'s laches holding remains valid and controlling. On December 30, 2014, the Federal Circuit granted an en banc rehearing in *SCA Hygiene Products*, vacated its prior holding, and reinstated the appeal. 194

The availability of laches in patent cases has been a key defense in patent infringement actions.¹⁹⁵ The defense of laches bars recovery by the plaintiff of any damages prior to the filing of the suit. Set forth in *Aukerman*, the doctrine of laches has essentially two elements: (1) an unreasonable and unexcused "delay" in bringing suit against the accused infringer; and (2) that "delay" resulted in "material prejudice" to the accused infringer—which could be either evidentiary or economic prejudice.¹⁹⁶ Unavailability of laches as a defense would be a significant setback to the arsenal of defense attorneys in patent cases and shake up the dynamics of the playing field.

On August 2, 2010, SCA brought a patent infringement action against First Quality in the United States District Court for the Western District of Kentucky, more than six years after its initial correspondence with First Quality regarding possible infringement.¹⁹⁷ First Quality filed motions for summary judgment based on laches and equitable estoppel defenses, which SCA opposed. 198 The district court granted summary judgment in favor of First Quality on both equitable estoppel and laches. 199 On September 17, 2004, after the Supreme Court had decided Petrella, the Federal Circuit affirmed the summary judgment on laches but reversed on equitable estoppel.²⁰⁰ On the issue of laches, the court reasoned that, due to the six-year delay, the plaintiff carried the burden to rebut the presumption of laches but failed to raise a genuine issue of material fact regarding the reasonability of its delay and the economic prejudice caused to the defendant.201 The SCA Hygiene Products panel refused to entertain a merits reconsideration of Aukerman, arguing that "[b]ecause Aukerman may only be overruled by the Supreme Court

^{193.} SCA Hygiene Prods., 767 F.3d at 1344-45; Reese, 2014 WL 3724055, at *1.

^{194.} SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, No. 2013-1564, 2014 WL 7460970, at *1 (Fed. Cir. Dec. 30, 2014).

^{195.} See generally Jean F. Rydstrom, Annotation, Laches as Defense in Patent Infringement Suits, 35 A.L.R. FED. 551 (1977).

^{196.} A.C. Aukerman Co. v. R.L. Chaides Constr. Corp., 960 F.2d 1020, 1028 (Fed. Cir. 1992).

^{197.} SCA Hygiene Prods., 767 F.3d at 1342.

^{198.} Id. at 1343.

^{199.} Id.

^{200.} Id. at 1351.

^{201.} Id. at 1346-48.

or an en banc panel of [the Federal Circuit], Aukerman remains controlling precedent."202

On October 15, 2014, SCA filed a petition for rehearing the case en banc of the initial decision in light of Petrella.²⁰³ In its brief, SCA argues that Petrella cannot be reconciled with Aukerman and hence the Federal Circuit should either overrule A.C. Aukerman or, in the alternative, abolish the Aukerman presumption of laches on the plaintiff.²⁰⁴ In support of its argument for overruling Aukerman's laches, SCA argues that the judicially created doctrine of laches cannot trump when Congress provides a limitations period and Petrella undermines all arguments in support of laches in Aukerman.²⁰⁵ Further, SCA argues that there is no actual difference between copyright law and patent law and, therefore, principles of equity must serve both fields.²⁰⁶ SCA also argues that, in the alternative, the Federal Circuit should abolish the Aukerman presumption of laches on the plaintiff because Petrella establishes that each infringing act starts a new limitations period—a contradiction to Aukerman's treatment of serial patent infringement as a unitary harm.²⁰⁷

In response, First Quality argues that Aukerman's laches holding should not be overruled because 35 U.S.C. § 286 is not a statute of limitations—it "only restricts the extent to which one can recover prefiling damages." In the absence of a statute of limitations, the Supreme Court recognized the "gap-filling" role of laches in Petrella, which is also corroborated by the legislative history and commentary of 35 U.S.C. § 282 that enlists available defenses. First Quality further points out that SCA should have raised the inapplicability of laches defense at the district court level for preservation on appeal, rather than arguing to overrule Aukerman after fully briefing and

^{202.} Id. at 1345.

^{203.} Combined Petition for Panel Rehearing and Rehearing En Banc of Plaintiffs-Appellants SCA Hygiene Products Aktiebolag and SCA Personal Care, Inc. at 2, SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, No. 2013-1564, 2014 WL 7460970 (Fed. Cir. Dec. 30, 2014).

^{204.} Id.

^{205.} Id. at 5-8.

^{206.} Id. at 10-12.

^{207.} Id. at 12-13.

^{208.} Response of Defendants-Appellees to Combined Petition for Rehearing and Rehearing En Banc at 1, SCA Hygine Prods. Aktiebolag, 2014 WL 7460970 (No. 2013-1564) (quoting Leinoff v. Louis Milona & Sons, Inc. 726 F.2d 734, 741 (Fed. Cir. 1984)).

^{209.} Id. at 3-9.

arguing the appeal once already.²¹⁰ Moreover, in countering SCA's argument for abolishing the *Aukerman* presumptions of delay and prejudice, First Quality asserts that SCA previously admitted that "whether the presumption applies or not was irrelevant."²¹¹ Finally, since the outcome of the case would not be altered even in the absence of a "presumption" of laches due to the unreasonableness of the delay and the economic prejudice suffered, First Quality argues that the case does not present the occasion to review the presumption of laches.²¹²

Morris Reese filed a patent infringement action against Sprint and four other defendants on May 29, 2013.²¹⁸ The district court disjoined the action into five cases and designated the case against Sprint as the lead case.²¹⁴ On March 17, 2014, each of the five defendants filed a motion for summary judgment asserting laches as a defense, which Reese opposed by arguing that there were genuine issues of material fact concerning laches.²¹⁵ The district court granted summary judgment on all five cases and affirmed its decision upon a motion for reconsideration based on *Petrella*.²¹⁶

Reese filed a timely appeal to the Federal Circuit, requesting an en banc reconsideration of the availability of *Aukerman* laches in light of *Petrella*.²¹⁷ In his petition, Reese argues that *Petrella* "swept away the logical foundations of *Aukerman*'s laches holding." Reese agrees with the arguments made in SCA's petition but points out that his case is the better vehicle to overrule *Aukerman*'s laches holding. Reese contends that, unlike in *SCA Hygiene Products*, there is no equitable estoppel issue in his case that could render the laches issue moot. Overruling *Aukerman*'s laches decision would conserve judicial resources by mooting issues including the reasonableness of Reese's delay in filing suit, the prejudice suffered by defendants, and the possible abuse of discretion by the trial judge who ruled on the

^{210.} Id. at 10-11.

^{211.} Id. at 11.

^{212.} Id. at 11-12.

^{213.} Petition of Plaintiff-Appellant for Hearing En Banc at 6, Reese v. Sprint Nextel Corp., No. 2015-1030 (Fed. Cir. Oct. 29, 2014).

^{214.} Id.

^{215.} Id.

^{216.} Id. at 6-7.

^{217.} Id. at 7.

^{218.} Id.

^{219.} Id. at 8-9.

^{220.} Id. at 10-11.

summary judgment motion before the close of discovery.²²¹ Finally, Reese argues that this rare simultaneous consideration of two en banc petitions that present the same question gives the Federal Circuit an opportunity to clarify its standards for granting en banc review.²²²

In response, two of the defendant-appellees, Verizon and AT&T Mobility, respond that the Court should not reconsider *Aukerman* because *Petrella* does not invalidate *Aukerman* but rather supports the availability of *Aukerman*'s laches. 223 According to the appellees, Congress's decision not to enact a statute of limitations for patent infringement claims reflects an implicit endorsement of the defense of laches and hence the fundamental argument of *Petrella*—"in face of a statute of limitations enacted by Congress, laches cannot be invoked to bar legal relief"—does not apply to patent cases. 224 Rather, 35 U.S.C. § 286 is a damages limitation for up to six years available to a plaintiff who promptly files suit upon knowledge of infringement. 225

On the other hand, the appellees argue that the doctrine of laches serves a different purpose than *Aukerman* because it prevents retrospective relief when a plaintiff sleeps on his patent rights for an extended period, thereby causing prejudice to the defendant by such delay. Such a doctrine has been recognized in patent cases for over a century. Finally, the appellees agree with Reese that, if the Federal Circuit does decide to reconsider *Aukerman*'s laches holding, their case is a better vehicle than *SCA Hygiene Products* for all of the reasons cited by Reese and because *SCA Hygiene Products* waived any argument that *Aukerman* was incorrectly decided. 228

The Federal Circuit briefly cited Aukerman in June 2014, in Southern Snow Manufacturing Co. v. SnoWizard Holdings, Inc., 229 where appellants and cross-appellants appealed from the decision of the United States District Court for the Eastern District of Louisiana, which found that cross-appellant and defendant SnoWizard's laches defense was meritless. 230 Even though one of the plaintiffs in the case brought

^{221.} Id.

^{222.} *Id.* at 11.

^{223.} Response to Petition for Hearing En Banc at 3-4, Reese, No. 2015-1030.

^{224.} Id. at 5 (quoting Petrella v. Metro-Goldwyn-Mayer, Inc., 134 S. Ct. 1962, 1974 (2014)).

^{225.} Id. at 6.

^{226.} Id.

^{227.} Id.

⁹⁹⁸ Id. at 13-14

^{229. 567} F. App'x 945 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 1416 (2015), and cert. denied, 135 S. Ct. 1439 (2015).

^{230.} Id. at 957.

claims after a thirteen-year delay, the Federal Circuit reasoned that adjudication of a laches defense is a matter of discretion of the trial judge and not a question for the jury and that the defendant had waived the laches defense by failing to raise it in the final pre-trial order.²⁸¹ Therefore, the district court had not abused its discretion by rejecting the defendant's laches defense.²⁸² Such a holding implicitly affirms the Federal Circuit's belief in the doctrine of laches as a valid defense even after the Supreme Court's decision in *Petrella* in May 2014.

The Federal Circuit's decision on the availability of laches as a defense in patent infringement actions will be observed with great interest, irrespective of which vehicle it chooses to address the issue—SCA Hygiene Products or Reese. Given that the Supreme Court consciously avoided the issue of laches in patent cases in Petrella, it is unlikely that the Federal Circuit will be swayed to change its controlling precedent in Aukerman. If it does, however, the change could have a significant impact on the strategy used by defense attorneys in patent infringement cases brought after more than six years since the notice of infringement.

D. Fee Shifting

In light of the 2014 Supreme Court decisions Highmark, Inc. v. Allcare Health Management System, Inc.²³³ and Octane Fitness, LLC v. ICON Health & Fitness, Inc.,²³⁴ the Federal Circuit considered updated fee-shifting provisions. The judges applied the standards for awarding attorney's fees under 35 U.S.C. § 285 and 15 U.S.C. § 1117(a). These cases highlight the expanding reach of the Octane and Highmark holdings to willfulness (under 35 U.S.C. § 284) and review of litigation stay orders.

On April 29, 2014, the Supreme Court simultaneously issued two decisions regarding fee shifting: *Highmark* and *Octane*. Section 285 of Title 35 allows courts to award attorney's fees to prevailing parties in "exceptional cases." In *Brooks Furniture Manufacturing, Inc. v. Dutailier International, Inc.*, 237 the Federal Circuit defined exceptional

^{231.} Id.

^{232.} Id.

^{233. 134} S. Ct. 1744 (2014).

^{234. 134} S. Ct. 1749 (2014).

^{235.} Highmark, 134 S. Ct. at 1748-49; Octane, 134 S. Ct. at 1758.

^{236. 35} U.S.C. § 285 (2012).

^{237. 393} F.3d 1378 (Fed. Cir. 2005), abrogated by Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749 (2014).

cases as (1) where a party engaged in "material inappropriate conduct"; or (2) where the litigation is both objectively baseless and brought in subjective bad faith.²³⁸ The Federal Circuit continued by saying that there is a presumption of good faith for an assertion of infringement on a properly issued patent, and litigants must present "clear and convincing evidence" to assert otherwise.²³⁹

In Octane, the Supreme Court overturned Brooks Furniture's "mechanical formulation."240 Octane involved elliptical exercise machines that allowed users to adjust the stride lengths to personal preferences.²⁴¹ ICON lost its patent infringement suit against Octane on summary judgment, and Octane moved for attorney's fees. 242 The District Court denied Octane attorney's fees and the Federal Circuit affirmed. 243 The lower courts applied the standard from Brooks Furniture, which the Supreme Court rejected as too rigid.²⁴⁴ While the Federal Circuit applied the first prong of the Brooks Furniture standard to situations of litigation misconduct for independently sanctionable conduct, the Supreme Court said courts could award attorney's fees in exceptional cases even if not independently sanctionable.²⁴⁵ The Supreme Court rejected the second prong of the Brooks Furniture standard as an invalid importation of the Noerr-Pennington antitrust doctrine.²⁴⁶ Also, the Brooks Furniture standard's rigidity renders it superfluous because courts have long applied a common law exception to the "American rule" when parties acted either in bad faith or with willful disobedience.²⁴⁷ The Court also rejected *Brooks* Furniture's clear and convincing evidence standard in favor of the lower preponderance of the evidence standard.²⁴⁸

Similarly, in *Highmark*, the Supreme Court said the newly announced *Octane* standard should be used when awarding attorney's

^{238.} Id. at 1381.

^{239.} Id. at 1382.

^{240.} Octane, 134 S. Ct. at 1752-54.

^{241.} Id. at 1754.

^{242.} Id. at 1755.

^{243.} Id.

^{244.} Id. at 1755-56.

^{245.} Id. at 1756-57.

^{246.} *Id.* at 1757–58 ("In the *Noerr-Pennington* context, defendants seek immunity from a judicial declaration that their filing of a lawsuit was actually unlawful....").

^{247.} *Id.* at 1758; *see also* Alyeska Pipeline Serv. Co. v. Wilderness Soc'y, 421 U.S. 240, 258–59 (1975) ("[A] court may assess attorneys' fees . . . when the losing party has 'acted in bad faith, vexatiously, wantonly, or for oppressive reasons.").

^{248.} Octane, 134 S. Ct. at 1758.

fees.²⁴⁹ The Court also clarified the standard of review as an abuse-ofdiscretion standard for reviewing 35 USC § 285 decisions. 250 Accordingly, the Court vacated the Federal Circuit's decision and remanded the case.²⁵¹ In September 2014, the Federal Circuit applied Octane in Homeland Housewares, LLC v. Sorensen Research & Development Trust. 252 Homeland Housewares arose after Sorensen, the patentee, sent a cease-and-desist letter to Homeland Housewares, the alleged infringer, regarding Sorensen's patent for thin-wall plastic products.²⁵³ Homeland Housewares responded by seeking a declaration of non-infringement, unenforceability, and invalidity of the patent.²⁵⁴ The district court ruled that Homeland Housewares did not infringe because Sorensen failed to produce evidence of infringement.255 Ultimately, the court denied the invalidity and unenforceability claims.²⁵⁶ Homeland Housewares moved for attorney's fees under § 285, and the court partially granted the motion due to clear and convincing evidence of Sorensen's misconduct, involving repeated failures to produce evidence of infringement.²⁵⁷ Applying the Octane standard, the Federal Circuit found that the district court did not abuse its discretion in partially awarding attorney's fees for Sorensen's misconduct when it considered the totality of the circumstances.²⁵⁸ The Federal Circuit affirmed the lower court's decision.²⁵⁹

The Federal Circuit also applied *Octane* in *Checkpoint Systems, Inc. v. All-Tag Security S.A.*²⁶⁰ Checkpoint sued All-Tag for patent infringement.²⁶¹ After finding for All-Tag, the district court awarded All-Tag \$6.6 million in attorney's fees under 35 U.S.C. § 285.²⁶² The Federal Circuit reversed, finding that All-Tag failed to prove that the litigation was objectively baseless or brought in bad faith.²⁶³ The

^{249.} Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 134 S. Ct. 1744, 1748 (2014).

^{250.} Id. at 1748-49.

^{251.} Id. at 1749.

^{252. 581} F. App'x 877 (Fed. Cir. 2014).

^{253.} Id. at 878-79.

^{254.} Id. at 879.

^{255.} Id.

^{256.} Id.

^{257.} Id. at 879-80.

^{258.} *Id.* at 880–81; *see* Octane Fitness, LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749, 1756 (2014) (instructing district courts to look at the totality of the circumstances).

^{259.} Homeland Housewares, 581 F. App'x at 882.

^{260. 572} F. App'x 988 (Fed. Cir. 2014).

^{261.} Id. at 988.

^{262.} Id.

^{263.} Id. at 988-89.

Supreme Court granted All-Tag's subsequent petition for certiorari and remanded the case to the Federal Circuit to be reconsidered consistent with the new *Octane* standard.²⁶⁴ The Federal Circuit remanded the case to the district court in light of the Supreme Court's guidance that district courts are best positioned to assess whether a case is "exceptional" under § 285.²⁶⁵

Section 35(a) of the Lanham Trademark Act parallels § 285 of the Patent Act. 266 The Third Circuit in Fair Wind Sailing, Inc. v. Dempster 267 discerned the Octane decision to apply to trademark infringement actions and the granting of attorney's fees. 268 The court held that attorney's fees may be awarded when (1) the merit of a position taken by a party qualifies as an "unusual discrepancy" or (2) a party litigated in an "unreasonable manner. 269 The court vacated the attorney's fees award found under the old standard and remanded the case to the district court to determine if the case satisfies the "exceptional" standard consistent with Octane. 270

The Sixth Circuit also considered a case involving both 35 U.S.C. § 285 and 15 U.S.C. § 1117(a). Premium Balloon Accessories, Inc. v. Creative Balloons Manufacturing, Inc.²⁷¹ dealt with two companies that made helium balloon accessories, such as heavy weights that prevent such balloons from floating away.²⁷² Following a trade dress infringement suit in 1999, Creative entered into a settlement agreement with Premium for use of the trade dress.²⁷³ In 2009, Creative started making a "SuperStar" balloon weight that was similar to Premium's "Heavy Weight" balloon weight.²⁷⁴ Premium filed suit for trade dress infringement.²⁷⁵ Creative responded by arguing that it had acquired trade dress rights through the earlier agreement and by asserting infringement of Creative's balloon-sealing patent.²⁷⁶ The

^{264.} Id. at 989.

^{265.} Id.

^{266. 15} U.S.C. § 1117(a) (2012) ("The court in exceptional cases may award reasonable attorney fees to the prevailing party."); 35 U.S.C. § 285 ("The court in exceptional cases may award reasonable attorney fees to the prevailing party.").

^{267. 764} F.3d 303 (3d Cir. 2014).

^{268.} Id. at 315.

^{269.} Id.

^{270.} Id.

^{271. 573} F. App'x 547 (6th Cir. 2014), cert. denied, 135 S. Ct. 1532 (2015).

^{272.} Id. at 548.

^{273.} Id.

^{274.} Id.

^{275.} Id.

^{276.} Id.

court held Creative had a valid license to use Premium's trade The court ruled Premium's design to be functional and lacking distinctiveness and secondary meaning and found that Premium had been selling its balloon-sealing device for close to a decade before Creative's patent.²⁷⁸ Applying the Octane standard for "exceptional" cases, the court noted that Creative had not acted in bad faith when it asserted the patent infringement claims or when it had applied for the patent.²⁷⁹ In light of Creative dropping the patent infringement claims as soon as it learned of Premium's prior commercial use, the district court erred in awarding attorney's fees under § 285.²⁸⁰ The court rejected Creative's trade dress infringement claims against Premium regarding the balloon-sealing device.²⁸¹ Again applying the *Octane* standard, the court reversed the award of attorney's fees under § 1117(a) because Creative voluntarily dropped the claims when it became aware of Premium's prior use.²⁸²

On October 22, 2014, the Federal Circuit, in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, ²⁸³ affirmed the district court's finding that, for sales of surface mount electronic packages in the United States, Pulse infringed Halo's patents on surface mounted electrical transformers used on printed circuit boards. ²⁸⁴ The court found inducement for Pulse's sales outside the U.S. but imported into the U.S. by third parties. ²⁸⁵ It also affirmed the district court's finding that "Pulse's infringement was not willful." ²⁸⁶ Judge O'Malley's concurrence suggested that the Federal Circuit update its standard for willfulness in light of the *Highmark* and *Octane* opinions. ²⁸⁷

As interpreted by Aro Manufacturing Co. v. Convertible Top Replacement Co., 288 35 U.S.C. § 284 allows enhanced damages for "willful or bad-faith infringement." The standard for willfulness

^{277.} Id. at 552.

^{278.} Id. at 554-55, 558.

^{279.} Id. at 559.

^{280.} Id.

^{281.} Id.

^{282.} Id.

^{283. 769} F.3d 1371 (Fed. Cir. 2014), reh'g en banc denied, 780 F.3d 1357 (Fed. Cir. 2015).

^{284.} Id. at 1374, 1383.

^{285.} Id. at 1383.

^{286.} Id.

^{287.} Id. at 1386 (O'Malley, J., concurring).

^{288. 377} U.S. 476 (1964).

^{289.} Id. at 508; see also 35 U.S.C. § 284 (2012) (allowing punitive damages up to three times the damage).

under In re Seagate Technology, LLC²⁹⁰ requires a patentee to show by clear and convincing evidence that (1) an objectively high likelihood of infringement existed and (2) the infringer knew this risk.²⁹¹ This test and Brooks Furniture's test for "exceptional" cases under 35 U.S.C. § 285 erroneously relied on a broad reading of Professional Real Estate Investors, Inc. v. Columbia Pictures Industries, Inc.²⁹² The concurrence in Halo Electronics suggests applying a flexible test to willfulness assessments, similar to the flexible standard applied to attorney's fees following Octane.²⁹³ Judge O'Malley also noted that the evidentiary standard should change from clear and convincing to preponderance of the evidence.²⁹⁴

Similarly, the court should consider changing the standard of review for willfulness from de novo to abuse of discretion. Judge O'Malley concluded by asking the full court to determine if judges or juries should handle willfulness assessments. While such assessments could require courts to weigh factual evidence, the mere presence of such elements should not override Congress' designation of courts to make such determinations. It remains open when the full court will conduct an evaluation of the willfulness standard.

In VirtualAgility, Inc. v. Salesforce.com, Inc., 298 the Federal Circuit considered whether to stay litigation pending a Covered Business Methods (CBM) review. 299 The court applied a four-factor test under section 18(b)(1) of the America Invents Act and reversed the district court's denial of a stay of litigation. 300 Judge Newman's dissent examined Highmark's abuse of discretion standard for a fee-shifting analysis and applied it to review of litigation stays. 301 Newman said review of a litigation stay order should be done on an abuse of discretion standard, not de novo, because the four-factor analysis is fact intensive and not amenable to "useful generalization." 302

^{290. 497} F.3d 1360 (Fed. Cir. 2007).

^{291.} *Id.* at 1371.

^{292. 508} U.S. 49 (1993); Halo Elecs., 769 F.3d at 1384 (O'Malley, J., concurring).

^{293.} Halo Elecs., 769 F.3d at 1384-85 (O'Malley, J., concurring).

^{294.} Id. at 1385.

^{295.} Id. at 1385-86.

^{296.} Id. at 1386.

^{297.} Id.

^{298. 759} F.3d 1307 (Fed. Cir. 2014).

^{299.} Id. at 1309.

^{300.} Id. at 1309, 1320.

^{301.} Id. at 1322-23 (Newman, J., dissenting).

^{302.} Id. at 1323.

Further, Judge Newman commented that district courts remain better positioned to balance party interests.³⁰³

IV. SUBSTANTIVE ISSUES

A. Induced Patent Infringement Under 35 U.S.C. § 271(b)

This Section discusses recent and pending Supreme Court decisions, as well as notable 2014 Federal Circuit opinions, regarding induced patent infringement under 35 U.S.C. § 271(b).

1. The Supreme Court on § 271(b)

Though the high court recently opined on the standard for induced infringement under 35 U.S.C. § 271(b) in 2011 in Global-Tech Appliances, Inc. v. SEB S.A., 304 it is already considering what some believe to be a fundamental change in the landscape in assessing the requisite intent for induced infringement. In Global-Tech Appliances, the Supreme Court held that "induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement." In so holding, the Court confirmed that § 271(b) also requires knowledge of the existence of the patent that is infringed, premising its decision on its prior decision in Aro Manufacturing Co. that the same knowledge is required for contributory infringement under § 271(c). 306

This year, the Supreme Court is considering additional issues surrounding induced infringement including a new defense borne out of the Federal Circuit's 2013 decision in Commil USA, LLC v. Cisco Systems, Inc.³⁰⁷ In Commil, the Federal Circuit vacated a jury's verdict on induced infringement and remanded for a new trial, relying in pertinent part on Global-Tech Appliances to hold that "the jury was permitted to find induced infringement based on mere negligence where knowledge is required." In so holding, the Court found that the district court gave a legally erroneous instruction because "the jury instruction allowed Cisco to be held

^{303.} Id

^{304. 131} S. Ct. 2060, 2068 (2011). The high court also pronounced that the doctrine of willful blindness should apply in civil lawsuits for induced patent infringement under 35 U.S.C. § 271(b), but this aspect of the court's decision is beyond the scope of this article. *Id.* at 2069.

^{305.} Id. at 2068.

^{306.} Id.

^{307. 720} F.3d 1361 (Fed. Cir. 2013), cert. denied, 135 S. Ct. 704, and cert. granted in part, 135 S. Ct. 752 (2014).

^{308.} Id. at 1367.

liable if 'Cisco knew or should have known that its actions would induce direct infringement.'"309

In *Commil*, the Federal Circuit also considered, and agreed with, Cisco's argument that it was improperly precluded from presenting evidence of its good-faith belief of invalidity to rebut allegations of induced infringement. Acknowledging that "[i]t is axiomatic that one cannot infringe an invalid patent," the Court held "that evidence of an accused inducer's good-faith belief of invalidity may negate the requisite intent for induced infringement. The court explained, however, "[t]his is, of course, not to say that such evidence precludes a finding of induced infringement. Rather, it is evidence that should be considered by the fact-finder in determining whether an accused party knew 'that the induced acts constitute patent infringement.'" "312

While the Federal Circuit agreed that Cisco could assert its goodfaith defense on remand, the court denied Cisco's challenge to the lower court's grant of a partial new trial based on prejudicial remarks by Cisco's counsel with respect to Commil's Jewish owners and inventors.³¹³ In pertinent part, Cisco argued that granting a partial new trial on induced infringement and damages, but not direct infringement and validity, violated the Seventh Amendment.³¹⁴ The Federal Circuit rejected Cisco's argument, noting that "patent infringement and invalidity are separate and distinct issues."315 The court acknowledged that the case was unique insofar as the jury would be considering evidence of invalidity with respect to Cisco's good-faith belief defense to induced infringement, but reasoned that "the jury must merely decide whether Cisco possessed that The jury need not decide whether the belief in good-faith. underlying position was meritorious."316 Accordingly, the Federal Circuit held that separate trials on invalidity and induced infringement would not constitute an infringement of the Seventh Amendment right to a fair trial.³¹⁷

In January 2014, Commil filed a petition for writ of certiorari, asking the high court to certify the following questions:

^{309.} Id.

^{310.} Id.

^{311.} Id. at 1368.

^{312.} Id. at 1368-69.

^{313.} Id. at 1370-71.

^{314.} Id. at 1371.

^{315.} *Id.* (quoting Pandrol USA, LP v. Airboss Ry. Prods., Inc., 320 F.3d 1354, 1365 (Fed. Cir. 2003)) (internal quotation marks omitted).

^{316.} Id. at 1372.

^{317.} Id.

- 1. Whether the Federal Circuit erred in holding that a defendant's belief that a patent is invalid is a defense to induced infringement under 35 U.S.C. § 271(b).
- 2. Whether the Federal Circuit erred in holding that *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060 (2011) required retrial on the issue of intent under 35 U.S.C. § 271(b) where the jury (1) found the defendant had actual knowledge of the patent and (2) was instructed that "[i]nducing third-party infringement cannot occur unintentionally."³¹⁸

In February 2014, Cisco cross-petitioned and presented the following question: "Whether, and in what circumstances, the Seventh Amendment permits a court to order a partial retrial of induced patent infringement without also retrying the related question of patent invalidity." Cisco's cross-petition was denied without explanation on December 1, 2014. Commil's petition was granted on December 5, 2014 limited to Question 1 presented by the petition. Circumstance of the service of the

i. The Federal Circuit's Commil USA, LLC v. Cisco Systems Decision

While Commil and Cisco's petitions were pending in 2014, the Federal Circuit issued two decisions bearing directly on the extent to which an accused infringer can rely on a good-faith belief of invalidity to negate the requisite intent for induced infringement, as set forth in *Commil*. First, though issued as an unpublished opinion, the Federal Circuit in *Bose Corp. v. SDI Technologies, Inc.*³²² examined the propriety of the district court's grant of summary judgment absolving the defendant of indirect infringement liability based on an opinion of counsel.³²³ The Federal Circuit reversed, finding that the district court "improperly depended on incomplete evidence of SDI's good-faith belief of the asserted patent's invalidity and of SDI's reliance on the opinion of counsel."³²⁴

The court based its decision on two primary grounds. First, the court reasoned that the grant of summary judgment "entirely absolved SDI of indirect infringement liability" and that "[s] everal points in

^{318.} Petition for Writ of Certiorari at i-ii, Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 752 (2014) (No. 13-896), 2014 WL 281332 (alteration in original).

^{319.} Conditional Cross-Petition for a Writ of Certiorari at i, Cisco Sys. Inc. v. Commil USA, LLC, 135 S. Ct. 704 (2014) (No. 13-1044), 2014 WL 825181.

^{320.} Cisco Sys., 135 S. Ct. at 704.

^{321.} Commil, 135 S. Ct. at 752.

^{322. 558} F. App'x 1012 (Fed. Cir. 2014).

^{323.} Id. at 1022-23.

^{324.} Id. at 1025.

time deserve independent analysis to judge SDI's good-faith belief of invalidity."925 In particular, the court found that "[w]hether SDI had such a good-faith belief prior to receiving the opinion of counsel is a triable issue for the jury to consider. Therefore the summary judgment incorrectly absolves SDI of liability from December 10, 2008 until May 22, 2009, when SDI received the opinion of counsel."326 Second, the court found a material dispute on the issue of whether the defendant actually relied in good-faith on its opinion of counsel, noting that "[a] party seeking to show lack of the requisite intent to infringe, based on receipt of a competent counsel opinion of noninfringement or of invalidity, must also show that it 'had exercised reasonable and good-faith adherence to the analysis and advice therein."327 It reasoned that SDI's allegations of reliance were disputed and that, even if uncontested, "summary judgment could not lie without uncontested proof of the date upon which such goodfaith reliance began."328

The Federal Circuit further opined on the Commil/Cisco good-faith belief of invalidity defense to inducement in VirnetX, Inc. v. Cisco Systems, Inc. 329 Specifically, the court reviewed the district court's decision to exclude evidence offered by the defendant, Apple, at trial that it had initiated reexaminations against the asserted patents and that its requests resulted in initial rejections of the asserted claims by the PTO. 330 Apple had offered the rejections as evidence of its reasonable belief of invalidity, to prove that it failed to meet the requisite intent element for inducement. The district court had excluded the evidence, finding it prejudicial and misleading because the PTO's actions were non-final. The Federal Circuit affirmed the exclusion, noting that "this court's precedent has often warned of the limited value of actions by the PTO when used for such purposes." The court further reasoned in VirnetX that it

need not decide whether [its] opinion in *Commil* justifies reliance on reexamination evidence to establish a good faith belief of invalidity. Instead, [it] conclude[d] that, regardless of the

^{325.} Id. at 1022-23.

^{326.} Id. at 1023.

^{327.} Id. at 1024 (quoting Cent. Soya Co. v. Geo. A. Hormel & Co., 723 F.2d 1573, 1577 (Fed. Cir. 1983)).

^{328.} Id.

^{329. 767} F.3d 1308 (Fed. Cir. 2014).

^{330.} Id. at 1324.

^{331.} Id.

^{332.} Id.

^{333.} Id.

evidence's relevance to a fact at issue at trial, the district court would still not have abused its discretion in finding that the probative value was substantially outweighed by the risk of unfair prejudice to the patentee, confusion with invalidity (on the merits), or misleading the jury, thereby justifying exclusion under Federal Rule of Evidence 403.³³⁴

In short, both *Bose Corp.* and *VirnetX* put some constraints on the good-faith belief of invalidity defense to inducement set forth in *Commil.*

ii. Other Notable 2014 Federal Circuit Decisions on Section 271(b)

Beyond *Commil* and its progeny, three additional induced infringement decisions from the Federal Circuit in 2014 merit discussion. First, in *Microsoft Corp. v. DataTern, Inc.*, ³³⁵ the Federal Circuit examined whether a patent-holder's suits against Microsoft's and SAP's customers successfully initiated declaratory judgment jurisdiction for Microsoft and SAP regarding induced infringement. ³³⁶ The court quoted its prior decision in *Arris Group, Inc. v. British Telecommunications PLC*, ³³⁷ to recognize that

where a patent holder accuses customers of direct infringement based on the sale or use of a supplier's equipment, the supplier has standing to commence a declaratory judgment action if... there is a controversy between the patentee and the supplier as to the supplier's liability for induced or contributory infringement based on the alleged acts of direct infringement by its customers.³³⁸

It also relied on *Global-Tech Appliances*, acknowledging that "[t]o prove inducement of infringement, unlike direct infringement, the patentee must show that the accused inducer took an affirmative act to encourage infringement with the knowledge that the induced acts constitute patent infringement." 339

With those principles in mind, *DataTern* held that "the claim charts used in the customer lawsuits support a finding of jurisdiction for only some of the declaratory judgment challenges at issue." In particular, the court upheld declaratory judgment jurisdiction for SAP's lawsuit, finding that

^{334.} Id. at 1324-25.

^{335. 755} F.3d 899 (Fed. Cir. 2014).

^{336.} Id. at 904-05.

^{337. 639} F.3d 1368 (Fed. Cir. 2011).

^{338.} DataTern, 755 F.3d at 903 (alteration in original) (quoting Arris Grp., 639 F.3d at 1375) (internal quotation marks omitted).

^{339.} Id. at 904 (citing Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2014)).

^{340.} Id. at 905.

these claim charts cite to SAP-provided user guides and documentation for each claim element. In other words, DataTern's claim charts show that SAP provides its customers with the necessary components to infringe the '402 and '502 patents as well as the instruction manuals for using the components in an infringing manner.³⁴¹

The court split, however, on Microsoft's declaratory judgment Specifically, it upheld Microsoft's declaratory judgment jurisdiction with respect to the '502 patent, finding that "[t]he claim charts cite to Microsoft-provided online documentation for each limitation of the '502 patent's representative claims. Thus, these claim charts can be read to allege that Microsoft is encouraging the exact use which DataTern asserts amount to direct infringement."342 Conversely, for Microsoft's '402 patent claim, the court found that the claim charts "cite exclusively to third-party-not Microsoft provided—documentation for several key claim limitations" and that "[n]othing in the record suggests that Microsoft encouraged the acts accused of direct infringement, and simply selling a product capable of being used in an infringing manner is not sufficient to create a substantial controversy regarding inducement."343 Thus, the court concluded that "Microsoft failed to establish that a substantial controversy existed regarding Microsoft's infringement of the '402 patent at the time the complaint was filed."344

Another notable induced infringement decision from the Federal Circuit, *Halo Electronics*, touched on the extraterritoriality of § 271(a), though the underlying finding of inducement was not specifically appealed.³⁴⁵ The court affirmed the judgment that "Pulse did not directly infringe the Halo patents by selling or offering to sell within the United States those accused products that Pulse manufactured, shipped, and delivered outside the United States," but it also affirmed the judgment of "direct infringement with respect to products that Pulse delivered in the United States and the judgment of inducement with respect to products that Pulse delivered outside the United States but were imported into the United States by others."³⁴⁶ These holdings were based on the facts that

^{341.} Id.

^{342.} Id.

^{343.} Id.

^{344.} Id. at 907.

^{345.} Halo Elecs., Inc. v. Pulse Elecs., Inc., 769 F.3d 1371, 1378-79 (Fed. Cir. 2014), reh'g en banc denied, 780 F.3d 1357 (Fed. Cir. 2015).

^{346.} Id. at 1383.

[s]ome of Pulse's products were delivered by Pulse to customers in the United States, but the majority of them were delivered outside the United States... [to] contract manufacturers [who] incorporated the electronic packages supplied by Pulse into end products overseas,... which were then sold and shipped to consumers around the world.³⁴⁷

With regard to direct infringement, the court opined that

when substantial activities of a sales transaction, including the final formation of a contract for sale encompassing all essential terms as well as the delivery and performance under that sales contract, occur entirely outside the United States, pricing and contracting negotiations in the United States alone do not constitute or transform those extraterritorial activities into a sale within the United States for purposes of § 271(a).³⁴⁸

In rejecting direct infringement liability for products manufactured, shipped, and delivered abroad, the court also rejected Halo's argument that the sales at issue occurred in the United States because Halo suffered economic harm as a result.³⁴⁹ In so holding, the court noted that "Halo recovered damages for products that Pulse delivered outside the United States but were ultimately imported into the United States in finished end products based on a theory of inducement."³⁵⁰

The final notable induced infringement decision from the Federal Circuit in 2014, Ericsson, Inc. v. D-Link Systems, Inc., 351 addresses induced infringement in the context of "standard essential patents" ("SEP"). 352 The court explained that "[b]ecause the standard requires that devices utilize specific technology, compliant devices necessarily infringe certain claims in patents that cover technology incorporated into the standard." 353 Regarding the requisite intent, the court recognized that "[i]nducement requires that the alleged infringer 'knowingly induced infringement and possessed specific intent to encourage another's infringement." 354

Appealing the finding of inducement infringement, D-Link contended that "Ericsson did not present sufficient facts from which

^{347.} Id. at 1375.

^{348.} Id. at 1379.

^{349.} Id. at 1380.

^{350.} Id.

^{351. 773} F.3d 1201 (Fed. Cir. 2014).

^{352.} Id. at 1209, 1219.

^{353.} Id. at 1209.

^{354.} *Id.* at 1219 (quoting DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1306 (Fed. Cir. 2006)).

a jury could conclude that it knew the induced acts constituted infringement," arguing that "knowledge of the patents plus advertising compliance with 802.11(n) is not enough evidence upon which to base a finding of induced infringement." The Federal Circuit found that substantial evidence supported the jury's decision, including "that D-Link knew about the patents and knew that the patents potentially were essential to the 802.11(n) standard—a standard with which D-Link intentionally complied." D-Link presented evidence that it did not think its actions constituted infringement, but the Federal Circuit declined to overturn the verdict, stating that "[q]uestions of intent are quintessential jury questions."

2. Induced Infringement at the ITC

On May 13 2014, the Federal Circuit granted the petitions for rehearing en banc in *Suprema*, *Inc. v. ITC.*³⁵⁸ The court's original 2013 opinion reversed the ITC's finding that Suprema was liable for inducing infringement under 35 U.S.C. § 271(b) when it imported manufactured hardware into the U.S. where Mentalix combined the hardware with its own software to make a product that infringed Cross Match's U.S. patents.³⁵⁹ The reversal was based on the majority's view that the inducement theory of infringement could not stand because it requires both additional steps to complete the infringement as well as a particular mens rea.³⁶⁰

The en banc panel will consider Cross Match's question: whether the ITC has authority to find a section 337 violation of the Tariff Act and to "issue an exclusion or cease and desist order—where it finds that an importer actively induced infringement of a patented invention using its imported articles but the direct infringement occurred post-importation." ³⁶¹

The Federal Circuit will also consider the ITC's questions:

(1) Did the panel contradict Supreme Court precedent in [Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd. 362] and precedents of this

^{355.} Id. at 1220.

^{356.} Id. at 1222.

^{357.} Id.

^{358.} No. 2012-1770, 2014 WL 3036241 (Fed. Cir. May 13, 2014).

^{359.} Suprema, Inc. v. ITC, 742 F.3d 1350, 1355, 1361 (Fed. Cir. 2013), reh'g en banc granted, No. 2012-1170, 2014 WL 3036241 (Fed. Cir. May 13, 2014).

^{360.} Id. at 1363.

^{361.} Intervenor's Combined Petition for Rehearing and Rehearing En Banc at 1, Suprema, Inc., 2014 WL 3036241 (No. 2012-1170).

^{362. 545} U.S. 913 (2005).

Court when it held that infringement under 35 U.S.C. § 271(b) is "untied to an article"?

- (2) Did the panel contradict Supreme Court precedent in *Grokster* and this Court's precedent in [Standard Oil Co. v. Nippon Shokubai Kagaku Kogyo Co. 363] when it held that there can be no liability for induced infringement under 35 U.S.C. § 271(b) at the time a product is imported because direct infringement does not occur until a later time?
- (3) When the panel determined the phrase "articles that... infringe" in 19 U.S.C. § 1337(a)(1)(B)(i) does not extend to articles that infringe under 35 U.S.C. § 271(b), did the panel err by contradicting decades of precedent and by failing to give required deference to the [ITC] in its interpretation of its own statute?
- (4)Did the panel misinterpret the Commission's order as a "ban [on the] importation of articles which may or may not later give rise to direct infringement" when the order was issued to remedy inducement of infringement and when the order permits U.S. Customs and Border Protection to allow importation upon certification that the articles are not covered by the order? 364

Rehearing en banc has yet to occur, but the Federal Circuit will now be able to consider the Supreme Court's decision in *Limelight Networks, Inc. v. Akamai Technologies, Inc.*³⁶⁵ when convening for *Suprema*. The high court in *Akamai* unanimously held, contrary to the Federal Circuit, that a defendant cannot be held liable for inducing infringement of a patent method claim when no single entity has directly infringed the claim, and direct infringement is not established unless all steps of the claim are performed by a single entity. ³⁶⁶

B. 35 U.S.C. § 112(b) Indefiniteness

Under 35 U.S.C. § 112(b), patent "specification[s] 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." Failure to meet this requirement, commonly referred to as 112(b) indefiniteness, will make a patent invalid. Before 2014, the Federal Circuit's test for whether a patent's claims were definite was the "insolubly ambiguous test," first seen in

^{363. 754} F.2d 345 (Fed. Cir. 1985).

^{364.} Combined Petition for Panel Rehearing and Rehearing En Banc of Appellee International Trade Commission at 2, *Suprema, Inc.*, 2014 WL 3036241 (No. 12-1170) (third and fifth alterations in original) (citations omitted).

^{365. 134} S. Ct. 2111 (2014).

^{366.} Id. at 2119.

^{367. 35} U.S.C. § 112(b) (2012).

Exxon Research & Engineering Co. v. United States. This test required only that claims be "amenable to construction" and that claims would be found invalid only if they were "insolubly ambiguous." Datamize, LLC v. Plumtree Software, Inc. 370 slightly modified this test, noting that "[s] ome objective standard must be provided in order to allow the public to determine the scope of the claimed invention," which allowed more patents to be found indefinite under the insolubly ambiguous test than under Exxon's formulation.

There were four 2014 Federal Circuit cases that led up to the Supreme Court's *Nautilus, Inc. v. Biosig Instruments, Inc.*³⁷² decision, which sidestepped the possible impact of the change in the "insolubly ambiguous" test.³⁷³ After *Nautilus*, three Federal Circuit cases later in the year cited it for their indefiniteness decisions, but did not provide much additional guidance.³⁷⁴

In Takeda Pharmaceutical, Takeda sued Zydus on an acid reflux drug patent that contained granules in its coating agent.³⁷⁵ Under the district court's claim construction, the size of Zydus' granules infringed on Takeda's patent.³⁷⁶ On appeal, Zydus argued that because the patent did not specify a technique for measuring the size of granules and different measurement methods could produce different results, it was impossible to know whether a product infringed.³⁷⁷ The Federal Circuit disagreed, noting "[t]hat there is more than one way of determining the average particle diameter of a particular sample does not render that clear claim language indefinite" especially because "there was no evidence in this case

^{368. 265} F.3d 1371 (Fed. Cir. 2001), abrogated by Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014).

^{369.} Id. at 1375.

^{370. 417} F.3d 1342 (Fed. Cir. 2005), abrogated by Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014).

^{371.} Id. at 1350.

^{372. 134} S. Ct. 2120 (2014).

^{373.} *Id.* at 2124 (rejecting the Federal Circuit's test in favor of a standard finding a "patent [claim] is invalid for indefiniteness if its claims... fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention").

^{374.} See DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1260 (Fed. Cir. 2014); Interval Licensing, LLC v. AOL, Inc., 766 F.3d 1364, 1370–74 (Fed. Cir. 2014); Augme Techs., Inc. v. Yahoo! Inc., 755 F.3d 1326, 1340 (Fed. Cir. 2014).

^{375.} Takeda Pharm. Co. v. Zydus Pharm. USA, Inc., 743 F.3d 1359, 1361–62 (Fed. Cir.), cert. denied, 135 S. Ct. 711 (2014).

^{376.} *Id.* at 1363 (explaining that the district court construed the language in the patent to allow for a ten percent deviation from the stated granule size and required each granule core to be measured separately even if the cores had fused).

^{377.} Id. at 1366.

that different measurement techniques in fact produced significantly different results for the same sample."³⁷⁸ The court "reverse[d] the district court's claim construction ruling and resulting finding of literal infringement, [and] affirm[ed] the court's judgment of no invalidity"³⁷⁹

In Ancora Technologies, Ancora sued Apple on a patent for verifying whether software is allowed to be on a computer.³⁸⁰ The district court construed "program" to mean an application program, excluding operating systems.³⁸¹ Further, it held that "volatile memory" and "non-volatile memory" were not indefinite terms even though Ancora's patent described a hard drive as an example of "volatile memory," which Apple contended was not capable of informing a person of ordinary skill in the art of the bounds of the invention. 382 The Federal Circuit reversed the district court's construction of "program" based on the prosecution history. 383 In its indefiniteness evaluation, the court noted that it could easily sidestep whatever the outcome of Nautilus would be because the terms "volatile memory" and "non-volatile memory" have "clear, settled, and objective" meanings to a person "of ordinary skill in the art." It further concluded that any statements made to the contrary in the prosecution history of Ancora's patent were explained by the ability of a hard drive to function as both volatile and non-volatile memory and that the language in the patent did not rise to an attempt to redefine the term. 385

In *Braintree Laboratories*, Braintree, a pharmaceutical company, had a patent on a colon-clearing drug and sued Novel, a generic drug maker, for the composition of its abbreviated new drug application. ³⁸⁶ Based on its claim construction, the district court granted summary judgment of infringement and rejected Novel's counterclaim of

^{378.} Id. at 1367.

^{379.} Id. at 1370.

^{380.} Ancora Techs., Inc. v. Apple, Inc., 744 F.3d 732, 733 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 957 (2015).

^{381.} Id. at 734.

^{382.} Id. at 737-38.

^{383.} See id. at 735–37 (providing a detailed account of why various statements in the prosecution history are not "sufficient to displace" the ordinary meaning of "program" with a narrower one).

^{384.} *Id.* at 737.

^{385.} Id. at 738-39.

^{386.} Braintree Labs., Inc. v. Novel Labs., Inc., 749 F.3d 1349, 1352 (Fed. Cir.), cert. denied, 135 S. Ct. 764 (2014).

invalidity after a bench trial.³⁸⁷ The Federal Circuit upheld parts of the district court's claim construction but reversed other parts, remanding for further consideration.³⁸⁸ In upholding the district court's decision on indefiniteness, the court agreed with Braintree that "one of skill in the art would understand what a 'copious' amount of diarrhea is," even though there is no clear definition for what "copious" means.³⁸⁹

In In re Packard, 390 Packard applied for a patent, which was rejected due to failure to meet the written description and indefiniteness requirements.³⁹¹ The Patent Trial and Appeal Board affirmed the rejections as to indefiniteness, and the Federal Circuit affirmed the Board's decision. 992 In Packard's argument at the Federal Circuit, he contended that the USPTO should have used the "insolubly ambiguous" standard in evaluating his claims. 393 The court rejected the argument, holding that the USPTO was within its rights to reject an application for failure to meet 35 U.S.C. § 112(b) indefiniteness requirements without regard for the insolubly ambiguous test.³⁹⁴ The court found it unnecessary to reach application of the insolubly ambiguous test because a patent application is reviewed in a different procedural posture than an issued patent and "Packard had an opportunity to bring clarity to his claim language."395 A vote to grant certiorari is pending, and the government's response was filed on April 9, 2015.396

The concurrence by Judge Plager laid out the history of the insolubly ambiguous standard and explained why it does not apply to USPTO decisions.³⁹⁷ Plager identified three options for ambiguous terms: (1) make them presumptively valid, without concern for the notice function of patents (the "insolubly ambiguous" standard); (2) "[g]ive weight to the notice function of patents while still recognizing

^{387.} Id. at 1353.

^{388.} Id. at 1352.

^{389.} Id. at 1360.

^{390. 751} F.3d 1307 (Fed. Cir. 2014) (per curium), appeal filed sub nom. Packard v. Lee, No. 14-655 (U.S. Dec. 2, 2014).

^{391.} Id. at 1310.

^{392.} Id. at 1310-11.

^{393.} Id. at 1311.

^{394.} *Id.* (explaining that the application of the insolubly ambiguous test raised broader issues than needed to resolve the case).

^{395.} Id. at 1312, 1314.

^{396.} No. 14-655, Sup. Ct. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-655.htm (last visited Apr. 23, 2015).

^{397.} See In re Packard, 751 F.3d at 1315-23 (Plager, J., concurring).

the role of presumption of validity" (the "person of ordinary skill" standard); or (3) "[g]ive full weight to the importance of the notice function," putting the burden on the patent drafter to solve ambiguities.³⁹⁸ While Packard argued for the first option, Plager determined that the Board did not flout the Federal Circuit's standard when it applied the third option because the Board had a unique role in its pre-issuance position.³⁹⁹ Plager observed that the USPTO is not bound by any existing Supreme Court or Federal Circuit decisions on claim construction issues and is therefore entitled by law to adopt a different standard.400 Further, it is good policy for the USPTO to have a higher standard than courts because it will have a better chance to remove ambiguity from claim construction disputes in lawsuits, lower the cost to society of new products and ideas, increase the opportunity for design-arounds, and avoid wasting judicial resources. Finally, "the USPTO does not have to deal with the presumption of validity," unlike courts, which allows it to form its own claim interpretation. 402

The Supreme Court decided Nautilus in June 2014, rejecting the insolubly ambiguous test. Biosig had a patent for an exercise heartrate monitor held in both hands to improve accuracy. The relevant language of Claim 1 went to a live electrode and a common electrode mounted... in spaced relationship with each other. The district court granted summary judgment for invalidity because spaced relationship was indefinite under 35 U.S.C. § 112 paragraph 2 (now 35 U.S.C. § 112(b) under the AIA). The Federal Circuit reversed and remanded under the insolubly ambiguous test because the claim would be indefinite only when it is not amenable to construction or insolubly ambiguous. The court noted that because there are inherent limits to how close or far the electrodes

^{398.} Id. at 1320-21.

^{399.} Id. at 1321-22, 1325.

^{400.} See id. at 1324 (noting that "no precedent... addressing patent claim construction issues suggests" that the USPTO is prohibited from interpreting applicable standards).

^{401.} See id. at 1324-25 (listing the negative consequences of ambiguous patent language).

^{402.} Id. at 1325.

^{403.} Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129-30 (2014).

^{404.} Id. at 2125.

^{405.} Id. at 2126 (alteration in original).

^{406.} Id. at 2127.

^{407.} Id. (internal quotation marks omitted).

can be from each other, the claims were capable of being construed and, thus, were not indefinite. 408

The Supreme Court agreed with the parties (1) that the standard for whether a claim would be ambiguous was to be measured against a person "skilled in the relevant art;" (2) that claims must be "read in light of the patent's specification and prosecution history;" and (3) that the relevant timeframe for examining a person skilled in the art's knowledge would be that of the time of filing. The Court then established the new standard, reading "§ 112, ¶ 2 to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." Under this reading, the Court rejected the insolubly ambiguous standard as too amorphous to meet the statutory definiteness requirement, noting that the current formulation "can breed lower court confusion." The Court then vacated and remanded for the Federal Circuit to decide the case under a more definite standard. The court the standard.

It remains to be seen whether the Federal Circuit will create a test that the Supreme Court will approve on remand, as most patents are susceptible to some sort of ambiguity, and a test which sets out a bright line rule will likely be hard to formulate. Two recent § 112(b) decisions in the Federal Circuit have followed *Nautilus*: Augme Technologies, Inc. v. Yahoo! Inc. 414 and Interval Licensing LLC v. AOL, Inc. 415 However, both opinions stayed relatively silent on how Nautilus affected their decisions. 416

^{408.} Id.

^{409.} Id. at 2128.

^{410.} Id. at 2129.

^{411.} Id. at 2130.

^{412.} Id. at 2131.

^{413.} But see Tun-Jen Chiang & Lawrence B. Solum, The Interpretation-Construction Distinction in Patent Law, 123 YALE L.J. 530, 533–34 & n.2 (2013) (acknowledging that many scholars believe a key issue in patent law centers on ambiguous patent language, but arguing that the ambiguity stems from inconsistent claim construction and interpretation in the judiciary).

^{414. 755} F.3d 1326 (Fed. Cir. 2014).

^{415. 766} F.3d 1364 (Fed. Cir. 2014).

^{416.} See id. at 1370–74 (citing Nautilus in reaching several conclusions without providing significant explanation of its application); Augme Techs., 755 F.3d at 1340 (mentioning Nautilus only once and quickly finding the issue in the case "unquestionably meets this standard").

Augme Technologies was the first Federal Circuit case to apply Nautilus. Augme sued Yahoo! on two patents, and Yahoo! countersued on one. After finding that Yahoo did not infringe Augme's patent, the court affirmed the district court's finding that claim 7 of Yahoo's '320 patent was not indefinite, which the court upheld in part based on Nautilus. The claim limitation at issue, in Yahoo's digital content delivery patent, was "receiving, by an ingest server, the unique identifier to the digital content. Augme argued that this limitation made the claim indefinite because the server actually receives digital content rather than a unique identifier. The court observed that Augme's arguments were "based on . . . written description or enablement," rather than indefiniteness and reiterated that

[t]he standard for indefiniteness is "whether those skilled in the art would understand what is claimed when the claim is read in light of the specification." It requires "that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." 422

The court then found that the issue was "clear on its face and unquestionably meets this standard." 423

In *Interval Licensing*, Interval sued AOL, Apple, Google, and Yahoo! on patents that "describe 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."⁴²⁴ The system included a "screen saver embodiment" and a "wallpaper embodiment."⁴²⁵ The embodiments involved displaying content in a user's peripheral vision "in an unobtrusive manner that does not distract a user."⁴²⁶ The district court found the patents invalid due to indefiniteness "because the patents fail[ed] to provide an objective standard by which to define the scope" of the invention, and the question of infringement "depend[ed] on usage in changing

^{417.} This case was decided on June 20, 2014, just eighteen days after *Nautilus* was decided. *Nautilus*, 134 S. Ct. at 2120; *Augme Techs.*, 755 F.3d at 1326.

^{418.} Augme Techs., 755 F.3d at 1329.

^{419.} Id.

^{420.} Id. at 1338, 1340 (internal quotation marks omitted).

^{421.} Id. at 1338-39.

^{422.} *Id.* at 1340 (citations omitted).

^{423.} Id.

^{424.} Interval Licensing LLC v. AOL, Inc., 766 F.3d 1364, 1366-67 (Fed. Cir. 2014).

^{425.} Id. at 1367.

^{426.} Id. at 1367-68.

circumstances."⁴²⁷ The Federal Circuit applied *Nautilus* in affirming invalidity, noting that while terms of degree are not inherently indefinite, the "unobtrusive manner" language that the patent relied on was "purely subjective," so the specification was determinative. ⁴²⁸ The court found that the specification was so "muddled" that it did not rise to the level required to make a person of ordinary skill in the art aware of the objective scope of the claims. ⁴²⁹ The court affirmed invalidity for the claims, which involved the "unobtrusive manner" language, and remanded for a determination of infringement under its new construction of Interval's other claims. ⁴³⁰ On December 18, 2014, the Federal Circuit denied rehearing en banc without concurrence or dissent. ⁴³¹

In DDR Holdings, LLC v. Hotels.com, L.P., 432 DDR Holdings sued several entities for infringement of patents covering "methods of generating a composite web page that combines certain visual elements of a 'host' website with content of a third-party merchant."433 The court found the claims patent-eligible, found one patent invalid because of anticipation, and remanded for recalculation of damages under the surviving patent. 434 defendants argued that the claims were indefinite because creating a composite web page to match the "look and feel and visually perceptible elements" of the host website was "impermissibly subjective and fail[ed] to notify the public of the bounds of the claimed invention."435 In the court's indefiniteness evaluation of the surviving patent, the court applied Nautilus, noting that "[t]he inquiry 'trains on the understanding of a skilled artisan at the time of the patent application."436 The court found that "'look and feel' had an established, sufficiently objective meaning in the art, and that the

^{427.} Id. at 1369.

^{428.} Id. at 1370-71.

^{429.} Id. at 1372, 1374.

^{430.} Id. at 1377-78.

^{431.} Hal Wegner, Interval Licensing Reh'g En Banc Denied: Prelude to "Nautilus II", on the Road to the Supreme Court [Correction], L.A. INTELL. PROP. L. ASS'N (Dec. 18, 2014), http://www.laipla.net/interval-licensing-rehg-en-banc-denied-prelude-to-nautilus-ii-on-the-road-to-the-supreme-court-correction.

^{432. 773} F.3d 1245 (Fed. Cir. 2014).

^{433.} Id. at 1248, 1250.

^{434.} Id. at 1259, 1263.

^{435.} Id. at 1259 (internal quotation marks omitted).

^{436.} *Id.* at 1260 (quoting Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2130 (2014)).

'399 patent used the term consistent with that meaning."⁴³⁷ In fact, the defendant conceded that it and its customers understood the meaning of "look and feel," making the term sufficiently definitive to inform a person skilled in the art about the scope of the patent's claims with reasonable certainty. ⁴³⁸

C. Claim Construction

1. Claim Language

Claim construction begins with the words of the claim. 439 However, the claims "must be read in view of the specification, of which they are a part."440 "[D]ifferent claim terms are presumed to have different meanings."441 In affirming the district court's construction of the term "embedded" in Augme Technologies, the Federal Circuit noted that "[e]ach asserted claim recites that the first code module is 'embedded' or 'configured to be embedded' and that the second code module is 'retrieve[d]' or 'download[ed][,]' . . . [which] creates a presumption that 'embedded' means something different than 'retrieved' or 'downloaded.'"442 "[T]he doctrine of claim differentiation disfavors reading a limitation from a dependent claim into an independent claim."443 In VirnetX, the Federal Circuit "affirm[ed] the district court's construction of the term 'domain name' as 'a name corresponding to an IP address." There, Apple argued that the proper construction was "a hierarchical sequence of words in decreasing order of specificity that corresponds to a numerical IP address."445 The court stated that "fundamental principles of claim differentiation disfavor reading Apple's hierarchical limitation into the independent claims."446 **Because**

^{437.} Id.

^{438.} Id. at 1261.

^{439.} See Phillips v. AWH Corp., 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc) (stressing that since the patent must "define precisely what [the] invention is," courts should look to the words of the patent first); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) (instructing courts to first look to the patent itself).

^{440.} Phillips, 415 F.3d at 1315 (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996)) (internal quotation marks omitted).

^{441.} Helmsderfer v. Bobrick Washroom Equip., Inc., 527 F.3d 1379, 1382 (Fed. Cir. 2008).

^{442.} Augme Techs., Inc. v. Yahoo! Inc., 755 F.3d 1326, 1333–34 (Fed. Cir. 2014) (second and third alterations in original) (citation omitted).

^{443.} VirnetX, Inc. v. Cisco Sys., Inc., 767 F.3d 1308, 1316 (Fed. Cir. 2014).

^{444.} *Id*. at 1317.

^{445.} Id. at 1316 (internal quotation marks omitted).

^{446.} Id. at 1317.

dependent claims required hierarchical formatting, the court determined that it "strongly suggest[ed] that the independent claims contemplate[d] domain names both with *and without* the hierarchical format" and rejected Apple's argument.⁴⁴⁷

In *Hill-Rom Services*, "[t]he district court construed the term 'datalink' to mean 'a cable connected to the bed that carries data." At issue was whether the datalink needed to be wired or whether it could be wireless. The Federal Circuit reversed the district court's construction, in part, noting that several dependent claims explicitly required a wired datalink. In fact, "[t]he only distinction between claim 1 and claim 2 is the limitation that the 'datalink' is a wired datalink." The court stated that the presumption that a limitation present in a dependent claim is not found in the independent claim is "especially strong where the limitation in dispute is the only meaningful difference between an independent and dependent claim."

"[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited."453 Technologies Ltd. v. Pegasus Technologies Ltd., 454 the Federal Circuit held that the district court had erroneously construed several claim First, it had erroneously construed the term "drawing implement" because it had "import[ed] the word 'conventional'" from preferred embodiments into its construction of the term. Although it is true that the specifications recite embodiments including 'conventional' writing implements, there is no clear indication in the intrinsic record suggesting that the claims are limited to 'conventional' drawing implements."456 Likewise, the district court had erroneously imported limitations in its construction of the terms "given time interval," and "marking implement." 457

^{447.} Id. (emphasis in original).

^{448.} Hill-Rom Servs., Inc. v. Stryker Corp., 755 F.3d 1367, 1371 (Fed. Cir.), cert. denied, 135 S. Ct. 719 (2014).

^{449.} Id.

^{450.} Id. at 1374.

^{451.} Id.

^{452.} Id.

^{453.} Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 913 (Fed. Cir. 2004).

^{454. 766} F.3d 1338 (Fed. Cir. 2014).

^{455.} Id. at 1340.

^{456.} Id. at 1343 (citation omitted).

^{457.} Id. at 1344-45.

"[A] claim construction that excludes a preferred embodiment... is rarely, if ever[,] correct and would require highly persuasive evidentiary support."⁴⁵⁸ In *EPOS Technologies*, the Federal Circuit held that the district court improperly construed the term "temporary attachment" because it read out the preferred embodiment and was inconsistent with the claim language.⁴⁵⁹

Although "[s]teps in a method claim need not necessarily be performed in the order they are written[,]... if grammar, logic, the specification, or the prosecution history require the steps to be performed sequentially, then the claims are so limited." In Apple, Inc. v. Motorola, Inc., 461 the Federal Circuit held that the plain meaning of the claim terms and the specification supported that the third step of a method claim could only be performed after steps one and two were performed. 462

In Takeda Pharmaceutical, the district court construed the claim term "fine granules having an average particle diameter of 400 μm or less . . . to mean fine granules up to and including the enteric coating layer having an average particle diameter of 400 μm (±10%) or less."⁴⁶³ The Federal Circuit reversed, finding that it was improper for the district court to include the ten percent margin of error in the construction because "there [was] no indication in the claim that 400 μm was intended to mean anything other than exactly 400 μm " and there was no indication in the specification that the inventors intended to deviate from the plain and ordinary meaning. The court was not "persuaded that the mere presence of the word 'about'" at three points in the specification can justify a 10% expansion of claim scope."

2. Specification

"A claim term should be given its ordinary meaning in the pertinent context, unless the patentee has made clear its adoption of

^{458.} Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1308 (Fed. Cir. 2003) (internal quotation marks omitted).

^{459.} EPOS Techs., 766 F.3d at 1346-47.

^{460.} Apple, Inc. v. Motorola, Inc., 757 F.3d 1286, 1309 (Fed. Cir. 2014) (internal citations omitted).

^{461. 757} F.3d 1286 (Fed. Cir. 2014).

^{462.} Id. at 1309-10.

^{463.} Takeda Pharm. Co. v. Zydus Pharm. USA, Inc., 743 F.3d 1359, 1362 (Fed. Cir.) (internal quotation marks omitted), cert. denied, 135 S. Ct. 711 (2014).

^{464.} Id. at 1363-64.

^{465.} Id. at 1365.

a different definition or otherwise disclaimed that meaning."⁴⁶⁶ The specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal. ⁴⁶⁷ The standards for finding lexicography and disavowal are exacting. "To act as its own lexicographer, a patentee must clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning" and must "clearly express an intent to redefine the term."⁴⁶⁸ Disavowal requires that "the specification makes clear that the invention does not include a particular feature,"⁴⁶⁹ or is clearly limited to a particular form of the invention.

This exacting standard was met in X2Y Attenuators, LLC v. ITC.⁴⁷¹ There, in construing the term "electrode," the Federal Circuit noted that "[t]he patents' statements that the presence of a common conductive pathway electrode positioned between paired electromagnetically opposite conductors is universal to all the embodiments and is an essential element among all embodiments or connotations of the invention constitute clear and unmistakable disavowal of claim scope."⁴⁷² The court reiterated its prior determination that "labeling an embodiment or an element as 'essential' may rise to the level of disavowal."⁴⁷³

In Azure Networks, the Federal Circuit looked to the specification to clarify whether the patentee had acted as his own lexicographer in defining the meaning of the term "MAC Address" or whether the customary and ordinary meaning in the industry should prevail.⁴⁷⁴ The court stressed that for a term mean something other than its well-established definition, the patentee must "clearly set forth a definition of the disputed term" and "[t]he lexicography must appear with reasonable clarity, deliberateness, and precision sufficient to

^{466.} Ancora Techs., Inc. v. Apple, Inc., 744 F.3d 732, 734 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 957 (2015).

^{467.} Thorner v. Sony Computer Entrn't Am. LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

^{468.} Id. (internal quotation marks omitted).

^{469.} SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001).

^{470.} Edwards Lifesciences LLC v. Cook Inc., 582 F.3d 1322, 1330 (Fed. Cir. 2009) (discussing claims involving "intraluminal grafts" as compared to other graft claims).

^{471. 757} F.3d 1358 (Fed. Cir. 2014).

^{472.} *Id.* at 1362 (citing GE Lighting Solutions, LLC v. AgiLight, Inc., 750 F.3d 1304, 1308–09 (Fed. Cir. 2014)) (internal quotation marks omitted).

^{473.} Id. (citing GE Lighting Solutions, 750 F.3d at 1309).

^{474.} Azure Networks, LLC v. CSR PLC, 771 F.3d 1336, 1347-48 (Fed. Cir. 2014), vacated, 83 U.S.L.W. 3683 (2015).

narrow the definition of the claim term in the manner urged."475 The court determined that the patentee did not re-coin a new term of art, especially because "'MAC address' has a 'clear, settled, and objective' meaning to a person of ordinary skill in the art."476 Likewise, in *Ancora Technologies*, the court concluded that nothing in the specification or claims "would lead one of ordinary skill in the art to understand that the claims use 'program' in a sense narrower than its ordinary meaning."477

Conversely, the Federal Circuit concluded that the patentee acted as his own lexicographer in *Allergan, Inc. v. Apotex Inc.* ⁴⁷⁸ in construing the term "treating hair loss." The specification stated that "'[t]reating hair loss' includes arresting hair loss or reversing hair loss, or both, and promoting hair growth." At issue was whether the word "and" required that treating hair loss must include promoting hair growth *and* arresting hair loss or reversing hair loss. ⁴⁸¹ In light of the definition in the specification, as well as various examples in the specification, the Federal Circuit concluded that treating hair loss "may include a method of promoting hair growth without also arresting or reversing hair loss." ⁴⁸²

In Ferring B.V. v. Watson Laboratories, Inc., 488 the Federal Circuit construed the term "about," which was not defined explicitly or by implication in the specification of the patent. 484 The court agreed with the district court and determined that "about" should be given its plain and ordinary meaning of "approximately" and refused to construe "about" to represent a particular numerical error rate. 485

In VirnetX, the Federal Circuit reversed the district court's construction of the term "secure communication link." The Court found that when read in light of the entire specification, the term required anonymity. Further, "[t]he fact that anonymity is

^{475.} Id. at 1349 (internal quotation marks omitted).

^{476.} Id.

^{477.} Ancora Techs., Inc. v. Apple, Inc., 744 F.3d 732, 735 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 957 (2015).

^{478. 754} F.3d 952 (Fed. Cir. 2014), cert. denied, 135 S. Ct. 956 (2015).

^{479.} *Id.* at 957.

^{480.} Id.

^{481.} *Id*.

^{482.} Id. at 958.

^{483. 764} F.3d 1382 (Fed. Cir. 2014).

^{484.} Id. at 1388-89.

^{485.} Id. at 1389.

^{486.} VirnetX, Inc. v. Cisco Sys., Inc., 767 F.3d 1308, 1314 (Fed. Cir. 2014).

^{487.} Id. at 1317.

'repeatedly and consistently' used to characterize the invention strongly suggests that it should be read as part of the claim."

In *Interval Licensing*, the Federal Circuit tackled the "facially subjective" claim term "unobtrusive manner."⁴⁸⁹ The patentee argued in part that a narrow example from the specification using an "e.g." phrase clarified the scope of the limitation. The Federal Circuit declined to "cull out a single 'e.g.' phrase from a lengthy written description to serve as the exclusive definition of a facially subjective claim term."⁴⁹¹ The court explained that it might be different if an "i.e." phrase had been used instead: "Had the phrase been cast as a definition instead of as an example—if the phrase had been preceded by 'i.e.' instead of 'e.g.'—then it would help provide the clarity that the specification lacks."⁴⁹²

3. Prosecution History

Similarly, statements made during the prosecution of a patent can result in disavowal of claim scope. In *Vederi, LLC v. Google, Inc.*, ⁴⁹³ the Federal Circuit reversed the district court's claim construction of the claim term "substantially elevations." ⁴⁹⁴ The district court had construed the term to exclude spherical or curved images. ⁴⁹⁵ However, the Federal Circuit concluded that the district court had not sufficiently considered the intrinsic record. ⁴⁹⁶ The court rejected Google's argument that the patentee had disclaimed such embodiments based on statements made in the specification of the patent. ⁴⁹⁷ Google also argued that the patentee had disclaimed spherical or curved images during prosecution when it responded to a rejection over a prior art reference. ⁴⁹⁸ The Federal Circuit disagreed, stating that the amendment to replace the claim term "non-aerial view" with the claim term "substantially elevations"

^{488.} Id . at 1318 (citing Eon-Net LP v. Flagstar Bancorp., 653 F.3d 1314, 1321–23 (Fed. Cir. 2011)).

^{489.} Interval Licensing, LLC v. AOL, Inc., 766 F.3d 1364, 1373 (Fed. Cir. 2014).

^{490.} Id.

^{491.} Id.

^{492.} Id.

^{493. 744} F.3d 1376 (Fed. Cir. 2014).

^{494.} Id. at 1380.

^{495.} *Id*.

^{496.} Id. at 1383.

^{497.} Id. at 1383-84.

^{498.} Id.

showed "no clear and unambiguous disavowal of spherical or curved images that would support the district court's construction."

Google sought rehearing en banc, which was denied.⁵⁰⁰ In its petition for writ of certiorari to the Supreme Court, Google identified the question presented as

When an applicant for a patent amends a claim to overcome the [USPTO's] earlier disallowance of the claim, should a court (i) presume that the amendment narrowed the claim and strictly construe the amended claim language against the applicant, as this Court has held, or (ii) presume that the claim scope remained the same and require that any narrowing be clear and unmistakable, as the Federal Circuit has held?⁵⁰¹

Essentially, Google argues that the Federal Circuit's holding and requirement that for disavowal the amendment must be "clearly and unmistakably" or "clearly and unambiguously" narrowing contradicts the Supreme Court's decision in *Hubbell v. United States*, ⁵⁰² which states that claim amendments made to overcome a rejection by the USPTO are presumptively narrowing and "must be strictly construed against the inventor and in favor of the public." ⁵⁰³ On November 19, 2014, Acushnet Company, Dell, Inc., Kaspersky Lab, Inc., Limelight Networks, Inc., Newegg Inc., QVC Inc., SAS Institute, Inc., eBay, Inc., and Xilinx, Inc. filed a brief as amici curiae in support of Google. ⁵⁰⁴

Statements made during prosecution of a related foreign patent can also affect claim construction. Such was the case in *Apple, Inc. v. Motorola, Inc.* Motorola had distinguished certain prior art in a related Japanese patent in the Japanese Patent Office after the U.S. patent issued.⁵⁰⁵ The Japanese application shared the same specification as the U.S. specification as well as an identical claim 17.⁵⁰⁶ The Federal Circuit held that Motorola should be bound by the statements it made in connection with the Japanese proceeding because the two patents were related, shared the same familial

^{499.} Id. at 1384.

^{500.} Vederi, LLC v. Google, Inc., No. 2013-1057, slip op. at 2 (Fed. Cir. June 18, 2014) (per curiam), *denying reh'g to* 744 F.3d 1376 (Fed. Cir. 2014).

^{501.} Petition for Writ of Certiorari at i, Google, Inc. v. Vederi, LLC, No. 14-448 (U.S. Oct. 16, 2014), 2014 WL 7507328.

^{502. 179} U.S. 77 (1900).

^{503.} Id. at 82.

^{504.} Brief of Acushenet Co. Dell Inc., Kaspersky Lab, Inc., Limelight Networks, Inc., Newegg Inc., QVC, Inc., SAS Institute Inc., eBay Inc., and Xilinx, Inc. as *Amici Curiae* in Support of Petitioner, *Google, Inc.*, No. 14-448, 2014 WL 6563346.

^{505.} Apple, Inc. v. Motorola, Inc., 757 F.3d 1286, 1312 (Fed. Cir. 2014).

^{506.} Id.

relationship, claimed priority to the same PCT application, had the same specification, contained an identical claim 17, and were "made in an official proceeding in which the patentee had every incentive to exercise care in characterizing the scope of its invention." ⁵⁰⁷

In Braintree Laboratories, Novel's noninfringement claims argue that the patentee made statements in its "patent term extension request" that limited the scope of the claim term "purgation." However, the Federal Circuit determined that the statements were not a clear and unmistakable disavowal—the "post-issuance statement of the patentee does not modify the plain meaning of the word 'purgation.'" 509

In Golden Bridge Technology, Inc. v. Apple, Inc., 510 the patentee submitted a stipulated construction of a claim term in documents accompanying an information disclosure statement ("IDS"). 511 The Federal Circuit stated that "an applicant's remarks submitted with an [IDS] can be the basis for limiting claim scope. 512 The court concluded that the patentee should be bound by that representation because it see[s] no meaningful difference between limiting claim scope based on an applicant's stipulations contained in IDS documents and an applicant's remarks contained in the IDS itself. 513

By contrast, the Federal Circuit reversed the district court's construction of the term "bed condition message" in *Hill-Rom Services*, and stated that "statements made during prosecution of a later, unrelated patent cannot form the basis for judicial estoppel.⁵¹⁴

4. Extrinsic Evidence

In Tempo Lighting, Inc. v. Tivoli, LLC,⁵¹⁵ the Federal Circuit reiterated that for purposes of claim construction, primary focus is given to intrinsic evidence, such as the claim language, specification, and prosecution history.⁵¹⁶ The court noted that while a dictionary

^{507.} *Id.* (citing Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004)).

^{508.} Braintree Labs., Inc. v. Novel Labs., Inc., 749 F.3d 1349, 1354 (Fed. Cir.), cert. denied, 135 S. Ct. 764 (2014).

^{509.} Id. at 1355.

^{510. 758} F.3d 1362 (Fed. Cir. 2014).

^{511.} Id. at 1364-65.

^{512.} *Id.* at 1366 (alteration in original) (quoting Uship Intellectual Props., LLC v. United States, 714 F.3d 1311, 1315 (Fed. Cir. 2013)) (internal quotation marks omitted).

^{513.} *Id*.

^{514.} Hill-Rom Servs., Inc. v. Stryker Corp., 755 F.3d 1367, 1380–81 (Fed. Cir.), cert. denied, 135 S. Ct. 719 (2014).

^{515. 742} F.3d 973 (Fed. Cir. 2014).

^{516.} Id. at 977.

definition was "not irrelevant," it had "relatively little probative value in view of the prevailing intrinsic evidence." Therefore, the examiner incorrectly "resort[ed] to extrinsic evidence that was *inconsistent* with the more reliable intrinsic evidence." ⁵¹⁸

5. Construction of Means-Plus-Function Claims

The Federal Circuit Examined "means-plus-function" claims in Apple, Inc. v. Motorola, Inc. Construing "means-plus-function" claim terms involves two steps.⁵¹⁹ First, the court "must determine if the claim limitation is drafted in means-plus-function format."520 court will "construe the claim limitation to decide if it connotes 'sufficiently definite structure' to a person of ordinary skill in the art, which requires [the court] to consider the specification (among other evidence)."521 If the court concludes that the claim limitation is in means-plus-function format, the court moves to the second step, which requires it to "specifically review the specification for 'corresponding structure.'"522 "[W]hen a claim limitation lacks the term 'means,' it creates a rebuttable presumption that [35 U.S.C. §] 112, ¶ 6 does not apply," and the term should not be construed as a means-plus-function element.⁵²³ "This presumption may be overcome if the claim fails to recite 'sufficiently definite structure' or merely recites a 'function without reciting sufficient structure for performing that function."524 However, the Federal Circuit has characterized the presumption as "'strong' and 'not readily overcome' and, as such, ha[s] 'seldom' held that a limitation without recitation of 'means' is a means-plus-function limitation."525

In Apple, Inc. v. Motorola, Inc., the Federal Circuit was faced with determining whether the term "heuristic" was a means-plus-function claim limitation.⁵²⁶ The court held that the district court had

^{517.} Id.

^{518.} *Id.* at 977–98 (citing Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc., 262 F.3d 1258, 1269 (Fed. Cir. 2001)).

^{519.} See Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1296 (Fed. Cir. 2014).

^{520.} Id.

^{521.} Id.

^{522.} Id.

^{523.} Id. at 1297.

^{524.} *Id.* (quoting Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1319 (Fed. Cir. 2004)).

^{525.} *Id.* (citing Inventio AG v. ThyssenKrupp Elevator Ams. Corp., 649 F.3d 1350, 1356 (Fed. Cir. 2011)); Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358, 1362 (Fed. Cir. 2004).

^{526.} Apple, Inc., 757 F.3d at 1294-96.

misconstrued the term as a means-plus-function limitation and "misapplied our precedent by requiring the claim limitations of the '949 patent themselves to disclose 'a step-by-step algorithm as required by Aristocrat Technologies [Austrailia Pty v. International Game Technology].'"⁵²⁷ Although the court declined to determine whether the term "heuristic,' by itself, connote[d] sufficient structure to maintain the presumption against means-plus-function claiming," it concluded that in this case the "claims do not nakedly recite heuristics without further description in the remaining claim language and specification."⁵²⁸ In fact, the court found that "the claim language and specification disclose the heuristics' operation within the context of the invention, including the inputs, outputs, and how certain outputs are achieved."⁵²⁹

In Robert Bosch, LLC v. Snap-On Inc., 530 the court noted the presumption that treatment under 35 U.S.C. § 112, paragraph 6 applies "when a claim uses the word 'means' as a noun in the claim: a 'means' for doing something. 531 The court further stated that the presumption is not triggered by a claim's use of the expression "by means of" and determined that the district court erred when it held that the term "program recognition device" was a means-plus-function term based on the phrase "by means of" in the claim. 532 Regardless, even without the presumption, the court determined that the terms "program recognition device" and "program loading device" both invoked treatment under 35 U.S.C. § 112, paragraph 6.533

Similarly, in EnOcean GmbH v. Face International Corp.,⁵³⁴ the court determined that the term "receiver" did not invoke treatment under 35 U.S.C. § 112, paragraph 6 because it "presumptively connotes sufficiently definite structure to those of skill in the art" and "because EnOcean has provided extensive evidence demonstrating that the term 'receiver' conveys known structure to the skilled person."⁵³⁵

^{527.} Id. at 1298. The Aristocrat line of cases "hold that, if a patentee has invoked computer-implemented means-plus-function claiming, the corresponding structure in the specification for the computer implemented function must be an algorithm unless a general purpose computer is sufficient for performing the function." Id. (citing Aristocrat Techs. Austl. Pty v. Int'l Game Tech., 521 F.3d 1328, 1333 (Fed. Cir. 2008)).

^{528.} Id. at 1301.

^{529.} Id.

^{530. 769} F.3d 1094 (Fed. Cir. 2014).

^{531.} Id. at 1098-99.

^{532.} Id.

^{533.} Id. at 1098-1101.

^{534. 742} F.3d 955 (Fed. Cir. 2014).

^{535.} Id. at 959-60.

D. Patent Eligible Subject Matter under Section 101

Alice Corp. v. CLS Bank International. Continued the Supreme Court's Mayo Collaborative Services v. Prometheus Laboratories, Inc. 1537 and Bilski v. Kappos Tulings on 35 U.S.C. § 101 patent-eligibility of claims. Signary Alice Corporation was the assignee of patents that disclosed how to manage financial risk. The claims relate to facilitate [ing] the exchange of financial obligations between two parties by using a computer system as a third-party intermediary. The district court found all of the claims ineligible because they were merely the implementation of an abstract idea, even though all of the claims involved a computer. The Federal Circuit affirmed the district court's judgment with respect to the method and media claims with seven judges, but it only achieved a five-member plurality in affirming the system claims, with some judges wanting to find the system claims patent-eligible because they involved computer hardware that is "specifically programmed to solve a complex problem." The support of the support of the support of the system claims of the system claims are problem."

The Supreme Court affirmed the Federal Circuit, based mainly on the ineligibility of abstract ideas implicit in the exception to 35 U.S.C. § 101, as laid out in the framework established by *Mayo*.⁵⁴⁴ The first question is whether the claims were directed to a law of nature, natural phenomenon, or an abstract idea.⁵⁴⁵ In answering, the Court considered both the individual elements and the elements "as an ordered combination."⁵⁴⁶ Second, was there an "inventive concept"?⁵⁴⁷ An inventive concept is "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself."⁵⁴⁸ In applying step one of this framework, the

^{536. 134} S. Ct. 2347 (2014).

^{537. 132} S. Ct. 1289 (2012).

^{538. 561} U.S. 593 (2010).

^{539.} Alice Corp., 134 S. Ct. at 2354-57.

^{540.} Id. at 2352.

^{541.} Id.

^{542.} Id. at 2353.

^{543.} *Id.* (quoting CLS Bank Int'l v. Alice Corp., 717 F.3d 1269, 1307 (Fed. Cir. 2013) (en banc) (plurality opinion), *aff'd*, 134 S. Ct. 2347 (2014)) (internal quotation marks omitted).

^{544.} *Id.* at 2354–57 (examining and applying the 35 U.S.C. § 101 exception under the *Mayo* analysis).

^{545.} Id. at 2355 (citing Mayo Collaborative Servs. v, Prometheus Labs., Inc., 132 S. Ct. 1289, 1296–97 (2012)).

^{546.} Id. (internal quotation marks omitted).

^{547.} Id. (quoting Mayo, 132 S. Ct. at 1294) (internal quotation marks omitted).

^{548.} Id. (alteration in original) (quoting Mayo, 132 S. Ct. at 1294).

Supreme Court found that the claims are "drawn to the abstract idea of intermediated settlement" and "a fundamental economic practice." In step two, the Court likewise found that the claims failed to disclose an "inventive concept" sufficient to transform the abstract idea into a patent-eligible invention because it "merely require[d] generic computer implementation." Merely introducing a computer into the claims did not alter the analysis, just like Mayo's prohibition in stating an abstract idea and adding "apply it." The Court distinguished computer-based claims like those seen in Diamond v. Diehr, 552 noting that the claims there "were patent eligible because they improved an existing technological process, not because they were implemented on a computer." In contrast, the claims in Alice Corp. did not "improve the functioning of the computer itself."

Although the decision did not push the envelope too far, it was used to invalidate all software patents in the Federal Circuit until December 2014 when the Federal Circuit decided *DDR Holdings*.

Following the Supreme Court's decision in *Alice Corp.*, the Federal Circuit heard and also reheard several cases on appeal under Section 101. The Federal Circuit considered and reconsidered the *Ultramercial, Inc. v. Hulu, LLC* case numerous times. Ultramercial sued Hulu, YouTube, and WildTangent, alleging infringement of U.S. Patent No. 7,346,545. The district court granted WildTangent's motion to dismiss for failure to state a patent-eligible claim, while Hulu and YouTube were dismissed for other reasons not at issue. The Federal Circuit initially reversed the decision, 559

^{549.} Id. at 2355-56 (quoting Bilski v. Kappos, 561 U.S. 593, 611 (2010)).

^{550.} Id. at 2357.

^{551.} Id. at 2358 (citing Mayo, 132 S. Ct. at 1294).

^{552. 450} U.S. 175 (1981).

^{553.} Alice Corp., 134 S. Ct. at 2358. The rubber curing claims in *Diehr* involved a process using a "thermocouple," an invention that had not previously been used in the industry. *Id.*

^{554.} Id. at 2359.

^{555.} See, e.g., Ultramercial, Inc. v. Hulu, LLC (*Ultramercial III*), 772 F.3d 709 (Fed. Cir. 2014); buySAFE, Inc. v. Google, Inc., 765 F.3d 1350 (Fed. Cir. 2014); Planet Bingo, LLC v. VKGS LLC, 576 F. App'x 1005 (Fed. Cir. 2014).

^{556. (}Ultramercial III), 772 F.3d 709 (Fed. Cir. 2014).

^{557.} Id. at 712.

^{558.} Id. at 712-13.

^{559.} Ultramercial, Inc. v. Hulu, LLC (*Ultramercial I*), 657 F.3d 1323, 1324 (Fed. Cir. 2011), vacated, 132 S. Ct. 2431 (2012).

which was vacated by the Supreme Court in light of Mayo.⁵⁶⁰ On remand, however, the Federal Circuit reversed again, and WildTangent again petitioned for certiorari by the Supreme Court.⁵⁶¹ While the petition was pending, the Supreme Court issued its decision in Alice Corp.⁵⁶² Thereafter, the Court granted the petition, vacated the Federal Circuit's decision, and remanded the case for further consideration in light of Alice Corp.⁵⁶³

Applying the Supreme Court's two-step analysis from Alice Corp., the Federal Circuit had to "determine whether the claims at issue [were] directed to one of those patent-ineligible concepts" and then determine whether the claims are "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself."564 The Federal Circuit concluded that the eleven steps listed in the claim, together, describe only the abstract idea of showing an advertisement before delivering free content and, therefore, failed the first step in the analysis.⁵⁶⁵ The claims similarly failed the second step-"the limitations of the '545 claims do not transform the abstract idea that they recite into patenteligible subject matter because the claims simply instruct the practitioner to implement the abstract idea with routine, conventional activity."566 The court further found that "[n]one of these eleven individual steps, viewed 'both individually and as an ordered combination,' transform the nature of the claim into patenteligible subject matter."567 Moreover, the Federal Circuit also looked at the "machine-or-transformation" test when analyzing the second step. 568 Applying that test, the Federal Circuit held that "[t]he claims

^{560.} Wild Tangent, Inc. v. Ultramercial, LLC (WildTangent I), 132 S. Ct. 2431, 2431 (2012).

^{561.} Ultramercial, Inc. v. Hulu, LLC (*Ultramercial II*), 722 F.3d 1335, 1337 (Fed. Cir. 2013), vacated, 134 S. Ct. 2870 (2014).

^{562.} Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014) (decided June 19, 2014).

^{563.} WildTangent, Inc. v. Ultramercial, LLC (WildTangent II), 134 S. Ct. 2870, 2870 (2014).

^{564.} Ultramercial, Inc. v. Hulu, LLC (*Ultramercial III*), 772 F.3d 709, 714 (Fed. Cir. 2014) (second alteration in original) (quoting *Alice Corp.*, 134 S. Ct. at 2355) (internal quotation marks omitted).

^{565.} *Id.* at 714–15. The patent claims here include "eleven steps for displaying an advertisement in exchange for access to copyrighted media." *Id.* at 714.

^{566.} Id. at 715.

^{567.} Id. (quoting Alice Corp., 134 S. Ct. at 2355).

^{568.} Id. at 716. The Supreme Court held in Bilski that the machine-ortransformation test is not the sole test governing Section 101 analyses. See Bilski v. Kappos, 561 U.S. 593, 604 (2010). However, the Federal Circuit stated the machine-

of the '545 patent... are not tied to any particular novel machine or apparatus, only a general purpose computer," and that it did not transform any article to a different state or thing. Thus, the claims failed to satisfy either prong of the machine-or-transformation test. 570

The Federal Circuit again found no patentable subject matter in Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.⁵⁷¹ The court specifically addressed whether claims in U.S. Patent No. 6,128,415 are "directed to a device profile and a method for creating a device profile within a digital image processing system."⁵⁷² However, the Federal Circuit affirmed the district court's conclusion that the claims were invalid under 35 U.S.C. § 101 because the device profile claims do not "require any physical embodiment, much less a non-transitory one"; rather, the device profile is merely "a collection of intangible color and spatial information."⁵⁷³ The method claims were found invalid because while the claimed process employs mathematical algorithms to manipulate existing information to generate additional information, they lacked any additional limitations.⁵⁷⁴ The court did not need to decide whether tying the method to an image processor was patent-eligible subject matter.⁵⁷⁵

The Federal Circuit also failed to find eligible patent subject matter in *Planet Bingo, LLC v. VKGS LLC.*⁵⁷⁶ The claims in U.S. Patent Nos. 6,398,646 and 6,656,045 were directed to managing a bingo game while allowing a player to repeatedly play the same set of numbers in multiple sessions.⁵⁷⁷ The court found the claims to be directed to the abstract idea of solving a tampering problem and minimizing other security risks during bingo ticket purchases; thus, the court determined that they were not patentable under 35 U.S.C. § 101.⁵⁷⁸ Beyond reasoning that the claims do not require anything that would make the invention impossible to carry out manually, the Federal Circuit applied *Alice Corp.* and found that the claims recite a generic computer implementation of an abstract idea and that there is no

or-transformation test "can provide a 'useful clue' in the second step of the *Alice Corp.* framework." *Ultramercial III*, 772 F.3d at 716.

^{569.} Ultramercial III, 772 F.3d at 716.

^{570.} *Id.* at 716–17.

^{571. 758} F.3d 1344 (Fed. Cir. 2014).

^{572.} Id. at 1347.

^{573.} Id. at 1348, 1350.

^{574.} *Id.* at 1351.

^{575.} Id.

^{576. 576} F. App'x 1005 (Fed. Cir. 2014).

^{577.} Id. at 1006-07.

^{578.} Id. at 1008.

"inventive concept' sufficient to 'transform' the claimed subject matter into patent-eligible [subject matter]." 579

Google, Inc..⁵⁸⁰ the buySAFE. Inc. υ. Federal overwhelmingly found the claims invalid under Alice Corp. 581 "Given the new Supreme Court authority in this delicate area, and the simplicity of the present case under that authority . . . [t]he claims in this case do not push or even test the boundaries of the Supreme Court precedents under [35 U.S.C. §] 101."582 The computer functionality in the claims, relating to "a computer receiv[ing] a request for a guarantee and transmit[ting] an offer of guarantee in return," was found to be generic. 583 Thus, similar to Alice Corp., the use of computers here added no inventive concept, making the claims invalid under 35 U.S.C. § 101.584

In *I/P Engine, Inc. v. AOL, Inc.*, ⁵⁸⁵ the majority did not address invalidity, but Judge Mayer filed a concurring opinion based on *Alice Corp.* and the Supreme Court's view in *Parker v. Flook* ⁵⁸⁶ that "subject matter eligibility analysis must precede the obviousness inquiry," and he urged a "robust application" of 35 U.S.C. § 101. ⁵⁸⁷

I/P Engine's claimed invention, which uses content data to organize a user's query results by relevance, fails to make the subject matter requirements of 35 U.S.C. § 101 because it does not "improve the functioning of the computer itself or effect an improvement in any other technology or technical field." 588 "The asserted claims simply describe the well-known and widely-applied concept" of combining content and collaborative data on a generic computer. 589 Moreover, the scope would include almost all types of online

^{579.} Id. at 1009.

^{580. 765} F.3d 1350 (Fed. Cir. 2014). Although Randall R. Rader was a member of the panel, he did not participate in the decision following his resignation on June 30, 2014. *Id.* at 1351 n.*.

^{581.} Id. at 1354-55.

^{582.} Id.

^{583.} Id. at 1355.

^{584.} *Id.* (noting that the computers in *Alice Corp.* "receiving and sending information over networks connecting the intermediary to the other institutions involved" was not sufficient to overcome 35 U.S.C. § 101).

^{585. 576} F. App'x 982 (Fed. Cir. 2014) (per curiam).

^{586. 437} U.S. 584 (1978).

^{587.} I/P Engine, 576 F. App'x at 983, 987; id. at 992, 995–96 (Mayer, J., concurring).

^{588.} Id. at 994-95 (quoting Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2359 (2014)) (internal quotation marks omitted).

^{589.} Id. at 995.

advertising.⁵⁹⁰ Such marginal technological disclosure is entirely outweighed by such pervasive reach.⁵⁹¹

DDR Holdings involves patents with systems and methods of generating a composite web page that combines visual elements of a host website with the content of a third-party merchant.⁵⁹² This enables a website to display a third-party merchant's products but retain the visitor traffic because the user will not have left the host site.⁵⁹³ Judge Chen, writing for the Federal Circuit, found that the '572 patent was invalid because it was anticipated under 35 U.S.C. § 102(a), found no anticipation of the '399 patent, and found that the patent was patent-eligible subject matter under the Supreme Court's Mayo test, affirmed in Alice Corp. 594 The court remanded to determine damages for infringement of the '399 patent.⁵⁹⁵ examining the patents for patentable subject matter the court first noted that the claims were not directed to an abstract idea.⁵⁹⁶ In particular, the claims did not "recite a mathematical algorithm" or a "fundamental economic or longstanding commercial practice." 597 The business challenge that the claims are directed to is retaining website visitors, a challenge particular to the Internet, with the solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks."598 Because the claims were not direct to an abstract idea, the court did not need to reach step two of the test (which asks whether the claim recites additional elements to overcome the judicial exception). 599 Judge Mayer's dissent argued that this was merely a "store within a store" concept, like a warehouse that contains a kiosk.600 However, the majority distinguished DDR's patent from this concept because the nature of the Internet poses different challenges than the real world:

that practice did not have to account for the ephemeral nature of an Internet 'location' or the near-instantaneous transport between these locations made possible by standard Internet communication

^{590.} Id.

^{591.} Id.

^{592.} DDR Holdings, LLC v. Hotels.com, 773 F.3d 1245, 1248 (Fed. Cir. 2014).

^{593.} Id. at 1248-49.

^{594.} Id. at 1248, 1254-55, 1257-59.

^{595.} Id. at 1262-63.

^{596.} Id. at 1255-57.

^{597.} Id. at 1256-57.

^{598.} Id. at 1257.

^{599.} Id. at 1255-58.

^{600.} Id. at 1264-65 (Mayer, J., dissenting) (internal quotation marks omitted).

protocols.... It is this challenge of retaining control over the attention of the customer in the context of the Internet that the '399 patent's claims address.⁶⁰¹

More importantly, the Federal Circuit held that the patent at bar was distinguishable from the other software patents that have recently been invalidated under 35 U.S.C. § 101, most notably distinguishable from its closest analogue, *Ultramercial III.* 602 *Ultramercial III* claimed "use of the Internet" broadly and generically with insignificant added activity over an abstract business practice, but here, the patent manipulated Internet interactions to "override[] the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." 603

E. Secret Prior Art—35 U.S.C. § 102(g)

In Solvay S.A. v. Honeywell International Inc., 604 the district court held one of the patent's claims was invalid under 35 U.S.C. § 102(g) (2). 605 The patent at issue claimed an improvement to a method of making a hydrofluorocarbon ("HFC") known as HFC-245fa. 606 The secret prior art involved work done by engineers in Russia at the Russian Scientific Center for Applied Chemistry ("RSCAC"), which was later reduced to practice in the United States by Honeywell's personnel before the priority date of October 23, 1995. 607 In 1994, Honeywell and RSCAC entered into an agreement whereby RSCAC "conducted process development studies for the commercial production of HFC-245fa." RSCAC then sent Honeywell a report, which Honeywell personnel used in the United States to run the same process prior to the October priority date. 609

Honeywell initially argued that its engineers were inventors under § 102(g)(2) because they reduced the invention to practice in the United States. 610 In a first round of summary judgment motions, the district court granted summary judgment of invalidity under § 102(g)(2) because "the Honeywell engineers were other inventors who made the invention in this country without abandoning,

^{601.} Id. at 1258 (majority opinion).

^{602.} Id.

^{603.} Id.

^{604. 742} F.3d 998 (Fed. Cir. 2014).

^{605.} Id. at 999.

^{606.} Id. at 1001.

^{607.} Id. at 999, 1001.

^{608.} Id. at 1001.

^{609.} Id.

^{610.} Id.

suppressing, or concealing it."⁶¹¹ On appeal, the Federal Circuit reversed, stating that "Honeywell personnel could not qualify as 'another inventor' because they 'did not conceive the invention of the '817 patent, but derived it from others,' specifically, the RSCAC engineers who 'first conceived the invention in Russia."⁶¹² On remand, Honeywell argued that the Russian engineers made the invention in the United States by sending the instructions, which were used to reduce the invention to practice, to Honeywell personnel.⁶¹³ The parties thus disputed "whether (1) the Honeywell reduction to practice should be attributed to the Russian inventors and (2) whether the Russian inventors had disclosed the invention rather than abandoning, suppressing, or concealing it."⁶¹⁴

The district court held that the RSCAC engineers were the legal equivalent of inventors who made the invention in the United States. 615 However, the jury determined that the asserted claim was invalid under 35 U.S.C. § 102(g)(2) because it was disclosed in a 1994 Russian patent application and had not been abandoned, suppressed, or concealed. 616 On appeal, Solvay challenged the jury's finding that the invention had not been suppressed and the district court's ruling that the RSCAC engineers had made the invention in the United States. 617 The jury's finding of non-suppression was based upon a process disclosed in a Russian patent application. 618 Solvay "argue[d] that the application did not satisfy § 102(g)(2) because the application did not disclose the full scope of the claims if they were properly construed."619 The Federal Circuit found that Solvay waived the issue because it "failed to object to the court's construction or jury instruction with respect to the term 'isolating," but despite the waiver, the Federal Circuit determined that the district court did not err in its construction. 620

Solvay also challenged the district court's finding that the RSCAC engineers had made the invention in the United States based upon the doctrine of inurement.⁶²¹ Solvay argued that there was no

^{611.} Id. at 1002.

^{612.} Id.

^{613.} *Id*.

^{614.} Id.

^{615.} *Id*.

^{616.} Id.

^{617.} Id. at 1003.

^{618.} Id.

^{619.} Id.

^{620.} Id. at 1004-06.

^{621.} Id. at 1006.

inurement because the RSCAC engineers "did not expressly ask the Honeywell researchers to perform the inventive process." The Federal Circuit rejected this argument and affirmed the district court, stating that "our case law does not support Solvay's contention that an inventor must make an express directive or request to benefit from a third party's reduction to practice. Rather, inurement exists if the inventor authorizes another to reduce his invention to practice." The court found that "the research agreement... confirm[ed] that the RSCAC authorized Honeywell to practice its invention in the United States and contemplated that [it] would do so." 624

F. Nonobviousness

2014 witnessed several important Federal Circuit decisions nonobviousness the law of applied to as pharmaceutical industry. In Bristol-Myers Squibb Co. Pharmaceuticals USA, Inc. (BMS I). 625 the patent-in-suit was directed in part to a nucleoside analog composed of a carbocylic ring and a guanine base, which forms an antiviral compound known as entecavir, a drug used for the treatment of hepatitis B. 626 Teva filed an abbreviated new drug application ("ANDA") for a generic version of entecavir, "alleging that its generic products would not infringe the '244 patent." Bristol-Myers Squibb ("BMS") subsequently sued Teva for infringing the '244 patent with the ANDA filing. 628 Teva argued that the '244 patent was invalid for obviousness, based upon a structurally similar prior art compound that predated the priority date of the '244 patent by six years. 629

The case was decided at the district court through a bench trial, and the court found that the prior art compound was instrumental to the development of antiviral drugs. It further determined that "a skilled artisan would have been motivated to [alter the compound] . . . with a reasonable expectation of success of creating a compound with beneficial antiviral properties." Despite some

^{622.} Id.

^{623.} Id. at 1006-08.

^{624.} Id. at 1006.

^{625. 752} F.3d 967 (Fed. Cir.), reh'g en banc denied, 769 F.3d 1339 (Fed. Cir. 2014), and appeal filed, No. 14-886 (U.S. Jan. 22, 2015).

^{626.} Id. at 969.

^{627.} Id. at 970.

^{628.} Id.

^{629.} Id. at 970-71.

^{630.} Id. at 972.

^{631.} Id.

evidence of objective indicia of nonobviousness, the court found that Teva proved by clear and convincing evidence that the relevant claim of the patent-in-suit was invalid as obvious.⁶³²

On appeal, the Federal Circuit affirmed the district court's holding. 633 In order to establish obviousness "in cases involving new chemical compounds, the accused infringer must identify some reason that would have led a chemist to modify a known [or lead] compound."634 The Federal Circuit determined that the record showed that a skilled artisan would have selected the prior art compound as a lead compound due to the general interest at the time of invention in carbocyclic analogs for their potential antiviral Moreover, beyond generalities, the particular prior art compound was already being considered and used as a lead compound by medicinal chemists. 636 The court discounted evidence presented by BMS that the prior art compound was discovered to be toxic not long after the priority date of the patent-in-suit.⁶³⁷ The court further explained that the subsequent steps of deciding whether to modify the carbocyclic ring or guanine base, which bond to modify, and how to modify that bond "equate to a small, finite number of changes" which a skilled artisan would have undertaken in order to achieve a compound with improved antiviral activity. 638 Upon deferring to the district court's findings on objective indicia of nonobviousness, the court affirmed that the '244 patent claim was invalid for obviousness. 639

BMS then petitioned the Federal Circuit for panel rehearing and rehearing en banc, but both petitions were denied. However, Judge Newman, who was joined by Judge Lourie and Judge Reyna, dissented and identified four reasons why BMS I should have been

^{632.} Id.

^{633.} Id. at 979.

^{634.} Id. at 973.

^{635.} Id. at 973-74.

^{636.} Id. at 974.

^{637.} Id. ("[A]t the time of entecavir's invention, the Price reference showed that 2[#]-CDG was generally understood to be safe and nontoxic, and other researchers were already using it as a lead compound. As the district court points out, in 'October 1990, 2[#]-CDG was not yet known to have high toxicity,' and BMS's expert, Dr. Schneller, agreed that researchers at the time treated 2[#]-CDG as a 'promising compound.'").

^{638.} Id. at 975-76.

^{639.} Id. at 976-79.

^{640.} Bristol-Myers Squibb Co. v. Teva Pharm. USA, Inc. (BMS II), 769 F.3d 1339, 1340 (Fed. Cir.), reh'g en banc denied, 769 F.3d 1339 (Fed. Cir. 2014), and appeal filed, No. 14-886 (U.S. Jan. 22, 2015).

reheard.⁶⁴¹ First, BMS I unnecessarily restricted the comparative data, data that could be submitted to show unexpected properties, to information that was available at the time of the invention.⁶⁴² The decision contradicted precedent by ignoring evidence that the prior art compound 2#-CDG was "highly toxic and concededly... useless in treating hepatitis B."643 Second, BMS I misapplied the "secondary considerations' of nonobviousness" by filtering out information that was discovered post-filing in contravention to "the characteristics of medicinal and biological products."644 Third, the court erred when it stated that "unexpected results do not per se defeat, or prevent, the finding that a modification to a lead compound will yield expected, beneficial properties" as "an unexpected result or property is the touchstone of nonobviousness."645 Finally, the court's reductive analysis in holding that "a 'mere difference in degree' is 'insufficient' to render a compound patentable" was inappropriate and inaccurate where "the court held that a new and effective non-toxic treatment for hepatitis B is merely a difference in degree from a highly toxic and useless treatment for hepatitis B."646

Judge Taranto also dissented from the majority's decision denying the petition for rehearing and was joined by Judges Lourie and Reyna. He, like Judge Newman, warned that the panel opinion could stand for the proposition that "any evaluation of prior art must focus exclusively on what was known about the prior art's properties... at the time of the... invention" and stated that he would have granted rehearing in order to resolve the questions raised by such a departure from patent law precedent. BMS appealed the denial of rehearing with a petition for a writ of certiorari on due on January 20, 2015. BMS

In *In re Teles AG Informationstechnologien*, 650 certain claims of Teles' No. 6,954,453 patent were rejected during an ex parte reexamination

^{641.} *Id.* at 1347–51 (Newman, I., dissenting).

^{642.} Id. at 1347-49.

^{643.} Id. at 1349.

^{644.} *Id.* at 1349–50.

^{645.} Id. at 1350.

^{646.} Id. at 1351.

^{647.} Id. at 1352 (Taranto, J., dissenting).

^{648.} Id. at 1356, 1359.

^{649.} No. 14-886, S. CT. U.S., http://www.supremecourt.gov/search.aspx?filename=/docketfiles/14-886.htm (last visited Mar. 4, 2014).

^{650. 747} F.3d 1357 (Fed. Cir.), cert. denied sub nom. Sigram Schindler Beteiligungsgesellschaft MBH v. Lee, 135 S. Ct. 759 (2014).

as invalid under 35 U.S.C. § 103.⁶⁵¹ The Board of Patent Appeals and Interferences ("the Board") affirmed.⁶⁵² Teles then brought suit in the U.S. District Court of the District of Columbia, challenging the Board's decision pursuant to 35 U.S.C. § 145.⁶⁵³ "The district court dismissed the case for lack of subject matter jurisdiction, holding that, after the 1999 amendments, § 145 proceedings could not be maintained by patent owners." Teles appealed the dismissal, but did not appeal the Board's decision.⁶⁵⁵

The Federal Circuit recognized that it had jurisdiction to review the district court's dismissal but that it had to determine whether it also had jurisdiction to review the Board's decision. It found that it had jurisdiction and stated that "[o]nce the district court held that it lacked jurisdiction, it should have transferred the case pursuant to [28 U.S.C.] § 1631. Thus, the Federal Circuit reviewed the case as though it had been properly transferred. Ultimately, the Federal Circuit affirmed both the district court and the Board's decisions.

Teles then filed a Petition for Certiorari to the Supreme Court, describing the question presented as

Does the US Constitution, in legal decisions based on 35 USC §§ 101/102/103/112,

 require instantly avoiding the inevitable legal errors in construing incomplete and vague classical claim constructions—especially for "emerging technology claim(ed invention)s, ET CIs"—by construing for them the complete/concise refined claim constructions of the Supreme Court's KSR/Bilski/Mayo/Myriad/Biosig/Alice Corp. line of unanimous precedents framework,

or does the US Constitution for such decisions

• entitle any public institution to refrain, for ET CIs, for a time it feels feasible, from proceeding as these Supreme

^{651.} Id. at 1359.

^{652.} Id.

^{653.} Id.; Teles AG v. Kappos, 846 F. Supp. 2d 102, 103–05, 112 (D.D.C. 2012), aff'd in part and rev'd in part sub nom. In re Teles AG Informationstechnologien, 747 F.3d 1357 (Fed. Cir.), cert. denied sub nom. Sigram Schindler Beteligungsgesellschaft MBH v. Lee, 135 S. Ct. 759 (2014).

^{654.} In re Teles, 747 F.3d at 1360.

^{655.} Id.

^{656.} Id.

^{657.} Id. at 1361.

^{658.} Id.

^{659.} See id. at 1366, 1368–69 (affirming the district court's finding of lack of jurisdiction, while affirming the Board's decisions as to claim of construction and obviousness).

Court precedents require—or meeting its requirements just by some lip-service—and in the meantime to construe incomplete classical claim constructions, notwithstanding their implied legal errors?⁶⁶⁰

Teles' petition was denied on December 8, 2014.⁶⁶¹ In a rare move, the Supreme Court directed petitioner's counsel to "to show cause, within 40 days, why he should not be sanctioned for his conduct as a member of the Bar of this Court in connection with the petition [for a writ of certiorari in] No. 14-424, Sigram Schindler Beteiligungsgesellschaft MBH v. Lee."⁶⁶²

CONCLUSION

The 2014 Federal Circuit Court consisted of a bench that was half rookies: six judges had been on the bench less than 4 years, three of which had been on the bench for only one year. The large number of newly appointed judges made it difficult to predict how the Federal Circuit would rule on intellectual property issues. Indeed, many of the highlighted cases included vigorous dissents.

Table 1 sets forth the current composition of the United States Court of Appeals for the Federal Circuit. There are eleven active service judges, six senior circuit Judges, and one vacancy (left by former Chief Judge Randall R. Rader on June 30, 2014). Senior Circuit Judges continue to serve on the court while handling fewer cases than an active service judge.

Title	Judge	Active	Chief	Senior	Appointed By
Chief	Sharon	2001-	2014-	-	G.W. Bush
Judge	Prost	present	present		
Circuit	Pauline	1984-	<u> </u>	-	Reagan
Judge	Newman	present			
Circuit	Alan David	1990-		-	G.H.W. Bush
Judge	Lourie	present	[ĺ	

TABLE 1: Biographical Directory of Federal Judges⁶⁶⁴

^{660.} Petition for a Writ of Certiorari at i, Sigram Schindler Beteiligungsgesellschaft MGH v. Lee, 135 S. Ct. 759 (2014) (No. 14-424), 2014 WL 5211966.

^{661.} Sigram Schindler, 135 S. Ct. at 760.

^{662.} In re Discipline of Shipley, 135 S. Ct. 779, 779-80 (2014).

^{663.} Biographical Directory of Federal Judges, FED. JUD. CENTER, www.fjc.gov/history/home.nsf/page/judges.html (last visited Mar. 4, 2015) (search by judge's name). 664. Id.

Circuit Timothy B. 2000— present Circuit Kimberly 2006— G.W. Bush Judge Ann Moore present Circuit Kathleen M. 2010— Obama Judge O'Malley present Circuit Jimmie V. 2011— Obama Judge Reyna present Circuit Evan 2011— Obama Judge Wallach present Circuit Richard G. 2013— Obama Judge Taranto present Circuit Raymond T. 2013— Obama Judge Chen Obama
Circuit JudgeKimberly Ann Moore2006- present- G.W. BushCircuit JudgeKathleen M. O'Malley2010- present- ObamaCircuit JudgeJimmie V. Reyna2011- present- ObamaCircuit JudgeEvan Wallach2011- present- ObamaCircuit Circuit JudgeRichard G. Taranto2013- present- ObamaCircuit Circuit Circuit Raymond T.2013- present- Obama
JudgeAnn MoorepresentCircuitKathleen M.2010ObamaJudgeO'Malleypresent-ObamaCircuitJimmie V.2011ObamaJudgeReynapresent-ObamaCircuitEvan2011ObamaJudgeWallachpresent-ObamaCircuitRichard G.2013ObamaJudgeTarantopresent-ObamaCircuitRaymond T.2013ObamaJudgeChenpresent-Obama
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Circuit Raymond T. 2013— - Obama Judge Chen present - Obama
Judge Chen present
Circuit Todd M. 2013– - Obama
Judge Hughes present
Circuit vacant
Judge
Senior Haldane 1987- 1997- 2010- Reagan
Circuit Robert 2010 2004 present
Judge Mayer
Senior S. Jay Plager 1989– 2000– G.H.W. Bush
Circuit 2000 present
Judge
Senior Raymond 1990- 2006- G.H.W. Bush
Circuit Charles 2006 present
Judge Clevenger III
Senior Alvin 1992– 2009– G.H.W. Bush
Circuit Anthony 2009 present
Judge Schall
Senior William 1994 2013 Clinton
Circuit Curtis 2013 present
Judge Bryson
Senior Richard 1999– 2012– Clinton
Circuit Linn 2012 present
Judge