

AREA SUMMARIES

2017 PATENT LAW DECISIONS OF THE FEDERAL CIRCUIT

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INTRODUCTION

The U.S. Court of Appeals for the Federal Circuit's patent law decisions in 2017 reflected significant development of the legal landscape. The Federal Circuit decided many novel questions implementing the Supreme Court's decision regarding venue, continued to address the question of patent eligibility, and encountered the first waves of the constitutionality of proceedings before the Patent Trial and Appeal Board (PTAB) at the U.S. Patent and Trademark Office (PTO). After a three-year stint of an overloaded patent docket, the Federal Circuit has adjusted to the surge of patent suits following the America Invents Act ("AIA"), allowing judges to write more opinions and reach greater consensus than previous years. Nevertheless, patent appeals remain the majority of the Federal Circuit's workload and promises to remain so. This Article collects and summarizes the Federal Circuit's 2017 patent decisions and analyzes their impact on patent practice moving forward.

I. PROCEDURAL ISSUES

A. *Venue Law Post-TC Heartland*

In *TC Heartland LLC v. Kraft Foods Group Brands LLC*,¹ the Supreme Court transformed patent venue law, finding that domestic corporations “reside” only in their state of incorporation. While a decision of the higher court, *TC Heartland* significantly affected Federal Circuit law and its aftermath is seen in the Federal Circuit’s rulings throughout the remainder of the term and in the lower courts. The Supreme Court reversed the Federal Circuit’s denial of a writ of mandamus² concerning venue in a patent infringement case.³ The Supreme Court found that the Federal Circuit erred in reasoning that *TC Heartland*, allegedly an Indiana corporation, “resided” in Delaware for venue purposes.⁴ Per *Fourco Glass Co. v. Transmirra Products Corp.*,⁵ the word “reside[nce]” in 28 U.S.C. § 1400(b), the patent venue statute, as applied to a domestic corporation, refers only to the state of incorporation.⁶ Kraft’s argument that the meaning of the post-*Fourco* amendments to 28 U.S.C. § 1391, the general venue statute, altered the meaning of § 1400(b) failed before the court.⁷

The Supreme Court rejected the Federal Circuit’s rationale for reaching the opposite result.⁸ The amendments to § 1391 stated that for “all venue purposes,” a corporation would “reside” in any judicial district where it was subject to the court’s personal jurisdiction.⁹ The principal basis for the Federal Circuit’s opinion in *TC Heartland* was the holding in *VE Holding Corp. v. Johnson Gas Appliance Co.*,¹⁰ which held that the amendments to § 1391 redefined venue for all other venue statutes in the same chapter, which also included the patent

1. 137 S. Ct. 1514 (2017).

2. *In re TC Heartland LLC*, 821 F.3d 1338, 1340 (Fed. Cir. 2016), *rev’d sub nom. TC Heartland LLC*, 137 S. Ct. 1514.

3. *TC Heartland LLC*, 137 S. Ct. at 1517–18.

4. *Id.*

5. 353 U.S. 222 (1957).

6. *TC Heartland LLC*, 137 S. Ct. at 1520 (alteration in original); *see* 28 U.S.C. § 1400(b) (2012) (“Any civil action for patent infringement may be brought in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business.”).

7. *TC Heartland LLC*, 137 S. Ct. at 1520–21; *see* 28 U.S.C. § 1391 (providing the rules governing civil action venue in United States district courts).

8. *TC Heartland LLC*, 137 S. Ct. at 1520.

9. *Id.* (citing § 1391(c)(2)).

10. 917 F.2d 1574 (Fed. Cir. 1990), *abrogated by TC Heartland LLC*, 137 S. Ct. 1514.

venue statute.¹¹ In reversing the Federal Circuit's denial of the writ of mandamus and remanding for further proceedings, the Supreme Court implicitly overruled *VE Holding*.¹²

The Supreme Court's decision appears to leave *In re Cordis Corp.*¹³ untouched in what a "regular and established place of business" means under the other prong of the subject-matter jurisdiction statute 28 U.S.C. § 1400(b).¹⁴ *In re Cordis Corp.* held, somewhat broadly, that "the appropriate inquiry is whether the corporate defendant does its business in that district through a permanent and continuous presence there."¹⁵ Under the facts of that case, Cordis had salespeople in Minnesota who would visit physicians and guide them through surgeries.¹⁶ So Cordis had a regular physical presence and conducted infringing business via that physical presence in Minnesota.¹⁷ But it seems a stretch to read *Cordis* to cover omnipresent companies, such as Google or Amazon, and the evolving means of those companies, such as whether the presence of Amazon lockers would create nationwide venue over Amazon.

Following *TC Heartland*, both the Federal Circuit and district courts were forced to reconcile the new venue law with ongoing litigations. In *In re Sea Ray Boats, Inc.*,¹⁸ the Federal Circuit denied a motion to stay trial and a petition for a writ of mandamus following the district court's denial of motion to transfer venue.¹⁹ The underlying litigation began in January 2015; the motion to transfer was filed approximately two weeks before trial, well beyond a timely motion to transfer on the eve of trial.²⁰

Dissenting, Judge Newman would have granted the stay and ordered expedited briefing and resolution of the issue, noting that the district court found venue in Virginia proper even under the *Fourco* standard²¹

11. *Id.* at 1575; see *TC Heartland LLC*, 137 S. Ct. at 1519–20 (describing the Federal Circuit's holding in *VE Holding*).

12. *Id.* at 1521.

13. 769 F.2d 733 (Fed. Cir. 1985).

14. *Id.* at 737.

15. *Id.* (rejecting the argument that a fixed physical presence, such as an office or store, should be sufficient to establish place of business in a jurisdiction).

16. *Id.* at 735.

17. *Id.* at 734.

18. 695 F. App'x 543 (Fed. Cir. 2017) (per curiam).

19. *Id.* at 544.

20. *Id.* at 543.

21. *Fourco Glass Co. v. Transmirra Products Corp.*, 353 U.S. 222, 228–29 (1957) (holding that 28 U.S.C. § 1400(b) is the "sole and exclusive provision controlling venue in patent infringement actions," versus the general corporation venue statute at § 1391(c)).

that *TC Heartland* embraced.²²

Addressing the question of timeliness in ongoing litigations, the Federal Circuit found that parties may bring venue motions based on *TC Heartland* in pending cases, but district courts have discretion whether the issue has been waived. In *In re Micron Technology, Inc.*,²³ the Federal Circuit issued a writ of mandamus vacating the denial of a motion to dismiss for improper venue.²⁴ The court determined that the district court erred in finding the venue issue waived based on Micron's failure to include the issue in its initial motion to dismiss and in reasoning that *TC Heartland* was not a change of law sufficient to release Micron from the waiver.²⁵ Per Federal Rule of Civil Procedure 12(h) (1) (A) and Rule 12(g) (2), there was no waiver because the venue defense was not "available" to Micron prior to *TC Heartland*.²⁶ However, the district court declined to order either the dismissal or transfer of the case.²⁷ The Federal Circuit described how district courts have "inherent powers" that may be used to find a venue objection forfeited, notwithstanding a movant's technical compliance with Rule 12.²⁸ In particular, the Federal Circuit noted that district courts in the past did not abuse discretion by denying post-*TC Heartland* venue motions presented close to trial.²⁹ District courts may also take into account the general timeliness of the motion and evidence of "a defendant's tactical wait-and-see bypassing of an opportunity to declare a desire for a different forum."³⁰ On remand, the district court could take such issues into account.

Applying *TC Heartland*, the Federal Circuit more clearly defined a "regular and established" place of business for venue purposes by excluding an employee's home office, virtual spaces, or electronic communications from one person to another. In *In re Cray Inc.*,³¹ the Federal Circuit issued a writ of mandamus directing a case transfer,³² finding that the district court abused its discretion and committed an

22. *In re Sea Ray Boats*, 695 F. App'x at 544–45 (Newman, J., dissenting).

23. 875 F.3d 1091 (Fed. Cir. 2017).

24. *Id.* at 1094.

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.* at 1101 (citing *Dietz v. Bouldin*, 136 S. Ct. 1885, 1892 (2016)).

29. *Id.* at 1102.

30. *Id.*

31. 871 F.3d 1355 (Fed. Cir. 2017).

32. *Id.* at 1357.

error of law in denying defendant's motion for transfer on venue grounds, and consequently, mandamus was warranted to decide an issue "important to 'proper judicial administration.'"³³ The Federal Circuit discussed the proper standards for determining whether a litigant has a "regular and established place of business" in the forum district per § 1400(b) and *TC Heartland*.³⁴ The Federal Circuit reasoned that the "place" of business need not be a "formal office or store," but must "be a physical, geographical location in the district from which the business of the defendant is carried out."³⁵ It must also be a "regular" place of business, and the opinion recited various definitions of "regular," such as "if it operates in a 'steady[,] uniform[,] orderly[,] and] methodical' manner."³⁶ It must be "established," emphasizing that "the place of business is not transient."³⁷ Finally, it must be a place "*of the defendant*," not solely a place of the defendant's employee, noting "[e]mployees change jobs."³⁸ Applying those standards to this case, the home of a Cray employee, which does not seem to have been established by Cray, but rather by the employee, was insufficient to establish venue.³⁹

As the Federal Circuit and district courts develop venue law based on *TC Heartland*, litigants should consider the implications. For example, the parties should consider the cost-benefit analysis of disputing venue at the outset of litigation to weigh overall cost and delay. Ultimately, this may lead to plaintiffs choosing undisputable venues even if that means giving up patentee-preferred districts. Also, from the outset, judges may see a rise in 12(b) motions objecting to venue before defendants answer the complaint. Alternatively, the only practical way to seek review of venue decisions is mandamus or certification by a judge who is genuinely in doubt or prefers not to have a mandamus motion filed.

33. *Id.* at 1358 (quoting *In re BP Lubricants USA Inc.*, 637 F.3d 1307, 1313 (Fed. Cir. 2011)).

34. *Id.* at 1360–62.

35. *Id.* at 1362.

36. *Id.* (alterations in original).

37. *Id.* at 1363.

38. *Id.* (emphasis in original).

39. *Id.* at 1366; *see, e.g.*, *U.S. Aluminum Corp. v. Kawneer Co.*, 694 F.2d 193, 195 (9th Cir. 1982) ("Venue in a declaratory judgment action for patent noninfringement and invalidity is governed by the general venue statute, 28 U.S.C. § 1391(b) and (c), and not the special patent infringement venue statute . . .").

B. Federal Jurisdiction

The Federal Circuit considered the breadth of its own jurisdiction over several key areas of patent law. First, analyzing 28 U.S.C. § 1292(c), the Federal Circuit determined that it lacks jurisdiction to hear non-final “accounting” orders notwithstanding jurisdiction to hear orders “final except for an accounting.” In *Halo Electronics, Inc. v. Pulse Electronics, Inc.*,⁴⁰ the Federal Circuit dismissed an appeal of a decision awarding, but not actually computing, prejudgment and post-judgment interest and supplemental damages.⁴¹ The 2016 final judgment followed a 2013 decision finding that Pulse infringed Halo’s patent.⁴² The Federal Circuit held that it did not have jurisdiction over Pulse’s appeal from the 2016 decision concerning prejudgment interest.⁴³ The Federal Circuit based its opinion on 28 U.S.C. § 1292(c),⁴⁴ which permits appeals from judgments that are “*final except for an accounting.*”⁴⁵ Jurisdiction for each appeal must be separately established.⁴⁶ Therefore, the Federal Circuit’s jurisdiction to adjudicate an appeal from the 2013 judgment was “not dispositive of whether we have jurisdiction in this appeal.”⁴⁷

In this appeal, the 2016 order was neither “final” nor “final except for an accounting.”⁴⁸ It was not “final” because the district court had not yet determined the amount of prejudgment interest or the computational method to be used in that determination.⁴⁹ And, although the 2016 order was part of the “accounting” that followed the 2013 order, “§ 1292(c) (2) ‘does not go so far as to permit us to consider [a] non-

40. 857 F.3d 1347 (Fed. Cir. 2017).

41. *Id.* at 1348 (dismissing the case for lack of jurisdiction without reaching the merits of the claims).

42. *Id.* at 1348–50; *see also* Halo Elecs., Inc. v. Pulse Elecs., Inc., No. 2:07-cv-00331-PMP-PAL, 2013 WL 2319145, at *16 (D. Nev. May 28, 2013), *vacated* 136 S. Ct. 1923 (2016) (entering judgment in favor of Halo on the infringement claims, except for the willfulness claim).

43. *Halo Elecs., Inc.*, 857 F.3d at 1353.

44. 28 U.S.C. § 1292(c) (2012) (granting the Federal Circuit exclusive jurisdiction over interlocutory appeals arising under § 1292(a) and (b) and appeals from final judgements in patent infringement suits).

45. *Halo Elecs., Inc.*, 857 F.3d at 1351 (quoting 28 U.S.C. § 1292(c) (2)).

46. *Id.* at 1362–63.

47. 320 F.3d 1354 (Fed. Cir. 2003).

48. *Halo Elecs., Inc.*, 857 F.3d at 1352 (holding that the court lacked jurisdiction under both § 1295(a) (1) and § 1292(c) (2) because the prejudgment interest order from the district court was not final).

49. *Id.* at 1351–52.

final order' that is related to the accounting."⁵⁰ The Federal Circuit further noted that Pulse preserved its right to file a "proper appeal concerning a final award of prejudgment interest" at a later time.⁵¹

Second, in *Preston v. Nagel*,⁵² the Federal Circuit determined that the America Invents Act⁵³ (AIA) does not create an exception to the general bar on reviewability of orders remanding to state court, so the Federal Circuit dismissed an appeal from remand to state court.⁵⁴ Because the district court's remand was based on a lack of subject-matter jurisdiction, its order was not reviewable by the Federal Circuit per 28 U.S.C. § 1447(d).⁵⁵ Even though Mr. Nagel attempted to raise counterclaims for declaratory judgment of patent noninfringement, his actions did not create an exception to § 1447(d).⁵⁶ The Federal Circuit rejected Mr. Nagel's argument that the AIA created such an exception, and further rejected Mr. Nagel's attempt to analogize this case to *Osborn v. Haley*,⁵⁷ finding that the AIA provisions relating to jurisdiction over patent cases were unlike the provisions at issue in *Osborn*.⁵⁸ The Federal Circuit also rejected Mr. Nagel's contention that he will have been deprived of a forum for his counterclaims because he could still present a separate federal declaratory judgment action.⁵⁹

The Federal Circuit also determined that it lacked subject-matter jurisdiction over overseas infringement of foreign patents, dismissing the cause of action in *Allied Mineral Products, Inc. v. Osmi, Inc.*⁶⁰ The district court had correctly determined that the sending of a notice letter to two of Allied's Mexican customers, asserting a Mexican patent

50. *Halo Elecs., Inc.*, 857 F.3d at 1352 (alteration in original) (quoting Alfred E. Mann Found. for Sci. Research v. Cochlear Corp., 841 F.3d 1334, 1347 (Fed. Cir. 2016)).

51. *Id.* at 1353.

52. 857 F.3d 1382 (Fed. Cir. 2017).

53. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

54. *Preston*, 857 F.3d at 1383.

55. *Id.*; see 28 U.S.C. § 1447(d) (2012) ("An order remanding a case to the State court from which it was removed is not reviewable on appeal or otherwise, except that an order remanding a case to the State court from which it was removed pursuant to [§] 1442 or 1443 of this title shall be reviewable by appeal or otherwise.").

56. *Preston*, 857 F.3d at 1384–85.

57. 549 U.S. 225, 252–53 (2007) (plurality opinion) (finding that the federal statutory bar against appellate review of remand orders did not displace provision of the Westfall Act, which shielded from remand any action removed to federal court based upon Attorney General's certification).

58. *Preston*, 857 F.3d at 1385–86.

59. *Id.* at 1386.

60. 870 F.3d 1337 (Fed. Cir. 2017).

and alleging acts of infringement under Mexican law, was insufficient to create a case or controversy in the United States to support Allied's complaint for declaratory judgment.⁶¹ The Federal Circuit rejected Allied's attempt to argue for jurisdiction under *Innovative Therapies, Inc. v. Kinetic Concepts, Inc.*⁶² or *Arkema Inc. v. Honeywell International, Inc.*⁶³ because both involved substantially different facts.⁶⁴

Likewise, the Federal Circuit found that the district court properly dismissed a declaratory judgment action on patents not owned by the accused party. In *First Data Corp. v. Inselberg*,⁶⁵ the Federal Circuit affirmed the dismissal of federal claims for lack of subject matter jurisdiction.⁶⁶ The claims in question were counterclaims brought by First Data and its CEO Frank Bisignano for declaratory judgment of noninfringement and invalidity for certain patents that listed Eric Inselberg as the inventor.⁶⁷ The opinion describes how Mr. Inselberg had threatened infringement litigation against Mr. Bisignano and First Data.⁶⁸ However, per a signed 2011 agreement, Mr. Bisignano—not Mr. Inselberg—was the apparent owner of the patents in question.⁶⁹ The district court did not err in dismissing First Data's declaratory judgment claims because the claims had apparently been made solely for the purpose of establishing federal jurisdiction.⁷⁰ Per *Jim Arnold Corp. v. Hydrotech Systems, Inc.*⁷¹ and *Arbaugh v. Y & H Corp.*,⁷² there was no plausible basis under which First Data could have contended that the assignment agreement was null and void (though Mr. Inselberg contested, via his state law claims, the validity of that agreement).⁷³ The Federal Circuit explained that, unless and until a state court granted rescission of the 2011 assignment, there was no dispute that Mr. Inselberg did not own any of the patents at issue.⁷⁴ Additionally, Mr. Bisignano and First Data still

61. *Id.* at 1338–39.

62. 599 F.3d 1377 (Fed. Cir. 2010).

63. 706 F.3d 1351 (Fed. Cir. 2013).

64. *Allied Mineral Prods., Inc.*, 870 F.3d at 1339–40.

65. 870 F.3d 1367 (Fed. Cir. 2017).

66. *Id.* at 1369.

67. *Id.* at 1369–70.

68. *Id.* at 1370.

69. *Id.* at 1369.

70. *Id.* at 1373.

71. 109 F.3d 1567 (Fed. Cir. 1997).

72. 546 U.S. 500 (2006).

73. *First Data Corp.*, 870 F.3d at 1374 (emphasizing that First Data's argument misunderstood the reasoning in *Jim Arnold*).

74. *Id.* at 1375.

faced significant standing and ripeness challenges.⁷⁵

In *ArcelorMittal v. AK Steel Corp.*,⁷⁶ the Federal Circuit considered its subject matter jurisdiction by affirming the district court's decision, on remand, to invalidate its initial grant of summary judgment.⁷⁷ The Federal Circuit stated that this dispute over the validity of an asserted patent is not moot despite the fact that ArcelorMittal filed with the court a covenant not to sue conditioned on resolution of a related procedural matter.⁷⁸ The case was complicated by a lengthy procedural history involving a reissue procedure, substitution of claims in the complaint, and a remand.⁷⁹ The Federal Circuit found that the district court did not err in exercising jurisdiction to invalidate two of ArcelorMittal's claims.⁸⁰ The Federal Circuit reached this conclusion even though ArcelorMittal had from time to time urged that the two claims were not at issue in the case, though others from the same patent were.⁸¹ The Federal Circuit described how ArcelorMittal made sufficient statements to indicate that the claims in question were asserted in the case and had tacitly accepted other statements by AK Steel indicating that they understood the claims were in the case.⁸² This was sufficient to demonstrate a substantial controversy between the parties over these claims.⁸³

The Federal Circuit also determined that the issue was not moot. The Federal Circuit held that the district court did not err in determining that ArcelorMittal's conditional tender of a covenant not to sue on the two claims did not moot the matter.⁸⁴ Mootness arises when the issues are "no longer live or the parties lack a legally cognizable interest in the outcome."⁸⁵ ArcelorMittal's various attempts to enter a covenant were all conditional, so its attempts did not resolve the merits

75. *Id.* (noting that because Mr. Inselberg did not have an ownership interest in the patent, the plaintiffs would have a difficult time establishing standing and ripeness due to the contingent event of Mr. Inselberg ever recovering title to the patent). First Data also disputed the district court's remand of state law claims to state court, but the Federal Circuit was precluded from reviewing that remand by 28 U.S.C. § 1447(d). *Id.*

76. 856 F.3d 1365 (Fed. Cir. 2017).

77. *Id.* at 1367.

78. *Id.*

79. *Id.* at 1367–68.

80. *Id.*

81. *Id.* at 1369.

82. *Id.*

83. *Id.*

84. *Id.* at 1372.

85. *Id.* at 1370 (quoting *Already, LLC v. Nike, Inc.*, 568 U.S. 85, 91 (2013)).

of the matter. The Federal Circuit found that “[a]t no time before the court entered summary judgment did ArcelorMittal *unconditionally* assure [AK Steel] and their customers that it would never assert RE’153 claims 24 and 25 against them.”⁸⁶ The Federal Circuit noted that a covenant, relied on by the dissent, filed with the district court by ArcelorMittal expressly made the covenant conditional on resolution of a procedural issue (a motion to amend a co-pending complaint), and characterized this covenant as unable to support mootness due to its conditional nature.⁸⁷ The Federal Circuit’s rejected ArcelorMittal’s remaining arguments, concluding that the district court’s consideration of the two claims was consistent with a prior Federal Circuit remand, and that the district court did not abuse its discretion in refusing ArcelorMittal’s request for new discovery on the commercial success of the claims at issue.⁸⁸ In dissent, Judge Wallach indicated that the covenant not to sue would have mooted the issue because it invalidated the existence of a “case or controversy.”⁸⁹

1. *Interlocutory Appeals*

In *Waymo LLC v. Uber Technologies, Inc.*,⁹⁰ the Federal Circuit dismissed an appeal from a denial of motions seeking relief from discovery orders, finding that there is no interlocutory appeal for an order compelling document production.⁹¹ The appellant was Anthony Levandowski, a former Waymo employee accused of “improperly download[ing] thousands of documents related to Waymo’s driverless vehicle technology, and then [leaving] Waymo to found Ottomotto, which Uber subsequently acquired.”⁹² On appeal, Mr. Levandowski argued that the court should analyze whether it has jurisdiction to hear the case under mandamus and the *Perlman*⁹³ doctrine⁹⁴ because either doctrine authorizes immediate appeal of an order compelling third

86. *Id.* at 1370.

87. *Id.* at 1371–72.

88. *Id.* at 1372.

89. *Id.* at 1374 (Wallach, J., dissenting).

90. 870 F.3d 1350 (Fed. Cir. 2017).

91. *Id.* at 1355.

92. *Id.*

93. *Perlman v. United States*, 247 U.S. 7 (1918).

94. *Waymo LLC*, 870 F.3d at 1366 (“The *Perlman* doctrine provides that ‘a discovery order directed at a disinterested third party is treated as an immediately appealable final order because the third party presumably lacks a sufficient stake in the proceeding to risk contempt by refusing compliance.’”).

party disclosure of privileged materials.⁹⁵

The Federal Circuit found that Mr. Levandowski's appeal did not warrant a writ of mandamus because he did not establish that typical review after final judgment would be inadequate to protect his rights.⁹⁶ The Federal Circuit rejected both of Mr. Levandowski's arguments: that certain materials ordered to be disclosed were privileged and/or work product and that the disclosure would be particularly injurious or would raise a particularly novel issue of law.⁹⁷ Mr. Levandowski also did not establish a clear, indisputable right to a mandamus writ.⁹⁸ The Federal Circuit further determined that he could not to assert privilege under "common interest doctrine" because the disclosures at issue were not attorney-client privileged communications.⁹⁹ It rejected Mr. Levandowski's argument that common interest can protect against disclosure of non-privileged material.¹⁰⁰ Similarly, the Federal Circuit rejected Mr. Levandowski's invocation of work-product protection because the material in question was not prepared by Mr. Levandowski or his counsel, but the material was disclosed to him by Uber's counsel (in circumstances not warranting common interest protection).¹⁰¹ Finally, the Federal Circuit dismissed Mr. Levandowski's attempt to invoke the Fifth Amendment.¹⁰²

Mr. Levandowski's appeal also did not warrant invocation of the *Pertman* doctrine because that doctrine generally does not apply in civil litigation and his issues were appealable after final judgment.¹⁰³ Also, the Federal Circuit concluded that Mr. Levandowski was not a disinterested third party, as a former employee of both parties in the litigation, and that his actions were "central to Waymo's claims."¹⁰⁴

C. Personal Jurisdiction

In weighing the sufficiency of contacts to establish personal jurisdiction, the Federal Circuit differentiated between directed contact with the forum and attenuated connections. For example, in

95. *Id.*

96. *Id.* at 1358.

97. *Id.*

98. *Id.* at 1359.

99. *Id.* at 1363.

100. *Id.* at 1359–60.

101. *Id.* at 1363.

102. *Id.*

103. *Id.* at 1366.

104. *Id.*

Xilinx, Inc. v. Papst Licensing GmbH & Co.,¹⁰⁵ the Federal Circuit determined that notice letters, travel to the forum, and past litigation in the forum were sufficient contacts to establish personal jurisdiction for a declaratory judgment action that reversed the lower court's dismissal.¹⁰⁶ Although the District of Delaware had recently transferred Papst's separate infringement suit against Xilinx to the district court that originally rejected Xilinx's declaratory judgment action, the issue was not moot because Xilinx had not asserted declaratory judgment counterclaims in the transferred action.¹⁰⁷ The Federal Circuit determined that the "[t]he mere availability of this unpursued alternative route to relief does not render moot Xilinx's action seeking the same relief."¹⁰⁸ Therefore, the Federal Circuit held that the U.S. District Court for the Northern District of California erred in concluding that it lacked specific personal jurisdiction over Papst.¹⁰⁹ The Federal Circuit determined that the record established that Papst had minimum contacts with the forum and that the exercise of personal jurisdiction was both reasonable and fair.¹¹⁰

Regarding minimum contacts, the Federal Circuit found "no question that Papst has the required minimum contacts with California," noting that Papst sent notice letters to Xilinx and traveled there to discuss Papst's allegations of patent infringement.¹¹¹ Additionally, the exercise of personal jurisdiction over Papst was both reasonable and fair.¹¹² The Federal Circuit rejected Papst's argument that, under *Red Wing Shoe Co. v. Hockerson-Halberstadt, Inc.*,¹¹³ the exercise of jurisdiction based only on Papst's attempt to inform Xilinx of its infringement would be unreasonable.¹¹⁴ Unlike the situation in *Red Wing*, Papst had done more than send notice letters; it had traveled to California to meet with both Xilinx and Altera.¹¹⁵ Further, the burden of Papst traveling to the district was mitigated, and therefore

105. 848 F.3d 1346 (Fed. Cir. 2017).

106. *Id.* at 1349.

107. *Id.* at 1352.

108. *Id.*

109. *Id.* at 1358.

110. *Id.* at 1355–58.

111. *Id.* at 1354.

112. *Id.* at 1358.

113. 148 F.3d 1355 (Fed. Cir. 1998).

114. *Xilinx*, 848 F.3d at 1354 (relating *Red Wing* to the case at hand, namely in holding that cease-and-desist letters sent by the patentee in the forum are enough to establish minimum contacts for personal jurisdiction).

115. *Id.* at 1357.

not an undue burden, because Papst is a “non-practicing patent holder residing outside of the United States” that must litigate its U.S. patents overseas regardless of the forum.¹¹⁶ To further bolster the Federal Circuit’s reasoning, the court cited to the fact that Papst had previously litigated in California.¹¹⁷

By comparison, the Federal Circuit determined that an exclusive license with an entity located in the forum is insufficient, without more, to establish specific personal jurisdiction over a patentee. In *New World International, Inc. v. Ford Global Technologies, LLC*,¹¹⁸ the Federal Circuit affirmed the dismissal of a declaratory judgment complaint for lack of personal jurisdiction.¹¹⁹ The Federal Circuit found that the district court correctly determined that, per *Breckenridge Pharmaceutical, Inc. v. Metabolite Laboratories, Inc.*,¹²⁰ the mere existence of an exclusive license of certain design patents between Ford Global Technologies, LCC (“FGTL”) and LKQ Corp., a company doing business in Texas, was insufficient to establish personal jurisdiction over FGTL in Texas.¹²¹ The Federal Circuit also found that the district court correctly determined that FGTL’s obligation to indemnify LKQ in certain circumstances was insufficient to establish specific personal jurisdiction.¹²² The Federal Circuit’s holding in *Genetic Implant Systems, Inc. v. Core-Vent Corp.*¹²³ was not contrary because that case merely noted the presence of an indemnity obligation but did not rely on such an obligation to find personal jurisdiction.¹²⁴ Further, the indemnity agreement required FGTL to indemnify LKQ for claims alleging infringement of the patents of others and had nothing to do with FGTL’s design patents at issue.¹²⁵ Likewise, the Federal Circuit found that the district court also correctly determined that New World failed to demonstrate that, when FGTL sent cease-and-desist letters, it had coordinated with LKQ in any way.¹²⁶ The Federal Circuit found that this case was thus further

116. *Id.*

117. *Id.*

118. 859 F.3d 1032 (Fed. Cir. 2017).

119. *Id.* at 1034–35.

120. 444 F.3d 1356 (Fed. Cir. 2006).

121. *New World Int’l, Inc.*, 859 F.3d at 1040 (rejecting New World’s argument that FGTL’s license with LKQ was sufficient to establish specific personal jurisdiction).

122. *Id.* at 1040–41.

123. 123 F.3d 1455 (Fed. Cir. 1997).

124. *New World Int’l, Inc.*, 859 F.3d at 1040–41.

125. *Id.* at 1041.

126. *Id.* at 1042 (stating that “LKQ’s role was that of another recipient of the letters, not a co-sender requesting that New World cease and desist infringing the [FGTL] design patents”).

distinguishable from *Breckenridge*, which demonstrated patent-enforcement coordination between the licensee and the licensor.¹²⁷ Taking all evidence into consideration, the license between FGTL and LKQ did not “impose a sufficient obligation on the patent holder[, FGTL,] regarding the enforcement of the patent rights to subject the patent holder to specific jurisdiction” in Texas.¹²⁸

Lastly, the Federal Circuit determined that the district court did not abuse its discretion in denying New World’s motion to amend its complaint post-dismissal by adding new allegations in support of personal jurisdiction over FGTL.¹²⁹ New World’s desire to “buttress its jurisdictional presentation” was insufficient to overcome the district court’s discretion, particularly as New World maintained that it “had done enough previously to avoid dismissal.”¹³⁰ Notably, New World had not alleged the discovery of any new evidence.¹³¹

Similarly, in *NexLearn, LLC v. Allen Interactions, Inc.*,¹³² the Federal Circuit affirmed the dismissal of the case for lack of personal jurisdiction because a website and single, free-trial offer was insufficient contacts with the forum.¹³³ In *NexLearn*, the Federal Circuit held that the district court correctly determined that NexLearn’s complaint failed to allege specific jurisdiction over Allen relative to NexLearn’s patent complaint.¹³⁴ Allen’s emails, presentations, and advertisements in Kansas were not relevant because they predated the asserted patent.¹³⁵ A trial relating to the accused product was “too attenuated” to form a sufficient contact.¹³⁶ And Allen’s execution of a Non-Disclosure Agreement and a End-Use Licensee Agreement including Kansas choice-of-law provisions were insufficient to confer jurisdiction per *Burger King Corp. v. Rudzewicz*.¹³⁷ Nor did operation of

127. *Id.*; see *Breckenridge Pharm., Inc. v. Metabolite Labs., Inc.*, 444 F.3d 1356, 1367 (Fed. Cir. 2006) (explaining that an ongoing relationship was created between licensee and licensor through their coordinated efforts in the state of Florida).

128. *New World Int’l, Inc.*, 859 F.3d at 1043.

129. *Id.* at 1044.

130. *Id.*

131. *Id.*

132. 859 F.3d 1371 (Fed. Cir. 2017).

133. *Id.* at 1373.

134. *Id.* at 1376–77 (declining to address general jurisdiction since NexLearn did not claim there was general jurisdiction in its briefs to the Federal Circuit or the district court).

135. *Id.* at 1376.

136. *Id.* at 1377.

137. 471 U.S. 462 (1985) (requiring defendants to purposefully direct activities toward the forum state and for the harm to arise from their activities); *NexLearn*, 859 F.3d at 1377.

a website render it subject to specific jurisdiction, as there was no evidence that Allen “purposefully availed itself of Kansas [or] that NexLearn’s claim arises out of or relates to those contacts.”¹³⁸ As in the application of the district’s long-arm statute in *Trintec Industries, Inc. v. Pedre Promotional Products, Inc.*,¹³⁹ there was no evidence that the website was directed to Kansas, and there was no indication of a sale in Kansas from the website.¹⁴⁰ A single post-issuance email from Allen into Kansas offering a free trial, while relevant, was insufficient on its own to confer specific jurisdiction.¹⁴¹ Finally, the opinion also affirmed the district court’s dismissal of NexLearn’s breach of contract claim for lack of subject matter jurisdiction.¹⁴²

D. Standing

The Federal Circuit highlighted the different standing requirements between appellants and appellees from the Patent Trial and Appeal Board’s (PTAB) decisions. In *Phigenix, Inc. v. ImmunoGen, Inc.*,¹⁴³ the Federal Circuit dismissed an appeal from a final inter partes review¹⁴⁴ (IPR) decision for lack of standing because the appellant did not face any risk of invalidating appellant’s patent.¹⁴⁵ The PTAB had instituted an IPR of ImmunoGen’s ’856 patent on Phigenix’s petition, but its final decision confirmed patentability of ImmunoGen’s claims.¹⁴⁶ The Federal Circuit determined that the record failed to demonstrate that Phigenix suffered an injury-in-fact from this decision sufficient to confirm Article III standing.¹⁴⁷ Phigenix does not manufacture

138. *NexLearn*, 859 F.3d at 1378.

139. 395 F.3d 1275 (Fed. Cir. 2005).

140. *NexLearn*, 859 F.3d at 1378 (citing *Trintec Industries, Inc.*, 395 F.3d at 1281–82) (comparing Allen’s website to Trintec’s website, which was not specifically directed to customers in the District of Columbia and had neither sales nor residents in the District).

141. *Id.* at 1379.

142. *Id.* at 1381 (noting that dismissing the patent claim left no claim over which the district court could exercise original subject matter jurisdiction).

143. 845 F.3d 1168 (Fed. Cir. 2017).

144. *Inter partes* review is a trial proceeding conducted by the Patent Trial and Appeal Board (PTAB) to review “claims in a patent only on a ground that could be raised under [35 U.S.C.] §§ 102 or 103, and only on the basis of prior art consisting of patents or printed publications.” *Inter Partes Review*, USPTO, <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/inter-partes-review> (last modified May 9, 2018 10:15 AM).

145. *Phigenix*, 845 F.3d at 1170.

146. *Phigenix, Inc. v. ImmunoGen, Inc.*, No. IPR2014-00676, 2015 WL 6550500 (P.T.A.B. Oct. 27, 2015), *appeal dismissed*, 845 F.3d 1168.

147. *Phigenix*, 845 F.3d at 1174.

products, but it was in the process of trying to find licensees for a patent of its own and submitted declarations asserting that the PTAB's decision tends to increase competition in those efforts to license.¹⁴⁸

The court found the question of what standard should apply to ascertaining standing for an appeal from an agency action to be one of first impression.¹⁴⁹ The court took guidance from *Sierra Club v. Environmental Protection Agency*¹⁵⁰ and *Lujan v. Defenders of Wildlife*,¹⁵¹ which together stand for the principle that a party facing a standing challenge in its efforts to seek appellate review of an agency action has a "summary judgment burden of production," i.e., a party must present evidence sufficient to avoid summary judgment-type adjudication.¹⁵² The Federal Circuit held that, if the appellant's standing is not self-evident (e.g., established by the administrative record alone), it must tender evidence, such as affidavits or declarations, directly to the appellate court.¹⁵³ Further, the appellant must identify such evidence "at the first appropriate time" after the standing challenge surfaces, such as in a response to a motion to dismiss or an opening brief.¹⁵⁴

The Federal Circuit determined that Phigenix failed to demonstrate standing under such standards. The two declarations the company provided as documentation were insufficient to demonstrate injury-in-fact, largely because "there [was] simply no allegation here that Phigenix [had] ever licensed [its] '534 patent to anyone, much less that it licensed the '534 patent to entities that have obtained licenses to the ImmunoGen '856 patent."¹⁵⁵ Statements to the contrary were conclusory and, therefore, not contradictory.¹⁵⁶ The Federal Circuit rejected Phigenix's argument that 35 U.S.C. § 141, by creating a path to appeal, obviated any standing problem and instead concluded that "Phigenix [could not] base its injury-in-fact upon a violation of § 141(c) because it [had] been permitted to file its appeal, and the exercise of its right to appeal [did] not necessarily establish that it possess[e] Article III standing."¹⁵⁷ It also rejected Phigenix's

148. *Id.* at 1170, 1173–74.

149. *Id.* at 1172.

150. 292 F.3d 895 (D.C. Cir. 2002).

151. 504 U.S. 555 (1992).

152. *Phigenix*, 845 F.3d at 1172–73 (citing *Lujan*, 504 U.S. at 561).

153. *Id.* at 1173 (citing *Sierra Club*, 292 F.3d at 900).

154. *Id.* (internal quotations omitted) (citing *Sierra Club*, 292 F.3d at 900).

155. *Id.* at 1174.

156. *Id.* at 1174–75.

157. *Id.* at 1175 (citing *Raines v. Byrd*, 521 U.S. 811, 820 n.3 (1997)).

attempt to argue that the IPR estoppel of § 315 created an injury-in-fact because “the appellant ‘is not engaged in any activity that would give rise to a possible infringement suit.’”¹⁵⁸

While appellants from the PTAB must establish Article III standing to bring an appeal to the Federal Circuit, appellees do not. In *Personal Audio, LLC v. Electronic Frontier Foundation*,¹⁵⁹ the Federal Circuit affirmed the PTAB’s anticipation and obviousness determination¹⁶⁰ and Electronic Frontier Foundation’s (EFF) standing to participate in the appeal.¹⁶¹ Although *Consumer Watchdog v. Wisconsin Alumni Research Foundation*¹⁶² held that a PTAB petitioner-appellant who did not meet the Article III case-or-controversy requirement lacked standing to initiate an IPR appeal,¹⁶³ in this case EFF was the appellee—not the appellant.¹⁶⁴ Because EFF was not invoking judicial review, there was no constitutional exclusion against EFF appearing in court to defend the PTAB’s decision.¹⁶⁵

E. Injunctions

The Federal Circuit considered the standard for awarding a permanent injunction focusing on the support required to find irreparable harm in *Nichia Corp. v. Everlight Americas, Inc.*¹⁶⁶ There, the Federal Circuit found no error in denying a permanent injunction where the record indicated a past willingness to license the asserted patents, affirming the bench judgment of liability for patent infringement.¹⁶⁷

The Federal Circuit determined that the district court did not abuse

158. *Id.* at 1175–76 (quoting *Consumer Watchdog v. Wis. Alumni Research Found.*, 753 F.3d 1258, 1262 (Fed. Cir. 2014)).

159. 867 F.3d 1246 (Fed. Cir. 2017), *petition for cert. docketed*, No. 17-1085 (U.S. Feb. 1, 2018).

160. *Id.* at 1247–48.

161. *Id.* at 1250.

162. 753 F.3d 1258 (Fed. Cir. 2014).

163. *Id.* at 1261–62.

164. *Personal Audio, LLC*, 867 F.3d at 1249–50.

165. *Id.* at 1250.

166. 855 F.3d 1328 (Fed. Cir. 2017).

167. *Id.* at 1344. The Federal Circuit determined that the district court did not clearly err in finding Nichia’s patents, which related to designs and methods for manufacturing LEDs, valid and infringed. The Federal Circuit considered how the district court correctly construed the claims. *Id.* at 1333. It rejected Everlight’s argument that “if different words are used in the claim and specification, then we must read that distinction as an intended difference.” *Id.* at 1335–36. While different terms may denote different meanings in some patents, that was not the case in Nichia’s patents. *Id.* The Federal Circuit also rejected Everlight’s invalidity arguments as lacking both in the references and in the reason to combine. *Id.* at 1339.

its discretion in declining to enter a permanent injunction against Everlight because Nichia failed to demonstrate that irreparable harm would result absent an injunction.¹⁶⁸ Moreover, the Federal Circuit found that the district court did not clearly err in finding that Nichia was not in meaningful competition with Everlight, noting that “Nichia is an LED chip manufacturer as well as a packager, ‘while Everlight is solely an LED packager.’”¹⁶⁹ Moreover, Everlight’s sales, compared to Nichia’s total sales, were “the proverbial drop in the bucket.”¹⁷⁰ Similarly, Nichia failed to demonstrate and a single lost sale attributable to Everlight’s activity.¹⁷¹ In fact, while rejecting Nichia’s price erosion argument, the Federal Circuit pointed out that there were other low-price competitors in the market besides Everlight that were applying price pressure to Nichia.¹⁷² Finally, the Federal Circuit held that the district court did not err in concluding that Nichia’s past willingness to license its patents weighed against a finding of irreparable harm.¹⁷³ Per *Acumed LLC v. Stryker Corp.*,¹⁷⁴ the district court was entitled to rely on past licensing activity as suggesting that a royalty would be sufficient to remedy any infringement.¹⁷⁵

In *Genband US LLC v. Metaswitch Networks Corp.*,¹⁷⁶ the Federal Circuit vacated an order denying a permanent injunction and remanded the case to ensure that the trial court did not apply too rigorous of a “causal nexus” standard to support a finding of irreparable harm.¹⁷⁷ The Federal Circuit found that the district court’s analysis of irreparable harm, and specifically its determination that Genband had failed to show that the patented features drive demand for the infringing product, was unclear as to whether it was properly applying the “causal nexus” standard.¹⁷⁸ Per *Apple, Inc. v. Samsung Electronics Co. (Apple III)*¹⁷⁹ and *Apple, Inc. v. Samsung Electronics Co. (Apple IV)*,¹⁸⁰ Genband’s burden was to show that the patented features were “‘a driver’ [for demand] as

168. *Id.* at 1340.

169. *Id.* at 1342.

170. *Id.*

171. *Id.*

172. *Id.* at 1343.

173. *Id.*

174. 551 F.3d 1323 (Fed. Cir. 2008).

175. *Nichia Corp.*, 855 F.3d at 1343–44.

176. 861 F.3d 1378 (Fed. Cir. 2017).

177. *Id.* at 1385.

178. *Id.* at 1382.

179. 735 F.3d 1352 (Fed. Cir. 2013).

180. 809 F.3d 633 (Fed. Cir. 2015).

opposed to ‘*the driver*,’ applied in the multi-consumer, multi-feature context.”¹⁸¹ The Federal Circuit recited some of the Federal Circuit’s recent case law—notably the various Apple-Samsung cases—to support this statement of the proper standard.¹⁸² Because the district court’s opinion was unclear as to whether it had properly applied this standard or had improperly applied a more rigorous standard, remand was necessary.¹⁸³ The Federal Circuit held that it is “not in a position to conclude that applying the *Apple III/Apple IV* standards would make no difference to the district court’s finding of no causal nexus and, hence, no irreparable injury.”¹⁸⁴ The Federal Circuit declined to affirm based on the district court’s determination of no irreparable harm due to Genband’s delay in filing suit and ultimately remanded the case.¹⁸⁵ The issue of irreparable harm was included in the remand because the assessment of whether and how the patented features drive demand might affect how the district court views the timing of Genband’s suit.¹⁸⁶

In the preliminary injunction space, the Federal Circuit determined that a claimed loss of “lifetime customers” due to brand loyalty is sufficient to show irreparable harm. In *Metalcraft of Mayville, Inc. v. Toro Co.*,¹⁸⁷ the court affirmed Scag Power Equipment’s (“Scag”) preliminary injunction against Toro.¹⁸⁸ The patent at issue related to lawnmowers with a suspended operator platform.¹⁸⁹ The Federal Circuit determined that the district court did not abuse its discretion in finding that patentee Scag was entitled to preliminary relief.¹⁹⁰ Further, the Federal Circuit determined that the district court’s irreparable harm finding was not clearly erroneous.¹⁹¹ Scag’s assertion that Toro’s infringement¹⁹² could lead to the loss of “a potentially

181. *Genband US LLC*, 861 F.3d at 1382.

182. *Id.* at 1382–83.

183. *Id.* at 1384.

184. *Id.*

185. *Id.* at 1385.

186. *Id.*

187. 848 F.3d 1358 (Fed. Cir. 2017).

188. *Id.* at 1370.

189. *Id.* at 1362. Scag is Metalcraft’s trade name. *Id.*

190. *Id.* at 1363.

191. *Id.* at 1369.

192. *Id.* The court rejected Toro’s noninfringement arguments because Scag’s claims cover mowers with chassis-mounted controls because the claims include no restriction against that configuration. *Id.* at 1366–67. As to obviousness, the district court did not commit clear error in concluding that Toro had failed to demonstrate a reason why a person of skill would have combined the references Toro was presenting. *Id.* at 1367. The court declined to take up Toro’s anticipation arguments, as they only

lifelong customer” due to brand loyalty in the mower business was sufficient to support the irreparable harm finding.¹⁹³ The Federal Circuit found that “the loss by Scag of customers may have far-reaching, long-term impact on its future revenues, and the sales lost by Scag are difficult to quantify due to “ecosystem” effects, where one company’s customers will continue to buy that company’s products and recommend them to others.”¹⁹⁴ The Federal Circuit also found that the district court did not abuse discretion in rejecting Toro’s equitable and public interest arguments.¹⁹⁵ The injunction, which enjoined “making, using, selling, and offering to sell lawnmowers equipped with platform suspension systems that infringe [Scag’s patent],” was not overly broad, particularly as Toro had offered no meaningful delineation between the accused products.¹⁹⁶

The *Mylan Institutional LLC v. Aurobindo Pharma Ltd.*¹⁹⁷ appeal raised questions about the suitability of the “function-way-result” equivalence test for some cases.¹⁹⁸ The Federal Circuit affirmed the grant of preliminary injunction barring Aurobindo from making or selling isosulfan blue (ISB)—a dye used in the mapping of lymph nodes—but modified the injunction so that it is premised only on a composition patent asserted by Mylan.¹⁹⁹ In doing so, the court determined that the district court had erroneously also based the injunction on two process patents.²⁰⁰

As to the process patents, the Federal Circuit found that the district court abused its discretion in concluding that Mylan was likely to succeed on the merits by proving infringement under the doctrine of equivalents.²⁰¹ The court noted that “the district court’s analysis of equivalence in this case was flawed, no doubt because of the sparse and confusing case law concerning equivalents, particularly the paucity of chemical equivalence case law, and the difficulty of applying the legal concepts to the facts.”²⁰² The Federal Circuit analyzed the function-way-result test, concluding that Aurobindo had raised “sufficient doubt” as to

addressed a subset of Scag’s asserted claims. *Id.* at 1368.

193. *Id.* at 1368–69.

194. *Id.* at 1368 (quoting *Apple IV*, 809 F.3d 633, 641, 645 (Fed. Cir. 2015)).

195. *Id.* at 1369.

196. *Id.* at 1369–70.

197. 857 F.3d 858 (Fed. Cir. 2017).

198. *Id.* at 867.

199. *Id.* at 873.

200. *Id.* at 866.

201. *Id.*

202. *Id.*

whether two compounds, silver oxide and manganese oxide, oxidize isoleuco acid in the same way as the claimed invention as to make the district court's finding abuse of discretion.²⁰³ The Federal Circuit noted that, at the full trial on the merits, the district court may wish to consider whether the "substantial differences" test for equivalents is better suited to chemical cases than the function-way-result test.²⁰⁴

As to the composition patent, the Federal Circuit found that the district court did not abuse its discretion in finding Mylan likely to prevail on the merits.²⁰⁵ Aurobindo did not contest the likelihood of an infringement finding, and the Federal Circuit found that the district court did not clearly err in its rejection of Aurobindo's invalidity defenses.²⁰⁶ Each of the errors Aurobindo alleged were factual in nature, so the Federal Circuit deferred to the district court.²⁰⁷ It also noted that Mylan had evidence of secondary considerations to overcome Aurobindo's obviousness attack.²⁰⁸

As to irreparable harm, the Federal Circuit found that the district court did not err in rejecting Aurobindo's arguments against causal nexus.²⁰⁹ The Federal Circuit rejected Aurobindo's argument that the district court had based its finding of nexus solely on the fact that the FDA had approved Aurobindo's abbreviated new drug application (ANDA).²¹⁰ The record also included evidence of copying and otherwise indicated that Aurobindo would not have been able to make the product described in its ANDA without infringement.²¹¹

In *Tinnus Enterprises, LLC v. Telebrands Corp.*,²¹² the Federal Circuit shed some light on the effect of a PTAB decision on a parallel district court action. Although the PTAB has issued a Post-Grant Review (PGR)²¹³

203. *Id.* at 866–69.

204. *Id.* at 867, 869–70.

205. *Id.* at 870.

206. *Id.* at 870–72.

207. *Id.* at 870.

208. *Id.* at 871.

209. *Id.* at 872–73.

210. *See id.* (explaining that Aurobindo misinterpreted the district court's reasoning and how that court examined the evidence to find a causal nexus between harm and infringement).

211. *Id.* at 873.

212. 846 F.3d 1190 (Fed. Cir. 2017).

213. A PGR is a procedure to review the patentability of a patent's claims. The review of a PGR is broader in scope than an IPR but must be filed within nine months of the issue or reissue of a patent. *Post Grant Review*, USPTO, <https://www.uspto.gov/patents-application-process/appealing-patent-decisions/trials/post-grant-review> (last modified May 9, 2017 10:16 AM).

determination of indefiniteness, the Federal Circuit affirmed the district court's parallel entry of a preliminary injunction against Telebrands.²¹⁴ The Federal Circuit determined that the district court did not abuse its discretion in concluding that irreparable harm would result absent the injunction and that Tinnus was likely to prove its patent valid and infringed.²¹⁵ The Federal Circuit rejected Telebrands's argument that the district court declined to construe two of the disputed claim terms, "not less than" and "connecting force"; to the contrary, the district court held that Tinnus was likely to prevail irrespective of those terms' construction.²¹⁶

While evaluating the success on the merits, the court also rejected Telebrands's invalidity arguments.²¹⁷ Because Telebrands did not object to the magistrate judge's definiteness analysis, the Federal Circuit reviewed the district court's conclusion that Telebrands had failed to raise a substantial question of validity for plain error.²¹⁸ The court found no such error in the district court's reasoning that the term "substantially filled" could meet definiteness standards, particularly in view of the skill to be applied by a person having ordinary skill in the art.²¹⁹ The Federal Circuit noted that in a month before the appeal, following the PGR proceedings, the PTAB entered a final written decision finding Tinnus's claims indefinite.²²⁰ That decision is non-binding on the Federal Circuit, and the appellate record supported the district court's treatment of the definiteness issues.²²¹ However, the Federal Circuit suggested that "[t]he parties are, of course, free to ask the district court to reconsider its preliminary injunction in light of the PTAB's decision."²²²

Likewise, the court found that there was no plain error in the district court's rejection of Telebrands's obviousness arguments, as Telebrands

214. *Tinnus*, 846 F.3d at 1208.

215. *Id.* at 1194.

216. *Id.* at 1203, 1204–05. The Federal Circuit found that the district court did not clearly err in holding that certain tubes in Telebrands's balloon-filling product were "attached" to the main housing during claim construction even though they only attached by sliding into place, and could be removed. *Id.* at 1204–06. And there was no reversible error in the district court relying on Telebrands's instruction manual (rather than direct citation to the product) to find infringement likely. *Id.* at 1204–05.

217. *Id.* at 1205.

218. *Id.* at 1202–03.

219. *Id.* at 1205–06.

220. *Id.* at 1202 n.7.

221. *Id.*

222. *Id.*

failed to identify a sufficient motivation to combine prior art.²²³ Finally, there was no clear error in the district court's irreparable harm analysis, including the district court's part-reliance on evidence from the time before Tinnus's patent as circumstantial evidence of consumer confusion, harm to reputation, or loss of goodwill.²²⁴

F. Collateral Estoppel

In *Phil-Insul Corp. v. Airlite Plastics Co.*,²²⁵ the Federal Circuit determined that Rule 36 affirmances are sufficiently valid and final to support collateral estoppel affirming the grant of summary judgment for noninfringement.²²⁶ In the prior 2011 case, *IntegraSpec*, the trade name of Phil-Insul, had unsuccessfully sued separate defendants on the same patent, "the '933 patent," resulting in a claim construction and summary judgment of noninfringement, which the Federal Circuit affirmed without opinion through Federal Rule of Appellate Procedure 36.²²⁷ The Federal Circuit determined that the district court did not err in concluding that the previous Rule 36 affirmance barred *IntegraSpec*'s assertion of the same patent in the present suit due to collateral estoppel.²²⁸ The Federal Circuit rejected *IntegraSpec*'s argument that a Rule 36 summary affirmance is not valid and that final judgments are suitable to support collateral estoppel.²²⁹ Relying on *Taylor v. McKeithen*,²³⁰ the Federal Circuit confirmed that Rule 36 affirmances are valid and final judgments²³¹ and support the application of collateral estoppel per *Rates Technology, Inc. v. Mediatrix Telecom, Inc.*²³² The Federal Circuit held that *TecSec, Inc. v. International Business Machines Corp.*,²³³ was not contrary because, in that case, the issue was whether the parties were bound by a district court's claim construction in a matter resolved via Rule 36 affirmance and, whether it was consequently preclusive because that construction was not

223. *Id.* at 1207.

224. *Id.* at 1207–08.

225. 854 F.3d 1344 (Fed. Cir. 2017).

226. *Id.* at 1359.

227. *Id.* at 1347; see FED. R. APP. P. 36 (authorizing federal appeals courts to affirm a lower court judgment without opinion).

228. *Phil-Insul Corp.*, 854 F.3d at 1347–48.

229. *Id.* at 1354–55.

230. 407 U.S. 191 (1972) (per curiam).

231. *Phil-Insul Corp.*, 854 F.3d at 1354–55 (citing *Taylor*, 407 U.S. at 194 n.4).

232. 688 F.3d 742, 750 (Fed. Cir. 2012); *Phil-Insul Corp.*, 854 F.3d at 1355.

233. 731 F.3d 1336 (Fed. Cir. 2013).

necessary to the judgment.²³⁴ Indeed, the *TecSec* court expressly rejected the contention that Rule 36 affirmance can always support collateral estoppel.²³⁵ In the present appeal, it was “clear that the prior panel actually and necessarily adopted the district court’s claim constructions when it affirmed the judgments,” so *TecSec* did not apply.²³⁶ Further, IntegraSpec had not appealed certain claim construction issues in the prior appeal. The Federal Circuit compared the prior 2011 case and the present one to find no error in the determination that the accused products in both cases were substantially the same, and, therefore, there was no error in summary judgment of noninfringement, giving weight to the apparent criticality of the claim construction to the Rule 36 affirmance.²³⁷ Finally, the Federal Circuit rejected IntegraSpec’s argument that claim two (in the present case) should be construed anew because that claim was not at issue in the present appeal.²³⁸

G. Arbitration

In *Evans v. Building Materials Corp. of America*,²³⁹ the Federal Circuit affirmed the denial of a motion to dismiss and stay pending arbitration, finding the arbitrability claim “wholly groundless” where a prior art agreement had no relationship to the patent and trade dress claims in suit.²⁴⁰ Applying Fourth Circuit law and the “wholly groundless” standard of *Qualcomm Inc. v. Nokia Corp.*,²⁴¹ the Federal Circuit determined that the district court had correctly found the assertion of arbitrability by General Aniline & Film (GAF) (trade name of Building Materials Corp. of America) wholly groundless.²⁴² The Federal Circuit declined to resolve whether the “wholly groundless” test is the only test

234. *Phil-Insul Corp.*, 854 F.3d at 1355–57.

235. *Id.* at 1356.

236. *Id.* at 1357.

237. *Id.* at 1357–58 (rejecting IntegraSpec’s attempt to cite the oral argument transcript in the prior appeal as casting doubt on the correctness of the district court’s claim constructions, *TecSec* did not apply).

238. *Id.* at 1359 (finding that numerous claim terms overlap and rejecting IntegraSpec’s contention that the same words might be construed differently in the two claims).

239. 858 F.3d 1377 (Fed. Cir. 2017).

240. *Id.* at 1379. The wholly groundless standard is a limited inquiry as to whether any legitimate argument could be made and applies when an arbitration agreement clearly and unmistakably refers the issue of arbitrability to the arbitrator. *Id.* at 1380.

241. 466 F.3d 1366 (Fed. Cir. 2006).

242. *Evans*, 858 F.3d at 1379.

to be used in review of arbitrability under Fourth Circuit law.²⁴³ Indeed, GAF's claims for patent infringement, trade-dress infringement, and unfair competition were completely unrelated to the arbitration agreement, as they involved completely different products and no issue "related to the performance or interpretation of the contract itself."²⁴⁴ The Federal Circuit also rejected GAF's claim that some of Mr. Evans's claims incorporated a dispute over whether GAF had breached various confidentiality obligations.²⁴⁵ And while some of Mr. Evans's claims urged "willfulness and similar states of mind," those states of mind related to GAF's conduct regarding its allegedly infringing products, not its state of mind relating to the confidentiality agreement.²⁴⁶

II. VALIDITY

A. Patent-Eligible Subject Matter

In the 2017 term, the Federal Circuit continued to provide direction to the patent eligibility of computing-based claims for data organization and structure and pharmaceutical patents under the patent eligibility standard excluding laws of nature, natural phenomenon, and abstract ideas. In *Intellectual Ventures I LLC v. Capital One Financial Corp.*,²⁴⁷ the Federal Circuit affirmed the judgment of the district court holding two patents ineligible under § 101, finding that the introduction of allegedly new "data structures" was insufficient to avoid ineligibility.²⁴⁸ The Federal Circuit found that summary judgment of ineligibility as to Intellectual Ventures I's (IV) patent was warranted.²⁴⁹ The patent related to techniques for dynamically managing Extensible Markup Language (XML) data.²⁵⁰ IV's patent failed the Supreme Court's two-part test for patent subject matter eligibility outlined in *Alice Corp. v. CLS Bank International*²⁵¹ steps.²⁵² At step one, the patent addressed

243. *Id.* at 1380.

244. *Id.* at 1381.

245. *Id.*

246. *Id.* at 1382.

247. 850 F.3d 1332 (Fed. Cir. 2017).

248. *Id.* at 1342–43 (granting summary judgment in a collateral estoppel claim regarding a third patent). The opinion refers to the plaintiff's as "IV". *Id.* at 1334.

249. *Id.* at 1342.

250. *Id.* at 1338–39.

251. 134 S. Ct. 2347 (2014).

252. *Intellectual Ventures I LLC*, 850 F.3d at 1340, 1342. The *Alice* test is a two-step inquiry: (1) whether the claim under examination is a patent-ineligible concept, such as an abstract idea; and (2) whether the patent adds to the idea "something extra" that

abstract “data manipulation” steps.²⁵³ Though it specifically related to making XML documents compatible via the use of “management record types” (MRTs) and “primary record types” (PRTs), at best this limited the invention “to a technological environment for which to apply the underlying abstract concept,” but did not make them less abstract.²⁵⁴ At *Alice* step two, nothing transformed the abstract method into an inventive concept because the claims did little more than describe the method.²⁵⁵ The Federal Circuit rejected IV’s argument that the patent was unconventionally improving a technological process, notwithstanding its introduction of MRTs and PRTs.²⁵⁶ Ultimately, the Federal Circuit concluded that “[t]he mere fact that the inventor applied coined labels to conventional structures does not make the underlying concept inventive.”²⁵⁷

The Federal Circuit’s opinion in a companion case, *Intellectual Ventures I LLC v. Erie Indemnity Co.*,²⁵⁸ discussed the ineligibility of IV’s third patent.²⁵⁹ Finding that the lack of detail as to how the asserted patents would accomplish the claimed benefits indicated the absence of inventive concept, the Federal Circuit affirmed the district court’s judgment of § 101 ineligibility as to two patents.²⁶⁰ Further, the Federal Circuit dismissed the infringement claims under the third patent for lack of standing and consequently vacated a collateral holding that the third patent was also § 101 ineligible.²⁶¹ The Federal Circuit instructed the lower court to dismiss the claims of the first asserted patent, the ’581 patent,²⁶² applying California law to the interpretation of an agreement between prior assignee AllAdvantage.com and a company called Alset (the alleged assignor to IV).²⁶³ The Federal Circuit

embodies an “inventive concept.” *Alice Corp.*, 134 S. Ct. at 2355, 2357.

253. *Intellectual Ventures I LLC*, 850 F.3d at 1340.

254. *Id.*

255. *Id.* at 1341.

256. *Id.* at 1341.

257. *Id.* at 1342. The Federal Circuit also considered how the claims lacked detail on how to overcome specific problems IV claimed they addressed. *Id.*

258. 850 F.3d 1315 (Fed. Cir. 2017).

259. *Id.* at 1331–32 (concluding that the claims failed to “recite an inventive concept that transforms the abstract idea into a patent-eligible invention”).

260. *Id.* at 1319.

261. *Id.* at 1332.

262. *Id.* at 1324–25.

263. *Id.* at 1320–21. In a footnote the opinion notes that Federal Circuit law sometimes controls issues of assignment, but the parties seem to have agreed to application of California law. *See id.* at 1320 n.1.

concluded that this agreement did not include any assignment of rights to the application leading to the '581 patent, even though Alset held itself out as the '581 patent's assignee post-issuance, including updating power of attorneys, paying the issuance fee, and recording an assignment from itself to IV.²⁶⁴ Further, the Federal Circuit rejected IV's argument that Alset and AllAdvantage.com intended to convey the '581 patent; the contract was unambiguous and the Federal Circuit declined to take up IV's submission of extrinsic evidence as to the parties' general behavior.²⁶⁵ Because IV was not the assignee, the court determined that IV lacked standing to bring suit on the '581 patent.²⁶⁶ Given the lack of standing, the Federal Circuit vacated the district court's determination that the '581 patent was § 101 ineligible.²⁶⁷

The Federal Circuit also determined that summary judgment of § 101 ineligibility was appropriate for IV's other two patents. The first, the '434 patent, related to the use of an index to locate information in a computer database.²⁶⁸ The court held that this failed *Alice* step one, reasoning that the use of index-searchable databases existed long before the patent and cited library indexes of books.²⁶⁹ Further, it rejected IV's argument that the patent improved how computer databases function, as in *Enfish, LLC v. Microsoft Corp.*²⁷⁰ While some claims recited use of XML tags to improve indexing, not all claims required this, and the specification indicated that the invention was "not necessarily limited to XML language."²⁷¹ In any event, even the XML claims were not focused on how use of XML improved the technology, but merely "call[ed] for XML-specific tags in the index without any further detail."²⁷² The patent also failed *Alice* step two.²⁷³ Recitation of an XML-based index was not enough to transform the abstract idea into a patentable invention, and the claims' other

264. *Id.* at 1322.

265. *Id.* at 1322–23.

266. *Id.* at 1324.

267. *Id.* at 1324–25.

268. *Id.* at 1325.

269. *Id.* at 1327–28.

270. 822 F.3d 1327, 1339 (Fed. Cir. 2016) (finding that Enfish's "self-referential table" claims were not directed to an abstract idea under *Alice* step one because the techniques improved specific database functions, and thus Enfish's claims were patent-eligible); *Erie Indem. Co.*, 850 F.3d at 1327–28.

271. *Erie Indem. Co.*, 850 F.3d at 1327–28.

272. *Id.* at 1328.

273. *Id.*

limitations recited routine computer functions.²⁷⁴

The Federal Circuit further found that summary judgment of § 101 ineligibility was also appropriate for the third patent, the '002 patent.²⁷⁵ The patent related to techniques for accessing remotely stored data using a “mobile interface.”²⁷⁶ First, the '002 patent failed *Alice* step one because “[r]emotely accessing and retrieving user-specified information is an age-old practice even though the mobile interface requirement only specified a particular field of use.”²⁷⁷ Second, the '002 patent failed *Alice* step two because it simply applied a generic computer implementation to the abstract idea and provided no inventive solution.²⁷⁸ The court noted that the claimed interface was “so lacking in implementation details that it amounts to merely a generic component (software, hardware, or firmware) that permits the performance of the abstract idea.”²⁷⁹ And the failure to describe how the claimed mobile interface would overcome cited “compatibility issues” bars taking that “purported feature” of the invention as an inventive concept.²⁸⁰

In *Thales Visionx Inc. v. United States*,²⁸¹ the Federal Circuit reversed the district court’s judgment on the pleadings of § 101 patent ineligibility, finding that claims applying a specific algorithm to track movements were not abstract.²⁸² Thales Visionx Inc.’s claims related to inertial tracking, i.e., using accelerometers and gyroscopes to track an object’s movement.²⁸³ The claims recited the use of two inertial sensors, and the computation of an object’s orientation was “based on signals received” from those sensors.²⁸⁴ The Federal Circuit reasoned that the claims required use of the mathematical techniques disclosed in the specification and were thus “indistinguishable from the claims at issue in [*Diamond v.*] *Diehr*.”²⁸⁵ The Federal Circuit determined that “[j]ust as the claims in *Diehr* reduced the likelihood that the rubber molding process would result in ‘overcuring’ or ‘undercuring,’ the claims here result in a system that reduces errors in an inertial system

274. *Id.* at 1328–29.

275. *Id.* at 1329.

276. *Id.*

277. *Id.* at 1330.

278. *Id.*

279. *Id.* at 1331.

280. *Id.* at 1331–32.

281. 850 F.3d 1343 (Fed. Cir. 2017).

282. *Id.* at 1349.

283. *Id.* at 1344.

284. *Id.* at 1345.

285. 450 U.S. 175 (1981); *Thales Visionx Inc.*, 850 F.3d at 1348.

that tracks an object on a moving platform.”²⁸⁶ Since the inertial sensors were used in a non-conventional way, the idea was patentable and not abstract and, thus, survived step one of *Alice*.²⁸⁷

By comparison, in *RecogniCorp, LLC v. Nintendo Co.*,²⁸⁸ the Federal Circuit affirmed judgment on the pleadings of patent ineligibility because invocation of a particular algorithm in face compositing claims was insufficient to confer patentability.²⁸⁹ RecogniCorp’s patent related to techniques for building a composite facial image from constituent parts.²⁹⁰ The patent failed both steps of the *Alice* inquiry. At step one, RecogniCorp’s patent addressed “the abstract idea of encoding and decoding image data.”²⁹¹ Per *Diehr*, it was not the mere use of a mathematical formula that rendered the representative claim abstract, but the absence of any patentable subject matter outside of the mathematical formula.²⁹² The Federal Circuit found *Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.*²⁹³ applicable because RecogniCorp’s claim, like the claim in *Digitech*, was abstract because it “started with data, added an algorithm, and ended with a new form of data.”²⁹⁴ At step two, the Federal Circuit rejected RecogniCorp’s argument that the “particular encoding process using the specific algorithm disclosed” was sufficient to confer patentability.²⁹⁵ The court distinguished the case from *DDR Holdings, LLC v. Hotels.com, L.P.*²⁹⁶ because, unlike *DDR Holdings*, there was nothing in RecogniCorp’s claim to provide the required inventive concept.²⁹⁷ The Federal Circuit reasoned that “[t]he addition of a mathematical equation that simply changes the data into other forms of data cannot save [a claim].”²⁹⁸ The Federal Circuit also rejected RecogniCorp’s attempt to argue that, under *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*,²⁹⁹

286. *Thales Visionx Inc.*, 850 F.3d at 1348 (internal citation omitted) (quoting *Diehr*, 450 U.S. at 187).

287. *Id.* at 1349.

288. 855 F.3d 1322 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 672 (2018).

289. *Id.* at 1324.

290. *Id.*

291. *Id.*

292. *Id.* at 1326–27 (citing *Diamond v. Diehr*, 450 U.S. 175, 187, 192 (1981)).

293. 758 F.3d 1344 (Fed. Cir. 2014).

294. *RecogniCorp*, 855 F.3d at 1327 (citing *Digitech Image Techs.*, 758 F.3d at 1351).

295. *Id.*

296. 773 F.3d 1245 (Fed. Cir. 2014).

297. *RecogniCorp*, 855 F.3d at 1327–28.

298. *Id.* at 1328.

299. 827 F.3d 1341 (Fed. Cir. 2016).

the claims had some “particularized application” of the image encoding/decoding techniques sufficient to confer patentability.³⁰⁰ In its conclusion, the Federal Circuit held that the patent “claims the use of a computer, but it does exactly what we have warned it may not: tell a user to take an abstract idea and apply it with a computer.”³⁰¹

In *Visual Memory LLC v. NVIDIA Corp.*,³⁰² the Federal Circuit held that a claim addressing use of categorical data storage in a computer memory is non-abstract, reversing the district court’s determination of subject-matter-ineligibility.³⁰³ Visual Memory’s patent related to a computer memory system tailorable for use with different processors without a performance penalty.³⁰⁴ The Federal Circuit found that the district court erred at *Alice* step one by reasoning that Visual Memory’s claims only encompassed an abstract idea.³⁰⁵ The Federal Circuit reasoned that Visual Memory’s claims were addressed to an improved memory system, not just the abstract idea of “categorical data storage” (i.e., storing data in different caches based on the data type).³⁰⁶ The Federal Circuit noted that the claims recited a number of limitations restricting their coverage to a memory system and not “all types and all forms of categorical data storage.”³⁰⁷ Thus, Visual Memory’s patent addressed a technological improvement as in *Enfish* and *Thales*, and that cases like *Content Extraction* and *In re TLI Communications LLC*,³⁰⁸ were distinguishable.³⁰⁹

In Judge Hughes’s dissent, he argued that the claims’ “fundamental concept” was expressed generally and should be interpreted as such in the *Alice* analysis.³¹⁰ He would have affirmed the subject-matter-ineligibility finding.³¹¹

Affirming § 101 patent-ineligibility in *Smart Systems Innovations, LLC v. Chicago Transit Authority*,³¹² the Federal Circuit held that claim

300. *RecogniCorp*, 855 F.3d at 1328.

301. *Id.* (citing *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1332 (Fed. Cir. 2015)).

302. 867 F.3d 1253 (Fed. Cir. 2017).

303. *Id.* at 1255.

304. *Id.*

305. *Id.* at 1257.

306. *Id.* at 1258–59 (citing *Thales Visionx Inc. v. United States*, 850 F.3d 1343, 1345 (Fed. Cir. 2017); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016)).

307. *Id.* at 1259.

308. 823 F.3d 607 (Fed. Cir. 2016).

309. *Visual Memory*, 867 F.3d at 1260.

310. *Id.* at 1262 (Hughes, J., dissenting).

311. *Id.* at 1264.

312. 873 F.3d 1364 (Fed. Cir. 2017).

references to tangible items are insufficient to demonstrate non-abstractness.³¹³ Smart Systems Innovations (“SSI”) claims related to techniques for using bankcards to regulate rider access to a transit system and for collecting/storing funding data.³¹⁴ Four patents were at issue, and the Federal Circuit addressed them together, finding that they all failed both steps of the *Alice* inquiry.³¹⁵ At step one, the Federal Circuit rejected SSI’s arguments that the claims were non-abstract because they operated in the “tangible” world.³¹⁶ The claims were all “directed to the collection, storage, and recognition of data” and were thus abstract.³¹⁷ The Federal Circuit also rejected SSI’s contention that the claims improved existing technological processes, as in *Enfish* and *DDR Holdings*.³¹⁸ SSI’s claims did not improve computer technology, “but rather invoke computers in the collection and arrangement of data.”³¹⁹ The Federal Circuit explained that there was no inventive concept, despite the fact that the claims were limited to mass transit applications.³²⁰ At step two, the Federal Circuit found no inventive concept sufficient to confer patentability.³²¹ The Federal Circuit also rejected SSI’s arguments as to lack of preemption and alleged satisfaction of the machine-or-transformation test.³²² Thus, the Federal Circuit found the patent invalid under § 101.

Judge Linn, dissenting in part and concurring in part, would have found two of SSI’s patents—those specifically related to the use of a bankcard in accessing a transit system—to be directed to non-abstract ideas and thus patent-eligible.³²³

In *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*,³²⁴ the Federal Circuit affirmed a determination of § 101 subject-matter

313. *Id.* at 1366–67.

314. *Id.* at 1368.

315. *Id.* at 1366–67.

316. *Id.* at 1371.

317. *Id.* at 1372.

318. *Id.* (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016); *DDR Holding, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1275 (Fed. Cir. 2014)).

319. *Id.* at 1272–73.

320. *Id.* at 1373.

321. *Id.* at 1373–74 (finding no inventive concept because “the claims at issue use generic computer components ‘in which to carry out the abstract idea.’” (quoting *Lending Tree, LLC v. Zillow, Inc.*, 656 F. App’x 991, 997 (Fed. Cir. 2016))).

322. *Id.* at 1373–75.

323. *Id.* at 1376, 1383–84 (Linn, J., dissenting in part and concurring in part).

324. 874 F.3d 1329 (Fed. Cir. 2017).

ineligibility for claims reciting results of simple functions.³²⁵ Four Two-Way patents were at issue, all relating to systems for streaming over the internet using multicasting.³²⁶ The Federal Circuit discussed them in two sets. Under *Alice* step one, the first set of patents concerned the abstract idea of sending and monitoring the transmission of information.³²⁷ Even if Two-Way’s proposed claim constructions had been adopted by the district court, they did not make this idea non-abstract.³²⁸ The Federal Circuit found that the lower court did not oversimplify the patent claims as Two-Way had suggested, and it instead agreed with the determinations that the patent claims related to “basic functions” instead of specific techniques that could be used to perform the functions.³²⁹ At *Alice* step two, there was no inventive concept in the application of the idea; the claims used only generic functional language to describe implementation and the order of the combination did not provide an inventive concept.³³⁰

As to the second set of patents, at *Alice* step one, Two-Way’s claims were directed to the abstract idea of monitoring and measuring delivery of real-time information.³³¹ Further, the district court did not err when it cited the claim’s preamble in analyzing the patent’s abstractness.³³² At *Alice* step two, there was again no inventive concept because the claims only used conventional computer and network components, operating according to ordinary functions.³³³

In *Secured Mail Solutions LLC v. Universal Wilde, Inc.*,³³⁴ the Federal Circuit held postal “unique identifier” patents ineligible under § 101, affirming the district court’s determination.³³⁵ The case involved multiple patents, and the Federal Circuit addressed them in three categories while conducting an *Alice* inquiry.³³⁶ At *Alice* step one, the court reasoned that all three categories claimed abstract ideas—first,

325. *Id.* at 1332.

326. *Id.* at 1333.

327. *Id.* at 1337.

328. *Id.* at 1338.

329. *Id.* at 1337–38 (citing *Affinity Labs of Tex., LLC v. Directv, LLC*, 838 F.3d 1253, 1258–59 (Fed. Cir. 2016), *cert. denied*, 137 S. Ct. 1596 (2017) (mem.); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016)).

330. *Id.* at 1338–39.

331. *Id.* at 1340.

332. *Id.*

333. *Id.* at 1340–41.

334. 873 F.3d 905 (Fed. Cir. 2017), *petition for cert. docketed*, No. 17-1319 (U.S. Mar. 20, 2018).

335. *Id.* at 907.

336. *Id.*

the idea of using a “unique identifier” to identify the senders of mail; second, the idea of using a quick response code (QR) code for a similar purpose; and third, the idea of using a personalized URL as an identifier.³³⁷ The court rejected Secured Mail’s argument, under *Enfish*, that such analysis described the claims too generally.³³⁸ At *Alice* step two, none of the categorized patents included an inventive concept sufficient to confer patent-eligibility.³³⁹ The Federal Circuit rejected Secured Mail’s citation to *DDR Holdings* because the claims do no more than “cite well known and conventional ways to allow generic communication between a sender and a recipient using generic computer technology.”³⁴⁰ The Federal Circuit found no error in the district court dismissing the case at the Rule 12(b)(6) stage.³⁴¹ Finally, the Federal Circuit rejected Secured Mail’s argument that the district court misplaced the burden of proof.³⁴²

In *Cleveland Clinic Foundation v. True Health Diagnostics LLC*,³⁴³ the Federal Circuit addressed the product of nature concept of section 101 when it affirmed the district court’s determination of patent ineligibility of claims for correlating enzyme levels to cardiovascular disease.³⁴⁴ The Cleveland Clinic’s patents related to methods for detecting myeloperoxidase (“MPO”) in the body and correlating the results to cardiovascular risk.³⁴⁵ As a procedural matter, the district court did not err in addressing only certain claims from Cleveland Clinic’s three patents.³⁴⁶ Per *Content Extraction & Transmission LLC v. Wells Fargo Bank*,³⁴⁷ it is appropriate to review only representative claims where the claims are substantially similar and linked to the same law of nature.³⁴⁸ The Federal Circuit also found that the district court also did not err in rejecting the claims at the motion to dismiss stage, per

337. *Id.*

338. *Id.* at 909–11 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1332–33 (Fed. Cir. 2016)).

339. *Id.* at 911–12.

340. *Id.* at 912.

341. *Id.*

342. *Id.* at 913.

343. 859 F.3d 1352 (Fed. Cir. 2017), *petition for cert. docketed*, No. 17-997 (U.S. Jan. 18, 2018).

344. *Id.* at 1355.

345. *Id.*

346. *Id.* at 1359.

347. 776 F.3d 1343 (Fed. Cir. 2014).

348. *Cleveland Clinic Found.*, 859 F.3d at 1360 (citing *Content Extraction*, 776 F.3d at 1348).

*Genetic Technologies Ltd. v. Meril L.L.C.*³⁴⁹ and other cases.³⁵⁰

At step one of the *Alice* analysis, Cleveland Clinic's claims were directed to the natural law correlating presence of MPO to cardiovascular disease.³⁵¹ As in *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*,³⁵² here, "the method starts and ends with naturally occurring phenomena with no meaningful non-routine steps in between."³⁵³ The Federal Circuit rejected Cleveland Clinic's citation to *Rapid Litigation Management Ltd. v. CellzDirect, Inc.*³⁵⁴ because Cleveland Clinic did not create a new laboratory technique but was only using well-known techniques to execute the claimed method.³⁵⁵ At step two of *Alice*, Cleveland Clinic's claims lacked an inventive concept sufficient to confer patentability. Citing *Ariosa* and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*,³⁵⁶ the Federal Circuit concluded that Cleveland Clinic's claims were merely applying a law of nature.³⁵⁷ The techniques used to assess MPO levels were well-known, as were the statistical techniques for making the required comparison to control levels.³⁵⁸ The Federal Circuit distinguished the case from *CellzDirect* because, in that case, there was an improvement to existing methods of cell preservation that applied a new discovered natural law; here, the patents "[did] not extend their discovery" of a correlation between MPO and cardiovascular disease.³⁵⁹

The Federal Circuit also found that the district court also did not err in dismissing Cleveland Clinic's claims under a separate patent, which related to methods of treating cardiovascular disease by prescribing lipid-lowering drugs.³⁶⁰ The district court did not abuse its discretion in denying Cleveland Clinic's request for leave to amend its complaint to correct some of the issues herein; the request was "buried" in

349. 818 F.3d 1369 (Fed. Cir. 2016), *cert. denied*, 137 S. Ct. 242 (2016) (mem.).

350. *Cleveland Clinic Found.*, 859 F.3d at 1360 (citing *Genetic Techs. Ltd.*, 818 F.3d at 1373–74; *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015); *Content Extraction*, 776 F.3d at 1349; *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014)).

351. *Id.*

352. 788 F.3d 1371 (Fed. Cir. 2015).

353. *Cleveland Clinic Found.*, 859 F.3d at 1361.

354. 827 F.3d 1042 (Fed. Cir. 2016).

355. *Cleveland Clinic Found.*, 859 F.3d at 1361.

356. 566 U.S. 66 (2012).

357. *Cleveland Clinic Found.*, 859 F.3d at 1362.

358. *Id.*

359. *Id.* (citing *CellzDirect*, 827 F.3d at 1051).

360. *Id.* at 1363.

Cleveland Clinic's opposition to True Health's motion to dismiss.³⁶¹ The Federal Circuit considered how True Health's sale of lab reports, documenting various testing services, could not support contributory infringement liability because they were not a "material or apparatus" used for infringement.³⁶² Nor could the sale of such reports support inducement due to Cleveland Clinic's failure to allege a connection between True Health's reports and any subsequent prescription of lipid lowering drugs by physicians.³⁶³

B. Anticipation

The Federal Circuit addressed issues of precision in anticipatory prior art. In *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*,³⁶⁴ the Federal Circuit held that possibilities untaught in a reference, but "immediately envision[ed]," may not support a finding of anticipation, thus reversing the PTAB's IPR determination.³⁶⁵ During the IPR, the parties agreed that a claimed signal had to be in a certain "frame of reference;" however, the PTAB's determination relied on prior art signals in a different reference frame.³⁶⁶ The Federal Circuit found that, even if a person of skill could "at once envisage" the claimed signals, that fact alone was insufficient to establish anticipation.³⁶⁷ *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*³⁶⁸ was not contrary because, there, the prior art disclosed various components and taught that they could be intertwined.³⁶⁹ As such, the reference "effectively taught" the claimed combination.³⁷⁰ The Federal Circuit reasoned that "*Kennametal* address[ed] whether the disclosure of a limited number of combination possibilities discloses one of the possible combinations [It] does not permit the Board to fill in missing limitations simply because a skilled artisan would immediately envision them."³⁷¹

In *Eli Lilly & Co. v. Los Angeles Biomedical Research Institute*,³⁷² the

361. *Id.* at 1363–64.

362. *Id.*

363. *Id.* at 1364.

364. 851 F.3d 1270 (Fed. Cir. 2017).

365. *Id.* at 1270–71.

366. *Id.* at 1273.

367. *Id.* at 1274 (quoting *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015)).

368. 780 F.3d 1376 (Fed. Cir. 2015).

369. *Nidec Motor Corp.*, 851 F.3d at 1274 (citing *Kennametal*, 780 F.3d at 1382–83).

370. *Id.*

371. *Id.* at 1274–75.

372. 849 F.3d 1073 (Fed. Cir. 2017).

Federal Circuit applied the same concept, this time affirming the PTAB's determination of non-anticipation.³⁷³ The Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center's ("LAB") claim required application of treatment "for not less than 45 days."³⁷⁴ The allegedly anticipatory reference did not expressly teach forty-five days of treatment, and the Federal Circuit found that the PTAB did not err in finding that it did not inherently teach such treatment.³⁷⁵ The prior art's reference to "chronic administration" was insufficient to teach the full forty-five days.³⁷⁶ The court found *AstraZeneca LP v. Apotex, Inc.*³⁷⁷ directly on point because, while the prior art may have "suggested" the claim duration, these suggestions are insufficient to succeed on an anticipation claim.³⁷⁸ Thus, similar to *AstraZeneca*, despite the prior art suggesting the claimed duration, it was not enough to anticipate the claim.³⁷⁹

Holding that factual predicate must be established to support reading prior art genus to anticipate a claimed species, the Federal Circuit generally affirmed IPR determinations of *Wasica Finance GmbH v. Continental Automotive Systems, Inc.*³⁸⁰ on patentability (finding some claims patentable, others not) and reversed determination of patentability as to one claim.³⁸¹ The Federal Circuit treated the appeals from patent-owner Wasica and from petitioners Continental and Schrader separately.³⁸²

In assessing Wasica's appeal, the Federal Circuit found that the PTAB did not err in finding the claims under review unpatentable as anticipated and obvious.³⁸³ *Phillips v. AWH Corp.*³⁸⁴ sets the standard for construing and reviewing claims of expired patents.³⁸⁵ Accordingly, the Federal Circuit rejected Wasica's argument that certain "pressure signal" limitations should have required numeric values instead of non-numeric

373. *Id.* at 1076.

374. *Id.* at 1074.

375. *Id.* at 1074–75.

376. *Id.* at 1075.

377. 633 F.3d 1042 (Fed. Cir. 2010).

378. *Eli Lilly & Co.*, 849 F.3d at 1075–76 (citing *AstraZeneca*, 633 F.3d at 1054–55).

379. *Id.* at 1076.

380. 853 F.3d 1272 (Fed. Cir. 2017).

381. *Id.* at 1289 (finding claims 1–5, 9–19, and 21 unpatentable and claims 6–8 and 20 patentable).

382. *Id.* at 1278, 1282.

383. *Id.* at 1278–79.

384. 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

385. *Wasica*, 853 F.3d at 1279–80.

representations as lacking support in the claim text or description.³⁸⁶ The Federal Circuit also rejected Wasica's argument that the claim limitation "emittance of a . . . signal" should have been limited to wireless signals.³⁸⁷ The plain meaning of "emit" could include wired communication, and there was no redefinition or disavowal in the patent.³⁸⁸

The PTAB did not err either when it found certain art cited by Schrader as too "unclear," or when it rejected Continental's argument that because the same prior art discussed using "any" modulation scheme, it should be held to inherently disclose the claimed modulation scheme.³⁸⁹ The Federal Circuit also found that Schrader waived its obviousness challenge because it did not include it in its petitions or appeals.³⁹⁰ The PTAB also did not err in rejecting Continental's argument that it should be held to inherently disclose the claimed modulation scheme because the same prior art disclosed using "any" modulation scheme.³⁹¹ Per *Atofina v. Great Lakes Chemical Corp.*,³⁹² not every disclosure of a genus also discloses every species within.³⁹³ Moreover, the Federal Circuit determined that *Kennametal* is not contrary, and Continental failed to develop the sort of factual showing necessary to prove that the disclosed genus teaches the claimed species.³⁹⁴ There were similar defects in Continental's obviousness contention.³⁹⁵

Further, the court also found that, because a dependent claim was anticipated, the PTAB erred in holding that the claim was patentable.³⁹⁶ Upon review of the specification and structure of the claims, the Federal Circuit found that "bit sequence" could include a sequence of a single bit.³⁹⁷ Thus, the PTAB construction ("two or more bits") was overly restrictive.³⁹⁸ Thus, under the Federal Circuit's

386. *Id.*

387. *Id.* at 1282.

388. *Id.*

389. *Id.* at 1287.

390. *Id.* at 1284–85.

391. *Id.* at 1285.

392. 441 F.3d 991 (Fed. Cir. 2006).

393. *Wasica*, 853 F.3d at 1285 (citing *Atofina*, 441 F.3d at 999).

394. *Id.* at 1285–86 (citing *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381–83 (Fed. Cir. 2015)).

395. *Id.* at 1286.

396. *Id.* at 1288.

397. *Id.*

398. *Id.*

construction, the dependent claim was invalid as anticipated.³⁹⁹

C. AIA On-Sale Bar

In *Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc.*,⁴⁰⁰ the Federal Circuit held that the AIA on-sale bar may be triggered by a contract despite terms to keep certain invention details confidential, reversing a bench trial determination that Helsinn's patents were not invalid per the on-sale bar provision of § 102.⁴⁰¹ The case involved four Helsinn patents relating to reducing chemotherapy-induced nausea and vomiting.⁴⁰² Pre-AIA § 102 applied to three of the patents,⁴⁰³ while AIA § 102 applied to the fourth.⁴⁰⁴

As to the three pre-AIA patents, the Federal Circuit held that the district court correctly determined that a 2001 supply agreement between Helsinn and MGI Pharma was a contract for future sale of a commercial product embodying the three patents.⁴⁰⁵ The Federal Circuit rejected Helsinn's argument that, because the contract was contingent on FDA approval for Helsinn's product, the arrangement would not be commercially understood as a contract for sale.⁴⁰⁶ Citing the Uniform Commercial Code (UCC) and *BG Group PLC v. Republic of Argentina*,⁴⁰⁷ the Federal Circuit reasoned that a contract with a condition precedent remains a valid, enforceable contract.⁴⁰⁸ The Federal Circuit found that although the agreement contemplated two products—one practicing the claims and one note—it did not change the outcome.⁴⁰⁹ The Federal Circuit rejected Helsinn's argument, under *Medicines Co. v. Hospira, Inc.*,⁴¹⁰ that the law will not find commercial activities invalidating if those same activities (here, MGI Pharma's selection of Helsinn as a sole supplier) could have been performed in house.⁴¹¹ Helsinn's relationship with MGI Pharma was

399. *Id.* at 1288–89.

400. 855 F.3d 1356 (Fed. Cir. 2017), *petition for cert. docketed*, No. 17-1229 (U.S. Mar. 2, 2018).

401. *Id.* at 1359–60.

402. *Id.*

403. *Id.* at 1360.

404. *Id.*

405. *Id.* at 1364.

406. *Id.* at 1365–66.

407. 134 S. Ct. 1198 (2014).

408. *Helsinn*, 855 F.3d at 1365 (citing U.C.C. § 2-105(2) (AM. LAW INST. & UNIF. LAW COMM'N 2003); *BG Grp.*, 134 S. Ct. at 1207).

409. *Id.* at 1366.

410. 827 F.3d 1363 (Fed. Cir. 2016) (en banc).

411. *Helsinn*, 855 F.3d at 1367.

too different from the contract manufacturing arrangement in *Medicines Co.* to invoke that case's rule.⁴¹²

As to the fourth patent, the Federal Circuit held that the district court erred in concluding that the same agreement failed to invoke the AIA on-sale bar because the agreement kept the actual dosing details—which were part of the claims—confidential.⁴¹³ The Federal Circuit analyzed AIA § 102's rule barring “patentability of an invention [that] was ‘patented, described in a printed publication, or in public use, *on sale*, or otherwise available to the public before the effective filing date of the claimed invention.’”⁴¹⁴ Further, it rejected Helsinn's argument that the revision to § 102 means that the on-sale bar does not apply to sales that do not disclose the invention itself to the public—i.e., sales that keep no details of the invention confidential.⁴¹⁵ Citing a variety of Supreme Court and Federal Circuit authority, the Federal Circuit reasoned that the history of the on-sale bar has not required full disclosure of all claim elements, so long as there is a sale of an embodiment of the invention.⁴¹⁶ Reviewing the legislative history of the AIA, the Federal Circuit also found no basis to support overturning such history.⁴¹⁷ It therefore concluded that the 2001 supply agreement was a contract for future sale of the invention of the fourth patent.⁴¹⁸

Finally, the Federal Circuit concluded that the inventions of all four patents were ready for patenting as of the critical date, as required by the on-sale bar standard established in *Pfaff v. Wells Electronics, Inc.*,⁴¹⁹ due to actual reduction to practice.⁴²⁰ It was uncontested that Helsinn made the formulation in a stable form by that date.⁴²¹ The district court erred in concluding that Helsinn had not yet determined that the invention would work for its intended purpose.⁴²² To satisfy that standard, it is not necessary to meet U.S. Food and Drug

412. *Id.*

413. *Id.* at 1369.

414. *Id.* at 1368 (quoting 35 U.S.C. § 102(b) (2006)).

415. *Id.* at 1369.

416. *Id.* at 1369–71 (citing *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 19 (1829); *Abbott Labs. V. Geneva Pharm., Inc.*, 182 F.3d 1315, 1317–18 (Fed. Cir. 1999); *RCA Corp. v. Data Gen. Corp.*, 887 F.2d 1056, 1060 (Fed. Cir. 1989), *overruled in part on other grounds by Grp. One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1048 (Fed. Cir. 2001)).

417. *Id.* at 1371.

418. *Id.*

419. 525 U.S. 55 (1998).

420. *Helsinn*, 855 F.3d at 1371 (citing *Pfaff*, 525 U.S. at 67–68).

421. *Id.* at 1372.

422. *Id.* at 1373.

Administration (FDA) standards for approval, but only to show that the invention works “beyond a probability of failure” but not “a possibility of failure.”⁴²³ The Federal Circuit concluded that, on the record available, as of the critical date it was clear that the invention would work for its intended purpose.⁴²⁴

D. Obviousness

In 2017, the Federal Circuit weighed in on various secondary consideration analyses affecting the obviousness determinations of the lower courts in *Millennium Pharmaceuticals, Inc. v. Sandoz Inc.*⁴²⁵ The Federal Circuit entered judgment for Millennium and determined that a failure to prove motivation to combine and failure to overcome secondary considerations warranted a reversal of an invalidity judgment.⁴²⁶ In this Hatch-Waxman case,⁴²⁷ where the defendant stipulated to infringement, the Federal Circuit further vacated judgments in separate actions that were based on collateral estoppel.⁴²⁸ Millennium’s patent claims the structure of Velcade, an anticancer drug.⁴²⁹ The Federal Circuit found that, based on the references, the district court erred in concluding that a person of skill would have had a reason to produce the compound in question.⁴³⁰ There was no dispute that a key process was known in the art, but there was nothing in the record to suggest applying that process in the manner required to reach the claimed compound.⁴³¹ The opinion discussed the various references and theories, and describes why none of them taught or suggested the required process.⁴³²

The Federal Circuit found that the district court also erred in determining that the prior art did not teach away from application of

423. *Id.* at 1372 (quoting *Scott v. Finney*, 34 F.3d 1058, 1062 (Fed. Cir. 1994)).

424. *Id.* at 1373.

425. 862 F.3d 1356 (Fed. Cir. 2017).

426. *Id.* at 1370.

427. 21 U.S.C. § 355 (2012); see Gerald J. Mossinghoff, *Overview of the Hatch-Waxman Act and Its Impact on the Drug Development Process*, 54 FOOD & DRUG L.J. 187, 189–90 (1999) (explaining that the Hatch-Waxman Act creates a regulatory process by which generic pharmaceuticals are approved and relevant causes of action for developers seeking to safeguard their drug patenting rights).

428. *Millennium Pharm.*, 862 F.3d at 1370.

429. *Id.* at 1360–61.

430. *Id.* at 1364.

431. *Id.*

432. *Id.* at 1364–65.

the proposed process in its application of inherency.⁴³³ While it was undisputed that the application of the process in question would have led to the claimed compound, that it did so was unexpected prior to the invention.⁴³⁴ The Federal Circuit rejected Sandoz's argument that the reactions at issue could not be inventive because they were "inherent" to the materials and process being used.⁴³⁵

The Federal Circuit found that the district court also clearly erred in its analysis of objective indicia of secondary considerations established in *Graham v. John Deere Co. of Kansas City*,⁴³⁶ including unexpected results and long-felt need, as "[t]hese indicia cannot be set aside in the analysis of obviousness."⁴³⁷ The opinion described how the district court erred in determining what the "closest prior art compound" was for purposes of this analysis; correcting for this, the record showed unexpected results.⁴³⁸ The Federal Circuit also found that the district court erred in concluding that Millennium had failed to show a long-felt need or commercial success because the record demonstrated both.⁴³⁹ In view of the above, the Federal Circuit held that the district court should not have found invalidity and reversed the district court's judgment.⁴⁴⁰

In another secondary considerations case, *Intercontinental Great Brands LLC v. Kellogg North America Co.*,⁴⁴¹ the Federal Circuit affirmed the district court's grant of summary judgment for patent invalidity due to obviousness, finding no error in the district court's consideration of objective indicia of nonobviousness after it found a prima facie obviousness case.⁴⁴² Intercontinental's patent related to resealable food packaging (referred to in the opinion by its former name, Kraft).⁴⁴³ The Federal Circuit determined that the district court did not err in granting summary judgment of obviousness,⁴⁴⁴ finding that the district court properly considered objective indicia of nonobviousness and properly based its obviousness determination on

433. *Id.* at 1366–67.

434. *Id.*

435. *Id.*

436. 383 U.S. 1 (1966).

437. *Millennium Pharm.*, 862 F.3d at 1367–68.

438. *Id.* at 1368.

439. *Id.* at 1369.

440. *Id.* at 1370.

441. 869 F.3d 1336 (Fed. Cir. 2017).

442. *Id.* at 1351–52.

443. *Id.* at 1339.

444. *Id.* at 1344–45.

all of the *Graham* factors.⁴⁴⁵ The Federal Circuit thus rejected Kraft's argument that the district court failed to sufficiently consider objective indicia.⁴⁴⁶ It also rejected Kraft's argument that objective indicia must be considered before analyzing whether a skilled artisan would have a reason to combine prior art and emphasized that the district court's ordering—analyzing objective indicia after considering the content of the art and the existence of a reason to combine—was not erroneous.⁴⁴⁷ The Federal Circuit also rejected Kraft's arguments as to the content of the record and the existence of a motivation to combine based on that record.⁴⁴⁸ It furthermore declined to find any error in the district court's analysis based on the fact that the art being analyzed had previously been considered during reexamination.⁴⁴⁹

When it considered the prior art from reexamination, the Federal Circuit determined that the district court did not err in granting summary judgment of no inequitable conduct.⁴⁵⁰ Kellogg's evidence was insufficient to permit a finding of intent.⁴⁵¹ The intent issue concerned an article that Kraft had submitted to the PTO that depicted a key piece of prior art.⁴⁵² The article described the prior art as not using "conventional wrapping film," but Kraft suggested in litigation that this was a misprint.⁴⁵³ Kraft's decision not to bring the belief of the misprint to the PTAB's attention was not, on its own, sufficient to support a determination of bad intent.⁴⁵⁴ Kellogg had not developed evidence that Kraft's counsel believed it was a misprint, and neither the ex parte requester nor the examiner had ever raised the issue.⁴⁵⁵ "The absence of such a statement indicates that the alleged misprint was not as obvious as Kellogg claims."⁴⁵⁶

445. *Id.* at 1345. The *Graham* factors to determine nonobviousness are consideration of: (1) the scope and content of the relevant prior art; (2) the difference between the claimed invention and the relevant prior art; and (3) the level of ordinary skill in the relevant art. *Graham*, 383 U.S. 1, 17 (1966).

446. *Id.*

447. *Id.* at 1346–47.

448. *Id.* at 1348.

449. *Id.* at 1350 ("[I]n this case[,] the 'enhanced burden' proposition [for art considered in reexamination] provides no basis for a different result.").

450. *Id.* at 1352.

451. *Id.*

452. *Id.* at 1351.

453. *Id.*

454. *Id.* at 1351–52.

455. *Id.* at 1352.

456. *Id.*

Judge Reyna, dissenting in part, believed that the district court “improperly found a prima facie case of obviousness before considering Kraft’s evidence of objective indicia of nonobviousness,” and on that basis would have reversed.⁴⁵⁷

In *Merck Sharp & Dohme Corp. v. Hospira, Inc.*,⁴⁵⁸ the Federal Circuit affirmed a bench judgment of obviousness in Hatch-Waxman litigation, finding that evidence of commercial success and copying was insufficient to establish nonobviousness.⁴⁵⁹ Merck’s patent related to a process for preparing its branded antibiotic Invanz (generic name ertapenem).⁴⁶⁰ The Federal Circuit analyzed how, in view of the prior art, Merck’s claims amounted to straightforward application of well-understood prior art principles and were obvious.⁴⁶¹ The Federal Circuit also rejected Merck’s argument that the prior art failed to disclose the precise order and detail of claimed steps because this “would have been discovered by routine experimentation while implementing known principles.”⁴⁶² The Federal Circuit noted Merck’s objective evidence concerning nonobviousness, particularly the commercial success of Merck’s Invanz product.⁴⁶³ After giving evidence of commercial success its “full and proper weight,” the Federal Circuit determined that the district court committed no clear error in its obviousness analysis.⁴⁶⁴ However, the district court erred in holding that “multiple patents do not necessarily detract from evidence of commercial success of a product or process” because, since Merck had separate patents covering ertapenem itself, evidence of Invanz’s commercial success should be discounted.⁴⁶⁵ But even correcting for this error, the commercial success evidence could not overcome the obviousness evidence.⁴⁶⁶ The Federal Circuit also rejected Hospira’s argument that the district court erred in finding copying by Hospira; the evidence could be given weight in this case because the ANDA did not require Hospira to copy the patented manufacturing process—only that the

457. *Id.* at 1353 (Reyna, J., dissenting in part).

458. 874 F.3d 724 (Fed. Cir. 2017).

459. *Id.* at 731.

460. *Id.* at 726.

461. *Id.* at 729.

462. *Id.* at 730.

463. *Id.* at 730–31.

464. *Id.* at 731.

465. *Id.* at 730–31.

466. *Id.*

result of that process matched Merck's.⁴⁶⁷

Dissenting, Judge Newman stated that she would have held that the district court gave insufficient weight to objective evidence of nonobviousness.⁴⁶⁸ Her opinion called for the Federal Circuit to “remedy our inconsistent treatment of the procedures and burdens in applying the evidentiary factors of obviousness.”⁴⁶⁹

In *Bayer Pharma AG v. Watson Laboratories, Inc.*,⁴⁷⁰ the Federal Circuit reversed a bench judgment finding nonobviousness in a Hatch-Waxman case, holding that evidence disfavoring a combination of reference did not teach away from it.⁴⁷¹ The case involved Bayer's patent for a formulation of an erectile-dysfunction (ED) treatment, vardenafil (brand name Levitra), as an oral disintegrating tablet (sold by Bayer as Staxyn).⁴⁷² The Federal Circuit determined that the district court clearly erred in concluding that Watson failed to show a motivation to formulate ED drugs as oral disintegrating tablets (ODT), as the record included numerous references describing such formulations, each of which the district court failed to consider.⁴⁷³ The opinion discussed these references and analyzed Bayer's counterarguments, concluding that the record clearly showed a motivation to formulate vardenafil ODT.⁴⁷⁴ The Federal Circuit found clear error in the district court's conclusion that there was no motivation to employ technology reaching those limitations.⁴⁷⁵ There was clearly an “otherwise apparent motivation to formulate a product,” despite the fact that some of this technology had not yet been FDA-approved.⁴⁷⁶ And while the district court did not err in finding that some of the combinations would have led to “bitter taste and increased bioavailability,” such did not rise to the level of teaching away from the combination—the combination would still have been productive, even if disfavored.⁴⁷⁷ The Federal Circuit noted that Bayer had presented objective evidence of nonobviousness (copying and unexpected

467. *Id.*

468. *Id.* at 733 (Newman, J., dissenting).

469. *Id.* at 731.

470. 874 F.3d 1316 (Fed. Cir. 2017).

471. *Id.* at 1329.

472. *Id.* at 1319.

473. *Id.* at 1321–22.

474. *Id.* at 1322–23.

475. *Id.* at 1324–25.

476. *Id.* at 1326 (citing *Allergan, Inc. v. Sandoz Inc.*, 726 F.3d 1286, 1291–92 (Fed. Cir. 2013)).

477. *Id.* at 1327 (citing *In re Mouttet*, 686 F.3d 1322, 1334 (Fed. Cir. 2012)).

results), but upon weighing the factors articulated in *Graham*, the claims were obvious.⁴⁷⁸

In *Novartis AG v. Noven Pharmaceuticals, Inc.*,⁴⁷⁹ the Federal Circuit held that the PTAB may differ in obviousness determination from district courts even on similar evidence and arguments. There, the Federal Circuit affirmed the PTAB's IPR determinations of non-patentability for obviousness.⁴⁸⁰ The existence of prior district court and Federal Circuit authority finding Novartis's claims nonobvious on a similar record⁴⁸¹ did not demonstrate factual or legal error in the PTAB's decisions.⁴⁸² As a factual matter, the record in the IPR included additional art and declarations not present in the district court and Federal Circuit cases.⁴⁸³ As a legal matter, the Federal Circuit held that the different standard of proof in IPR, preponderance of the evidence, and in district court, clear and convincing evidence, meant that the PTAB can properly reach a "different conclusion based on the same evidence."⁴⁸⁴ *In re Baxter International, Inc.*⁴⁸⁵ was not contradictory; *Baxter* merely noted that, on the same evidence and argument, the PTO should "ideally" reach the same outcomes as a district court.⁴⁸⁶ However, *Baxter* "used 'ideally' to connote aspiration," and recognized that the PTO has its own standards to apply.⁴⁸⁷ Applying the PTAB standard of proof in IPR, the Federal Circuit determined that substantial evidence supported the PTAB's obviousness determination.⁴⁸⁸

In *Los Angeles Biomedical Research Institute v. Eli Lilly & Co.*,⁴⁸⁹ the

478. *Id.* at 1329.

479. 853 F.3d 1289 (Fed. Cir. 2017).

480. *Id.* at 1296.

481. *Novartis Pharm. Corp. v. Watson Labs., Inc.*, 611 F. App'x 988, 996 (Fed. Cir. 2015) (rejecting defendant's claim that Novartis's patents were invalid for obviousness and holding defendant liable for infringement); *Novartis Pharm. Corp. v. Noven Pharm., Inc.*, 125 F. Supp. 3d 474, 486–87 (D. Del. 2015) (rejecting defendant Noven's claim that Novartis's patents are invalid as obvious).

482. *Novartis*, 853 F.3d at 1293.

483. *Id.*

484. *Id.* at 1294 (citing *Noven Pharm., Inc. v. Novartis AG*, IPR2014-00550, 2015 WL 5782081, at *2 (P.T.A.B. Sept. 28, 2015), *aff'd*, 853 F.3d 1289 (Fed. Cir. 2017)).

485. 678 F.3d 1357 (Fed. Cir. 2012).

486. *Novartis*, 853 F.3d at 1294 (citing *In re Baxter*, 678 F.3d at 1365).

487. *Id.* (citing *In re Baxter*, 678 F.3d at 1365).

488. *See id.* at 1294–95 (explaining that substantial evidence showed that a person having of ordinary skill in the art ("PHOSITA") would have known to assess the compound of the structure prior to testing rather than waiting for tests to show degradation because of a PHOSITA's knowledge of organic chemistry basics).

489. 849 F.3d 1049 (Fed. Cir. 2017).

Federal Circuit vacated an IPR obviousness determination holding that a recitation of the treatment goal within a claim step, but not the preamble, supported a determination that the goal limited the claim.⁴⁹⁰ The Los Angeles Biomedical Research Institute’s (“LAB”) patent related to treatment of certain symptoms (e.g., erectile dysfunction) relating to penile fibrosis.⁴⁹¹ In co-pending litigation, LAB contended that Eli Lilly’s marketing of its erectile dysfunction treatment Cialis induced infringement of the patent.⁴⁹² The Federal Circuit determined that the PTAB did not err in rejecting LAB’s priority claim to its provisional patent application.⁴⁹³ The Federal Circuit explained that to get from the provisional patent application’s disclosure of dosing used in a rat study to the later-claimed dosing of “up to 1.5 mg/kg/day,” a person of skill would have had to make a series of assumptions.⁴⁹⁴ Specifically, the person of ordinary skill would have to know the rats’ daily water intake, the average weights of the rats and humans, and the conversion methodology described in the provisional.⁴⁹⁵

The Federal Circuit considered three claim interpretations by the PTAB. First, the PTAB erred in holding that the claim term “an individual with at least one of penile tunical fibrosis and corporal tissue fibrosis” could cover individuals having symptoms “associated with” penile fibrosis without actually having the enumerated condition.⁴⁹⁶ The Federal Circuit examined the patent and file history and concluded that, as in *Rapoport v. Dement*,⁴⁹⁷ the claim requires an individual actually having the underlying condition.⁴⁹⁸

Second, the PTAB erred in finding the claim step, “arresting or regressing [the fibrosis]” did not limit the claim, as the Federal Circuit determined that such text required actually arresting or reversing the condition.⁴⁹⁹ The Federal Circuit noted that this was not a preamble but a step so it was distinct from other cases where preambles discussed other intrinsic and extrinsic evidence (including LAB’s infringement

490. *Id.* at 1067–68.

491. *Id.* at 1052.

492. *Id.* at 1054.

493. *Id.* at 1058.

494. *Id.* at 1057.

495. *Id.* at 1057–58.

496. *Id.* at 1059.

497. 254 F.3d 1053 (Fed. Cir. 2001).

498. *L.A. Biomedical Research Inst.*, 849 F.3d at 1060 (citing *Rapoport*, 254 F.3d at 1059).

499. *Id.* at 1060–61.

contentions) and were held non-limiting.⁵⁰⁰

Third, the Federal Circuit held that the PTAB did not err in rejecting LAB's argument that the term "continuous long-term regimen" required that the drug concentration in the patient's body be at a "constant level."⁵⁰¹ The PTAB was not required to adopt LAB's proposed limitation despite the fact that the claim elsewhere required a "45-day" dosing regimen.⁵⁰² The Federal Circuit then analyzed the references reviewed by the PTAB, and ultimately remanded for further determinations on issues necessary to reach the obviousness conclusion.⁵⁰³

In a partial dissent, Judge Newman "agree[d] generally with the court's discussion of the '903 patent and the prior art."⁵⁰⁴ However, she would have gone on to find LAB's claims obvious over the cited references and would affirm.⁵⁰⁵

In *Meiresonne v. Google, Inc.*,⁵⁰⁶ the Federal Circuit affirmed an IPR obviousness determination, finding that the absence of express criticism in the prior art reference undermined the "teaching away" contention.⁵⁰⁷ The Federal Circuit determined that substantial evidence supported the PTAB's conclusion that the cited references did not teach away from Meiresonne's claims.⁵⁰⁸ While one reference included some criticism of a certain approach, it "does not say or imply that text descriptions[, the approach at issue,] are 'unreliable,' 'misleading,' 'wrong,' or 'inaccurate,' which might lead one of ordinary skill in the art to discard text descriptions completely."⁵⁰⁹ The Federal Circuit rejected Meiresonne's citation to *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*,⁵¹⁰ which expressly criticized a prior art approach and stated that it could lead to unacceptable failure.⁵¹¹

In *Novartis AG v. Torrent Pharmaceuticals Ltd.*,⁵¹² the Federal Circuit confirmed that where there is no persuasive link between the product's success and the innovative patent features, no nexus exists to support

500. *Id.* at 1061.

501. *Id.* at 1062–63.

502. *Id.* at 1063.

503. *Id.* at 1066–67.

504. *Id.* at 1068 (Newman, J., concurring in part, dissenting from the judgment).

505. *Id.*

506. 849 F.3d 1379 (Fed. Cir. 2017).

507. *Id.* at 1380.

508. *Id.* at 1384.

509. *Id.* at 1383.

510. 567 F.3d 1314 (Fed. Cir. 2009).

511. *Meiresonne*, 849 F.3d at 1383–84 (citing *DePuy Spine*, 567 F.3d at 1326–27).

512. 853 F.3d 1316 (Fed. Cir. 2017).

the secondary considerations to overcome nonobviousness.⁵¹³ The Federal Circuit affirmed the PTAB's IPR determination of unpatentability for both original claims and proposed substitutes.⁵¹⁴ Novartis's patent related to a solid pharmaceutical composition used in treating multiple sclerosis.⁵¹⁵ As to nexus, the Federal Circuit determined that the PTAB did not err in rejecting Novartis's argument that the commercial success, industry praise, and long-felt need evidence related to its Gilenya product demonstrated nonobviousness.⁵¹⁶ While Gilenya was the first FDA-approved, commercially available, solid multiple sclerosis composition, such compositions were already known in the field prior to Gilenya's release, so the mere fact that Gilenya was first to market did not demonstrate nonobviousness.⁵¹⁷ Per *Asyst Technologies, Inc. v. Emtrak, Inc.*,⁵¹⁸ it is appropriate to find no nexus where the evidence indicates that the commercial success was not "attributable" to the claimed advantages of the patent.⁵¹⁹ As to unexpected results, the PTAB also did not err in finding that Novartis failed to substantiate this argument, and the PTAB further declined to take up arguments Novartis raised for the first time on appeal.⁵²⁰

Additionally, the Federal Circuit found that there was no due process or Administrative Procedure Act (APA) error in the PTAB's partial reliance on a reference ("Sakai") as supporting motivation to combine.⁵²¹ Although the PTAB's institution decision had declined to institute on anticipation and obviousness over Sakai, both the petition and the conduct of the proceeding indicated that Sakai was still at least relevant enough to support motivation to combine other references.⁵²² The Federal Circuit noted that Novartis elected not to move to specifically exclude Sakai, citing *Genzyme Therapeutic Products Ltd. v. Biomarin*

513. *Id.* at 1331.

514. *Id.* at 1319.

515. *Id.*

516. *Id.* at 1330–31.

517. *Id.* at 1331.

518. 544 F.3d 1310, 1316 (Fed. Cir. 2008) ("[E]ven though commercial embodiments of [Asyst's] '421 invention may have enjoyed commercial success, Asyst's failure to link that commercial success to the features of its invention that were not disclosed in [the] Hesser [patent] undermines the probative force of the evidence pertaining to the success of Asyst's . . . products.").

519. *Torrent*, 853 F.3d at 1331 (citing *Asyst Techs.*, 544 F.3d at 1316).

520. *Id.* at 1328–30.

521. *Id.* at 1324.

522. *Id.* at 1324–26.

*Pharmaceutical Inc.*⁵²³ The Federal Circuit also found that the PTAB did not err in finding Novartis's claims obvious.⁵²⁴ The Federal Circuit rejected Novartis's argument that the PTAB failed to take into account the potential negatives surrounding the proposed combination.⁵²⁵ The Federal Circuit relied on *Medichem, S.A. v. Rolabo, S.L.*,⁵²⁶ which instructs tribunals to take into account that there might be "conflicting" teachings as to potential combinations and, ultimately, the Federal Circuit held that the PTAB properly analyzed the record.⁵²⁷ In fact, *Medichem* does not impose a requirement to "expressly discuss each and every negative and positive piece of evidence lurking in the record."⁵²⁸

E. Written Description and Enablement

To meet the § 112 requirement, a patentee may not rely on background knowledge for written description support absent some suggestion in the specification. In *Rivera v. International Trade Commission*,⁵²⁹ the Federal Circuit affirmed the determination that there had been no Tariff Act violation due to invalidity for lack of written description.⁵³⁰ Mr. Rivera's patent related to single-serve coffee brewing and addressed compatibility between disk-shaped coffee "pods" and cup-shaped coffee "cartridges."⁵³¹ The Federal Circuit found that the International Trade Commission (ITC) correctly determined that Mr. Rivera's patent did not describe the full scope of his claim (specifically, it did not describe a "cartridge or pod adapter assembly" that was itself the "pod"; it described only how to adapt a cartridge so that a pod could be put into it).⁵³² The Federal Circuit rejected Mr. Rivera's reliance on *Honeywell International Inc. v. United States*.⁵³³ In *Honeywell*, disclosure "of a CRT-type monitor provided written description support for other types of monitors."⁵³⁴ The case did not address the situation here, where Mr. Rivera was relying on an

523. 825 F.3d 1360 (Fed. Cir. 2016); *Torrent*, 853 F.3d at 1326 n.2.

524. *Torrent*, 853 F.3d at 1327–31.

525. *Id.* at 1327.

526. 437 F.3d 1157 (Fed. Cir. 2006).

527. *Torrent*, 853 F.3d at 1327 (citing *Medichem*, 437 F.3d at 1165).

528. *Id.* at 1328 (citing *Medichem*, 437 F.3d at 1165).

529. 857 F.3d 1315 (Fed. Cir. 2017).

530. *Id.* at 1323.

531. *Id.* at 1316–17.

532. *Id.* at 1320.

533. 609 F.3d 1292 (Fed. Cir. 2010); *Rivera*, 857 F.3d at 1321 (citing *Honeywell*, 609 F.3d at 1301).

534. *Rivera*, 857 F.3d at 1321 (citing *Honeywell*, 609 F.3d at 1301).

“undisclosed configuration that eliminates a fundamental component . . . (i.e., the ‘pod’).”⁵³⁵ The Federal Circuit also rejected Mr. Rivera’s argument that background knowledge of one of skill in the art could supplement the written description to provide written description support.⁵³⁶ Under *Lockwood v. American Airlines, Inc.*,⁵³⁷ the knowledge of ordinary artisans can inform the specification but not fill in limitations not disclosed therein, even if those limitations would be obvious.⁵³⁸ The court did not find *Falkner v. Inglis*⁵³⁹ and *Boston Scientific Corp. v. Johnson & Johnson*⁵⁴⁰ contradictory because, in those cases, the specifications at least alluded to the relevant material as a potential configuration of the claims.⁵⁴¹

In *Amgen Inc. v. Sanofi, Aventisub LLC*,⁵⁴² the Federal Circuit concluded that a post-priority date reference may be used to interrogate the sufficiency of the written description’s disclosure of a representative species, affirming in part and reversing in part the judgment that Amgen’s patents were not invalid and the district court’s entry of a permanent injunction against the sale of Sanofi’s “Praluent” product.⁵⁴³ Amgen’s patents related to antibodies that reduce bad cholesterol.⁵⁴⁴ Regarding the § 112 written description and enablement requirement, the Federal Circuit found that the district court erred by excluding certain evidence tendered by Sanofi, evidence bearing on whether Amgen’s patent disclosed a representative number of the claimed species.⁵⁴⁵ Though post-patent evidence is typically not germane to evaluating written description, it may be used to evaluate the sufficiency of the species disclosure.⁵⁴⁶ *In re Hogan*⁵⁴⁷ was not contrary because, in that case, the post-priority-date evidence was being used for a different purpose (i.e., to show a change in the state of the art relevant

535. *Id.*

536. *Id.* at 1322.

537. 107 F.3d 1565 (Fed. Cir. 1997).

538. *Rivera*, 857 F.3d at 1322 (citing *Lockwood*, 107 F.3d at 1571–72).

539. 448 F.3d 1357 (Fed. Cir. 2006).

540. 647 F.3d 1353 (Fed. Cir. 2011).

541. *Rivera*, 857 F.3d at 1322 (citing *Bos. Sci.*, 647 F.3d at 1366; *Falkner*, 448 F.3d at 1366).

542. 872 F.3d 1367 (Fed. Cir. 2017).

543. *Id.* at 1381–82.

544. *Id.* at 1371.

545. *Id.* at 1375.

546. *Id.*

547. 559 F.2d 595 (C.C.P.A. 1977).

to evaluating enablement of the genus).⁵⁴⁸ The Federal Circuit remanded for a new trial on written description and enablement “[f]or many of the same reasons.”⁵⁴⁹ The Federal Circuit notes that the district court also erred by instructing the jury that disclosure of a “newly characterized antigen” could satisfy the written description requirement for a claim to an antibody.⁵⁵⁰ The opinion discusses how prior precedent on this issue did not endorse such a rule.⁵⁵¹ However, the Federal Circuit found that the district court did not err in denying Sanofi’s motion for judgment as a matter of law (JMOL) of no written description and no enablement because the record was incomplete without the post-patent evidence discussed above.⁵⁵²

In addition, the Federal Circuit concluded that the Patent Cooperation Treaty (PCT) applications were not prior art because Sanofi had not shown that the provisional applications provided written description support for the claims of the PCT applications.⁵⁵³ The Federal Circuit’s opinion discusses how the district court was correct to exclude Sanofi’s alleged prior art.⁵⁵⁴ The references were published PCT applications claiming priority to provisionals that predated the priority date of Amgen’s patents.⁵⁵⁵ The district court correctly determined that *Dynamic Drinkware, LLC v. National Graphics, Inc.*⁵⁵⁶ was not contrary because *Dynamic Drinkware* described how, for prior art purposes, the provisional patent application’s specification must support the claims in the non-provisional application to properly claim priority to the provisional application.⁵⁵⁷

The permanent injunction was also vacated because the written description/enablement judgment was vacated.⁵⁵⁸ The Federal Circuit noted that the district court’s permanent injunction analysis failed to properly apply the public interest factor from *eBay, Inc. v.*

548. *Amgen*, 872 F.3d at 1375 (citing *In re Hogan*, 559 F.2d at 606).

549. *Id.*

550. *Id.* at 1378–79.

551. *Id.* at 1376–77 (citing *Centocor Ortho Biotech, Inc. v. Abbott Labs.*, 636 F.3d 1341, 1351–53 (Fed. Cir. 2011); *Noelle v. Lederman*, 355 F.3d 1343, 1349 (Fed. Cir. 2004); *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 960, 964 (Fed. Cir. 2002)).

552. *Id.* at 1380.

553. *Id.* at 1376–77.

554. *Id.* at 1379.

555. *Id.* at 1380.

556. 800 F.3d 1375 (Fed. Cir. 2015).

557. *Amgen*, 872 F.3d at 1380 (citing *Dynamic Drinkware*, 800 F.3d at 1378).

558. *Id.* at 1381.

MercExchange, LLC.⁵⁵⁹ Significantly, the district court entered an injunction despite its conclusion that a permanent injunction would disserve the public interest by reducing consumer choice in drugs.⁵⁶⁰ The Federal Circuit emphasized that a district court may only enter a permanent injunction if a plaintiff shows that the public interest would not be disserved.⁵⁶¹ Further, the Federal Circuit found that the district court erred in reasoning that reduction in consumer choice, without more, was sufficient to disserve the public interest because “[u]nder such an approach, courts could never enjoin a drug.”⁵⁶²

In *Storer v. Clark*,⁵⁶³ the Federal Circuit affirmed the PTAB’s interference decision that granted priority to an application by Clark (assigned to Gilead), over an application by Storer (assigned to Idenix).⁵⁶⁴ The Federal Circuit found that the PTAB properly determined that Storer was not entitled to the priority date of his provisional application due to a lack of enablement as to the subsequently claimed compounds.⁵⁶⁵ The Federal Circuit noted that Storer initially attempted to have the District of Delaware review the PTAB’s priority determination, but the court dismissed the case for lack of jurisdiction under *Biogen MA, Inc. v. Japanese Foundation for Cancer Research*.⁵⁶⁶ The Federal Circuit noted, “Although Storer says that *Biogen* was incorrectly decided, that decision is binding on this panel.”⁵⁶⁷ The claims at issue related to treatment of hepatitis C and the formation of specific compounds used therein.⁵⁶⁸ The Federal Circuit concluded that a person of skill in the art would have been unable to practice the invention, based on the provisional and the prior art, without undue experimentation.⁵⁶⁹ To assess undue experimentation, the Federal Circuit applied the eight-factor test of *In re Wands*.⁵⁷⁰ The Federal Circuit closely considered the chemical

559. 547 U.S. 388 (2006); *Amgen*, 872 F.3d at 1381 (citing *eBay*, 547 U.S. at 394).

560. *Amgen*, 872 F.3d at 1381.

561. *Id.*

562. *Id.*

563. 860 F.3d 1340 (Fed. Cir. 2017), *cert. denied*, No. 17-1248, 860 F.3d 1340 (U.S. Apr. 23, 2018) (mem.).

564. *Id.* at 1352.

565. *Id.* at 1349–50.

566. 785 F.3d 648 (Fed. Cir. 2015); *Storer*, 860 F.3d at 1343.

567. *Storer*, 860 F.3d at 1343.

568. *Id.*

569. *Id.* at 1350.

570. 858 F.2d 731 (Fed. Cir. 1988); *Storer*, 860 F.3d at 1345 (citing *In re Wands*, 858 F.2d at 737).

compounds and techniques at issue and particularly noted the PTAB's determinations that the relevant art—"fluoridation of tertiary alcohols"—was "highly unpredictable," and significant experimentation would be necessary to reach the claimed compounds from the disclosure in Storer's provisional patent application.⁵⁷¹ On the whole, the record supported the PTAB's determinations.⁵⁷²

F. Indefiniteness

In analyzing indefiniteness under § 112, the Federal Circuit found that terms of degree having sufficient objective baselines may survive an indefiniteness challenge, reversing the district court's grant of summary judgment in *Sonix Technology Co. v. Publications International, Ltd.*⁵⁷³ The patent related to a technique for visually encoding information, such as information typically in a universal product code (UPC) or QR code, into an item such that the information has a "visually negligible" effect on the item's appearance.⁵⁷⁴ The Federal Circuit found that the district court erred in finding the term "visually negligible" indefinite.⁵⁷⁵ Both sides agreed that the term should receive its ordinary meaning, so neither the district court nor the Federal Circuit construed the term.⁵⁷⁶ At the Federal Circuit, the issue received de novo review, with clear error review for factual findings.⁵⁷⁷ The Federal Circuit rejected Publications International's argument for deference to the district court's holding that "visually negligible" was subjective because the district court did not make a specific factual finding on that issue and expressly explained that its indefiniteness determination was not dictated by extrinsic evidence.⁵⁷⁸

The Federal Circuit held that the patent contained sufficient guidance to avoid indefiniteness.⁵⁷⁹ The court found that *Datamize, LLC v. Plumtree Software, Inc.*⁵⁸⁰ and *Interval Licensing LLC v. AOL, Inc.*⁵⁸¹ were

571. *Storer*, 860 F.3d at 1346–47.

572. *Id.* at 1352.

573. 844 F.3d 1370, 1381 (Fed. Cir. 2017).

574. *Id.* at 1371–73.

575. *Id.* at 1371.

576. *Id.* at 1374.

577. *Id.* at 1376.

578. *Id.*

579. *Id.* at 1377 (citing *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1336 (Fed. Cir. 2010)).

580. 417 F.3d 1342 (Fed. Cir. 2005), *abrogated by* *Naututilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014).

581. 766 F.3d 1364 (Fed. Cir. 2014).

not contrary, as those cases involved terms invoking personal taste or opinion.⁵⁸² The “visually negligible” term, by comparison, had a sufficient “objective baseline” to allow a person of skill to ascertain its scope even though it was a term of degree.⁵⁸³ The Federal Circuit considered the written description, file history, and other extrinsic evidence, and found those factors supportive.⁵⁸⁴ Finally, the Federal Circuit noted that the appellees’ “other actions during litigation also reflect that they understood ‘visually negligible,’” and had even proposed a claim construction for them at one point.⁵⁸⁵

In *One-E-Way, Inc. v. International Trade Commission*,⁵⁸⁶ the Federal Circuit reversed the summary determination of invalidity for indefiniteness based on the use of the term in a “non-technical manner” in the claim.⁵⁸⁷ One-E-Way’s patents related to wireless headphones that would not interfere with one another, even in crowded spaces.⁵⁸⁸ The Federal Circuit determined that the term “virtually free from interference” was not indefinite as read in the context of the file history and specification because it meant that One-E-Way’s system would prevent one user from eavesdropping on another.⁵⁸⁹ The Federal Circuit relied on support from the specification and noted that, in the file history, the applicant had specifically written that an example of “virtually eliminating” interference was that eavesdropping could not occur.⁵⁹⁰ The Federal Circuit rejected the argument from Sony and the other parties that were respondents in the ITC investigation, that the claim failed to teach how much interference was permitted, reasoning that the use of the term “interference” was “in a non-technical manner to simply mean” secure from eavesdropping.⁵⁹¹ The Federal Circuit also rejected the argument that One-E-Way failed to establish how “virtually free from interference” differed from “free from interference,” which appeared in other unasserted claims.⁵⁹² The Federal Circuit reasoned, “Audio ‘free from interference’ will be a be a bit better than audio

582. *Sonix Tech.*, 844 F.3d at 1377–78 (citing *Interval Licensing*, 766 F.3d at 1368, 1370–71, 1373–74; *Datamize*, 417 F.3d at 1348–49).

583. *Id.* at 1378.

584. *Id.* at 1378–80.

585. *Id.* at 1380.

586. 859 F.3d 1059 (Fed. Cir. 2017).

587. *Id.* at 1067.

588. *Id.* at 1060.

589. *Id.* at 1067.

590. *Id.* at 1065.

591. *Id.* at 1066.

592. *Id.*

‘virtually free from interference,’” and so audio “free from interference” would be “at a minimum, free from eavesdropping as well.”⁵⁹³ In dissent, Chief Judge Prost advocated for affirming the ITC’s indefiniteness finding and criticized the majority for relying entirely on “a single, non-definitional remark from the prosecution history and ignor[ing] intrinsic evidence that injects ambiguity.”⁵⁹⁴

III. CLAIM CONSTRUCTION

The Federal Circuit continued to address questions of claim construction, implementing the *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*,⁵⁹⁵ standard of review and expounding on the effect of error in claim construction on other issues such as invalidity and infringement.⁵⁹⁶ In *Technology Properties Ltd. v. Huawei Technologies Co.*,⁵⁹⁷ the Federal Circuit held that the scope of surrender is not limited by a patentee disclaiming more than necessary during prosecution, vacating a stipulated judgment of noninfringement.⁵⁹⁸ The Federal Circuit found that the district court did not err in holding that Technology Properties’s traversal during prosecution of a first reference (“Magar”) led to disclaimer of two categories of claim coverage.⁵⁹⁹ Although Technology Properties might have traversed Magar on only one of the two categories, it was bound by both aspects of its double disclaimer, per *Norian Corp. v. Stryker Corp.*⁶⁰⁰ The district court erred, however, in its assessment of the scope of disclaimer associated with traversal of a second reference (“Sheets”).⁶⁰¹ During prosecution, Technology Properties disclaimed the use of certain control signals to change an oscillator’s clock frequency, but the company did not disclaim the use of control signals altogether.⁶⁰²

593. *Id.* at 1066–67.

594. *Id.* at 1067 (Prost, J., dissenting).

595. 135 S. Ct. 831 (2015).

596. *Tech. Props. Ltd. v. Huawei Techs. Co.*, 849 F.3d 1349, 1358 (Fed. Cir. 2017) (citing *Teva*, 135 S. Ct. at 841–42).

597. 849 F.3d 1349 (Fed. Cir. 2017).

598. *Id.* at 1360 (holding that because the party stipulated noninfringement the court remands).

599. *Id.* at 1358.

600. 432 F.3d 1356 (Fed. Cir. 2005) (finding that a patentee cannot prevail on a doctrine of equivalents theory due to disclaimer of multiple alternatives to the claimed invention).

601. *Tech. Props.*, 849 F.3d at 1356–57, 1359 (analyzing whether the term was distinguishable from other patent claims).

602. *Id.* at 1359.

Although this was a “minor modification” to the claim construction, the Federal Circuit found vacatur necessary because the judgment was based on stipulated noninfringement.⁶⁰³

In *TVIIM, LLC v. McAfee, Inc.*,⁶⁰⁴ the Federal Circuit determined that an allegation of inconsistent infringement and validity analyses were immaterial to the jury finding because the patentee conceded that either analysis was proper regardless of the claim construction standard applied.⁶⁰⁵ The Federal Circuit affirmed the district court’s judgment of no infringement and patent invalidity by anticipation and obviousness of TVIIM’s patent related to techniques for identifying computer security vulnerabilities.⁶⁰⁶ Contrary to TVIIM’s arguments, the record did not indicate that the jury applied inconsistent claim constructions in its noninfringement and invalidity findings.⁶⁰⁷ The Federal Circuit noted that, although TVIIM on appeal cited three terms as having multiple ordinary meanings, TVIIM did not ask the district court to construe any of the three, thus it waived any new construction.⁶⁰⁸ The Federal Circuit did not find that any of the terms had multiple ordinary meanings and determined that the jury, on the evidence presented, could have reasonably found both no infringement and invalidity under a single ordinary meaning for each term.⁶⁰⁹ Further, TVIIM conceded that the jury could have reasonably found either noninfringement or invalidity (though, it argued, that it could not find both) under “any single ordinary meaning construction.”⁶¹⁰ The Federal Circuit marked this as a dispositive concession: “[E]ven if we were to find an inconsistent verdict, substantial evidence under ‘any’ construction supports the jury’s verdict of invalidity. Consequently, any potential error by the jury regarding [noninfringement] was harmless.”⁶¹¹

However, in another case this term the Federal Circuit held that failure to identify prejudice from alleged claim construction errors serves a basis for affirmance. In *Comcast IP Holdings I LLC v. Sprint*

603. *Id.* at 1360 (emphasizing that minor modification would not impact the outcome of the case).

604. 851 F.3d 1356 (Fed. Cir. 2017).

605. *Id.* at 1359.

606. *Id.*

607. *Id.* at 1362–63.

608. *Id.* at 1363.

609. *Id.* at 1363, 1365.

610. *Id.* at 1365.

611. *Id.*

Communications Co.,⁶¹² the Federal Circuit affirmed an infringement judgment and \$7.5 million damages award, plus prejudgment interest, against Sprint.⁶¹³ The three asserted patents are related and involve the use of Domain Name System (DNS) to route telephone calls.⁶¹⁴ The Federal Circuit rejected Sprint's suggestion that the district court erred in construing "switched telecommunication system" and noted that the specification did in fact support the district court's construction.⁶¹⁵ The Federal Circuit found that there was sufficient evidence to support the jury's determination that Sprint's accused call flows included a "call destination" and a "unique identifier of a second party."⁶¹⁶ Neither Sprint nor Comcast sought construction of either term.⁶¹⁷ Thus, the court held that the jury was thus free to apply the plain and ordinary meaning, and the record, including testimony from Comcast's expert, reasonably supported the finding.⁶¹⁸ The Federal Circuit also rejected Sprint's argument that the district court erred in construing the term "parsing," noting Sprint's failure to identify prejudice from that construction "in its opening brief" because it failed to explain how the accused call flows do not practice the asserted claims under the narrower claim construction.⁶¹⁹ Even without waiver, the Federal Circuit held that the district court correctly construed the term.

In *Medicines Co. v. Mylan, Inc.*,⁶²⁰ the Federal Circuit construed a key limitation, "efficiently mixing," which neither the court nor parties treated as a means-plus-function term requiring sufficient disclosure of structure under § 112, as limited to a specific mixing technique in the specification notwithstanding the following quasi-definitional language in the specification: "efficient mixing' . . . is characterized by minimizing levels of Asp⁹-bivalirudin in the compounding solution."⁶²¹ The Federal Circuit reversed a bench judgment of infringement as to one of Medicines patents and affirmed summary judgment of noninfringement as to another patent based primarily on claim

612. 850 F.3d 1302 (Fed. Cir. 2017).

613. *Id.* at 1315.

614. *Id.* at 1305, 1307.

615. *Id.*

616. *Id.* at 1312.

617. *Id.*

618. *Id.* at 1308.

619. *Id.* at 1312.

620. 853 F.3d 1296 (Fed. Cir. 2017).

621. *Id.* at 1306.

construction.⁶²² Medicines's patents related to techniques for minimizing impurities in batches of bivalirudin, a synthetic peptide used to prevent blood clotting.⁶²³ Representative claims from both patents addressed "pharmaceutical batches" of bivalirudin compounds, and the parties agreed that "pharmaceutical batches" meant a batch or batches, made by the same "compounding process."⁶²⁴ The claims went on to require that the batches not exceed a maximum impurity level.⁶²⁵ On appeal, the issue was whether, and which of, Medicines's claims required that the "batches" be made using an "efficient mixing" process, a process that mixed more efficiently than the prior art techniques that the patents described as "old" and "inefficient."⁶²⁶

The Federal Circuit found that the district court had correctly held that one of Medicines's patents required "efficient mixing," but erred in holding that the other did not.⁶²⁷ To support its holding, the Federal Circuit discussed the specification and file history in detail and reasoned that all of Medicines's claims required "the use of a process that achieves batch consistency."⁶²⁸ From that, the Federal Circuit concluded that "batch consistency" required "efficiently mixing."⁶²⁹

In both of Medicines's patents, "efficiently mixing" meant mixing in the manner described by one of the examples in Medicines's written description.⁶³⁰ The Federal Circuit rejected Medicines's argument that the term simply meant mixing in such a manner as to minimize the relevant impurity.⁶³¹ Although the patent described "efficiently mixing" in such terms, the Federal Circuit reasoned that the description was not definitional "because it [did] not accord with the linguistic formula used by the patentee to signal the designation of other defined terms."⁶³² The Federal Circuit also cited concerns that Medicines's definition was essentially functional.⁶³³ "Although functional limitations in patent claims are not per se objectionable even when the means-plus-function format is not invoked, they cannot

622. *Id.* at 1310.

623. *Id.* at 1298.

624. *Id.* at 1300.

625. *Id.* at 1300, 1302.

626. *Id.* at 1301.

627. *Id.* at 1298.

628. *Id.* at 1303.

629. *Id.* at 1298.

630. *Id.* at 1307.

631. *Id.* at 1298, 1306.

632. *Id.* at 1306.

633. *Id.*

be ‘so broad that [they] cause[] the claim to have a potential scope of protection beyond that which is justified by the specification disclosure.’”⁶³⁴ Moreover, the court stated that one of ordinary skill in the art would have been guided by the specification to define “efficiently mixing.”⁶³⁵ Applying this construction, the Federal Circuit found that Mylan did not infringe as a matter of law because Mylan’s mixing technique did not comport with the written description’s relevant description of “efficiently mixing.”⁶³⁶

In *Core Wireless Licensing S.A.R.L. v. Apple Inc.*,⁶³⁷ the Federal Circuit affirmed a noninfringement verdict finding that a reference to “advantageously” performing operation did not mean the asserted claims’ non-performing designs.⁶³⁸ Core Wireless’s patent related to the means for sending packet data from a handset to a network on a selected channel.⁶³⁹ The Federal Circuit found that the district court did not err in application of its claim construction as JMOL. The Federal Circuit found that, properly construed, Core Wireless’s claims required certain channel selection be by the handset, not the network.⁶⁴⁰ The Federal Circuit considered the claim construction evidence in detail and rejected Core Wireless’s argument that the construction entered by the magistrate judge and district court did not require such channel selection by the handset.⁶⁴¹ “The problem with Core Wireless’s theory is that the entire point of the invention is to enable the mobile station [handset] to make the channel selection decision”⁶⁴² The district court identified the structure that worked with the handset making the channel selection, and the limitation at issue was a means-plus-function limitation.⁶⁴³ The Federal Circuit rejected Core Wireless’s contention that the limitation was only a preferred embodiment.⁶⁴⁴ Ultimately, the court emphasized that a reference in the specification to performing channel selection in the

634. *Id.* at 1306–07 (alternation in original) (quoting *In re Swinehart*, 439 F.2d 210 (C.C.P.A. 1971)).

635. *Id.* at 1309.

636. *Id.* at 1307.

637. 853 F.3d 1360 (Fed. Cir. 2017).

638. *Id.* at 1361 (finding that the accused device did not infringe and is capable of being a mobile station).

639. *Id.* at 1362.

640. *Id.* at 1363.

641. *Id.* at 1362, 1364, 1366.

642. *Id.* at 1366.

643. *Id.*

644. *Id.* at 1368.

handset “advantageously” did not mean that the claim covered embodiments where channel selection was performed elsewhere.⁶⁴⁵ Under this construction, there was sufficient evidence to sustain the jury’s noninfringement verdict.⁶⁴⁶

In *MasterMine Software, Inc. v. Microsoft Corp.*,⁶⁴⁷ the Federal Circuit affirmed in part and reversed in part a judgment of noninfringement and invalidity based on claim construction reciting structures performing active functions.⁶⁴⁸ The court determined that the district court did not err in requiring that the “pivot tables” in MasterMine’s claims actually display data.⁶⁴⁹ The Federal Circuit relied on the specification and noted that the applicant made reference to “dragging and dropping” elements into pivot tables.⁶⁵⁰ The Federal Circuit found that this “dragging and dropping” disclosure fell short of showing unmistakable disclaimer but supported the district court’s construction.⁶⁵¹ However, the Federal Circuit found that the district court erred in holding five MasterMine claims indefinite as “claiming two subject-matter classes” (i.e., an *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*⁶⁵²-type claiming of both a method and an system).⁶⁵³ MasterMine’s claims did not introduce method elements into system claims but were “simply apparatus claims with proper functional language.”⁶⁵⁴ The Federal Circuit considered its authority on the issue and concluded that the claims’ use of “wherein” clauses containing active verbs (e.g., “wherein the reporting module . . . presents a set of user-selectable database fields”) merely claimed that the system would have a structure “capable of performing the recited functions.”⁶⁵⁵ Further, the claims did not recite activities performed by the user and their use of functional language was “specifically tied to structure.”⁶⁵⁶ The Federal Circuit held that, “[b]ecause the claims merely use permissible functional language to describe the capabilities of the

645. *Id.* at 1367.

646. *Id.* at 1370.

647. 874 F.3d 1307 (Fed. Cir. 2017).

648. *Id.* at 1308.

649. *Id.* at 1310–11.

650. *Id.* at 1312.

651. *Id.*

652. 430 F.3d 1377 (Fed. Cir. 2005).

653. *MasterMine Software*, 874 F.3d at 1310.

654. *Id.* at 1313.

655. *Id.* at 1316 (citing *Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008)).

656. *Id.*

claimed system, it is clear that infringement occurs when one makes, uses, offers to sell, or sells the claimed system.”⁶⁵⁷

The Federal Circuit determined that the § 112, ¶ 6 means-plus-function presumption may be rebutted where there is no function associated with the “means” term. In *Skky, Inc. v. MindGeek, s.a.r.l.*,⁶⁵⁸ the Federal Circuit affirmed an IPR determination of unpatentability,⁶⁵⁹ finding that the PTAB did not err in declining to apply § 112, ¶ 6 to the preamble term “wireless device means.”⁶⁶⁰ In the claim, there was no function associated with the “wireless device means,” and the Federal Circuit held that the term denoted the “common parlance” structure of a wireless device.⁶⁶¹ Thus, MindGeek rebutted the presumption of means-plus-function treatment. The PTAB also correctly rejected Skky’s argument that the term should be construed to require multiple processors as inconsistent with the claims and written description.⁶⁶²

In *Aylus Networks, Inc. v. Apple Inc.*,⁶⁶³ the Federal Circuit affirmed a summary judgment of noninfringement, finding that statements in an IPR preliminary response resulted in prosecution disclaimer.⁶⁶⁴ The Federal Circuit determined that the district court did not err in concluding that Aylus’s statements during IPR could be relied on to support a finding of prosecution disclaimer.⁶⁶⁵ The Federal Circuit reviewed a number of cases applying prosecution disclaimer in other post-issuance proceedings, finding that “[i]t follows that we should apply the doctrine in IPR proceedings.”⁶⁶⁶ Citing *Cuozzo Speed Technologies, LLC v. Lee*,⁶⁶⁷ the Federal Circuit rejected Aylus’s argument that statements in IPR should receive different treatment because an IPR is

657. *Id.*

658. 859 F.3d 1014 (Fed. Cir. 2017), *cert. denied*, No. 17-349, 2018 WL 1994802 (U.S. Apr. 30, 2018) (mem.).

659. *Id.* at 1016 (holding that a part or segment of the entire song was unpatentable).

660. *Id.* at 1018–19.

661. *Id.* at 1020 (describing the standard to describing devices).

662. *Id.* at 1018.

663. 856 F.3d 1353 (Fed. Cir. 2017).

664. *Id.* at 1359, 1362 (holding that statements made during IPR proceedings by the patent owner can be used to support a prosecution disclaimer and that these statements “constitute[d] a clear and unmistakable surrender of claim scope”).

665. *Id.* at 1359.

666. *Id.* at 1359–60.

667. 136 S. Ct. 2131 (2016).

“adjudicative” and not administrative.⁶⁶⁸ The IPR proceeding extended from the inter partes reexamination (IPRx) process, but did not change that process’s basic administrative character.⁶⁶⁹

Further, the Federal Circuit concluded that the district court did not err in concluding that statements in a preliminary response may lead to prosecution disclaimer.⁶⁷⁰ Although, per *Shaw Industrial Group, Inc. v. Automated Creel Systems, Inc.*,⁶⁷¹ “an IPR does not begin until instituted, [the Federal Circuit found] the differences between the two phases of an IPR to be a distinction without a difference.”⁶⁷² Statements in the preliminary response are part of the public record, and the public may rely on them.⁶⁷³ Lastly, the court held that the district court also did not err in finding that Aylus had made clear, unmistakable disclaimers of claim scope.⁶⁷⁴

IV. INFRINGEMENT

A. Direct Infringement

In *Georgetown Rail Equipment Co. v. Holland L.P.*,⁶⁷⁵ the Federal Circuit affirmed an infringement judgment and award of enhanced damages because it found that the defendant willfully shipped data to third parties meeting the claim limitation of “put into service.”⁶⁷⁶ Based on the patent claims and specification, the district court correctly rejected Holland’s arguments that the claim preamble was limiting because the phrase “mounted on a vehicle *for movement along the railroad track*” was a statement of intended use and did not exclude devices lacking a vehicle mount.⁶⁷⁷ Further, the Federal Circuit also rejected Holland’s argument that Georgetown relied on the preamble during prosecution to overcome prior art; the Federal Circuit found that the statements in question from the prosecution history were ambiguous.⁶⁷⁸

The Federal Circuit also determined that the district court did not err in

668. *Aylus Networks*, 856 F.3d at 1360–61 (citing *Cuozzo*, 136 S. Ct. at 2143–44).

669. *Id.* at 1361.

670. *Id.*

671. 817 F.3d 1293 (Fed. Cir. 2016), *cert. denied*, 137 S. Ct. 374 (2016) (mem.).

672. *Aylus Networks*, 856 F.3d at 1361.

673. *Id.*

674. *Id.* at 1362 (noting that the case was not “subject to more than one reasonable interpretation”).

675. 867 F.3d 1229 (Fed. Cir. 2017).

676. *Id.* at 1233 (holding that substantial evidence supported the infringement finding).

677. *Id.* at 1234.

678. *Id.* at 1238.

denying a JMOL and that the record was sufficient to support a determination that Holland was “using” the accused data processing equipment insofar as it was gathering data and sending it to a third party for analysis.⁶⁷⁹ As in *Centillion Data Systems v. Qwest Communications*,⁶⁸⁰ this was sufficient to “put into service” those limitations of the claim that Holland was not itself performing.⁶⁸¹ The record also sufficiently supported a determination that Holland had actually gathered the data at issue.⁶⁸²

The Federal Circuit also affirmed the district court’s remedy findings, determining that there was no error in denying JMOL of no lost profits.⁶⁸³ The Federal Circuit found that the record contained sufficient evidence to support Georgetown prevailing on *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*⁶⁸⁴ factors one and four: demand for the patented product and the amount of profit that would have been made.⁶⁸⁵ Additionally, the Federal Circuit held that the district court did not abuse its discretion in awarding enhanced damages for willfulness.⁶⁸⁶ The Federal Circuit considered the record and concluded that there was sufficient evidence to show that Holland recklessly infringed.⁶⁸⁷

Finding no infringement where an operator did not obtain a benefit from the invention, the Federal Circuit partially affirmed and partially reversed an infringement judgment in *Intellectual Ventures I LLC v. Motorola Mobility LLC*.⁶⁸⁸ The case involved two patents from IV: the ’144 patent relating to file transfer between computers and the ’462 patent relating to a laptop formed by docking a smartphone into a “shell.”⁶⁸⁹ The Federal Circuit found that the district court erred in failing to grant JMOL that neither Motorola nor its customers directly

679. *Id.* at 1237, 1239 (finding no reasonable jury could have found infringing data equipment or could have found that the product was intended to be sold as covered by the requirements under the theory of infringement).

680. 631 F.3d 1279, 1286 (Fed. Cir. 2011) (holding that where a customer controls a system and derives a benefit from that system, it is tantamount to putting the system into service, which is a “use” of the system as a matter of law).

681. *Georgetown Rail Equip.*, 867 F.3d at 1239–40 (citing *Centillion*, 631 F.3d at 1285).

682. *Id.* at 1231, 1239.

683. *Id.* at 1240.

684. 575 F.2d 1152 (6th Cir. 1978) (establishing relevant factors for setting reasonable royalty rates as equivalent to ordinary licensing negotiations between “willing” participants).

685. *Georgetown Rail Equip.*, 867 F.3d at 1241–42.

686. *Id.* at 1232, 1245.

687. *Id.*

688. 870 F.3d 1320, 1322 (Fed. Cir. 2017) (holding certain claims are valid within patent infringement requirements and other claims remanded).

689. *Id.* at 1323.

infringed.⁶⁹⁰ Applying *Centillion* to show “use” of the patented system, which is required to show infringement, it was necessary for IV to show that an accused infringer both “control” the system in question and obtain “benefit” from it.⁶⁹¹ To infringe, the system had to generate delivery reports upon the sending of Multimedia Messaging Service (MMS) messages; the record indicated that while reports of this kind were stored on users’ phones, they were not accessible and there was no evidence of a user ever accessing such reports.⁶⁹² Moreover, IV had not developed any argument that Motorola itself accessed or otherwise benefited from such reports.

In *Shire Development, LLC v. Watson Pharmaceuticals, Inc.*,⁶⁹³ the Federal Circuit reversed an infringement judgment that found no infringement of a “consisting of” Markush claim where unclaimed materials were also present.⁶⁹⁴ Shire’s claim required a hydrophilic matrix that “consists of compounds selected from the group consisting of” various materials.⁶⁹⁵ In the accused composition, the relevant matrix contained an unrecited material, magnesium stearate.⁶⁹⁶ Further, the magnesium stearate exhibited lipophilic properties and “exerted lipophilic influence” in the accused matrix.⁶⁹⁷ The Federal Circuit found that the district court erred in holding that the presence of the magnesium stearate could be discounted for infringement purposes.⁶⁹⁸ The Federal Circuit held that *Norian Corp. v. Stryker Corp.* was not applicable.⁶⁹⁹ Unlike *Norian*, the magnesium stearate in Watson’s composition “structurally and functionally relate[d] to the invention.”⁷⁰⁰ Specifically, the magnesium stearate’s lipophilic influence affected the overall hydrophilic character of the matrix—which was a requirement of the claim.⁷⁰¹ Because of this influence, the exception from *Norian*, which found infringement of a “consisting of” claim

690. *Id.* at 1330–31.

691. *Id.* at 1329.

692. *Id.* at 1329–30.

693. 848 F.3d 981 (Fed. Cir. 2017).

694. *Id.* at 982 (holding that the defendants were entitled to noninfringement because the product did not satisfy the requirements for the claim).

695. *Id.* at 983.

696. *Id.* at 984, 986.

697. *Id.*

698. *Id.* at 986–87.

699. *Id.* at 985 (citing *Norian Corp. v. Stryker Corp.*, 363 F.3d 1321, 1324–25, 1331–32 (Fed. Cir. 2004)).

700. *Id.* at 986.

701. *Id.*

notwithstanding presence of unenumerated elements because they were “aspects unrelated to the invention,” did not apply.⁷⁰² The Federal Circuit found it irrelevant that Watson was using the magnesium stearate as a lubricant, and not for its lipophilic properties.⁷⁰³

In *Life Technologies Corp. v. Promega Corp.*,⁷⁰⁴ the Supreme Court reversed the Federal Circuit’s determination that exporting of a single commodity component of a multi-component invention to one’s own overseas facilities could support § 271(f)(1) liability.⁷⁰⁵ U.S. law makes it illegal to induce infringement outside the United States by exporting a “substantial portion of the components of a patented invention,” where “such components” are uncombined when exported but are later combined to make an infringing product.⁷⁰⁶ The Supreme Court held that, because the statute spoke explicitly in terms of plural “components,” this provision in the statute could only be met if a defendant exported more than one component.⁷⁰⁷ Bolstering its interpretation, the Court noted that the following sub-section, which addresses contributory infringement instead of inducing infringement, used “component” in the singular.⁷⁰⁸ The Court also noted in its conclusion, curiously, that “substantial portion” in the statute “has a quantitative, not a qualitative, meaning.”⁷⁰⁹

The Court’s opinion rested generally on a direct interpretation of § 271(f)(1)’s reference to exporting “a substantial portion” of the components of a multi-component invention.⁷¹⁰ In that context, “substantial” connoted “a quantitative measure.”⁷¹¹ The Court rejected Promega’s argument that “substantial” should be read in a case-specific manner, mixing qualitative and quantitative considerations.⁷¹² As a matter of law, a single component can never constitute a “substantial

702. *Id.* at 981 (quoting *Norian Corp.*, 363 F.3d at 1321, 1331).

703. *Id.* at 986.

704. 137 S. Ct. 734 (2017).

705. *Id.* at 737 (finding that the Federal Circuit erred in its assessment of 35 U.S.C. § 271(f)(1) (2012) and that terms within the statute did not cover components of the invention).

706. *See* § 271(f)(1).

707. *See Life Techs.*, 137 S. Ct. at 742 (2017) (discussing components that come and go abroad being outside the scope).

708. *Id.* at 742.

709. *Id.* at 743.

710. *Id.* at 738–39.

711. *Id.* at 739.

712. *Id.* at 740 (explaining that the case-specific manner requires the fact finder to decipher whether components are substantial).

portion of the components.”⁷¹³ The Court also declined to reach the related question of “how close to ‘all’ of the components ‘a substantial portion’ must be.”⁷¹⁴ The Court concluded with a brief discussion of the history of § 271 (f), finding that it supports the present outcome.⁷¹⁵ Concurring in part, Justice Alito did not view the history of § 271 (f) as illuminating and noted that the Court’s opinion should not be taken as holding that “*any* number greater than one is sufficient.”⁷¹⁶

This decision will not likely have a large impact. The vast majority of patent cases involve either infringing acts inside the United States or the importing of infringing articles into the United States. Comparatively few cases center on exporting, perhaps because the United States is not strong technology exporter.⁷¹⁷ Also, the patent owner can meet the additional requirements of that other sub-section because the adjacent sub-section of the statute (35 U.S.C. § 271 (f) (2)) does not have a qualitative requirement—though it is narrower in other respects—and it may be possible that a patent owner could still stop an exporter who exports only a single component.⁷¹⁸ Obviously, this decision is significant in the cases where it does apply because it could eliminate liability for sales outside the United States, although export cases are not a significant percentage of the overall case load in U.S. courts.

B. *Induced Infringement*

In *Eli Lilly & Co. v. Teva Parenteral Medicines, Inc.*,⁷¹⁹ the Federal Circuit found that physicians’ “direction and control” of patients’ self-administration supported induced infringement, affirming a judgment of liability for inducing divided infringement as per *Akamai Technologies, Inc. v. Limelight Networks, Inc.*⁷²⁰ Eli Lilly’s claims were method claims, and the limitations in each claim included a step of “administering” a certain amount of folic acid before administering pemetrexed (brand name ALIMITA, used in treatment of certain

713. *Id.* at 743.

714. *Id.* at 742.

715. *Id.* at 742–43.

716. *Id.* at 742 (Alito, J., concurring in part).

717. *See id.* at 738 (majority opinion) (conveying stricter requirements for United States born inventions).

718. *Id.* at 739, 742.

719. 845 F.3d 1357 (Fed. Cir. 2017).

720. 797 F.3d 1020 (Fed. Cir. 2015) (en banc), *aff’d in part, rev’d in part*, 805 F.3d 1368 (Fed. Cir. 2015); *Eli Lilly & Co.*, 845 F.3d at 1361.

cancers).⁷²¹ At issue was who, if anyone, was the “direct infringer” for the purpose of supporting Eli Lilly’s induced infringement case against the defendants who were planning to sell generic pemetrexed.⁷²²

The Federal Circuit found that the district court correctly determined that, for purposes of predicate infringement, the physicians were “directing or controlling” the patients’ self-administration.⁷²³ Both prongs of *Akamai*’s direction or control test were satisfied.⁷²⁴ First, the receipt of a benefit (i.e., reducing certain toxicities associated with pemetrexed) was conditioned on the patients’ self-administration, and the physicians’ continued participation in treatment was conditioned on the patients taking folic acid.⁷²⁵ Second, the physicians established the method and timing of the patients’ self-administration by telling patients to take folic acid regularly for a period of time before starting the pemetrexed.⁷²⁶

The Federal Circuit also rejected defendants’ arguments that their actions did not otherwise amount to inducement, as well as defendants’ validity attacks.⁷²⁷ These discussions were largely specific to the record. Notably, the Federal Circuit affirmed the district court’s definiteness holding, and its construction of “vitamin B12,” despite the redundancy in the claim.⁷²⁸

The ITC may bar importation of components on induced infringement grounds. In *Cisco Systems, Inc. v. International Trade Commission*,⁷²⁹ the Federal Circuit affirmed the limited exclusion order against Arista Networks (“Arista”) based on infringement of three patents and affirmed determination of no infringement as to two other patents.⁷³⁰ The Federal Circuit discussed only two of these patents:

721. *Eli Lilly & Co.*, 845 F.3d at 1361–62.

722. *Id.* at 1364.

723. *Id.* at 1365–67.

724. *Id.* at 1365, 1367–68. The *Akamai* direction or control test includes an analysis of “circumstances in which an actor (1) ‘conditions participation in an activity or receipt of a benefit’ upon others’ performance of one or more steps of a patented method, and (2) ‘establishes the manner or timing of that performance.’” *Id.* at 1365 (emphasis in original) (quoting *Akamai Techs., Inc.*, 797 F.3d at 1022).

725. *Id.* at 1366.

726. *Id.* at 1367.

727. *Id.* at 1369 (noting that the defendants attacked the definiteness of the term “vitamin B12,” obviousness, and obviousness-type double patenting).

728. *Id.* at 1369, 1371–72.

729. 873 F.3d 1354 (Fed. Cir. 2017).

730. *Id.* at 1357.

one the ITC held was infringed and one it held not infringed.⁷³¹

As to the infringed patent, the Federal Circuit found that the ITC did not err in its claim construction, and the Federal Circuit rejected Arista's claim construction argument that the syntax of the claim required that user-supplied commands be stored in a specific database.⁷³² The Federal Circuit also rejected Arista's prosecution history-based argument on the same claim construction issue.⁷³³ The Federal Circuit also held that the ITC's order had sufficient support for its finding that certain "components of Arista's accused products induce infringement of the '537 patent," and so the ITC did not err in extending its exclusion order to bar importation of those components.⁷³⁴ While this meant that components such as processors, memories, computer processing unit cards, and chassis would be excluded, the Federal Circuit noted the ITC's broad discretion in its remedies.⁷³⁵ Ultimately, the Federal Circuit held, "Blocking imports of articles that induce patent infringement has a reasonable relationship to stopping unlawful trade acts."⁷³⁶

As to the noninfringed patent, the record supported the ITC's determination that the accused products "infer[red]" information about a subsystem's operation, which was different from the claim's requirement of "detect[ing]" such operation.⁷³⁷

C. Indirect Infringement

In *Lifetime Industries, Inc. v. Trim-Lok, Inc.*,⁷³⁸ the Federal Circuit clarified the application of *Ashcroft v. Iqbal*⁷³⁹ and *Bell Atlantic Corp. v. Twombly*⁷⁴⁰ to indirect infringement, reversing the district court's dismissal of a patent infringement complaint.⁷⁴¹ The Federal Circuit determined that the district court erred in concluding that Lifetime had failed to adequately state claims for direct and indirect patent

731. *Id.*

732. *Id.* at 1361–62. The reference to storing in a database did not apply to the commands but to "router configuration data" derived from those commands. *Id.*

733. *Id.* at 1362.

734. *Id.* at 1362–63.

735. *Id.* at 1363.

736. *Id.*

737. *Id.* at 1363–64.

738. 869 F.3d 1372 (Fed. Cir. 2017).

739. 556 U.S. 662 (2009).

740. 550 U.S. 544 (2007).

741. *Trim-Lok, Inc.*, 869 F.3d at 1372.

infringement.⁷⁴² Lifetime's patent related to a two-part seal for mobile living quarters that extends from the side of an RV.⁷⁴³ The claims required both the seal and the RV.⁷⁴⁴ As to direct infringement, Lifetime's second amended complaint met pleading standards set forth in *Iqbal* and *Twombly*.⁷⁴⁵ Although Trim-Lok only manufactures seals and not RVs, it was plausible that Trim-Lok had installed a seal onto an RV at some point so as to reach the claimed invention.⁷⁴⁶ The Federal Circuit rejected Trim-Lok's argument that Lifetime's complaint lacked sufficient detail in its allegation, noting that the complaint identified where, when, by whom, and why the infringement occurred.⁷⁴⁷ As to indirect infringement, the *Iqbal/Twombly* standard was also met.⁷⁴⁸ For inducement, Lifetime adequately pleaded that Trim-Lok had knowledge of the patent before directing the installation of the seal in question on an RV, thus supporting its allegations as to intent.⁷⁴⁹ For contributory infringement, Lifetime adequately pleaded knowledge of both the patent and the infringement, which was all that was required.⁷⁵⁰ The Federal Circuit also approved Trim-Lok's pleading in the alternative as to whether the employees who installed the seals were Trim-Lok employees (in which case Trim-Lok would face direct infringement liability) or non-employees (in which case it would face indirect infringement liability).⁷⁵¹

V. REMEDIES

A. Damages

The Federal Circuit continued to clarify the mechanics for proving damages and for requiring a higher showing of willfulness when awarding enhanced damages. In *Prism Technologies LLC v. Sprint Spectrum L.P.*,⁷⁵² the Federal Circuit affirmed judgment of infringement and \$30 million damages award finding no error in leveraging cost-

742. *Id.* at 1373.

743. *Id.* at 1373–74.

744. *Id.*

745. *Trim-Lok, Inc.*, 869 F.3d at 1376 (citing *Ashcroft*, 556 U.S. at 663–64; *Twombly*, 550 U.S. at 545–46).

746. *Id.* at 1378–79.

747. *Id.* at 1379.

748. *Id.*

749. *Id.* at 1379–80.

750. *Id.* at 1380–81.

751. *Id.* at 1381.

752. 849 F.3d 1360 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 429 (2017) (mem.).

avoidance evidence for a reasonable royalty computation.⁷⁵³ The Federal Circuit determined that the district court did not err in denying Sprint's motion for a new trial.⁷⁵⁴ The Federal Circuit also held that a new trial was not warranted because Prism's expert gave testimony suggesting that certain Sprint networks were an "Internet Protocol network" (a term whose details Sprint was contesting).⁷⁵⁵ The Federal Circuit rejected Sprint's argument that the district court failed to resolve a dispute between the parties as to what "Internet Protocol network" required. In fact, to the contrary, the order denying Sprint's motion to exclude the testimony resolved the issue in Prism's favor.⁷⁵⁶ The Federal Circuit also rejected Sprint's additional argument for a new trial.⁷⁵⁷ Sprint argued that Prism's expert referred to a path "through" the accused network—as opposed to the path "to access" the network—which is what the claim, as interpreted, required.⁷⁵⁸

Second, the Federal Circuit affirmed the district court's discretion in admitting evidence of Prism's recent settlement, which was negotiated just before closing arguments in separate litigation, with AT&T.⁷⁵⁹ The Federal Circuit considered the weighing of probativeness versus prejudice that the Federal Rules of Evidence (FRE) 403 applies, noting that there is no "per se" rule when it comes to admissibility of such licenses.⁷⁶⁰ It further noted that the AT&T settlement included the patents asserted against Sprint (though the settlement included other patents), and that Prism had tendered evidence apportioning the agreement's value to the asserted patents.⁷⁶¹ It also noted that the AT&T settlement was entered "not just after all discovery was complete, but after the entire trial was finished, except for closing arguments and jury deliberations."⁷⁶² Sprint also attempted to urge a "categorical legal rule barring admission of a patentee's licenses entered into in settlement of infringement litigation," but the Federal Circuit concluded that because Sprint failed to preserve those arguments, they were waived.⁷⁶³

753. *Id.* at 1363–64.

754. *Id.*

755. *Id.* at 1367–68.

756. *Id.* at 1367.

757. *Id.* at 1366.

758. *Id.* at 1367–68 (noting that, in context, it was clear to what the expert was referring).

759. *Id.* at 1368.

760. *Id.* at 1368; *see* FED. R. EVID. 403.

761. *Sprint Spectrum L.P.*, 849 F.3d at 1370–71.

762. *Id.* at 1371.

763. *Id.*

The Federal Circuit went on to express skepticism about such a rule, both under applicable Supreme Court precedent and FRE 408.⁷⁶⁴ Third, contrary to Sprint's arguments, the Federal Circuit found that the district court did not fail to consider Sprint's allegations of legal error in weighing the motion for a new trial.⁷⁶⁵

Fourth, there was no error in admitting Prism's damages evidence, which focused on the costs that Sprint "avoided" by infringement.⁷⁶⁶ While *Uniloc USA Inc. v. Microsoft Corp.*⁷⁶⁷ requires that a damages proof be tied "to the claimed invention's footprint in the market place,"⁷⁶⁸ that requirement "can be met if the patentee adequately shows that the defendant's infringement allowed it to avoid taking a different, more costly course of action."⁷⁶⁹ *Riles v. Shell Exploration & Production Co.*⁷⁷⁰ was not contrary.⁷⁷¹ *Riles* rejected a patentee's attempt to use, as part of his damages base, certain costs that went beyond the patent.⁷⁷² The Federal Circuit found that "[h]ere, in contrast, the uncontroverted evidence showed that Sprint would have chosen to build its own backhaul network in the absence of a license."⁷⁷³ The Federal Circuit affirmed that the district court did not err in permitting Prism to use Sprint's costs for leasing backhaul network capacity from third parties as a starting point for its damages analysis.⁷⁷⁴

As to Prism's cross-appeal, the Federal Circuit found that the district court did not err in denying Prism's motion for an accounting and post-2014 royalties.⁷⁷⁵ The district court did not abuse its discretion in determining that the jury's award covered "past, present, and ongoing infringement."⁷⁷⁶ *WhitServe LLC v. Computer Packages, Inc.*⁷⁷⁷ also supported the district court's holding, as the jury's award was expressly limited to past infringement, so an accounting for future infringement was necessary.⁷⁷⁸

764. *Id.* at 1372–75.

765. *Id.* at 1375.

766. *Id.*

767. 632 F.3d 1292 (Fed. Cir. 2011).

768. *Sprint Spectrum L.P.*, 849 F.3d at 1376 (citing *Uniloc*, 632 F.3d at 1317).

769. *Id.* at 1376.

770. 298 F.3d 1302 (Fed. Cir. 2002).

771. *Sprint Spectrum L.P.*, 849 F.3d at 1376 (citing *Riles*, 298 F.3d at 1312).

772. *Id.* (citing *Riles*, 298 F.3d at 1312).

773. *Id.*

774. *Id.* at 1376–77.

775. *Id.* at 1377.

776. *Id.*

777. 694 F.3d 10 (Fed. Cir. 2012).

778. *Sprint Spectrum L.P.*, 849 F.3d at 1378–79 (citing *WhitServe*, 694 F.3d at 35).

In *Mentor Graphics Corp. v. EVE-USA, Inc.*,⁷⁷⁹ the Federal Circuit determined that applying the *Panduit* factors is sufficient to satisfy the apportionment requirement in damages analyses.⁷⁸⁰ The Federal Circuit partially affirmed, partially reversed, and partially vacated various judgments in a case involving four Mentor patents and two Synopsys (parent of EVE) patents.⁷⁸¹ The patents related to simulation/emulation technology for computer software.⁷⁸²

In the principal appeal relating to Mentor's '376 patent,⁷⁸³ the Federal Circuit affirmed the judgement of infringement and the \$36 million lost profits award,⁷⁸⁴ finding that the district court did not err in denying JMOL because substantial evidence supported the infringement judgment.⁷⁸⁵ The district court did not err in holding that Synopsys was estopped from contesting validity under assignor estoppel; under *Diamond Scientific Co. v. Ambico, Inc.*,⁷⁸⁶ that doctrine has "continued vitality" even post-*Lear, Inc. v. Adkins*.⁷⁸⁷ Likewise, the district court did not err in its awarding lost profits.⁷⁸⁸ The Federal Circuit rejected Synopsys's argument that the district court erred when it failed to apportion lost profits to the "inventive contribution" of Mentor's patent.⁷⁸⁹ The Federal Circuit reasoned that the *Panduit*

779. 851 F.3d 1275 (Fed. Cir. 2017), *petition for cert. docketed*, No. 17-804 (U.S. Dec. 4, 2017).

780. *Id.* at 1290.

781. *Id.* at 1275.

782. *Id.* at 1280.

783. The other issues on appeal related to two Synopsys patents. Regarding Synopsys's '109 patent, the Federal Circuit reversed the summary judgment of indefiniteness. *Id.* The district court erred in holding that the claims' reference to displaying information "visually near" certain other information was indefinite. *Id.* The patent gives sufficient examples to make a person of skill reasonably certain about what "near" meant. *Id.* at 1291. Regarding Synopsys's '526 patent, the Federal Circuit affirmed the summary judgment of § 101 patent ineligibility. *Id.* at 1280. The Federal Circuit determined that the patent's definition of "machine readable medium," a term present in all claims, included "carrier waves," which rendered the claims patent ineligible. *Id.* at 1294–95. Per *In re Nuijten*, 500 F.3d 1346 (Fed. Cir. 2007), claims covering signals themselves are not patent eligible. *Mentor Graphics*, 851 F.3d at 1294–95. The Federal Circuit concluded that although the claims also covered some patent eligible embodiments, this did not save them. *Id.*

784. *Mentor Graphics*, 851 F.3d at 1280.

785. *Id.* at 1282.

786. 848 F.2d 1220 (Fed. Cir. 1988).

787. 395 U.S. 653 (1969); *Mentor Graphics*, 851 F.3d at 1283 (citing *Diamond Sci. Co.*, 848 F.2d at 1222–26).

788. *Mentor Graphics*, 851 F.3d at 1290.

789. *Id.* at 1287–88.

analysis incorporated sufficient apportionment,⁷⁹⁰ holding that “*Panduit’s* requirement that patentees prove demand for the product as a whole and the absence of noninfringing alternatives ties lost profit damages to specific claim limitations and ensures that damages are commensurate with the value of the patented features.”⁷⁹¹ The Federal Circuit noted that Synopsys did not appeal the jury’s relevant *Panduit* fact findings.⁷⁹² The Federal Circuit also rejected the contention from Synopsys and amici that, where complex multi-function devices are at issue, there is a risk of “serial infringement claims” unless further apportionment is made.⁷⁹³ The Federal Circuit concluded that “[u]nder *Panduit*, . . . there can only be one recovery of lost profits for any particular sale.”⁷⁹⁴

On the cross-appeal issues,⁷⁹⁵ the Federal Circuit vacated the motion in limine precluding Mentor from presenting willfulness evidence.⁷⁹⁶ The Federal Circuit found that the district court erred in barring Mentor’s willfulness evidence.⁷⁹⁷ The Federal Circuit disagreed with the district court’s reasoning that Mentor’s willfulness claim was based only on post-

790. *Id.* at 1288.

791. *Id.*

792. *Id.* at 1288–89.

793. *Id.* at 1289.

794. *Id.*

795. The other issues on cross-appeal related to two Mentor patents. Regarding Mentor’s ’882 patent, the Federal Circuit reversed the summary judgment of no written description. *Id.* at 1296. The Federal Circuit rejected Synopsys’s argument that the specification required a specific relationship between two clocks in the claimed invention, with one running faster than the other. *Id.* The originally-filed claim 1 expressly required that the clocks be “independent” and undermined Synopsys’s contention that the specification was limited in the manner proposed. *Id.* at 1297. Regarding Mentor’s ’531 and ’176 patents, the Federal Circuit also reversed summary judgment of issue preclusion against Mentor. *Id.* at 1301. Mentor and EVE had litigated these patents in 2006, ultimately reaching a settlement and bestowing a license to EVE. *Id.* at 1295. Synopsys’s acquisition of EVE in mid-2012 terminated the license. *Id.* at 1281. The Federal Circuit held that the district court erred in finding Mentor precluded from pursuing infringement counterclaims in the present case. *Id.* at 1295. Mentor’s counterclaims were specifically directed to acts occurring after the EVE acquisition, and so they could not have been previously litigated. *Id.* The Federal Circuit reviewed prior authority on the issue and concluded that *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335 (Fed. Cir. 2012), and *Brain Life LLC v. Elekta Inc.*, 746 F.3d 1045 (Fed. Cir. 2014), were on point and guided its decision. *Mentor Graphics*, 851 F.3d at 1298.

796. *Mentor Graphics*, 851 F.3d at 1295.

797. *Id.*

suit conduct.⁷⁹⁸ The claim recited some conduct occurring after Synopsys filed declaratory judgment claims against Mentor but before Mentor's counterclaim for infringement, and therefore the conduct constituted "pre-suit acts."⁷⁹⁹ Moreover, the district court was also wrong in finding that Mentor's failure to seek a preliminary injunction meant it could not pursue willfulness.⁸⁰⁰ There is no "rigid rule" on that issue, per *Aqua Shield v. Inter Pool Cover Team*⁸⁰¹ and *Halo Electronics, Inc. v. Pulse Electronics Inc.*⁸⁰²

Following the initial appeal EVE-USA petitioned for a rehearing en banc. In *Mentor Graphics Corp. v. EVE-USA, Inc.*,⁸⁰³ the en banc court declined to revisit the question of the need for apportionment in *Panduit*-based damages cases, denying EVE-USA's petition for rehearing en banc.⁸⁰⁴ Concurring in the denial, Judge Stoll endorsed the Federal Circuit's determination that when the *Panduit* factors are applied in a lost profits analysis, there is no further apportionment requirement.⁸⁰⁵ Also concurring in the denial, Judge Moore noted that EVE asked the court to revisit assignor estoppel doctrine, but she found this case an insufficient vehicle to do so as the parties did not substantially brief the issue. The facts were not well oriented to consider whether the privity doctrine had expanded too broadly.⁸⁰⁶ In dissent, Judge Dyk determined that Supreme Court precedent required apportionment in all cases, including lost profits cases applying *Panduit*, as the first and second *Panduit* factors were insufficient to actually provide the necessary apportionment.⁸⁰⁷

In *Rembrandt Wireless Technologies, LP v. Samsung Electronics Co.*,⁸⁰⁸ the Federal Circuit determined that a remand was necessary to determine whether, for damages purposes, disclaimer of a claim can cure a failure to mark, while affirming infringement judgment and claim construction.⁸⁰⁹ The Federal Circuit held that the district court did not err in construing Rembrandt's claims as broad enough to cover

798. *Id.*

799. *Id.*

800. *Id.* at 1295–96.

801. 774 F.3d 766 (Fed. Cir. 2014).

802. 136 S. Ct. 1923 (2016); *Mentor Graphics Corp.*, 851 F.3d at 1296 (citing *Halo Elec. Inc.*, 136 S. Ct. at 1934; *Aqua Shield*, 774 F.3d at 773).

803. 870 F.3d 1298 (Fed. Cir. 2017) (en banc) (per curiam).

804. *Id.* at 1298.

805. *Id.* at 1299–300.

806. *Id.* at 1304.

807. *Id.* at 1300–04 (Dyk, J., dissenting).

808. 853 F.3d 1370 (Fed. Cir. 2017).

809. *Id.* at 1374.

multiple “types” of modulation methods.⁸¹⁰ Its interpretation was based on the applicant’s post-allowance insertion of language into the claim stating that the interpretation “clarified” to establish that it would cover multiple methods.⁸¹¹ Therefore, the Federal Circuit held that despite the statement including an “i.e.” clause, the applicant’s claim construction was not rendered indefinite.⁸¹² The Federal Circuit also rejected Samsung’s argument that the district court’s interpretation created a conflict with a dependent claim.⁸¹³

Further, the Federal Circuit also concluded that the district court did not err in rejecting Samsung’s obviousness attack.⁸¹⁴ The Federal Circuit held that the “different types” limitation was a question of fact, and, therefore, the jury could freely weigh the expert testimonial evidence on this issue, as well as to the issue of the sufficiency of Samsung’s proof regarding the prior art combination.⁸¹⁵ Though Rembrandt had argued that one of Samsung’s references taught away from combination with the other reference, it was not necessary to weigh whether there was substantial evidence to support a teaching away determination.⁸¹⁶ The Federal Circuit concluded that “[w]hether a reference teaches away is doctrinally distinct from whether there is no motivation to combine prior art references.”⁸¹⁷

As to damages, the Federal Circuit determined that the district court did not err in denying Samsung’s motion to exclude testimony from Rembrandt’s damages expert on methodological grounds in his assessment of the incremental value associated with the patented technology.⁸¹⁸ The Federal Circuit rejected Samsung’s arguments that the time periods analyzed by the expert were improperly chosen, that the expert erred in attributing the entirety of an observed price differential to the patented technology, and that the expert should not have relied on a settlement agreement that was redacted in various

810. *Id.* at 1376.

811. *Id.*

812. *Id.* at 1376–77 (interpreting the “i.e.” clause as “two types of modulation methods, i.e., different families of modulation techniques, such as [frequency-shift keying and quadrature amplitude modification]”).

813. *Id.* at 1377.

814. *Id.* at 1377, 1380.

815. *Id.* at 1378–79. There was a question of fact as to whether one of Samsung’s references disclosed a key limitation, which was left for the jury to decide.

816. *Id.* at 1379.

817. *Id.*

818. *Id.* at 1380.

ways.⁸¹⁹ As such, the court held that substantial evidence supported the jury's award of damages on "all of Samsung's infringing sales," subject to the marking and notice issue discussed below.⁸²⁰

The district court erred, however, in denying Samsung's motion to limit damages based on Rembrandt's failure to mark products covered by one of its claims—a claim that Rembrandt subsequently disclaimed.⁸²¹ The Federal Circuit considered how § 287 exists to "protect[] the public's ability to exploit an unmarked product's features without liability for damages until a patentee provides either constructive notice through marking or actual notice."⁸²² The Federal Circuit held that Rembrandt cannot perform an "end-run" around the marking statute via disclaimer,⁸²³ stating that "disclaimer cannot serve to retroactively dissolve the § 287(a) marking requirement for a patentee to collect pre-notice damages."⁸²⁴ However, Rembrandt's argument that the marking statute should attach on a claim-by-claim, not patent-by-patent, basis was novel, not waived, and not developed by the district court. The Federal Circuit "remand[ed] to the district court to address in the first instance whether the patent marking statute should attach on a patent-by-patent or claim-by-claim basis."⁸²⁵

In *NOVA Chemicals Corp. (Canada) v. Dow Chemical Co.*,⁸²⁶ the Federal Circuit held that mere filing of an action to set aside judgment cannot lead to an award of enhanced damages, but a lack of substantive support for such a complaint can, affirming the finding of exceptionality under § 285.⁸²⁷ NOVA Chemicals Corp. (NOVA) had been found liable for infringement in 2010, but in 2013, while supplemental damages proceedings were still ongoing, it filed a complaint for equitable relief from liability based on allegations that Dow had committed fraud with respect to true ownership of the asserted patents.⁸²⁸ The district court had dismissed NOVA's equity action as lacking plausibility.⁸²⁹

819. *Id.* at 1380–81.

820. *Id.* at 1382.

821. *Id.* at 1382.

822. *Id.* at 1383.

823. *Id.*

824. *Id.* at 1384.

825. *Id.* at 1384–85.

826. 856 F.3d 1012 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 485 (2017) (mem.).

827. *Id.* at 1014.

828. *Id.* at 1015–16.

829. *Id.* at 1016.

To the extent the district court's exceptionality finding was based on the mere fact that NOVA filed a complaint for equitable relief from liability for its infringement, which was subsequently found implausible, the district court erred.⁸³⁰ The Federal Circuit reasoned that "[a] party whose only option for relief from a prior judgment is to file a separate action in equity should not be disincentivized from doing so if that party has a plausible basis for relief."⁸³¹ However, the district court did not abuse its discretion in basing its exceptionality finding on the substantive strength of NOVA's equity arguments.⁸³² The district court was also correct to base its § 285 decision on a comparison of this patent case to the totality of other patent cases.⁸³³ It rejected NOVA's argument that the baseline for comparison should have been other actions to set aside a prior judgment.⁸³⁴ NOVA's argument lacked legal authority, and the Federal Circuit declined to hold that the comparison to other cases should be so limited.⁸³⁵

Finding that a plaintiff's failure to reassess case viability post-*Alice* supports a fee award, in *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*,⁸³⁶ the Federal Circuit affirmed an award of attorneys' fees to Bed, Bath & Beyond (BBB).⁸³⁷ The district court did not abuse its discretion in finding the case exceptional under § 285, particularly in view of *Alice*.⁸³⁸ The Federal Circuit analyzed Inventor Holdings's (IH) claims, which related to techniques for purchasing goods at a local point-of-sale system from a remote seller, and determined that they fail both steps of the *Alice* test for patent eligibility.⁸³⁹ At step one, the Federal Circuit reasoned, "The idea that a customer may pay for items ordered from a remote seller at a third-party's local establishment is the type of fundamental business practice that, when implemented using generic computer technology, is not patentable under *Alice*."⁸⁴⁰ At step two, the Federal Circuit found that only conventional components are disclosed to implement this idea.⁸⁴¹ The Federal Circuit also rejected IH's

830. *Id.*

831. *Id.* at 1017.

832. *Id.*

833. *Id.* at 1018.

834. *Id.*

835. *Id.* at 1018–19.

836. 876 F.3d 1372 (Fed. Cir. 2017).

837. *Id.* at 1373–74.

838. *Id.* at 1377–78.

839. *Id.* at 1378.

840. *Id.*

841. *Id.*

argument that, because the district court had rejected other defendants' § 101 challenges pre-*Alice*, it was reasonable for IH to believe its claims patent-eligible.⁸⁴² First, the district court never endorsed the eligibility of IH's claims or gave reasons for its denial of other defendants' motions.⁸⁴³ Second, "*Alice* was a significant change in the law as applied to the facts of this particular case."⁸⁴⁴ Post-*Alice*, IH had an obligation "to reassess its case in view of new controlling law."⁸⁴⁵ The district court also did not abuse its discretion in awarding appellate attorneys' fees, per *Therasense, Inc. v. Becton, Dickinson & Co.*⁸⁴⁶

In *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*,⁸⁴⁷ the Federal Circuit determined that the district court neither abused its discretion in rejecting BRP's *Daubert v. Merrell Dow Pharmaceuticals, Inc.*⁸⁴⁸ challenge to royalty rate testimony from Arctic Cat nor erred in denying JMOL on the same issue.⁸⁴⁹ The record was sufficient to establish that a later-developed system from BRP could be used as a value benchmark for the infringing system.⁸⁵⁰ The district court also did not abuse discretion in granting Arctic Cat an ongoing royalty. Though BRP argued that the ordered rate "impermissibly covers [BRP's] profits, [the Federal Circuit] has affirmed rates at or near the infringer's alleged profit margin."⁸⁵¹ The district court also did not err in denying JMOL on willfulness because the record included sufficient evidence on the issue. The district court's jury instruction that willfulness could be proved by evidence that BRP "actually knew or should have known" of the risk of infringement was consistent with *Halo Electronics Inc. v. Pulse Electronics, Inc.* and *WesternGeco L.L.C. v. ION Geophysical Corp.*⁸⁵²

842. *Id.* at 1378–79.

843. *Id.* at 1379.

844. *Id.*

845. *Id.*

846. 745 F.3d 513 (Fed. Cir. 2014); *Inventor Holdings*, 876 F.3d at 1380 (citing *Therasense*, 745 F.3d at 517) (noting that § 285 does not prevent trial courts from awarding attorneys' fees for an entire case and appeals).

847. 876 F.3d 1350 (Fed. Cir. 2017).

848. 509 U.S. 579 (1993).

849. *Arctic Cat Inc.*, 876 F.3d at 1369–70.

850. *Id.* at 1369.

851. *Id.* at 1370.

852. 837 F.3d 1358 (Fed. Cir. 2016), *cert. granted*, 138 S. Ct. 734 (2018); *Arctic Cat Inc.*, 876 F.3d at 1371.

B. Attorneys' Fees

In *Bayer CropScience AG v. Dow AgroSciences LLC*,⁸⁵³ the Federal Circuit affirmed the exceptionality finding and award of attorneys' fees, concluding that arguments that the positions taken were "objectively reasonable" insufficient.⁸⁵⁴ As required by *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*,⁸⁵⁵ the district court properly examined the totality of the circumstances and determined that the case stood out from others.⁸⁵⁶ The case's core dispute was whether a previous Bayer license (executed under UK law) gave Dow's partner rights to exploit certain patents commercially.⁸⁵⁷ The district court found Bayer's interpretation of the license as conveying only non-commercial rights unpersuasive and found its pre-suit investigation lacking.⁸⁵⁸ In particular, it cited the surrounding conduct and circumstances for the license's negotiation and recited a variety of Bayer's statements and conduct that the district court viewed as unacceptable.⁸⁵⁹ The Federal Circuit rejected Bayer's argument that the case could not be exceptional because Bayer's contract interpretation was objectively reasonable.⁸⁶⁰ *Octane Fitness* rejected such rigidity, and the district court's analysis properly reviewed the totality of the case.⁸⁶¹ The Federal Circuit held that, even though Bayer presented expert testimony from a "former Justice of the Supreme Court of the United Kingdom," this testimony did not undermine the district court's analysis because the expert had only considered the license's text, not surrounding conduct.⁸⁶² The Federal Circuit also declined Bayer's argument for re-weighting evidence on appeal.⁸⁶³ Per *Highmark Inc. v. Allcare Health Management Systems, Inc.*,⁸⁶⁴ such was reserved to the district court's discretion.⁸⁶⁵

853. 851 F.3d 1302 (Fed. Cir. 2017).

854. *Id.* at 1303.

855. 134 S. Ct. 1749 (2014).

856. *Bayer*, 851 F.3d at 1303 (citing *Octane Fitness*, 134 S. Ct. at 1752 (holding that an "exceptional case" is one that stands out from others on the basis of the strength of a party's litigating position or the way in which the case was litigated)).

857. *Id.*

858. *Id.* at 1304–05.

859. *Id.*

860. *Id.* at 1305.

861. *Id.* at 1306.

862. *Id.* at 1307.

863. *Id.*

864. 134 S. Ct. 1744 (2014).

865. *Bayer*, 851 F.3d at 1307–08.

In *University of Utah v. Max-Planck-Gesellschaft zur Foerderung der Wissenschaften E.V.*,⁸⁶⁶ the Federal Circuit found no abuse of discretion in declining to find a case exception even considering the weaknesses of the case, affirming non-exceptionality finding and denial of § 285 attorneys' fees motion.⁸⁶⁷ The case involved University of Utah's ("UUtah") claim that Dr. Brenda Bass was the sole inventor, or joint inventor, of patents assigned to Max Planck that listed Dr. Thomas Tuschl as first-named inventor.⁸⁶⁸ It was undisputed that after Dr. Tuschl published some preliminary results concerning RNA interference, Dr. Bass published a mini-review hypothesizing that certain activity observed by Dr. Tuschl involved molecules having a feature called "3' overhangs."⁸⁶⁹ Dr. Tuschl went on to explore 3' overhangs, which ultimately led to the patents in question.⁸⁷⁰ Dr. Bass testified that she had not done any experiments to study the effect of 3' overhangs or to otherwise develop the inventions Dr. Tuschl patented.⁸⁷¹ Notwithstanding these facts, UUtah pursued a high damages request.⁸⁷² Just before summary judgment, UUtah withdrew its claim for sole inventorship.⁸⁷³ The district court granted summary judgment for Max Planck on the joint inventorship claim but rejected Max Planck's claim for attorneys' fees and exceptional case status.⁸⁷⁴ The Federal Circuit determined this was not an abuse of discretion because *Octane Fitness* does not require any particular methodology for exceptionality, and the district court's opinion set forth why the case did not "stand[] out from [other patent cases]" to be considered exceptional.⁸⁷⁵ The Federal Circuit concluded that the district court did not abuse its discretion in determining that UUtah's conduct, notwithstanding Dr. Bass's testimony, did not warrant an exceptionality finding.⁸⁷⁶

In *Checkpoint Systems, Inc. v. All-Tag Security S.A.*,⁸⁷⁷ the Federal Circuit

866. 851 F.3d 1317 (Fed. Cir. 2017).

867. *Id.* at 1319.

868. *Id.* at 1320.

869. *Id.*

870. *Id.*

871. *Id.*

872. *Id.* at 1322.

873. *Id.* at 1321.

874. *Id.* at 1321–22.

875. *Id.* at 1323 (citing *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014)).

876. *Id.*

877. 858 F.3d 1371 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 650 (2018).

determined that a finding of exceptionality absent evidence of bad faith was an abuse of discretion, reversing exceptional case determination and award of attorneys' fees under § 285.⁸⁷⁸ The Federal Circuit found that the district court abused its discretion in concluding that Checkpoint's conduct warranted an exceptionality finding.⁸⁷⁹ Though a party's "motivation" in bringing a suit is relevant to exceptionality per *Octane Fitness*, in this case, the record indicated that Checkpoint's belief in All-Tag's infringement was reasonable, and there was no evidence of harassment or abuse, or other indicators of bad faith.⁸⁸⁰ Though the district court concluded that Checkpoint's goal by the litigation was "to protect its own competitive advantage," a patent right permits such protection.⁸⁸¹ The Federal Circuit also considered how Checkpoint's claims survived summary judgment motions.⁸⁸² And although the products tested by Checkpoint's expert were, apparently, not the specifically accused products, "[t]here was no representation by All-Tag that the accused products were different from the tested products, and the district court did not so find."⁸⁸³

In *Rothschild Connected Devices Innovations, LLC v. Guardian Protection Services, Inc.*,⁸⁸⁴ the Federal Circuit reversed a denial of motion to declare case exceptional under § 285, finding that a failure to declare exceptionality was an abuse of discretion, notwithstanding the plaintiff's attempt to withdraw the complaint.⁸⁸⁵ The Federal Circuit considered how Rothschild had maintained "willful ignorance" of prior art cited by appellant ADS Security (ADS) in a post-complaint email, even after ADS filed for attorneys' fees.⁸⁸⁶ The Federal Circuit held that, despite Rothschild voluntarily moving to dismiss its own action prior to the fees motion, the case could still be considered exceptional because Rothschild submitted affidavits opposing fees to the district court stating that it continued to believe its claims were valid and had still not considered ADS's tendered claims.⁸⁸⁷ The Federal Circuit reasoned, "It is unclear how Rothschild's counsel and

878. *Id.* at 1373.

879. *Id.* at 1376–77.

880. *Id.* at 1375.

881. *Id.*

882. *Id.* at 1375–76.

883. *Id.* at 1376.

884. 858 F.3d 1383 (Fed. Cir. 2017).

885. *Id.* at 1385.

886. *Id.* at 1387.

887. *Id.* at 1388.

founder could reasonably believe that claim 1 is valid if neither analyzed the purportedly invalidating prior art provided by ADS.”⁸⁸⁸ The district court’s failure to address these “incongruent statements” was abuse of discretion per *Atlantic Research Marketing Systems, Inc. v. Troy*.⁸⁸⁹ The Federal Circuit also identified other problems in the district court’s review of the record. The district court failed to properly consider Rothschild’s conduct in other litigation, where it had settled the vast majority of its fifty-eight filed cases for nuisance value.⁸⁹⁰ The district court also erred in reasoning that an exceptionality finding would interfere with the operation of Rule 11, which the district court reasoned had encouraged Rothschild to voluntarily withdraw its complaint.⁸⁹¹ Per *Octane Fitness*, litigation conduct may support exceptionality even if it is not on its own sanctionable under Rule 11.⁸⁹²

Concurring, Judge Mayer wrote separately to note that Rothschild’s infringement complaint was “frivolous on its face” due to obvious § 101 problems, and thus supported exceptionality under *Octane Fitness* even absent Rothschild’s problematic affidavits and willful ignorance.⁸⁹³

In *AdjustaCam, LLC v. Newegg, Inc.*,⁸⁹⁴ the Federal Circuit reversed the denial of a motion for § 285 attorneys’ fees because of the court’s failure to recognize the impact of the Markman order rendering the case baseless.⁸⁹⁵ The Federal Circuit determined that the district court abused its discretion in two respects. First, it failed to follow the instructions of a previous remand, which had come following *Octane Fitness*, that had instructed the district court to evaluate the full merits of Newegg’s motion.⁸⁹⁶ The district court’s re-adoption of its previous findings was inconsistent with the remand order.⁸⁹⁷ Although the matter had been assigned to a new judge following the original district judge’s retirement, the Federal Circuit held that it could not excuse the district court’s failure to reevaluate the record.⁸⁹⁸ *University of Utah*

888. *Id.*

889. 659 F.3d 1345 (Fed. Cir. 2011); *Rothschild Connected Devices Innovations*, 858 F.3d at 1388. This abuse of discretion occurs when the court “fail[s] to conduct an adequate inquiry.” *Atl. Research Mktg. Sys.*, 659 F.3d at 1360.

890. *Rothschild Connected Devices Innovations*, 858 F.3d at 1389.

891. *Id.* at 1390.

892. *Id.*

893. *Id.* at 1390–91 (Mayer, J., concurring).

894. 861 F.3d 1353 (Fed. Cir. 2017).

895. *Id.* at 1354–55.

896. *Id.* at 1357, 1359.

897. *Id.* at 1359.

898. *Id.* at 1357, 1359–60.

v. Max-Planck-Gesellschaft zur Foerderung der Wissenschaften e.V. did not bar the Federal Circuit from reversing because, in this case, there was “no evidence that the district court properly weighed the issues.”⁸⁹⁹ Second, the district court clearly erred in its assessment of the substantive strength of AdjustaCam’s case.⁹⁰⁰ The Federal Circuit considered how the court’s *Markman* order rendered AdjustaCam’s case baseless and criticizes the district court for relying, in its non-exceptionality determination, on an argument AdjustaCam had not actually made.⁹⁰¹ Further, the Federal Circuit considered how AdjustaCam’s use of “after-the-fact declarations” to excuse its behavior was unreasonable per *Octane Fitness*.⁹⁰² Because of both of the district court’s errors, the Federal Circuit reversed.

In *AIA America, Inc. v. Avid Radiopharmaceuticals*,⁹⁰³ the Federal Circuit held that there is no Seventh Amendment right to a jury for fact finding in fee awards, affirming the § 285 attorneys’ fee award to Avid.⁹⁰⁴ The Federal Circuit rejected the Alzheimer Institute of America’s (“Institute”) argument that the Seventh Amendment required a jury trial to determine the facts underlying the award.⁹⁰⁵ The Federal Circuit applied the test of *Tull v. United States*⁹⁰⁶ to conclude that an award of fees is properly characterized as an equitable remedy, not a legal one, so the Seventh Amendment requires no jury trial.⁹⁰⁷ It rejected the Institute’s argument that, because the fee award involved a measure of fact finding as to state of mind and intent, a jury trial was required; such an argument lacked case law support.⁹⁰⁸ The Federal Circuit also found that the district court also did not err in making fact findings that went beyond what the jury had addressed.⁹⁰⁹

899. *Id.* at 1360.

900. *Id.* at 1359.

901. *Id.* at 1360.

902. *Id.* at 1361.

903. 866 F.3d 1369 (Fed. Cir. 2017).

904. *Id.* at 1371.

905. *Id.* at 1372, 1374.

906. 481 U.S. 412 (1987).

907. *Avid*, 866 F.3d at 1373 (citing *Tull*, 481 U.S. at 418 (finding that, in determining whether a statutory cause of action involves only legal rights, the court compares the action to those brought in eighteenth-century English courts and then determines whether the action is legal or equitable in nature)).

908. *Id.* at 1373–74.

909. *See id.* at 1372, 1374 (noting the jury’s conclusion that Institute lacked standing to press a patent suit against Avid and had engaged in bad conduct in obtaining the patent in question).

Cases like *Door-Master Corp. v. Yorktowne, Inc.*⁹¹⁰ and *Jurgens v. CBK, Ltd.*⁹¹¹ bar a court from making fact finding inconsistent with the jury's verdict, but they do not bar additional fact finding that is not inconsistent with the verdict.⁹¹² The district court also did not violate the Institute's due process rights because it provided both parties an opportunity for briefing, submission of evidence, and an in-court hearing on the fee issue.⁹¹³

In *Nantkwest, Inc. v. Matal*,⁹¹⁴ the Federal Circuit reversed a denial of attorneys' fees motion finding that the PTO may recover attorneys' fee following a successful defense in a § 145 appeal.⁹¹⁵ The case was a § 145 appeal to the Eastern District of Virginia from the PTO's rejection of a patent application assigned to Nantkwest.⁹¹⁶ The Federal Circuit found that the district court erred in reasoning that the "all expenses" provision of § 145 did not authorize payment of attorneys' fees, particularly against the backdrop of the American Rule.⁹¹⁷ The court expressed "substantial doubts" that the American Rule applies to § 145 proceedings.⁹¹⁸ *Baker Botts L.L.P. v. Asarco LLC*.⁹¹⁹ does not mean that the American Rule's specific requirements must apply to all fee statutes irrespective of a prevailing party.⁹²⁰ But even if the American Rule were to apply, § 145's reference to awarding "expenses" includes attorneys' fees.⁹²¹ The Federal Circuit relied on various dictionaries, as well as historical versions of the Patent Act and *Taniguchi v. Kan Pacific Saipan, Ltd.*,⁹²² as demonstrating that "expenses" is a broader term than "costs"

910. 256 F.3d 1308 (Fed. Cir. 2001).

911. 80 F.3d 1566 (Fed. Cir. 1996).

912. *Avid*, 866 F.3d at 1374.

913. *Id.*

914. 860 F.3d 1352 (Fed. Cir. 2017), *vacated*, 869 F.3d 1352 (Fed. Cir. 2017) (en banc).

915. *Id.* at 1353; *see* 35 U.S.C. § 145 (2012) (allowing a patent applicant to appeal to the U.S. District Court for the Eastern District of Virginia if that person is dissatisfied with a decision of the PTAB under 34 U.S.C. § 134(a)).

916. *Nantkwest*, 860 F.3d at 1353–54.

917. *See id.* at 1354–56, 1359 (noting that according to the American Rule, litigants generally pay their own attorneys' fees, win or lose).

918. *Id.* at 1355.

919. 135 S. Ct. 2158 (2015) (holding that the Bankruptcy Code does not permit bankruptcy courts to award attorneys' fees to counsel or other professionals employed by the bankruptcy estate for work performed in defending a fee application in court).

920. *Nantkwest*, 860 F.3d at 1355.

921. *Id.* at 1359.

922. 566 U.S. 560 (2012).

and includes attorneys' fees.⁹²³ The Federal Circuit also rejected Nantkwest's argument that the PTO's attorneys' fees were not "expenses of the proceedings" because the PTO was represented by its own full-time employees, whose salaries it was obligated to pay regardless of the suit.⁹²⁴ Citing regional circuit authority and *Raney v. Federal Bureau of Prisons*,⁹²⁵ the Federal Circuit reasoned that the PTO can recover an apportionment of its lawyers' salaries "because the litigation required the lawyers to divert their time away from other pending matters."⁹²⁶ In dissent, Judge Stoll would have concluded that § 145 lacked the specificity necessary to overcome the American Rule's general bar against shifting attorneys' fees.⁹²⁷

Acting sua sponte, the Federal Circuit vacated the *NantKwest* Federal Circuit opinion and ordered a rehearing en banc.⁹²⁸ The Federal Circuit has requested new briefing to address whether the Federal Circuit properly determined that § 145 authorizes a district court to award attorneys' fees to the PTO.⁹²⁹

The *Octane Fitness* standard for awarding attorneys' fees applies to cases under the Lanham Act. In *Romag Fasteners, Inc. v. Fossil, Inc.*,⁹³⁰ the Federal Circuit vacated a determination of attorneys' fees.⁹³¹ The Federal Circuit found that the district court erred in not applying the same standard for attorneys' fee recovery under the Lanham Act as under the Patent Act.⁹³² The Federal Circuit reasoned that, applying Second Circuit law, Lanham Act fee recovery would apply the standard of *Octane Fitness*.⁹³³

Further, the Federal Circuit determined that the district court also erred in its award of fees under § 285 and *Octane Fitness*.⁹³⁴ The district court clearly erred in finding that Fossil had declined to abandon various invalidity defenses until after trial. The record indicated that Fossil had not pursued such defenses at trial.⁹³⁵ Despite the record

923. *Nantkwest*, 860 F.3d at 1356–57.

924. *Id.* at 1359.

925. 222 F.3d 927 (Fed. Cir. 2000) (en banc).

926. *Nantkwest*, 860 F.3d at 1359.

927. *Id.* at 1360.

928. *NantKwest, Inc. v. Matal*, 869 F.3d 1327 (Fed. Cir. 2017) (en banc).

929. *Id.*

930. 866 F.3d 1330 (Fed. Cir. 2017).

931. *Id.* at 1333.

932. *Id.* at 1335.

933. *Id.* at 1336.

934. *Id.*

935. *Id.*

indicating otherwise, the district court erroneously determined that another of Fossil's invalidity defenses "bordered on frivolous."⁹³⁶ The district court also erred in failing to take into account that Romag had previously been sanctioned for its own litigation conduct.⁹³⁷ The Federal Circuit rejected Romag's argument that the district court denied attorneys' fees connected to one of Fossil's noninfringement defenses based solely on the district court's previous refusal to grant a Rule 50(a) motion on the subject.⁹³⁸ The district court's reasoning was not based solely on the Rule 50(a) denial.⁹³⁹

Dissenting in part, Judge Newman agreed that the issue of fees under the Lanham Act should be remanded for treatment under *Octane Fitness*.⁹⁴⁰ However, she would have affirmed the district court's § 285 award as within the district court's discretion.⁹⁴¹

C. Sanctions and Inequitable Conduct

In *Walker v. Health International Corp.*,⁹⁴² the Federal Circuit concluded that the presentation of meritless arguments, even post-settlement, warranted both trial and appellate sanctions, affirming the lower court's judgment award, and granted defendants' motion for appellate sanctions.⁹⁴³ Under Tenth Circuit precedent, the district court did not abuse its discretion in finding Mr. Walker's conduct sufficiently vexatious to support an award of attorneys' fees as a sanction.⁹⁴⁴ The Federal Circuit rejected each of Mr. Walker's arguments, holding that the district court created an "ample" record of Mr. Walker's bad conduct, finding no error in the district court's refusal to re-hear arguments already deemed meritless and that the district court had jurisdiction notwithstanding the settlement.⁹⁴⁵ Additionally, the Federal Circuit determined that Mr. Walker's appeal was frivolous because it presented meritless arguments and baseless accusations against the opposing counsel, even after these errors were pointed out to Mr.

936. *Id.* at 1339.

937. *Id.* at 1340.

938. *Id.* at 1341.

939. *Id.*

940. *Id.* at 1342 (Newman, J., concurring in part and dissenting in part).

941. *Id.* at 1342–43.

942. 845 F.3d 1148 (Fed. Cir. 2017).

943. *Id.* at 1151.

944. *Id.* at 1153.

945. *Id.* at 1154–55.

Walker.⁹⁴⁶ The Federal Circuit held Mr. Walker and his counsel jointly and severally liable, awarding Rule 38 sanctions amounting to \$51,801.88 in double costs and attorneys' fees.⁹⁴⁷

In *Organik Kimya San. Ve Tic., A.Ş. v. International Trade Commission*,⁹⁴⁸ the Federal Circuit affirmed the ITC's award of default judgment and a limited exclusion order barring Organik Kimya from importing certain polymers for twenty-five years unless and until Organik Kimya could show that it was no longer seeking to import polymers developed using trade secrets of the Complainant Dow Chemical.⁹⁴⁹ The Federal Circuit held that the ITC did not abuse its discretion in entering default judgment after finding that Organik Kimya had engaged in severe discovery misconduct, including "spoliation of evidence on a staggering scale."⁹⁵⁰ The Federal Circuit rejected Organik Kimya's argument that the ITC should have applied the framework of *Micron Technology, Inc. v. Rambus Inc.*⁹⁵¹ when contemplating entry of default judgment.⁹⁵² *Micron* addressed a district court's power to enter default judgment as part of its "inherent authority to control the judicial process and litigation."⁹⁵³ This holding was inapplicable because neither the Administrative Law Judge nor the ITC was relying on inherent authority to enter default judgment, but on express regulatory authority established in 19 C.F.R. § 210.33(b).⁹⁵⁴ Thus, simple abuse of discretion analysis applied and led to affirmance.

The ITC also did not abuse its discretion in the limited exclusion order, including its term.⁹⁵⁵ The evidence supported the ITC's conclusion that it would have taken Organik Kimya twenty-five years to develop the polymers in question independent from Dow's trade secrets.⁹⁵⁶ The Federal Circuit concluded, "Given this basis for the [ITC's] decision, and that Organik Kimya can end the exclusion order

946. *Id.* at 1156.

947. *Id.* at 1157.

948. 848 F.3d 994 (Fed. Cir. 2017).

949. *Id.* at 995.

950. *Id.* at 997.

951. 645 F.3d 1311 (Fed. Cir. 2011).

952. *Organik*, 848 F.3d at 1003. Additionally, in a footnote, the opinion notes that the same outcome would have applied even had *Micron's* analysis applied. *Id.* at 1003.

953. *Id.* at 1326.

954. 19 C.F.R. § 210.33(b) (2017).

955. *Organik*, 848 F.3d at 1005.

956. *Id.* (finding Dow's expert credible "when he opined that it would take Organik Kimya fifteen to twenty-five years to develop opaque polymers" independent of Dow's trade secrets).

period at any time by seeking an advisory opinion or initiating a modification proceeding before the [ITC],” there was neither legal error or abuse of discretion in the ITC’s choice of remedy.⁹⁵⁷

In *Regeneron Pharmaceuticals, Inc. v. Merus N.V.*,⁹⁵⁸ the Federal Circuit found litigation tactics disguising prosecution misconduct warranted an adverse inference of specific intent, affirming a judgment of patent unenforceability for inequitable conduct.⁹⁵⁹ The district court correctly established the broadest reasonable interpretation of Regeneron’s claims.⁹⁶⁰ Applying that interpretation, the district court correctly determined that certain references withheld during prosecution were non-cumulative and but-for material.⁹⁶¹ The Federal Circuit rejected each of Regeneron’s arguments for non-materiality and cumulateness.⁹⁶²

The Federal Circuit found no abuse of discretion in entering an adverse inference of specific intent to deceive based on Regeneron’s litigation misconduct.⁹⁶³ The Federal Circuit considered a variety of acts by Regeneron that the district court found sanctionable, including Regeneron’s refusal to provide element-by-element infringement contentions, and its refusal to engage with the district court’s claim construction procedural rules, specifically, its refusal to propose constructions beyond “plain meaning.”⁹⁶⁴ Also, the Federal Circuit considered a record of bad conduct by Regeneron in connection with the district court’s inquiry into the scope of waiver of privilege in connection with certain key documents bearing on Regeneron’s conduct during prosecution.⁹⁶⁵ Applying Second Circuit law, the Federal Circuit concluded that the district court was entitled to draw an adverse inference generally and not with respect to a single piece of problematic evidence.⁹⁶⁶ It rejected Regeneron’s argument that the adverse inference was actually a dismissal, which would have required a showing of bad faith.⁹⁶⁷ *Aptix Corp. v. Quickturn Design Systems, Inc.*,⁹⁶⁸

957. *Id.* at 1005.

958. 864 F.3d 1343 (Fed. Cir. 2017), *reh’g denied*, 878 F.3d 1041 (Fed. Cir. 2017) (per curiam).

959. *Id.* at 1346.

960. *Id.* at 1348.

961. *Id.* at 1352–53.

962. *Id.* at 1352–56.

963. *Id.* at 1356.

964. *Id.* at 1357.

965. *Id.* at 1361–62.

966. *Id.* at 1351, 1363.

967. *Id.* at 1363–64.

968. 269 F.3d 1369 (Fed. Cir. 2001).

relied on heavily by the dissent, was not contrary because the adverse inference was not a sanction only against litigation misconduct, but against litigation misconduct that “obfuscated [Regeneron’s] prosecution misconduct.”⁹⁶⁹ Unlike *Aptix*, the unenforceability determination was not a sanction in its own right, but only the proper result once the adverse inference was combined with the materiality determinations discussed above.⁹⁷⁰ Dissenting, Judge Newman would have reversed, reasoning that an unenforceability declaration is not an available remedy for litigation misconduct.⁹⁷¹

VI. EQUITABLE DEFENSES

A. Laches

In *SCA Hygiene Products Aktiebolag v. First Quality Baby Products, LLC*,⁹⁷² the Supreme Court vacated the Federal Circuit’s en banc opinion, holding that laches remains a defense to patent infringement.⁹⁷³ The Supreme Court reasoned that, similar to *Petrella*, application of laches in patent infringement cases would undermine Congress’s guidance as to the term for recovering damages in patent cases, i.e., § 286’s six-year damages limitation.⁹⁷⁴ The Supreme Court reasoned that § 286 “represents a judgment by Congress that a patentee may recover damages for any infringement committed within six years of the filing of the claim.”⁹⁷⁵ The Court rejected First Quality’s argument that *Petrella* should not apply because § 286 “runs backward from the time of suit,” not forward from the accrual of the cause of action.⁹⁷⁶ The Court further rejected the notion that there was a meaningful difference between § 286 and the statute of limitations in *Petrella*, noting that *Petrella* described the Copyright Act’s statute of limitations as running backward from the complaint.⁹⁷⁷ The Court also rejected the Federal Circuit’s reasoning that § 286’s reference to “except as otherwise provided by law” permitted continued application of laches.⁹⁷⁸ The

969. *Regeneron Pharm.*, 864 F.3d at 1364.

970. *Id.* at 1364.

971. *Id.* at 1365–66.

972. 137 S. Ct. 954 (2017), *vacating in part*, 807 F.3d 1311 (Fed. Cir. 2015) (en banc).

973. *Id.* at 959–60.

974. *Id.* at 960–61.

975. *Id.* at 961.

976. *Id.* at 961–62.

977. *Id.* at 962.

978. *Id.* at 961.

Federal Circuit reasoned that § 282 codified laches as a defense, apparently relying on that section's reference to "unenforceability."⁹⁷⁹ But even if that section somehow incorporated laches, the court held that nothing in § 282 suggests that laches could be invoked to bar a damages claim that was otherwise within § 286's damages period.⁹⁸⁰

Writing for the majority, Justice Alito discussed, in some detail, a variety of pre-1952 Patent Act cases that the Federal Circuit cited and concluded that these cases do not support First Quality's arguments.⁹⁸¹ He separately addressed claims at law, claims in equity, and post-merger cases⁹⁸² and concluded that while there was some precedent for applying laches to defeat damages claims pre-1952, it was not sufficiently uniform to overcome *Petrella's* reasoning.⁹⁸³

Dissenting, Justice Breyer found laches to be an available defense, largely relying on pre-Patent Act practice that, in his view, applied laches in patent damages cases "with virtual unanimity."⁹⁸⁴

B. Patent Exhaustion

Foreign sales and use-restricted sales may exhaust U.S. patent rights. In *Impression Products, Inc. v. Lexmark International, Inc.*,⁹⁸⁵ the Supreme Court reversed the Federal Circuit's determinations concerning patent exhaustion.⁹⁸⁶ First, the Supreme Court found that the Federal Circuit erred in determining that there was no exhaustion from Lexmark's sale in the United States of printer cartridges subject to "single-use/no resale" restrictions.⁹⁸⁷ While such restrictions "may have been clear and enforceable under contract law, . . . they do not entitle Lexmark to retain patent rights in an item it has elected to sell."⁹⁸⁸ The Supreme Court discussed how exhaustion doctrine imposes positive limits on the scope of a patentee's rights such that, after a sale, "there is no exclusionary right left to enforce."⁹⁸⁹ The Supreme Court also drew a distinction between a patentee's ability to restrict the acts of its

979. *Id.* at 962–63.

980. *Id.* at 963.

981. *Id.*

982. *Id.* at 964–66.

983. *Id.* at 966.

984. *Id.* at 967 (Breyer, J., dissenting).

985. 137 S. Ct. 1523 (2017), *rev'g in part*, 816 F.3d 721 (Fed. Cir. 2016).

986. *Id.* at 1531, 1535, 1538.

987. *Id.* at 1531.

988. *Id.* at 1532.

989. *Id.*

licensees, as in *General Talking Pictures Corp. v. Western Electric Co.*,⁹⁹⁰ which can preserve the right to sue for infringement, and the ability to restrict the post-sale activities of purchasers.⁹⁹¹

Further, the Supreme Court held that the Federal Circuit also erred in determining that there was no exhaustion from Lexmark's sale of products overseas.⁹⁹² "An authorized sale outside the United States, just as one within the United States, exhausts all rights under the Patent Act."⁹⁹³ The Supreme Court rejected Lexmark's argument that the territorial nature of patent law should lead to a different result.⁹⁹⁴ Because exhaustion is a "separate limit on the patent grant," it may be triggered whenever—and wherever—the patentee makes a decision to sell an item embodying the patent rights.⁹⁹⁵ *Boesch v. Graff*⁹⁹⁶ was not contrary because it involved an overseas sale in which "the patentee had nothing to do with the transaction."⁹⁹⁷ The Supreme Court also considered and rejected the rule proposed by the government that foreign sales exhaust patent rights absent specific reservation of such rights,⁹⁹⁸ commenting that "[the government's] position is largely based on policy rather than principle."⁹⁹⁹

VII. PATENT OFFICE APPEALS

A. *Inter Partes* Reviews

1. *IPR procedure and practice*

In *Cascades Projection LLC v. Epson America, Inc.*,¹⁰⁰⁰ the Federal Circuit denied Cascades's petition for en banc hearing of its appeal; instead, the patentee's argument against the constitutionality of IPR proceedings will be heard by a three-judge Federal Circuit.¹⁰⁰¹ Cascades argued that a

990. 305 U.S. 124 (1938).

991. *Lexmark*, 137 S. Ct. at 1534.

992. *Id.* at 1535.

993. *Id.*

994. *Id.* at 1536–37.

995. *Id.* at 1537.

996. 133 U.S. 697 (1890).

997. *Lexmark*, 137 S. Ct. at 1537.

998. *Id.*

999. *Id.*

1000. 864 F.3d 1309 (Fed. Cir. 2017) (en banc) (per curiam).

1001. *Id.* at 1310–11 (holding that a patent creates a private property right and the AIA statutory scheme meets the constitutional requirements of due process in disposition of property).

patent right is a private right, not a public one, and therefore the PTAB's cancellation of patents in IPR was an unconstitutional exercise of judicial power.¹⁰⁰² Concurring in the denial of initial hearing en banc, Judge Newman reasoned that the matter should be resolved by a panel of the Federal Circuit prior to any en banc consideration.¹⁰⁰³ Also concurring in the denial of initial hearing en banc, and joined by Judges Prost and Hughes, Judge Dyk viewed the issue raised in the petition as settled in *MCM Portfolio LLC v. Hewlett-Packard Co.*,¹⁰⁰⁴ which held that patent rights are public rights.¹⁰⁰⁵ Addressing the dissents, he saw no inconsistency between *MCM* and either *Patlex Corp. v. Mossinghoff*,¹⁰⁰⁶ or *McCormick Harvesting Machinery Co. v. Aultman & Co.*¹⁰⁰⁷ He also saw no inconsistency in concluding that patent rights are public rights, conferred by federal statute.¹⁰⁰⁸

Dissenting, Judge O'Malley expressed uncertainty that *MCM* was correctly decided.¹⁰⁰⁹ She approved Judge Reyna's dissent and noted that *McCormick* indicated that patent rights may only be annulled by the courts and not the Patent Office.¹⁰¹⁰ Judge Reyna's dissent read *McCormick* as limiting the power to "annul" patents as vesting only in the judiciary and not the Patent Office.¹⁰¹¹ He also viewed *MCM* and *Patlex* as "inconsistent and irreconcilable" opinions within the Federal Circuit's case law.¹⁰¹² Finally, he cited the separation of powers as an issue to be analyzed carefully.¹⁰¹³

The Federal Circuit granted a petition for en banc rehearing and vacates its opinions in *Wi-Fi One, LLC v. Broadcom Corp.*,¹⁰¹⁴ and *Wi-Fi*

1002. *Id.* The Supreme Court has since ruled that patents are public rights. *See Oil States Energy Servs., LLC v. Greens's Energy Grp., LLC*, No. 16-712, 2018 WL 1914662, at *6 (U.S. Apr. 24, 2018).

1003. *Id.* at 1311 (Newman, J., concurring).

1004. 812 F.3d 1284 (Fed. Cir. 2015).

1005. *Id.* at 1293 (holding that because patent rights are public rights, the Seventh Amendment posed no barrier to administrative agency review as to patent validity); *Cascades Projection*, 864 F.3d at 1312 (Dyk, J., concurring).

1006. 758 F.2d 594 (Fed. Cir. 1985), *aff'd in part, rev'd in part*, 771 F.2d 480 (Fed. Cir. 1985).

1007. 169 U.S. 606 (1898); *Cascades Projection*, 864 F.3d at 1311–12.

1008. *Cascades Projection*, 864 F.3d at 1312.

1009. *Id.* at 1312–13 (O'Malley, J., dissenting).

1010. *Id.* at 1313.

1011. *Id.* at 1314 (Reyna, J., dissenting).

1012. *Id.*

1013. *Id.*

1014. *Wi-Fi One, LLC v. Broadcom Corp.*, 837 F.3d 1329 (Fed. Cir. 2016), *rev'd*, 878 F.3d 1364 (Fed. Cir. 2018) (en banc).

*One, LLC v. Broadcom Corp.*¹⁰¹⁵ The case concerned the extent to which the PTAB's decisions on whether a petition for an IPR is not time barred are reviewable by the courts.¹⁰¹⁶ Sitting en banc, the Federal Circuit held that the PTAB's determination that Broadcom's petition for IPR was not time barred was judicially reviewable. The Federal Circuit reasoned that the statement that IPR institution decisions are non-appealable in § 314(d) is expressly limited to institution decisions "under this section," i.e., institution decisions evaluating whether the petitioner is likely to prevail as set forth in § 314(a).¹⁰¹⁷ The Federal Circuit found that "[i]t does not address any other issue relevant to an institution decision."¹⁰¹⁸ Because the time-bar provision is in a different section § 315(b), it is not addressed by the nonappealability restriction of § 314(d). The Federal Circuit reasoned that this approach is consistent with the approach of *Cuozzo*, which, when discussing § 314(d), noted that it barred judicial review of the PTAB's assessment of a "reasonable likelihood of success" for the petition¹⁰¹⁹ In this decision, the Federal Circuit overruled the contrary reasoning of *Achates Reference Publishing, Inc. v. Apple Inc.*¹⁰²⁰

Concurring, Judge O'Malley would have reached the same outcome, but she would have analyzed the PTAB's time-bar assessment as an instance of the PTAB exceeding its statutory authority to undertake an IPR.¹⁰²¹ In dissent, Judge Hughes viewed the majority's reading of § 314(d) as excessively narrow and incompatible with the statute, and contrary to *Cuozzo*.¹⁰²² In his view, *Cuozzo* rejected the notion that § 314(d) was limited to barring review of reasonable-likelihood-of-success determinations and specifically held that Congress had "told the Patent Office to determine whether the IPR should proceed, and it has made the agency's decision 'final' and 'nonappealable.'"¹⁰²³

In *Ultratec, Inc. v. CaptionCall, LLC*,¹⁰²⁴ the Federal Circuit vacated the IPR determination of obviousness and anticipation, finding the

1015. 878 F.3d 1364 (Fed. Cir. 2018); *Wi-Fi One, LLC*, 837 F.3d at 1329.

1016. *Wi-Fi One, LLC*, 837 F.3d at 1333.

1017. *Wi-Fi One, LLC*, 878 F.3d at 1370–71.

1018. *Id.* at 1372.

1019. *Id.* at 1369 (internal quotations omitted) (quoting *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2141, 2142 (2016)).

1020. 803 F.3d 652 (Fed. Cir. 2015), *overruled by Wi-Fi One*, 878 F.3d at 1367.

1021. *Wi-Fi One*, 878 F.3d at 1375 (O'Malley, J., concurring).

1022. *Id.* at 1377–78 (Hughes, J., dissenting).

1023. *Id.* at 1379.

1024. 872 F.3d 1267 (Fed. Cir. 2017).

PTAB's procedures for reviewing late-submitted evidence inadequate.¹⁰²⁵ The PTAB abused its discretion by denying Ultratec's request to supplement the record with testimony from CaptionCall's expert made during co-pending district court litigation, which was inconsistent with statements the expert had made during the IPR.¹⁰²⁶ The Federal Circuit considered how admission and review of the expert's statements would have imposed little burden on the PTAB and discussed how the PTAB's procedures for requesting supplementation of the record have the effect of denying the PTAB any opportunity to actually know the content of the requested supplementation before ruling on the motion.¹⁰²⁷ The Federal Circuit criticized the PTAB's practice of denying a request to admit evidence without examining the evidence it denied. In the IPR proceeding, the PTAB never reviewed the expert's testimony because it was not accompanied with Ultratec's motion to supplement the record; instead, the PTAB only considered "the parties' competing characterizations" of the testimony, as articulated during a conference call of which there was no record.¹⁰²⁸

The Federal Circuit found that the PTAB also failed to provide a reasoned basis for its denial, and its procedures on this issue "impede meaningful appellate review of the agency decision-making."¹⁰²⁹ The Federal Circuit rejected CaptionCall and the PTAB's argument that Ultratec bore responsibility to bring a stenographer to the conference call at issue, as the rules impose no such burden.¹⁰³⁰ Further, the Federal Circuit held that it was the PTO's responsibility to provide a satisfactory explanation for its action.¹⁰³¹

In related appeals for *Vicor Corp. v. SynQor, Inc.*,¹⁰³² the Federal Circuit partially affirmed and partially vacated the PTAB's IPR determination that some of SynQor's claims from two of its patents were patentable and others anticipated or obvious.¹⁰³³ As to the first

1025. *Id.* at 1269.

1026. *Id.* at 1270.

1027. *Id.*

1028. *Id.* at 1273.

1029. *Id.* at 1274.

1030. *Id.* at 1274–75.

1031. *Id.* at 1275.

1032. 869 F.3d 1309 (Fed. Cir. 2017).

1033. *Id.* at 1312 (finding that the PTAB sufficiently addressed the patentee's argument that the voltage-range limitation claims in the patent would have been obvious and that other claims were anticipated).

group of rejection for the first patent, the Federal Circuit found that substantial evidence supported the PTAB's decision not to adopt the proposed grounds because there was sufficient evidence to indicate that a person of skill would not have been motivated to combine the cited references in the required manner.¹⁰³⁴

As to the second group of proposed rejections, the Federal Circuit found that the PTAB erred in affirming the examiner's withdrawal of rejections "based solely on SynQor's proffered objective evidence of nonobviousness."¹⁰³⁵ The Federal Circuit found that the court stated that the PTAB should have considered all the *Graham* factors, not just the objective evidence.¹⁰³⁶ Second, the PTAB's apparent assessment of the secondary considerations was inconsistent with how it treated secondary considerations evidence in reexamination of two other SynQor patents "without any explanation to justify such inconsistency."¹⁰³⁷ Prior decisions relating to SynQor's patents did not address secondary considerations, which required giving the parties an opportunity to address the issues on remand.¹⁰³⁸

As to the third group of proposed rejections, the PTAB erred in finding that a certain combination of prior art elements were nonobvious because "on the same day, the [PTAB] reached the opposite conclusion on this issue in [another SynQor] reexamination on essentially the same record."¹⁰³⁹ The Federal Circuit determined that vacatur was necessary because the PTAB failed to explain its inconsistent results.¹⁰⁴⁰ Moreover, the Federal Circuit discussed some of the Board's apparent reasoning in declining to adopt the rejections from the separate reexamination and finds it lacking.¹⁰⁴¹ The Federal Circuit concluded that "the direct conflict between the [PTAB's] fact findings in the reexaminations before us is unsupported by any rational explanation in either of the Board's decisions."¹⁰⁴² The Federal Circuit also concluded that the PTAB's failed to address "all grounds for proposed rejection" presented by Vicor.¹⁰⁴³

1034. *Id.* at 1318, 1320.

1035. *Id.* at 1320–21.

1036. *Id.* at 1320.

1037. *Id.* at 1321.

1038. *Id.* at 1316–17.

1039. *Id.* at 1322–23.

1040. *Id.* at 1312, 1323.

1041. *Id.* at 1323.

1042. *Id.*

1043. *Id.* at 1324.

On the second patent, for the first proposed rejection, the Federal Circuit held that the PTAB correctly found the claims anticipated on the presented record.¹⁰⁴⁴ The Federal Circuit rejected SynQor's arguments that it presented a new ground of rejection that affected the outcome, and that the PTAB misinterpreted the reference at issue.¹⁰⁴⁵ For the second proposed rejection, the PTAB correctly found the claims obvious.¹⁰⁴⁶ The Federal Circuit rejected SynQor's argument that the record demonstrated teaching away.¹⁰⁴⁷ The third and fourth proposed rejections were among those suffering from inconsistent treatment between the two reexamination proceedings, and the Federal Circuit vacated the PTAB's treatment of them.¹⁰⁴⁸

In *Idemitsu Kosan Co. v. SFC Co.*,¹⁰⁴⁹ the Federal Circuit held that an IPR decision may rely on post-institution arguments, affirming the IPR obviousness determination.¹⁰⁵⁰ Accordingly, the Federal Circuit found that the PTAB did not err in determining that the prior art taught combining various compounds for the purpose of light emission.¹⁰⁵¹ The Federal Circuit rejected Idemitsu's argument that the PTAB made improper assumptions in its characterization of the prior art.¹⁰⁵² The Federal Circuit also rejected Idemitsu's argument that the PTAB's reasoning came from an argument that was raised "too late" in the IPR proceedings.¹⁰⁵³ The Federal Circuit outlined the back-and-forth of SFC's petition, Idemitsu's response, which raised the issue in question, and SFC's reply, which more fully developed the issue.¹⁰⁵⁴ This outline determined that that "what Idemitsu characterize[ed] as an argument raised 'too late' is simply the by-product of one party necessarily getting the last word."¹⁰⁵⁵ Under *Genzyme Therapeutic Products Ltd. v. Biomarin Pharmaceutical Inc.*, the PTAB is permitted to reach counterarguments not preemptively raised in either the petition or the institution decision.¹⁰⁵⁶

1044. *Id.* at 1324–25.

1045. *Id.* at 1324.

1046. *Id.* at 1326.

1047. *Id.*

1048. *Id.* at 1321–22.

1049. 870 F.3d 1376 (Fed. Cir. 2017).

1050. *Id.* at 1377 (affirming the court of appeals' holding that Idemitsu Kosan's patent was unpatentable as obvious and supported by substantial evidence).

1051. *Id.* at 1380.

1052. *Id.* at 1379–80.

1053. *Id.* at 1380.

1054. *Id.* at 1381.

1055. *Id.*

1056. *Genzyme Therapeutic Prods. Ltd. v. Biomarin Pharm. Inc.*, 825 F.3d 1360,

The Federal Circuit declined to find error in the Board's fact finding on this issue without expert testimony, at least in this context.¹⁰⁵⁷

While Idemitsu argued in its response that the prior art taught away from the claimed technology, the Federal Circuit found that it did not provide supporting evidence.¹⁰⁵⁸ The Federal Circuit determined that "SFC, of course, bears the ultimate burden of establishing unpatentability, but it is not required as a matter of law to rebut mere *attorney argument* with *expert testimony* in order to satisfy that burden."¹⁰⁵⁹ The Federal Circuit found the PTAB's fact-finding sufficiently supported by the record in the context.¹⁰⁶⁰

In *NFC Technology, LLC v. Matal*,¹⁰⁶¹ the Federal Circuit reversed and remanded an IPR obviousness determination, holding that minimal documentation corroborating inventorship was not fatal to the patentee's priority claim.¹⁰⁶² The court found that the PTAB erred when it determined that NFC Technology (NFC) failed to show that certain third-party prototyping activity predating a cited reference did not inure to NFC's benefit.¹⁰⁶³ The Federal Circuit considered how the testimony and documentary evidence of record established NFC's pre-critical date conception and found that the PTAB improperly discounted certain evidence establishing conception and inurement.¹⁰⁶⁴ The Federal Circuit emphasized that the PTAB also relied improperly on *Woodland Trust v. Flowertree Nursery, Inc.*¹⁰⁶⁵ to find that the absence of emails or other communications between the inventor and the third-party prototyper led to a conclusion that the prototyper was not acting according to the inventor's design or direction.¹⁰⁶⁶ In *Woodland Trust*, as in *NFC Technology*, in view of the amount of time that had passed, it was not surprising that certain documents that might have existed in the past could not be produced at present for corroboration.¹⁰⁶⁷ Quoting *In re Jolley*,¹⁰⁶⁸ the Federal Circuit wrote, "Corroboration of every factual issue

1366–67 (Fed. Cir. 2016).

1057. *Id.* at 1371–72.

1058. *Idemitsu Kosan Co.*, 870 F.3d at 1381.

1059. *Id.*

1060. *Id.* at 1381.

1061. 871 F.3d 1367 (Fed. Cir. 2017).

1062. *Id.* at 1368.

1063. *Id.* at 1370.

1064. *Id.* at 1372, 1374–75.

1065. 148 F.3d 1368 (Fed. Cir. 1998).

1066. *NFC Tech.*, 871 F.3d at 1373 (citing *Woodland Trust*, 148 F.3d at 1373).

1067. *Id.* at 1373–74.

1068. 308 F.3d 1317 (Fed. Cir. 2002).

contested by the parties is not a requirement of the law.”¹⁰⁶⁹ Because the PTAB had not yet determined whether the prototype at issue actually reduced the claims to practice, it was necessary to remand the case.¹⁰⁷⁰

In *In re Chudik*,¹⁰⁷¹ the Federal Circuit reversed an anticipation rejection supported by two references after initial examination.¹⁰⁷² The patent at issue related to a surgical implant for use in shoulder surgery.¹⁰⁷³ The Federal Circuit determined that the rejections were not supported by substantial evidence.¹⁰⁷⁴ For the rejections over the first reference (“Rambert”), the court found that the PTAB erred in reasoning that, although the reference depicted a configuration that did not precisely practice the claim, the device in the reference “can still be arranged” in such a way as to practice and, therefore, anticipate.¹⁰⁷⁵ The Federal Circuit held that “[p]rior art that ‘must be distorted from its obvious design’ does not anticipate a new invention.”¹⁰⁷⁶ The PTAB and examiner’s failure to explain how the Rambert device could practice the claim without tearing the reference apart warranted reversal.¹⁰⁷⁷ For the rejections over the second reference (“Bouttens”), the PTAB committed a similar error, reasoning that the reference indicated a certain cavity could have “any” suitable shape and certain parts could be reconfigured.¹⁰⁷⁸ The Federal Circuit found that the PTAB failed to explain how such a device would actually work, and its reasoning amounted to “a significant and impermissible modification” improper for an anticipation analysis.¹⁰⁷⁹

In *Aqua Products, Inc. v. Matal*,¹⁰⁸⁰ the en banc court barred the PTAB from placing the burden of persuasion on patent owners proposing substitute claims in an IPR without formal rulemaking from the PTO. The Federal Circuit vacated the PTAB’s denial of motion to amend

1069. *NFC Tech.*, 871 F.3d at 1374.

1070. *Id.* at 1375.

1071. 851 F.3d 1365 (Fed. Cir. 2017).

1072. *Id.* at 1367.

1073. *Id.*

1074. *See id.* at 1367, 1371–72, 1374–75 (finding that because the substantial evidence showed that the devices had to be distorted from their obvious design to practice as the claim depicts, the designs do not anticipate a new invention).

1075. *Id.* at 1373.

1076. *Id.* at 1374 (quoting *In re Wells*, 53 F.2d 537, 539 (C.C.P.A. 1931)).

1077. *Id.* at 1374.

1078. *Id.*

1079. *Id.* at 1374–75.

1080. 872 F.3d 1290 (Fed. Cir. 2017) (en banc).

claims in IPR and remanded.¹⁰⁸¹ The Federal Circuit found that the PTAB erred in placing the burden of proof on the patent owner in assessing the patentability of proposed substitute claims.¹⁰⁸² No single opinion was joined by a majority of judges sitting en banc, though a majority supported vacating the judgment).¹⁰⁸³ In her opinion, Judge O'Malley reasoned that vacatur was warranted because the PTAB's decision was incompatible with the unambiguous statutory text of 35 U.S.C. § 316(e).¹⁰⁸⁴ The PTAB's reasoning thus failed step one of *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*¹⁰⁸⁵ In Judge O'Malley's view, § 316(e) unambiguously required the IPR petitioners—not patent owners—to bear the burden of proof on all issues of unpatentability, including for proposed substitute claims.¹⁰⁸⁶ Were the statute ambiguous, the result would be the same because the PTO has promulgated no regulation requiring *Chevron* deference and the most reasonable reading of the statute was the one given above.¹⁰⁸⁷

With support from a majority of judges sitting en banc, O'Malley ordered that the PTAB re-assess “the patentability of the proposed substitute claims without placing the burden of persuasion on the patent owner. The [PTAB] must follow this same practice in all pending IPRs unless and until the PTO Director engages in notice-and-comment rulemaking.”¹⁰⁸⁸

Similar to Judge O'Malley, Judge Moore reasoned that § 316(e) is unambiguous in its assignment of the burden of proof for motions to substitute claims in an IPR.¹⁰⁸⁹ Further, Judge Moore would have specifically held that PTAB decisions designated as precedential (here, *MasterImage 3D, Inc. v. RealD Inc.*¹⁰⁹⁰) or informative (here, *Idle Free*

1081. *Id.* at 1296 (determining that the PTAB can no longer place the burden of establishing the patentability of amended claims on the patent owner in IPR proceedings).

1082. *Id.* at 1324.

1083. *Id.* at 1295.

1084. *Id.* at 1296; *see also* 35 U.S.C. § 316(e) (2012).

1085. 467 U.S. 837 (1984); *Aqua Prods.*, 872 F.3d at 1315 (citing *Chevron*, 467 U.S. at 842).

1086. *Aqua Prods.*, 872 F.3d at 1295.

1087. *Id.* at 1335–36.

1088. *Id.* at 1328.

1089. *Id.* at 1328 (Moore, J., concurring).

1090. IPR2015-00040, 2015 WL 10709290 (P.T.A.B. July 15, 2015), *overruled by Aqua Prods.*, 872 F.3d 1290.

*Systems, Inc. v. Bergstrom, Inc.*¹⁰⁹¹) are not entitled to *Chevron* deference.¹⁰⁹²

Concurring, Judge Reyna reasoned that § 316(e) is ambiguous as to who bears the burden of persuasion on a motion to amend claims in IPR, and so proceeded to *Chevron* step two.¹⁰⁹³ He would have held that the PTO did not promulgate regulations concerning assignment of the burden of proof sufficient enough to satisfy *Chevron* step two, and the PTAB's reasoning would not be given *Chevron* deference.¹⁰⁹⁴ Interpreting § 316(d) and 37 C.F.R. § 42.121 in the first instance, Judge Reyna would have held that those rules “place a default burden of production [though not of persuasion] on the patentee.”¹⁰⁹⁵ This final conclusion was joined by Chief Judge Prost and Judges Chen, Taranto, and Hughes, though they do not join Judge Reyna's *Chevron* step two analysis or his conclusion that vacatur was warranted.¹⁰⁹⁶

Dissenting from the judgment, Judge Taranto reasoned that § 316(e) was ambiguous as to who bears the burden of persuasion on a motion to amend claims in IPR, and so proceeded to *Chevron* step two.¹⁰⁹⁷ He would have held that *Chevron* deference was owed, however, to the PTO's allocation of the burden of proof per 37 C.F.R. § 42.20(c), and so he would have affirmed the PTAB's decision.¹⁰⁹⁸ Judge Hughes joined the Taranto opinion, and further reasoned that 37 C.F.R. § 42.20(c) would be due under *Auer v. Robbins*¹⁰⁹⁹ deference even if not *Chevron* deference.¹¹⁰⁰

2. Obviousness

In *In re Van Os*,¹¹⁰¹ the Federal Circuit vacated a rejection for obviousness finding that the PTAB may not rely on conclusory statements of intuitiveness.¹¹⁰² The claims, which were apparently assigned to Apple, related to a touchscreen interface that permits rearranging icons, and

1091. IPR2012-00027, 2013 WL 5947697 (P.T.A.B. June 3, 2013), *overruled by Aqua Prods.*, 872 F.3d 1290.

1092. *Aqua Products*, 872 F.3d at 1328.

1093. *Id.* at 1334–35 (Reyna, J., concurring).

1094. *Id.* at 1335.

1095. *Id.*

1096. *Id.*

1097. *Id.* at 1342 (Taranto, J., dissenting).

1098. *Id.*

1099. 519 U.S. 452 (1997).

1100. *Aqua Prods.*, 872 F.3d at 1342 (Hughes, J., dissenting).

1101. 844 F.3d 1359 (Fed. Cir. 2017).

1102. *Id.* at 1361–62 (explaining that “conclusory assertion[s]” with no “articulated rationale” do not support a “motivation to combine”).

they concerned a sustained button press that would trigger an editing mode.¹¹⁰³ The Federal Circuit found that the PTAB erred in holding, without discussion, that it would have been “intuitive” to apply sustained-button-press-to-activate technology from a prior art reference for the purpose of invoking editing mode.¹¹⁰⁴ The PTAB needed to provide further reasoning or analysis was necessary to support finding that motivation existed to make this modification.¹¹⁰⁵ Concurring in part and dissenting in part, Judge Newman agreed that the PTAB’s treatment of the sustained-press-to-edit mode was inadequate, but she would have reversed rather than vacated and remanded.¹¹⁰⁶

In *Rovalma S.A. v. Bohler-Edelstahl GmbH & Co.*,¹¹⁰⁷ the Federal Circuit held that the IPR statute does not bar the PTAB from relying on the patentee’s own submissions to find obviousness, vacating the IPR determination.¹¹⁰⁸ The PTAB switched its claim construction view—the institution decision adopted the constructions of the petitioner, Böhler, but the final decision adopted the constructions of patentee Rovalma.¹¹⁰⁹ The final decision relied in part on Rovalma’s own submissions to find obviousness.¹¹¹⁰ The Federal Circuit found that the PTAB erred by failing to sufficiently explain the basis for its decision.¹¹¹¹ Specifically, the PTAB only substantively discussed one of the limitations of the claims and applied generally conclusory reasoning to the others.¹¹¹² Further, the Federal Circuit found that the PTAB’s discussion of motivation to combine was also lacking.¹¹¹³ This alone was sufficient to warrant vacating and remanding the decision, so the PTAB could better explain itself.¹¹¹⁴

The Federal Circuit emphasized that the IPR statute did not bar the

1103. *Id.* at 1360, 1362.

1104. *Id.* at 1361.

1105. *Id.* at 1361–62.

1106. *Id.* at 1362 (Newman, J., concurring in part and dissenting in part).

1107. 856 F.3d 1019 (Fed. Cir. 2017).

1108. *Id.* at 1019 (explaining that: (1) “substantial-evidence issues” obviated the need for remand; (2) the Board was within its rights to use “patentee’s submissions” to discern a claim of obviousness; and (3) the Board inadequately explained its determination of obviousness, leaving an open question of whether there were procedural violations).

1109. *Id.* at 1024, 1026.

1110. *Id.* at 1024.

1111. *Id.* at 1025–26.

1112. *Id.*

1113. *Id.*

1114. *Id.*

PTAB from relying on Rovalma's own submissions to support its obviousness determination.¹¹¹⁵ Rovalma had notice of the arguments Böhler was making and had an opportunity to respond to them.¹¹¹⁶ The Federal Circuit found that *In re Magnum Oil Tools International Ltd.*¹¹¹⁷ was not contrary because, in this appeal, the PTAB did not engage in improper burden-shifting.¹¹¹⁸ Further, it is well-established in other contexts that a tribunal may rely on a party's own submissions in making findings against it.¹¹¹⁹

Agreeing with Rovalma's contention that it did not receive sufficient process under the APA, the Federal Circuit remanded.¹¹²⁰ The same deficiencies in the PTAB's final decision discussed above made it impossible to "conclusively determine whether the [PTAB's] actions complied with the APA's procedural requirements."¹¹²¹

In *Outdry Technologies Corp. v. Geox S.p.A.*,¹¹²² the Federal Circuit held that the PTAB may establish a motivation to combine by reciting the petitioner's arguments, affirming IPR determination of obviousness.¹¹²³ Outdry's patent related to methods for waterproofing leather goods.¹¹²⁴ The PTAB correctly interpreted the claims, ultimately rejecting Outdry's plea for a narrower construction unsupported by the specification.¹¹²⁵ The Federal Circuit also rejected Outdry's attempt to overcome the prior art by relying on the language of the preamble, which recited a "process for waterproofing leather."¹¹²⁶ In this case, the preamble "like most preambles [was] simply a statement of intended use, not a separate claim limitation," as per *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*¹¹²⁷ Further, the PTAB's finding that a person of skill would have been

1115. *Id.* at 1026–28.

1116. *Id.*

1117. 829 F.3d 1364 (Fed. Cir. 2016).

1118. *Rovalma S.A.*, 856 F.3d at 1026–28.

1119. *Id.* (citing various cases that demonstrate where tribunals have used party submissions against them).

1120. *Id.* at 1029–30.

1121. *Id.*

1122. 859 F.3d 1364 (Fed. Cir. 2017), *cert. denied*, No. 17-408, 2018 WL 1994804 (U.S. Apr. 20, 2018).

1123. *Id.* at 1370.

1124. *Id.* at 1366.

1125. *Id.* at 1367–68.

1126. *Id.*

1127. 320 F.3d 1339 (Fed. Cir. 2003); *Outdry Techs. Corp.*, 859 F.3d at 1368 (citing *Boehringer Ingelheim Vetmedica*, 320 F.3d at 1345).

motivated to combine references to reach the claimed inventions was supported by substantial evidence.¹¹²⁸ Unlike in several recent cases where the PTAB failed to adequately explain its analysis of motivation to combine, the Federal Circuit “clearly articulated Geox’s arguments” showing a motivation¹¹²⁹ stating that the PTAB’s “reliance on Geox’s arguments does not undermine its otherwise adequate explanation for finding a motivation to combine.”¹¹³⁰ Moreover, there was no requirement that the motivation to combine be the same motivation described by Outdry’s inventors.¹¹³¹

In *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*,¹¹³² the Federal Circuit held that a lack of clear criticism undermines a “teaching away” challenge, affirming an IPR determination of obviousness.¹¹³³ Broad Ocean filed its IPR petition challenging Nidec’s patent on obviousness and anticipation grounds.¹¹³⁴ The PTAB instituted on the obviousness challenge but denied institution based on anticipation because Broad Ocean failed to supply an affidavit claiming the accuracy of the translation.¹¹³⁵ Broad Ocean filed a second petition re-raising the anticipation ground, including the affidavit and seeking joinder with the already-running obviousness proceeding.¹¹³⁶ Upon review, the PTAB denied institution as time barred.¹¹³⁷ After rehearing, the PTAB reconstituted the Federal Circuit with five judges, instead of three, and granted joinder of the two proceedings.¹¹³⁸ The expanded PTAB panel ultimately issued the final written decision on both obviousness and anticipation grounds.¹¹³⁹

The Federal Circuit found no need to examine whether the PTAB’s construction of the preamble term “HVAC system” as a limitation was

1128. *Outdry Techs. Corp.*, 859 F.3d at 1369–70.

1129. *Id.* at 1369.

1130. *Id.* at 1370.

1131. *Id.* at 1371–72 (“Any motivation to combine references, whether articulated in the references themselves or supported by evidence of the knowledge of a skilled artisan, is sufficient to combine those references to arrive at the claimed process.” (emphasis added)).

1132. 868 F.3d 1013 (Fed. Cir. 2017), *cert. denied*, No. 17-751, 2018 WL 1994809 (U.S. Apr. 30, 2018).

1133. *Id.* at 1019 (holding that the PTAB appropriately determined the claim for obviousness, but the PTAB declined to reach a conclusion on the anticipation claim).

1134. *Id.* at 1015.

1135. *Id.*

1136. *Id.*

1137. *Id.*

1138. *Id.*

1139. *Id.* at 1015–16.

erroneous because it was undisputed that the prior art taught an HVAC system either way.¹¹⁴⁰ The PTAB also did not err in finding that the prior art did not teach away from the proposed combination.¹¹⁴¹ Applying *Meiresonne v. Google, Inc.*,¹¹⁴² nothing in the art “criticize[d], discredit[ed], or otherwise discourage[d]” use of the technology in question.¹¹⁴³ The Federal Circuit also rejected Nidec’s argument that the prior art, by implication, rejected use of technology like that in the companion reference.¹¹⁴⁴ Because the PTAB’s decision could be affirmed on obviousness grounds, there was no need to reach the separate issue of whether the PTAB properly rejected a time-bar challenge by Nidec to also enter an obviousness determination.¹¹⁴⁵

Judge Dyk’s concurrence expressed reservations about the PTAB’s use of an expanded PTAB panel to join issues that would otherwise be time barred.¹¹⁴⁶ In this case, the PTAB allowed § 315(c)’s joinder provisions to be used in a manner that essentially added issues to the case, i.e., Broad Ocean’s anticipation challenge.¹¹⁴⁷ Judge Dyk believed “it unlikely that Congress intended that petitioners could employ the joinder provision to circumvent the time bar by adding time-barred issues to an otherwise timely proceeding.”¹¹⁴⁸ Judge Dyk also expressed concern about the PTAB’s practice of expanding the administrative panel from three judges to five in the context of rehearing a challenged issue: “While we recognize the importance of achieving uniformity in PTO decisions, we question whether the practice of expanding panels is the appropriate mechanism of achieving the desired uniformity.”¹¹⁴⁹

In *In re Stepan Co.*,¹¹⁵⁰ the Federal Circuit held that the PTAB must fully explain its basis for findings in its motivation to combine analysis, vacating the PTAB’s decision to affirm the examiner’s rejection of

1140. *Id.* at 1017.

1141. *Id.* at 1017–18.

1142. 849 F.3d 1379 (Fed. Cir. 2017); *Nidec Motor Corp.*, 868 F.3d at 1017 (citing *Meiresonne*, 849 F.3d at 1382).

1143. *Nidec Motor Corp.*, 868 F.3d at 1017.

1144. *Id.*

1145. *Id.* at 1019.

1146. *Id.* at 1019–20 (Dyk, J., concurring).

1147. *Id.* at 1020.

1148. *Id.*

1149. *Id.*

1150. 868 F.3d 1342 (Fed. Cir. 2017).

claims.¹¹⁵¹ The claim related to an herbicide formulation.¹¹⁵² The Federal Circuit held that the PTAB failed to adequately support its determination that the applicant, upon being presented with the prior art, had failed to establish how the claimed matter demonstrated more than “routine optimization” of known techniques.¹¹⁵³ The Federal Circuit determined that “[m]issing from the Board’s analysis is an explanation as to *why* it would have been routine optimization to arrive at the claimed invention.”¹¹⁵⁴ On appeal, the PTAB argued that the evidence in the record was sufficient to establish a motivation to combine references with a reasonable expectation of success.¹¹⁵⁵ Citing *In re Lee*,¹¹⁵⁶ the Federal Circuit rejected this as “post hoc rationalization.”¹¹⁵⁷ It also rejected a finding by the PTAB as to the content of a reference.¹¹⁵⁸ Finally, the court found that the PTAB erred by shifting the burden of proving patentability to Stepan because the PTAB had not established a prima facie obviousness case.¹¹⁵⁹ Further, the PTAB erred insofar as it determined that the scope of Stepan’s claims was entirely within the scope of the prior art disclosure.¹¹⁶⁰ While there was some overlap, it was incomplete, and it was thus the PTAB’s burden to establish that the non-overlapping element was obvious.¹¹⁶¹

Dissenting, Judge Lourie would have affirmed.¹¹⁶² While acknowledging imperfections in the PTAB’s opinion, to him, the claim was clearly obvious over the references.¹¹⁶³

In *EmeraChem Holdings, LLC v. Volkswagen Group of America, Inc.*,¹¹⁶⁴ the Federal Circuit held that an uncorroborated declaration was insufficient to establish an inventorship claim for cited prior art,

1151. *Id.* at 1347–48 (remanding the case because of evidentiary issues, questioning the Board’s determination of a “reasonable expectation of success” for a person skilled in the art, and concluding that the Board’s findings lacked support that the burden rests with the PTO for establishing a “prima facie case of obviousness”).

1152. *Id.* at 1344.

1153. *Id.* at 1346.

1154. *Id.*

1155. *Id.*

1156. 277 F.3d 1338 (Fed. Cir. 2002).

1157. *In re Stepan Co.*, 868 F.3d at 1347.

1158. *Id.*

1159. *Id.* at 1348.

1160. *Id.*

1161. *Id.*

1162. *Id.* at 1348–49 (Lourie, J., dissenting).

1163. *Id.*

1164. 859 F.3d 1341 (Fed. Cir. 2017).

affirming the IPR determination on obviousness as to some claims and vacating the determination as to others.¹¹⁶⁵ The court held that the PTAB did not err in rejecting EmeraChem's contention that certain portions of a key reference were not § 102(e) prior art because they were not "by another."¹¹⁶⁶ EmeraChem's sole evidence on this point was an uncorroborated declaration by an individual named as an inventor on both the patent under review and the prior art reference, and the PTAB was under no obligation to accept the declaration as true.¹¹⁶⁷ *In re DeBaun*,¹¹⁶⁸ and *In re Katz*,¹¹⁶⁹ were not contrary because, although the cases involved reliance on a declaration, they "required more than a naked assertion by the inventor," such as additional explanation of relevant circumstances.¹¹⁷⁰ The Federal Circuit noted that contemporary documentary corroboration is not required "in every case."¹¹⁷¹

The Federal Circuit did find error in the PTAB's obviousness determination in certain dependent claims without addressing the IPR petition or institution decision.¹¹⁷² Although the Petition included general statements concerning this reference or the reference being cited for other claims, it did not give EmeraChem sufficient notice under the APA's requirements.¹¹⁷³ *In re Cuozzo Speed Technologies, LLC*,¹¹⁷⁴ is not contrary because, in that case, the institution decision "gave the patentee notice of the prior art combination that the final decision relied upon."¹¹⁷⁵ *Genzyme* did not authorize the PTAB's decision because, there, the patentee had sufficient notice and opportunity to respond to the combination the PTAB ultimately used.¹¹⁷⁶

In *Corning v. Fast Felt Corp.*,¹¹⁷⁷ the Federal Circuit reversed an IPR determination of nonobviousness because the record could support

1165. *Id.* at 1348, 1352.

1166. *Id.* at 1348.

1167. *Id.* at 1345–46.

1168. 687 F.2d 459 (C.C.P.A. 1982).

1169. 687 F.2d 450 (C.C.P.A. 1982).

1170. *Emerachem Holdings*, 859 F.3d at 1347 (explaining that these cases provided additional evidence—a drawing and additional explanation—to support their respective declarations, whereas Emerachem only provided the declaration).

1171. *Id.* at 1347.

1172. *Id.* at 1348.

1173. *Id.*

1174. 793 F.3d 1268 (Fed. Cir. 2015), *aff'd*, 136 S. Ct. 2131 (2016).

1175. *Emerachem Holdings*, 859 F.3d at 1350.

1176. *Id.*

1177. 873 F.3d 896 (Fed. Cir. 2017).

no other outcome.¹¹⁷⁸ The PTAB analysis implicitly applied a claim interpretation that failed to reflect the broadest reasonable interpretation of a key term.¹¹⁷⁹ The Federal Circuit considered the record and concluded that the PTAB's decision could only be understood as applying a narrow claim scope.¹¹⁸⁰ The Federal Circuit found remand unnecessary because the record lacked sufficient evidence to overcome Owens Corning's prima facie demonstration of obviousness based on the proper broadest reasonable interpretation construction.¹¹⁸¹ Also, Fast Felt did not seek remand in the event that the Federal Circuit agreed with Corning's claim interpretation.¹¹⁸²

In *CFRD Research, Inc. v. Matal*,¹¹⁸³ the Federal Circuit consolidated three IPR appeals for the same patent, affirmed the invalidation of two claims, and reversed the patentability determination of a third claim, rendering all challenged claims unpatentable.¹¹⁸⁴ Essentially, the Federal Circuit held that the PTAB may not shortcut the IPR obviousness analysis by over-reliance on non-anticipation findings. CFRD's patent related to technology for transferring an ongoing communication session from one device to another.¹¹⁸⁵ The opinion analyzes the three written decisions sequentially.¹¹⁸⁶

In the first decision, the Federal Circuit agreed with the PTAB's findings on certain CFRD claims regarding anticipation or obviousness because the determinations were supported by substantial evidence.¹¹⁸⁷ In the second decision, the Federal Circuit found that the PTAB did not err in finding other CFRD claims anticipated or obvious.¹¹⁸⁸ For some of these claims, the reasoning of the first decision applied; for others, the Federal Circuit considered how the PTAB's determinations were supported by substantial evidence.¹¹⁸⁹

In the third decision, the Federal Circuit determined that the PTAB committed legal error by failing to separately analyze certain obviousness

1178. *Id.* at 901.

1179. *Id.* at 900–01.

1180. *Id.*

1181. *Id.* at 901.

1182. *Id.*

1183. 876 F.3d 1330 (Fed. Cir. 2017).

1184. *Id.* at 1349 (affirming the Board's findings for some claims regarding obviousness and anticipation, but finding error with others).

1185. *Id.* at 1333.

1186. *Id.* at 1337, 1340–41, 1344.

1187. *Id.* at 1337, 1340.

1188. *Id.* at 1342–43.

1189. *Id.* at 1343.

arguments made by the petitioner Hulu and by generally over relying on a previously performed anticipation analysis.¹¹⁹⁰ The Federal Circuit stated that “[w]hatever the merits of the [PTAB’s] determination that [a reference] does not anticipate . . . [a certain limitation], its findings on anticipation [were] insufficient as a matter of law to decide the obviousness inquiry.”¹¹⁹¹ The court found that the PTAB also erred when it declined to consider arguments in Hulu’s petition relating to a non-instituted single-reference obviousness analysis that Hulu had incorporated into its multiple-reference grounds.¹¹⁹² Ultimately, the Federal Circuit held that, under a proper obviousness analysis, the record demonstrated the unpatentability of CFRD’s claim.¹¹⁹³

3. Claim Construction

In *MPHJ Technology Investments, LLC v. Ricoh Americas Corp.*,¹¹⁹⁴ the Federal Circuit held that distinctions between a provisional and final application support a broad claim construction, affirming an IPR anticipation decision.¹¹⁹⁵ MPHJ Technology Investments’s (MPHJ) patent related to a virtual copier.¹¹⁹⁶ MPHJ argued that, properly construed, its claims required “single button” operation, meaning that a user would push the “go” button on a copier one time and the image would be seamlessly replicated onto other devices and applications.¹¹⁹⁷ The Federal Circuit held that the PTAB correctly rejected MPHJ’s argument.¹¹⁹⁸ The Federal Circuit also affirmed PTAB’s findings that MPHJ’s claims described a configuration which required a user to take multiple steps to initiate a scan and transmit an electronic image.¹¹⁹⁹ The Federal Circuit noted that language tending to adopt a “single button” limitation in MPHJ’s provisional was removed in the final

1190. *Id.* at 1345.

1191. *Id.*

1192. *Id.* at 1346 (“To bar Hulu from pressing an argument it raised in a ground the [PTAB] found ‘redundant’ and that it expressly incorporated into other proposed grounds of unpatentability on which the Board instituted would not only unfairly prejudice Hulu, but would also raise questions about the propriety of the Board’s redundancy decision.”).

1193. *Id.* at 1349.

1194. 847 F.3d 1363 (Fed. Cir. 2017).

1195. *Id.* at 1363 (holding that the patent did not adequately describe an operation and there was sufficient evidence to support a finding of anticipation).

1196. *Id.* at 1364.

1197. *Id.* at 1368.

1198. *Id.* at 1369.

1199. *Id.* at 1368.

application, and that references to “single button” operation in the final specification characterized it as optional.¹²⁰⁰ Thus, the Federal Circuit held that the PTAB did not err in finding several of MPHJ’s claims anticipated.¹²⁰¹ Further, the PTAB also did not err in its other claim constructions.¹²⁰²

Dissenting, Judge O’Malley would have adopted MPHJ’s “single button” claim interpretation based on statements in the specification amounting to “unmistakable disavowal.”¹²⁰³ She would have partially reversed the PTAB’s anticipation determination, as well as its alternative determination of obviousness (which the majority did not reach).¹²⁰⁴

In *Organik Kimya AS v. Rohm & Haas Co.*,¹²⁰⁵ the Federal Circuit affirmed the IPR decisions confirming patentability as to two Rohm & Haas patents, holding that grammatical uncertainty in the specification does not require an expansive view of the “broadest reasonable interpretation” standard.¹²⁰⁶ The Federal Circuit found that the PTAB did not err in its determination of the broadest reasonable interpretation of a claim term.¹²⁰⁷ The Federal Circuit considered the record, and rejected Organik’s argument that definitional language in the specification was grammatically ambiguous.¹²⁰⁸ Organik argued that the PTAB erred in resolving the ambiguity with the narrower of two possible approaches.¹²⁰⁹ The language in question¹²¹⁰ was not actually ambiguous and meant that the suitable swelling agents were those having the characteristic in question.¹²¹¹ Applying that construction, the Federal Circuit concluded the record established neither anticipation nor obviousness.¹²¹²

4. *Moving Forward with IPR Practice*

The Supreme Court has recently issued two decisions that will impact

1200. *Id.* at 1368–69.

1201. *Id.* at 1369.

1202. *Id.* at 1370.

1203. *Id.* at 1374–76 (O’Malley, J., dissenting).

1204. *Id.* at 1380–81.

1205. 873 F.3d 887 (Fed. Cir. 2017).

1206. *Id.* at 892, 896.

1207. *Id.* at 892.

1208. *Id.*

1209. *Id.*

1210. “Suitable swelling agents include, are those which, [have a certain characteristic].” *Id.*

1211. *Id.*

1212. *Id.* at 894, 896.

IPR practice. First, the Supreme Court in *SAS Institute, Inc. v. Iancu*,¹²¹³ examined whether, in an IPR, the PTAB must enter a final decision on every claim addressed in the petition, or only some of the claims.¹²¹⁴ In the decision being reviewed, the Federal Circuit held that the PTAB, in its written decision, did not have to address those claims for which the PTAB did not institute IPR.¹²¹⁵ The Supreme Court reversed this decision finding that the PTAB must resolve all claims in the IPR petition.¹²¹⁶

Second, the Supreme Court reviewed the constitutionality of IPR proceedings in *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*.¹²¹⁷ The Supreme Court held that, because patents are public rights, an IPR is constitutional both under Article III and the Seventh Amendment.¹²¹⁸

B. *Inter Partes Reexamination*

In *Icon Health & Fitness, Inc. v. Strava, Inc.*,¹²¹⁹ the Federal Circuit vacated in part and affirmed in part the PTAB's rejection for obviousness following inter partes reexamination (IPRx).¹²²⁰ The Federal Circuit held that the PTAB did not erroneously rely in part on Strava's expert declarations.¹²²¹ Even though Strava's expert declaration included certain borderline legal conclusions (e.g., stating something "would have been obvious"), this did not render the declaration unreliable.¹²²² However, the PTAB failed to support its obviousness determinations for some claims with sufficient factual findings and explanations.¹²²³ The Federal Circuit determined that the PTAB decision failed to materially discuss Strava's arguments for several claims, and its attempt to incorporate by reference the examiner's determinations, which, in turn, referenced Strava's submissions and expert declarations, was improper.¹²²⁴ The Federal Circuit held that "[t]his multi-layered incorporation by reference does

1213. No. 16-969, 2018 WL 1914661 (U.S. Apr. 24, 2018).

1214. *Id.* at *2.

1215. *SAS Inst., Inc. v. Complementsoft, LLC*, 825 F.3d 1341, 1352–53 (Fed. Cir. 2016), *rev'd*, No. 16-969, 2018 WL 1914661 (U.S. Apr. 24, 2018).

1216. *SAS Inst., Inc.*, 2018 WL 1914661, at *9–10.

1217. No. 16-712, 2018 WL 1914662 (U.S. Apr. 24, 2018).

1218. *Id.* at *11.

1219. 849 F.3d 1034 (Fed. Cir. 2017).

1220. *Id.* at 1040–49 (noting that the PTAB properly relied on the expert declaration, even though it committed error in a few but not all of the claims).

1221. *Id.* at 1039–41.

1222. *Id.* at 1041.

1223. *Id.* at 1041–44.

1224. *Id.* at 1041–46.

not satisfy the substantial evidence standard of review.”¹²²⁵ While the PTAB may, in some cases, incorporate by reference an examiner’s treatment, simply incorporating a party’s arguments by reference is insufficient because it does nothing to “transform . . . attorney argument into factual findings or supply the requisite explanation that must accompany those findings.”¹²²⁶ The Federal Circuit further reviewed several categories of the PTAB’s decision concerning Icon’s claims, finding some adequately supported by factual findings and explanation, whereas others were not.¹²²⁷ Those determinations lacking sufficient explanation were vacated and remanded; the rest were affirmed.¹²²⁸ Concurring in part and dissenting in part, Judge O’Malley agreed with the majority’s discussion, but she would have reversed rather than vacated on those claims where the PTO and PTAB had failed to carry their burden to establish unpatentability.¹²²⁹

In *In re Affinity Labs of Texas, LLC*,¹²³⁰ the Federal Circuit held that dismissal of invalidity counterclaims without prejudice does not invoke § 317(b) estoppel against IPRx, affirming the PTAB’s determination of unpatentability.¹²³¹ The PTO did not err when it denied Affinity’s motion to have the IPRx terminated after Affinity settled a co-pending district court litigation with requestor Apple.¹²³² Section 317(b) only imposes an estoppel against maintenance of IPRx proceedings following a “final decision” in civil litigation as to patentability.¹²³³ Because the district court litigation never reached the merits of Apple’s invalidity counterclaims and because the district court dismissed those counterclaims without prejudice to Apple re-filing them, there was no “final decision” suitable to invoke § 317(b).¹²³⁴

As to the validity analysis, the Federal Circuit rejected Affinity’s claim interpretation as unduly narrow.¹²³⁵ Affinity argued that claim steps of “sending” certain content to two separate computers must occur

1225. *Id.* at 1042.

1226. *Id.* at 1043–44.

1227. *Id.* at 1049.

1228. *Id.*

1229. *Id.* (O’Malley, J., concurring in part and dissenting in part).

1230. 856 F.3d 902 (Fed. Cir. 2017), *cert. denied*, No. 17-233, 2018 WL 1994800 (U.S. Apr. 30, 2018).

1231. *Id.* at 907–08.

1232. *Id.* at 904.

1233. *Id.*

1234. *Id.* at 905.

1235. *Id.* at 907.

without any intervening step after “receiving” a request.¹²³⁶ The Federal Circuit reasoned that this was inconsistent with the claim language, which set the two steps up as separate steps—i.e., not a single step.¹²³⁷ The Federal Circuit also noted that the claim preamble used the open-ended term “comprising” in setting forth the claim.¹²³⁸

The Federal Circuit affirmed an IPRx obviousness determination in *In re Ethicon, Inc.*,¹²³⁹ holding that a normal desire to optimize the claimed invention can support a finding of obviousness.¹²⁴⁰ The claims at issue related to drug-delivery stents.¹²⁴¹ The Federal Circuit found that substantial evidence supported the PTAB’s determination that the prior art taught all limitations of Ethicon’s claims and taught a motivation to combine them.¹²⁴² The Federal Circuit rejected Ethicon’s argument that one reference taught away from another stating that the mere statement that one sort of polymer “is probably more desirable,” without more, is not teaching away.¹²⁴³ There was also no error in the PTAB’s determination that a person of skill would have relied on certain art that was somewhat old and tangentially related to the field at issue.¹²⁴⁴ The art taught the general properties of the copolymer family that was ultimately claimed.¹²⁴⁵ Moreover, the Federal Circuit held that the PTAB also did not err in concluding that Ethicon’s evidence on secondary considerations of nonobviousness was insufficient to overcome the prima facie obviousness case.¹²⁴⁶ Ethicon was relying “solely on its expert’s conclusory testimony” regarding copying; its evidence on unexpected results was thin, and its evidence on commercial success “did not establish that any success, praise or unexpected results were due to the [patented] coating, rather than due to an unclaimed feature such as the drug or stent design.”¹²⁴⁷ Dissenting, Judge Newman would have held that the claims were nonobvious, noting that none of the references cited disclosed

1236. *Id.* at 906.

1237. *Id.* at 907.

1238. *Id.*

1239. 844 F.3d 1344 (Fed. Cir. 2017).

1240. *Id.* at 1352.

1241. *Id.* at 1346–47.

1242. *Id.* at 1350.

1243. *Id.* at 1351.

1244. *Id.* at 1349, 1351.

1245. *Id.* at 1351 (“The normal desire of artisans to improve upon what is already generally known can provide the motivation to optimize.”).

1246. *Id.* at 1352.

1247. *Id.*

the copolymer coating material described in the claims.¹²⁴⁸

In *Fairchild (Taiwan) Corp. v. Power Integrations, Inc.*,¹²⁴⁹ the Federal Circuit granted a motion to remand to the PTAB with instructions to vacate the IPRx decision and issue the reexamination certificate because of a jury verdict confirming the nonobviousness of the asserted patents.¹²⁵⁰ The IPRx proceeding was initiated by Power Integrations in 2012 and concerned a patent that was the subject of ongoing litigation between Power Integrations (PI) and Fairchild.¹²⁵¹ While the district court matter was pending, the examiner in the IPRx rejected Fairchild's claims, the PTAB affirmed, and Fairchild appealed.¹²⁵²

In the meantime, the litigation resulted in a jury verdict rejecting PI's invalidity arguments.¹²⁵³ Sometime after the PTAB's affirmance, the Federal Circuit affirmed that aspect of the district court judgment.¹²⁵⁴ The time for PI to seek a writ of certiorari expired, rendering that aspect of the district court proceeding final.¹²⁵⁵ 35 U.S.C. § 317(b) thus barred "maintain[ing]" the IPRx proceeding, which by this time was on appeal to the Federal Circuit, because the proceeding involved claims that were raised in a civil action that had reached final decision.¹²⁵⁶ The Federal Circuit reasoned that "[i]f a defendant brought an invalidity challenge in a district court litigation and was unsuccessful, it is not permitted to bring the same challenge in an [IPRx]." ¹²⁵⁷ The Federal Circuit's affirmance of the jury's verdict included a remand on infringement and other issues unrelated to patent validity was irrelevant for purposes of applying § 317(b).¹²⁵⁸ And, while Fairchild had claims in the IPRx that were not in the litigation, it had committed to abandon those claims.¹²⁵⁹ On remand, the Federal Circuit ordered the PTAB to dismiss the IPRx as to the claims in the litigation and to issue a reexamination certificate

1248. *Id.* at 1358 (Newman, J., dissenting).

1249. 854 F.3d 1364 (Fed. Cir. 2017).

1250. *Id.* at 1366.

1251. *Id.* at 1365.

1252. *Id.*

1253. *Id.*

1254. *Id.* (citing *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 843 F.3d 1315, 1340–42 (Fed. Cir. 2016)).

1255. *Id.* at 1365–66.

1256. *Id.* at 1365 (discussing 35 U.S.C. § 317(b) (2012)).

1257. *Id.* (quoting *Function Media, LLC v. Kappos*, 508 F. App'x 953, 955–56 (Fed. Cir. 2013)).

1258. *Id.* at 1366.

1259. *Id.*

invalidating the abandoned claims.¹²⁶⁰

In *In re Affinity Labs of Texas, LLC*, the Federal Circuit found that the PTAB properly refused to terminate a merged reexamination proceeding following the district court verdict of patentability as to only one requestor.¹²⁶¹ The Federal Circuit affirmed the PTAB's determination that merged reexamination proceedings two IPRxs and one ex parte reexamination (EPRx) could continue even after a district court litigation involving one of the requesting parties resulted in a verdict confirming patentability for some claims.¹²⁶² The Federal Circuit also affirmed the PTAB's determination of unpatentability for all claims.¹²⁶³

The Federal Circuit held that the PTAB did not err in denying Affinity's motion to terminate the entire merged proceeding after it obtained a verdict in civil litigation that some, but not all, of the claims under reexamination were valid.¹²⁶⁴ Applying § 317(b)'s plain language, the estoppel to continue reexamination proceedings only applies to the party that actually participated in the civil action (the PTO severed out Volkswagen's participation) and only applies to those claims actually addressed in the action.¹²⁶⁵ The Federal Circuit rejected Affinity's argument that reexamination should be terminated as to all claims in the patent (as opposed to only those claims in the civil action), and rejected Affinity's argument that § 317 imposes a "patent-based," as opposed to claim-based, estoppel in the case of already instituted reexamination proceedings.¹²⁶⁶ The Federal Circuit also rejected Affinity's argument for preclusive effect against the reexaminations initiated by parties other than Volkswagen.¹²⁶⁷ As to the EPRx, § 317 had no effect.¹²⁶⁸ And regarding the non-Volkswagen IPRx, as stated above, the statute imposes estoppel only against those who actually participate in the civil litigation.¹²⁶⁹

Regarding the validity analysis, the Federal Circuit found that the PTAB's conclusion that Affinity's claims were unpatentable over the

1260. *Id.*

1261. *In re Affinity Labs of Tex., LLC*, 856 F.3d 883, 886 (Fed. Cir. 2017), *cert. denied*, No. 17-233, 2018 WL 1994800 (U.S. Apr. 30, 2018).

1262. *Id.*

1263. *Id.* at 902.

1264. *Id.* at 886–87.

1265. *Id.* at 887.

1266. *Id.* at 892.

1267. *Id.* at 889.

1268. *Id.* at 893.

1269. *Id.* at 892–93.

prior art was supported by substantial evidence as to all challenged claims.¹²⁷⁰ The Federal Circuit also rejected Affinity's argument that the PTAB erred in analyzing Affinity's objective indicia of nonobviousness.¹²⁷¹ It noted that Affinity "provided no explanation or analysis that corroborates the relationship between the claims of the patent and the relevant market."¹²⁷² And although Affinity had demonstrated a significant history of licensing, the Federal Circuit noted that "the mere fact of licensing alone cannot be considered strong evidence of nonobviousness if it cannot also be shown that the licensees did so out of respect for the patent rather than to avoid the expense of litigation."¹²⁷³ The Federal Circuit noted that Affinity had failed to make this latter showing.¹²⁷⁴

In *In re AT & T Intellectual Property II, L.P.*,¹²⁷⁵ the Federal Circuit held that a decision to institute IPRx is not reviewable despite a requestor's motion to have the petition denied, and it affirmed the IPRx determination of anticipation.¹²⁷⁶ Per § 312(c) and *Belkin International, Inc. v. Kappos*,¹²⁷⁷ the Federal Circuit lacked authority to review the PTAB's institution decision.¹²⁷⁸ Although the petitioner, LG, had sought denial of the petition so that it could file an IPR petition, the Federal Circuit determined that the PTAB could still review the petition.¹²⁷⁹ As to the anticipation determination, the Federal Circuit found that substantial evidence supported the PTAB's determination.¹²⁸⁰ The Federal Circuit also rejected AT & T's contention that the examiner shifted its basis for finding anticipation.¹²⁸¹

In *Cisco Systems, Inc. v. Cirrex Systems, LLC*,¹²⁸² the Federal Circuit affirmed in part and reversed in part an IPRx determination finding that the claims at issue were unpatentable for lack of written

1270. *Id.* at 898, 900.

1271. *Id.* at 887.

1272. *Id.* at 901.

1273. *Id.*

1274. *Id.* at 901–02.

1275. 856 F.3d 991 (Fed. Cir. 2017), *cert. denied*, No. 17-643, 2018 WL 1994807 (U.S. Apr. 30, 2018).

1276. *Id.* at 997.

1277. 696 F.3d 1379 (Fed. Cir. 2012).

1278. *AT & T*, 856 F.3d at 996 (citing 35 U.S.C. § 312(c) (2012)).

1279. *Id.* at 996.

1280. *Id.*

1281. *Id.* at 997.

1282. 856 F.3d 997 (Fed. Cir. 2017).

description.¹²⁸³ On claim construction, the Federal Circuit considered how the parties agreed to construction of a certain term, but it found that the PTAB erred in holding that this construction covered a specific embodiment.¹²⁸⁴ The discussion was highly fact specific and concerned equalization and attenuation of light signals in a fiber optic communication system.¹²⁸⁵ Applying the correct construction, the Federal Circuit found all the claims on appeal lacking in written description support, so the PTAB erred insofar as it had held some claims patentable.¹²⁸⁶ The Federal Circuit noted that each of the claims that the PTAB found patentable had been added by amendment during prosecution and so cannot be relied on to establish written description support per *Gentry Gallery, Inc. v. Berklene Corp.*¹²⁸⁷ Applying the appropriate claim construction, the Federal Circuit found that the material Cirrex had been citing for its written description arguments failed to teach a requirement of the claims—namely, the attenuation of certain light signals while they were still inside a certain circuit.¹²⁸⁸

As to the claims where the PTAB had found unpatentability for lack of written description, the Federal Circuit affirmed.¹²⁸⁹ The material cited by Cirrex failed to teach the claims' requirement of a "diverting element" inside a certain circuit.¹²⁹⁰

In *IPCom GmbH v. HTC Corp.*,¹²⁹¹ the Federal Circuit held that the PTAB's failure to identify a specific algorithm for a means-plus-function limitation required partial vacatur and remanded the PTAB's IPRx obviousness determination.¹²⁹² The Federal Circuit found the PTAB erred in its interpretation of a means-plus-function limitation appearing in several claims. Specifically, the PTAB erroneously failed to identify the algorithm in the specification corresponding to the claimed means.¹²⁹³ Under *In re Donaldson Co.*,¹²⁹⁴ the application of the

1283. *Id.* at 1011.

1284. *Id.* at 1005–06.

1285. *E.g., id.* at 1000 (discussing the scientific process of the optical network assembly).

1286. *Id.* at 999.

1287. 134 F.3d 1473, 1479 (Fed. Cir. 1998) (holding that the patentee's initial disclosure limits the permissible scope of his later-drafted claims); *Cisco Sys.*, 856 F.3d at 1007 (citing *Gentry Gallery*, 134 F.3d at 1479).

1288. *Cisco Sys.*, 856 F.3d at 1009.

1289. *Id.* at 1011.

1290. *Id.*

1291. 861 F.3d 1362 (Fed. Cir. 2017).

1292. *Id.* at 1378.

1293. *Id.* at 1369.

1294. 16 F.3d 1189 (Fed. Cir. 1994) (en banc).

“broadest reasonable interpretation” standard is not a justification for construing a means-plus-function limitation as encompassing any means capable of performing the function.¹²⁹⁵ The PTAB had rejected the algorithm tendered by patent owner ICom, but it did not identify an algorithm of its own.¹²⁹⁶ On remand, the PTAB needed to identify the appropriate algorithm.¹²⁹⁷ The Federal Circuit vacated the obviousness determinations for claims affected by this issue.¹²⁹⁸

The Federal Circuit affirmed the PTAB’s remaining determinations.¹²⁹⁹ For those claims unaffected by the issue above, substantial evidence supported the Board’s obviousness determinations.¹³⁰⁰ The Federal Circuit considered the references, and the proof of motivation to combine.¹³⁰¹ The court found that the PTAB did not err in reviewing the patentability of certain claims. These claims had initially been part of the IPRx, but the PTAB did not mention them when it issued a new ground of rejection following an initial determination of patentability by the examiner.¹³⁰² Following the PTAB’s decision, ICom reopened prosecution and amended the claims in question.¹³⁰³ On that basis, the court held that there was no error in the PTAB exercising jurisdiction to consider HTC’s challenge to the claims when the matter returned to the PTAB.¹³⁰⁴

In *Soft Gel Technologies, Inc. v. Jarrow Formulas, Inc.*,¹³⁰⁵ the Federal Circuit affirmed the PTAB’s IPRx obviousness determinations holding that the “reasonable expectation of success” concept does not require certainty.¹³⁰⁶ In its analysis, the Federal Circuit was mostly fact-oriented, and it rejected Soft Gel’s arguments as to the content of the record.¹³⁰⁷ In rejecting Soft Gel’s argument that a person of skill would not have had a reasonable expectation of success in combining various aspects of the references, the Federal Circuit noted that the law does not require

1295. *ICom GmbH*, 861 F.3d at 1369 (quoting *In re Donaldson*, 16 F.3d at 1194).

1296. *Id.* at 1370–71.

1297. *Id.* at 1371.

1298. *Id.*

1299. *Id.* at 1372–76.

1300. *Id.* at 1376.

1301. *Id.* at 1375.

1302. *Id.* at 1371.

1303. *Id.*

1304. *Id.* at 1372.

1305. 864 F.3d 1334 (Fed. Cir. 2017).

1306. *Id.* at 1335.

1307. *Id.* at 1340.

“absolute predictability.”¹³⁰⁸ A reference suggesting that one dissolve a certain compound (“CoQ10”) in lemon oil was sufficient to support a reasonable expectation of success in dissolving CoQ10 in d-limonene (a major constituent of lemon oil).¹³⁰⁹ Thus, the Federal Circuit affirmed.

C. Interference

In *Board of Trustees of the Leland Stanford Junior University v. Chinese University of Hong Kong*,¹³¹⁰ the Federal Circuit vacated the cancellation of Stanford’s patent claims following interference proceedings due to written description issues.¹³¹¹ The claims related to methods for detecting fetal aneuploidies (abnormalities in the number of fetal chromosomes).¹³¹² After the PTAB found Stanford’s claims unpatentable, Stanford appealed to the U.S. District Court for the Northern District of California under § 146.¹³¹³ Subsequently, *Biogen MA, Inc., v. Japanese Foundation for Cancer Research*,¹³¹⁴ held that, for post-AIA interferences, the Federal Circuit is the exclusive appellate tribunal from PTAB interference decisions, and the appeal was subsequently transferred to the Federal Circuit.¹³¹⁵ The Federal Circuit declined to address Stanford’s argument that *Biogen* was incorrectly decided.¹³¹⁶ Instead, the Federal Circuit noted that the Supreme Court denied certiorari in that case, and thus *Biogen* remains controlling law.¹³¹⁷

The Federal Circuit rejected Stanford’s argument that discovery taken while the case was in the Northern District of California, including expert discovery, could be taken into account in reviewing the Board’s interference decisions.¹³¹⁸ “Given that the district court did not have subject matter jurisdiction to review the Board’s interference decisions, Stanford’s attempt to include evidence elicited during proceedings there is inappropriate—the activities in the district court are a nullity.”¹³¹⁹

The Federal Circuit determined that on the record before it, the

1308. *Id.* at 1342.

1309. *Id.* at 1339.

1310. 860 F.3d 1367 (Fed. Cir. 2017).

1311. *Id.* at 1369.

1312. *Id.* at 1370.

1313. *Id.* at 1373 (citing 35 U.S.C. § 146 (2012)).

1314. 785 F.3d 648 (Fed. Cir. 2015).

1315. *Bd. of Tru. of the Leland Stanford Junior Univ.*, 860 F.3d at 1373 (citing *Biogen*, 785 F.3d at 650).

1316. *Id.* at 1374.

1317. *Id.*

1318. *Id.* at 1375.

1319. *Id.* at 1374.

PTAB erred in relying on certain testimony from Chinese University of Hong Kong's expert as to how a person of skill would have read various references in Stanford's specification at the time of the invention.¹³²⁰ The testimony failed to cite support for its conclusions, and Stanford had assembled counterevidence.¹³²¹ Therefore, the Federal Circuit held that the PTAB should not have relied in an unquestioning way on the testimony in question.¹³²² Nor should the PTAB have presumed that a reference in Stanford's specification could only disclose one technique or another; it could have disclosed both.¹³²³

D. Derivation

Encouragement to undertake research does not amount to derivation. In *Cumberland Pharmaceuticals Inc. v. Mylan Institutional LLC*,¹³²⁴ the Federal Circuit affirmed an infringement judgment against Mylan.¹³²⁵ Cumberland's patent was to "acetylcysteine compositions substantially free of chelating agents," such as Cumberland's ACETADOTE product.¹³²⁶ The Federal Circuit found that the district court did not clearly err in concluding that Mylan had failed to prove derivation. Even though the FDA had prompted Cumberland to undertake the research that eventually led to the invention, this did not establish derivation.¹³²⁷ Per *Gambro Lundia AB v. Baxter Healthcare Corp.*,¹³²⁸ "derivation" does not necessarily occur by a third party communicating an idea that makes the invention obvious.¹³²⁹ Similarly, an FDA suggestion that Cumberland "remove or reduce" the previously present chelating agent did not teach the claimed invention because it did not "direct a skilled artisan to remove [the chelating agent], add nothing else, and test the resulting formulation in exactly the manner to lead to the invention."¹³³⁰ The Federal Circuit determined that the district court also did not clearly err in rejecting Mylan's obviousness challenge. Though the FDA had

1320. *Id.* at 1377.

1321. *Id.*

1322. *Id.* at 1376.

1323. *Id.* at 1377.

1324. 846 F.3d 1213 (Fed. Cir. 2017).

1325. *Id.* at 1215.

1326. *Id.* at 1214.

1327. *Id.* at 1221.

1328. 110 F.3d 1573 (Fed. Cir. 1997).

1329. *Cumberland Pharm.*, 846 F.3d at 1218.

1330. *Id.* at 1221.

encouraged Cumberland to remove the chelating agent, all prior art indicated that without such an agent, the formulation would be unstable.¹³³¹ Because stability was expressly a requirement of the claim, the Federal Circuit held that there was no clear error in the district court's determination that a person of skill "would not have reasonably expected a chelating-agent-free intravenous acetylcysteine formulation to succeed in being stable."¹³³²

E. Covered Business Methods

As covered business method (CBM) proceedings become more popular, the Federal Circuit addressed the subject-matter eligibility for various methods. In *Secure Axxcess, LLC v. PNC Bank National Ass'n*,¹³³³ the Federal Circuit held that references in the specification to use the claimed invention in banking was insufficient to establish the CBM status, reversing the determination that Secure Axxcess's patent was a CBM patent and vacating subsequently-made claim construction and obviousness determinations.¹³³⁴ The patent claimed methods and systems for authenticating web pages in connection with "activities that are financial in nature" described in various portions of the written description.¹³³⁵ The Federal Circuit emphasized that CBM-status inquiry focuses on the claims, not the written description.¹³³⁶ Further, the Federal Circuit found that the PTAB erred in reasoning that CBM status could be triggered by claims addressing technology "incidental to a financial activity."¹³³⁷ Under *Unwired Planet, LLC v. Google Inc.*,¹³³⁸ the statutory definition of a CBM patent does not include patents claiming material "incidental" to such activities.¹³³⁹ The court found remand unnecessary: on the appellate record, Secure Axxcess's patent lacked "a single claim that could qualify this patent as a 'patent that claims a method or corresponding apparatus . . . used in the practice

1331. *Id.* at 1222.

1332. *Id.*

1333. 841 F.3d 1376 (Fed. Cir. 2017), *reh'g denied*, 682 F. App'x 928 (Fed. Cir. 2017) (per curiam), *and cert. denied*, No. 17-357, 2018 WL 1994803 (U.S. Apr. 30, 2018).

1334. *Id.* at 1373.

1335. *Id.*

1336. *Id.* at 1378–79.

1337. *Id.* at 1380.

1338. 848 F.3d 1370 (Fed. Cir. 2017), *reh'g denied*, 859 F.3d 998 (Fed. Cir. 2017) (per curiam), *and petition for cert. docketed*, No. 17-350 (U.S. Sept. 7, 2017).

1339. *Secure Axxcess*, 848 F.3d at 1380 (citing *Unwired Planet*, 841 F.3d at 1382).

[etc.] of a financial product or service.”¹³⁴⁰

Dissenting, Judge Lourie concluded that Secure Access’s patent was directed to a covered business method, reasoning that the claims were “used in the practice” of providing financial services, particularly in view of the written description’s repeated references to banks, and Secure Access’s assertion of the patent against a litany of banks.¹³⁴¹

On petition for a rehearing en banc, the Federal Circuit denied review of the *Secure Access* determination limiting CBM status to claims reciting financial activity.¹³⁴² The issue was whether patents whose claims included no reference to financial activity, but whose specifications indicated that they were for use in that field, qualified for CBM review.¹³⁴³ The judges were decidedly split in opinion.¹³⁴⁴ In concurrence, Judge Taranto approved the Federal Circuit’s decision that claims not clearly directed to financial activity would not qualify for CBM review.¹³⁴⁵ He noted that congressional redrafting would be a better approach to address the policy concerns raised by others.¹³⁴⁶ Also concurring, Judges O’Malley and Reyna approved the denial of en banc review, for the reasons in Judge Plager’s concurrence in the denial of Federal Circuit rehearing.¹³⁴⁷ Concurring from denial of the rehearing, Judge Plager endorsed the PTAB’s reasoning and emphasized that because this was an appeal from an administrative agency, the Federal Circuit was not in a position to substitute an alternate basis on the CBM-coverage issue from the basis used by the PTAB.¹³⁴⁸ He associated Judge Lourie’s dissent as advocating such an alternate basis.¹³⁴⁹

As in his dissent from the panel opinion, Judge Lourie disagreed with the panel’s analysis and argued that the matter should have appeared en banc.¹³⁵⁰ In his view, the Federal Circuit’s reasoning was inconsistent with the statutory language, congressional intent, and

1340. *Id.* at 1382 (alternations in original).

1341. *Id.* at 1382, 1385 (Lourie, J., dissenting).

1342. *Secure Access v. PNC Bank Nat’l Ass’n*, 859 F.3d 998, 998 (Fed. Cir. 2017) (per curiam).

1343. *Id.* at 1000 (Taranto, J., concurring).

1344. Judge Stoll did not participate in the en banc proceeding. Judge Plager participated only in the decision on Federal Circuit rehearing.

1345. *Id.* at 998, 1000 (Taranto, J., concurring).

1346. *Id.* at 999.

1347. *Id.* at 1003 (O’Malley, J., concurring).

1348. *Id.* at 1013–14 (Plager, J., concurring).

1349. *Id.*

1350. *Id.* at 1004 (Lourie, J., dissenting).

Federal Circuit precedent.¹³⁵¹ Also dissenting, Judge Dyk raised questions regarding the issue of whether claims address a “financial product or service” is appealable under the AIA.¹³⁵² In his view, it is not appealable, and *Versata Development Group, Inc. v. SAP America, Inc.*,¹³⁵³ reaching the opposite result, was wrongly decided.¹³⁵⁴

In *Credit Acceptance Corp. v. Westlake Services*,¹³⁵⁵ the Federal Circuit held that there was no estoppel against maintaining a CBM challenge on claims that were not previously instituted, affirming CBM patent-ineligibility determination.¹³⁵⁶ Credit Acceptance Corp.’s (CAC) patent related to providing financing to a customer who is purchasing a product from a dealer’s inventory.¹³⁵⁷ Two CBM proceedings were at issue, both brought by Westlake. The first resulted in an institution decision that was pre-*Alice* and in which the PTAB declined to institute review of certain claims of CAC’s patent.¹³⁵⁸ The second CBM petition was post-*Alice*, but before the first proceeding reached a final written decision, and this time the PTAB addressed the subject-matter patentability of the claims it had previously declined to review.¹³⁵⁹ The PTAB reached a written review on the first CBM proceeding and CAC moved to terminate the second claim, arguing that § 325(e) (1) barred Westlake from challenging the claims that the PTAB had declined to institute on.¹³⁶⁰

The Federal Circuit held that it has jurisdiction to review the PTAB’s decision that Westlake was not estopped.¹³⁶¹ The court did not find *Cuozzo* contradictory because § 325(e) (1) is not limited to institution decisions; its estoppel governs any stage of subsequent proceedings, and the ability of an estopped petitioner to “maintain” a proceeding.¹³⁶² The Federal Circuit reasoned that the AIA does not bar review of such decisions, and noted that it would be incongruous for estoppel to be non-reviewable as to subsequent CBM proceedings, but would be reviewable as to subsequent district court or ITC

1351. *Id.* at 1008.

1352. *Id.* at 1010 (Dyk, J., dissenting).

1353. 793 F.3d 1306 (Fed. Cir. 2015).

1354. *Secure Access*, 859 F.3d at 1010–11.

1355. 859 F.3d 1044 (Fed. Cir. 2017).

1356. *Id.* at 1057.

1357. *Id.* at 1047.

1358. *Id.*

1359. *Id.* at 1048.

1360. *Id.*

1361. *Id.*

1362. *Id.* at 1050.

proceedings, as per AIA § 18(a)(1)(D).¹³⁶³

The Federal Circuit determined that the PTAB did not err in concluding that Westlake was not estopped. Under *Synopsys, Inc. v. Mentor Graphics Corp.*,¹³⁶⁴ there was no estoppel in future PTO proceedings for claims on which CBM was not instituted.¹³⁶⁵ The Federal Circuit reasoned that *Shaw Industries Group v. Automated Creel Systems, Inc.*¹³⁶⁶ was supportive because, in that case, IPR estoppel attached only to those grounds that could have actually been raised *during* the IPR—which did not include non-instituted grounds.¹³⁶⁷ Likewise, the court found that the PTAB did not err in finding the claims patent-ineligible. At *Alice* step one, they claim the abstract idea of processing an application for financing a purchase.¹³⁶⁸ There was no meaningful distinction against the abstract claims in *Alice* or *Bilski v. Kappos*.¹³⁶⁹ The Federal Circuit rejected CAC’s argument that the claims improved the functionality of computers—they did so only by automating previously manual processes, so the computer-specific solution of *Enfish* was not applicable.¹³⁷⁰ The claims also failed to recite an inventive concept at *Alice* step two.¹³⁷¹ Nothing in the recitation of components transforms the claim into anything more than an abstract idea.

Dissenting in part, Judge Mayer would have held that the Federal Circuit lacks jurisdiction to review the PTAB’s decision to deny a motion to terminate for § 325(e)(1) estoppel.¹³⁷²

In *Return Mail, Inc. v. U.S. Postal Service*,¹³⁷³ the Federal Circuit affirmed a CBM determination of subject-matter ineligibility.¹³⁷⁴ As an initial matter, the PTAB’s determination that the Postal Service had standing to file a petition for CBM review is subject to judicial review.¹³⁷⁵ The Federal Circuit reasoned that neither *Cuozzo*, nor

1363. *Id.* at 1050–51.

1364. 814 F.3d 1309 (Fed. Cir. 2016), *overruled by* *Aqua Products, Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017) (en banc).

1365. *Credit Acceptance Corp.*, 859 F.3d at 1052 (citing *Synopsys*, 814 F.3d at 1316).

1366. 817 F.3d 1293 (Fed. Cir. 2016), *cert. denied*, 137 S. Ct. 374 (2016).

1367. *Credit Acceptance Corp.*, 859 F.3d at 1053.

1368. *Id.* at 1054.

1369. 561 U.S. 593 (2010) (plurality opinion); *Credit Acceptance Corp.*, 859 F.3d at 1054.

1370. *Credit Acceptance Corp.*, 859 F.3d at 1055.

1371. *Id.* at 1056.

1372. *Id.* at 1057 (Mayer, J., dissenting in part).

1373. 868 F.3d 1350 (Fed. Cir. 2017).

1374. *Id.* at 1371.

1375. *Id.* at 1356–59.

Achates, precludes judicial review, as the determination of whether a party has statutory authorization to file a petition is qualitatively different from the merits-oriented analysis in institution decisions that 35 U.S.C. § 324(e) puts beyond judicial review.¹³⁷⁶ As to the merits, the Federal Circuit found that the PTAB did not err in determining that the Postal Service had standing to file a petition for CBM review.¹³⁷⁷ Applying *de novo* review, there was no error in the PTAB's determination that Return Mail's § 1498(a) suit against the Postal Service in the Claims Court was a suit for "infringement" sufficient to confer standing.¹³⁷⁸ The Federal Circuit rejected Return Mail's argument that AIA § 18(a)(1)(B)'s provision permitting CBM review upon an infringement suit could only be triggered under the Patent Act,¹³⁷⁹ holding that "[i]nfringement is a prerequisite to § 1498(a) liability; the government's infringement triggers its obligation to pay just compensation."¹³⁸⁰ The Federal Circuit noted that this reading creates tension with the estoppel provision of AIA § 18(a)(1)(D), which by its text applies to petitioners litigating in district court or the ITC, but does not mention the U.S. Court of Federal Claims.¹³⁸¹ As to the dissent's argument about whether the word "person" in § 18(a)(1)(B) could include the Postal Service, the Federal Circuit noted that Return Mail had not made this argument, and it disagreed that the term could not include a government agency in this context.¹³⁸²

On the merits, the court held that the PTAB had properly found Return Mail's claims patent-ineligible under § 101. Under *Alice* step 1, the claims were directed to the abstract idea of relaying "mailing address data" by reviewing encoded data about message addressing and transferring certain electronic data based on whether the sender did or did not want to receive corrected addresses for the addressee in question.¹³⁸³ The Federal Circuit held that Return Mail's claims were not specific to improving technology, but rather that they were fully practicable by a human mind.¹³⁸⁴ Under *Alice* step 2, the court held

1376. *Id.* at 1356–59.

1377. *Id.* at 1356–57.

1378. *Id.* at 1362–63, 1366–67.

1379. *Id.* at 1361.

1380. *Id.* at 1364.

1381. *Id.* ("Although this raises certain policy concerns, Congress is better suited to address them by revising the estoppel provisions for CBM review should it see fit.")

1382. *Id.* at 1365.

1383. *Id.* at 1368.

1384. *Id.*

that the claims lacked an inventive concept. Their references to “encoded data,” and certain uses of the data, “amount[ed] to a basic logic determination of what to do given a user’s preferences.”¹³⁸⁵ The Federal Circuit rejected Return Mail’s argument that the claims should be found non-abstract because, as a practical matter, the claims did not preempt any commercially deployed mail processing systems.¹³⁸⁶ Per *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, “the absence of complete preemption does not demonstrate patent eligibility.”¹³⁸⁷

Dissenting, Judge Newman would have held that the issue of whether the Postal Service was a “person” under § 18(a)(1)(B) was a jurisdictional issue, not subject to waiver, and she would have held that the term “person,” in this context, does not include the United States or its agencies.¹³⁸⁸

VIII. PHARMACEUTICALS AND BIOLOGICS PRACTICE

Federal law does not authorize an injunction to force biosimilar manufacturers to engage in Biologics Price Competition and Innovation Act¹³⁸⁹ (BPCIA) sharing of application details. In *Sandoz Inc. v. Amgen Inc.*,¹³⁹⁰ the Supreme Court vacated in part and reversed in part the Federal Circuit’s opinion¹³⁹¹ interpreting various aspects of the BPCIA.¹³⁹² The Supreme Court closely analyzed 35 U.S.C. § 262(*l*), which describes the “patent dance” that biosimilars must engage in before beginning marketing.¹³⁹³ The Supreme Court found that the Federal Circuit correctly held that federal law does not authorize an injunction to require a biosimilar applicant (here, Sandoz) to disclose its FDA application and manufacturing information to the manufacturer of the reference product (the “sponsor”; here, Amgen), as contemplated by § 262(*l*)(2)(A).¹³⁹⁴ The appropriate remedy for an applicant’s failure to disclose such material is the sponsor’s ability to

1385. *Id.* at 1368–69.

1386. *Id.* at 1369–70.

1387. *Id.* at 1370.

1388. *Id.* at 1371–72 (Newman, J., dissenting).

1389. Pub. L. No. 111-148, 124 Stat. 119 (2010) (codified in scattered section of 42 U.S.C.).

1390. 137 S. Ct. 1664 (2017).

1391. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347 (Fed. Cir. 2015), *rev’d in part, vacated in part*, 137 S. Ct. 1664.

1392. *Sandoz Inc.*, 137 S. Ct. at 1678. The two key takeaways are (1) the requirement that an applicant must provide a sponsor with a biologics license application (“BLA”) that is not enforceable by injunction under federal law and (2) a biosimilar applicant may provide notice of commercial marketing before obtaining a license. *Id.* at 1669.

1393. *Id.*

1394. *Id.* at 1675.

file a declaratory judgment action for infringement because the submission of the application to the FDA is itself an infringing act under § 271(e)(2)(C)(i) and (ii).¹³⁹⁵ Though reaching the same outcome, the Supreme Court changed the reasoning. The Supreme Court made clear that the act of “artificial infringement” for biosimilars occurs with submission of the application.¹³⁹⁶

However, the Supreme Court determined that the Federal Circuit erred when it rejected Amgen’s request for an injunction under state law.¹³⁹⁷ Contrary to the Federal Circuit’s reasoning, federal law does not provide any remedy for an applicant’s failure to disclose its application and manufacturing information, so the Federal Circuit erred in concluding that federal law provided the “only remedies” for such failure.¹³⁹⁸ The Supreme Court vacated that determination, as well as the Federal Circuit’s analysis of California law as a potential basis for a state-law injunction.¹³⁹⁹ On remand, the Federal Circuit may revisit the California law issues.¹⁴⁰⁰

The Federal Circuit also erred in its analysis of when an applicant must notify a sponsor of its biosimilar application to the FDA.¹⁴⁰¹ Interpreting § 262(l)(8)(A), “the applicant may provide notice either before or after receiving FDA approval.”¹⁴⁰² The Federal Circuit’s reasoning that the notice must come after the FDA’s approval was inconsistent with the overall structure of the statute.¹⁴⁰³

In a concurring opinion, Justice Breyer noted that the FDA may, at some point, “determine[] that a different interpretation would better serve the statute’s objectives.”¹⁴⁰⁴ Should it do so, then, under *National Cable & Telecommunications Ass’n v. Brand X Internet Services*,¹⁴⁰⁵ the FDA “may well have authority to depart from, or to modify, today’s interpretation.”¹⁴⁰⁶

On remand from the Supreme Court, based on preemption grounds, the Federal Circuit held that the BPCIA preempts state

1395. *Id.* at 1670.

1396. *Id.* at 1670–71.

1397. *Id.* at 1678.

1398. *Id.* at 1674.

1399. *Id.* at 1676.

1400. *Id.*

1401. *Id.* at 1677.

1402. *Id.*

1403. *Id.*

1404. *Id.* at 1678.

1405. 545 U.S. 967 (2005).

1406. *Sandoz Inc.*, 137 S. Ct. at 1678 (citing *National Cable & Television*, 545 U.S. at 982–84).

enforcement of the “patent dance” provisions, affirming dismissal of Amgen’s state law claims relating to Sandoz’s noncompliance with § 262(*l*)(2)(A) of the BPCIA.¹⁴⁰⁷ At issue was whether Amgen could seek any relief under state law for Sandoz not providing Amgen with its biosimilar application prior to filing.¹⁴⁰⁸ The Federal Circuit rejected Amgen’s argument that Sandoz had waived any argument that the BPCIA preempted California law on this point by failing to make it before the district court because the Supreme Court expressly invited the Federal Circuit to analyze the preemption issue.¹⁴⁰⁹ Even if the Federal Circuit did not assess the issue, Sandoz would be able to take it up on remand.¹⁴¹⁰ The Federal Circuit then concluded that the BPCIA preempts any state law remedies for failure to comply with § 262(*l*)(2)(A).¹⁴¹¹ In its reasoning, the Federal Circuit noted the intrinsically federal nature of patent law and how states have not traditionally regulated in that area.¹⁴¹² Applying *Arizona v. United States*¹⁴¹³ and *Rice v. Santa Fe Elevator Corp.*¹⁴¹⁴ the Federal Circuit found that the federal government has “fully occupied” the relevant field of biosimilar patent litigation.¹⁴¹⁵ The Federal Circuit also rejected Amgen’s argument that its state law claims are not in conflict with the BPCIA.¹⁴¹⁶ Noting that Congress created no injunctive remedy for breach of § 262(*l*)(2)(A), and reasoning that such must have been intentional, the court concluded that applying state law would create a conflict in the method of enforcement.¹⁴¹⁷

A BPCIA sponsor may list and sue on patents it believes infringed even if the biosimilar application fails to disclose necessary information required under the Act. In *Amgen Inc. v. Hospira, Inc.*,¹⁴¹⁸ the Federal Circuit dismissed an appeal relating to the denial of discovery motion, and it denied writ of mandamus concerning same, under the BPCIA.¹⁴¹⁹ The district court denied Amgen’s motion to compel

1407. *Amgen, Inc. v. Sandoz, Inc.*, 877 F.3d 1315, 1330 (Fed. Cir. 2017).

1408. *Id.* at 1322.

1409. *Id.* at 1320.

1410. *Id.* at 1322.

1411. *Id.* at 1320.

1412. *Id.* at 1327.

1413. 567 U.S. 387 (2012).

1414. 331 U.S. 218 (1947).

1415. *Id.* at 1328 (quoting *Arizona*, 567 U.S. at 401; *Rice*, 331 U.S. at 230).

1416. *Id.* at 1329.

1417. *Id.*

1418. 866 F.3d 1355 (Fed. Cir. 2017).

1419. *Id.* at 1356.

discovery into certain cell culture mediums for lack of relevance.¹⁴²⁰ However, the Federal Circuit lacked jurisdiction over the appeal.¹⁴²¹ Though the discovery order conclusively determined a disputed question (whether the cell mediums were discoverable), and was completely separate from the merits of the action, it was still an act that was reviewable on appeal from a final judgment, per *Coopers & Lybrand v. Livesay*.¹⁴²² Amgen's forced delay for review after final judgment of whether the cell medium data should have been disclosed and/or discoverable under BPCIA was consistent.¹⁴²³ The Federal Circuit found that "the lack of immediate appeal over orders denying discovery of paragraph (l)(2)(A) information does not render such orders 'effectively unreviewable' or distinguish them from run-of-the-mill discovery disputes."¹⁴²⁴

Amgen's petition for mandamus was denied because Amgen did not establish that it had a clear and indisputable right to relief.¹⁴²⁵ Amgen was responsible for electing to neither list nor sue on its cell-culture patents, which the opinion reasons it could have done notwithstanding Hospira's non-disclosure of its cell mediums in its paragraph (l)(2)(A) disclosures.¹⁴²⁶ "Paragraph (l)(3)(A) merely requires the sponsor to list patents that it 'believes . . . could reasonably be asserted.'"¹⁴²⁷ It does not impose sanctions for mistakenly (but in good faith) asserting patents that ultimately turn out to be noninfringed.¹⁴²⁸ Nor would Federal Rule of Civil Procedure 11 have precluded Amgen from listing the cell-culture patents as one of the reasons for Amgen's uncertainty about the infringement question was Hospira's own failure to make its disclosure.¹⁴²⁹ Because Amgen could have listed the patents in question in which case it could have sought discovery relating to them, the Federal Circuit concluded that the denial of discovery did not

1420. *Id.* at 1358. Amgen claimed the cell culture medium data should have been in Hospira's paragraph (l)(2)(A) disclosures, and was trying to use discovery to learn about them so as to evaluate possible infringement of other patents. *Id.*

1421. *Id.* at 1356.

1422. 437 U.S. 463 (1978), *superseded by* FED. R. CIV. P. 23(f), *as stated in* Microsoft Corp. v. Baker, 137 S. Ct. 1702 (2017).

1423. *Amgen Inc.*, 866 F.3d at 1359–60.

1424. *Id.* at 1360.

1425. *Id.* at 1363.

1426. *Id.* at 1361.

1427. *Id.* at 1362 (omission in original).

1428. *Id.*

1429. *Id.*

undermine the purpose of the BPCIA.¹⁴³⁰

IX. PATENT MARKING

The patentee has the burden at all times to prove compliance with the marking statute. In *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*, the Federal Circuit generally affirmed an infringement verdict and damages award, while vacating denial of JMOL as to marking.¹⁴³¹ Arctic Cat's patents related to a thrust steering system for personal watercraft.¹⁴³²

Regarding marking, the Federal Circuit found that the district court erred by placing the burden of proving a marking defense on the defendant, BRP.¹⁴³³ Instead, the Federal Circuit held that "[t]he burden of proving compliance with marking is and at all times remains on the patentee."¹⁴³⁴ However, the alleged infringer must meet a low bar: "bears an initial burden of production to articulate the products it believes are unmarked 'patented articles' subject to § 287."¹⁴³⁵ The Federal Circuit held that, because the district judge committed this error at the summary judgment stage, Arctic Cat was not properly informed of its burden to prove compliance with § 287.¹⁴³⁶ The judgment as to marking is thus vacated "so that Arctic Cat has an opportunity to proffer evidence" on the issue.¹⁴³⁷

CONCLUSION

The Federal Circuit addressed many novel questions in 2017, but many issues remain unresolved. In the next year, the court will continue to delineate the legal lines from lower court appeals and address new directives from the Supreme Court. In particular, the Supreme Court has recently published two decisions that will influence the development of patent law and practice.

First, in *Oil States Energy Services, LLC v. Greene's Energy Group, LLC*, the Supreme Court addressed the constitutionality of IPR proceedings, established by the AIA, which have been used to challenge thousands

1430. *Id.* at 1362–63.

1431. *Arctic Cat Inc., v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1372 (Fed. Cir. 2017).

1432. *Id.* at 1357.

1433. *Id.* at 1369.

1434. *Id.* at 1367.

1435. *Id.* at 1368.

1436. *Id.* at 1367.

1437. *Id.* at 1369.

of patents since 2012.¹⁴³⁸

The PTAB declared Oil States's patent, which relates to hydraulic fracturing, invalid.¹⁴³⁹ Oil States argued that patents are private property rights that can only be revoked by a federal court under Article III of the U.S. Constitution, not by an executive branch agency like the PTAB.¹⁴⁴⁰ The PTO maintained that patents are public rights derived from a federal regulatory system, and there is thus no constitutional impediment to the PTAB invalidating patents.¹⁴⁴¹ The justices addressed this clash between two policy issues, holding that, because patents are public rights, IPRs do not violate either Article III or the Seventh Amendment.¹⁴⁴² The second decision, *SAS Institute, Inc. v. Iancu*, also implicates the PTAB's proceedings. The case involved the IPR process for instituting AIA reviews of patents.¹⁴⁴³ The *SAS Institute* ruling eliminated the PTAB's practice of instituting review on only some grounds and restructured the AIA process and petitioners' approach to IPRs.¹⁴⁴⁴ The Supreme Court reversed the Federal Circuit holding that the PTAB must resolve all claims in an IPR petition.¹⁴⁴⁵

Still on the Supreme Court's docket, in *WesternGeco LLC*, the Court asked the U.S. Solicitor General to weigh in on the issue of the availability of lost profits damages in patent cases when infringing actions take place outside the United States.¹⁴⁴⁶ In the lower court's decision, ION was found to have infringed WesternGeco's patents by shipping parts of a system for underwater oil and gas exploration from the United States to be combined overseas.¹⁴⁴⁷ While a jury initially awarded WesternGeco \$93 million in lost profits damages,¹⁴⁴⁸ the

1438. No. 16-712, 2018 WL 1914662, *3 (U.S. Apr. 24, 2018).

1439. *Id.* at *5.

1440. Brief for Petitioner at 3, *Oil States*, 2018 WL 1914662 (No. 16-712), 2017 WL 3713059, at *3.

1441. Brief for the Federal Respondent at 2–3, *Oil States*, 2018 WL 1914662 (No. 16-712), 2017 WL 4805230, at *2–3.

1442. *Oil States*, 2018 WL 1914662, at *11.

1443. No. 16-969, 2018 WL 1914661, *2 (U.S. Apr. 24, 2018).

1444. *Id.* at *4.

1445. *Id.* at *9–10.

1446. *WesternGeco LLC v. ION Geophysical Corp.*, SCOTUSBLOG, <http://www.scotusblog.com/case-files/cases/westerngeco-llc-v-ion-geophysical-corp-2> (last visited May 9, 2018).

1447. *WesternGeco LLC v. Ion Geophysical Corp.*, 791 F.3d 1340, 1354 (Fed. Cir. 2015), *vacated*, 136 S. Ct. 2486 (2016).

1448. *WesternGeco LLC v. Ion Geophysical Corp.*, 953 F. Supp. 2d 731, 740 (S.D. Tex. 2013), *aff'd in part, vacated in part, rev'd in part*, 837 F.3d 1358 (Fed. Cir. 2016), *cert. granted*, 138 S. Ct. 734 (2018).

Federal Circuit reversed finding that the damages award was not available because ION's infringement took place "on the high seas, outside the jurisdiction of U.S. patent law."¹⁴⁴⁹ In its briefing, WesternGeco argued that there are no limitations on damages based on an act of infringement of U.S. patents to ship components to other countries to be combined there.¹⁴⁵⁰

While the 2017 term indicated a balancing of the Federal Circuit's patent docket, the recent Supreme Court decisions in *TC Heartland* and *SAS Institute* will likely lead to an influx of appeals.

1449. *WesternGeco*, 791 F.3d at 1349.

1450. *Id.* at 1351.