

AREA SUMMARIES

2012 PATENT LAW DECISIONS OF THE FEDERAL CIRCUIT*

ROBERT J. SMYTH**

DAVID P. BERNSTEIN***

ADAM D. BROOKE****

RUDOLPH FINK IV*****

NICHOLAS J. KIM*****

JANICE H. LEE*****

* This Area Summary reflects the Authors' current thoughts on the subject matter and should not be attributed, in whole or in part, to Morgan, Lewis & Bockius LLP, any of its attorneys, or any of its clients. This Area Summary is not meant to convey legal opinions or legal advice of any kind.

** Partner, Morgan, Lewis & Bockius LLP, Ph.D.; J.D. *Temple University School of Law*, 1999; Ph.D., Pharmacology, *Temple University School of Medicine*, 1995; B.S., Biology, *Syracuse University*, 1989.

*** Patent Agent, Morgan, Lewis & Bockius LLP; Ph.D., Applied Physics, *Stanford University*, 2012; B.S., Engineering Science, *Pennsylvania State University*, 2005.

**** Associate, Morgan, Lewis & Bockius LLP; J.D., *Washington University School of Law*, 2010; B.S., Electrical Engineering, *Grove City College*, 2005.

***** Associate, Morgan, Lewis & Bockius, LLP; J.D., *University of Houston Law Center*, 2012; B.S., Computer Science, *Rice University*, 2002.

***** Associate, Morgan, Lewis & Bockius LLP; J.D., *George Mason University School of Law*, 2008; S.B., Aerospace Engineering with Information Technology, *Massachusetts Institute of Technology*, 2003.

RACHAEL LEA LEVENTHAL *****

DAVID V. SANKER *****

MARK J. SULLIVAN *****

YALEI SUN *****

TABLE OF CONTENTS

Introduction.....	829
I. Patentability and Validity	833
A. Inventorship.....	833
B. Anticipation	835
C. Obviousness	842
1. Indicia of Non-obviousness	842
2. Willful Infringement.....	845
3. Presumption of Validity.....	847
4. Affirmed Rejection of Claims.....	848
5. Disclosure Under 35 U.S.C. § 102(g)	855
6. Obviousness After <i>KSR International Co. v. Teleflex</i> <i>Inc.</i>	858
7. Other Issues with Obviousness	860
D. Indefiniteness	863
E. Reissue Proceedings	864
F. Enablement.....	868
II. Utility.....	868
III. Infringement	872
A. General Infringement Cases	872
B. Secondary Infringement	882
C. Doctrine of Equivalents.....	882

***** Associate, Morgan, Lewis & Bockius LLP; J.D., *Georgetown University School of Law*, 2011; Ph.D., Biomedical Engineering, *Johns Hopkins University School of Medicine*, 2007; B.S., Materials and Science Engineering, *Cornell University*, 2002.

***** Associate, Morgan, Lewis & Bockius LLP; M.B.A., *Suffolk University*, 2010; J.D., *Suffolk University Law School*, 2004; S.B., Electrical Engineering and Computer Science, *Massachusetts Institute of Technology*, 2001.

***** Associate, Morgan, Lewis & Bockius LLP; J.D., *University of California, Berkeley, Boalt School of Law*, 2007; Ph.D., Mathematics, *University of California, Berkeley*, 1989; B.S., *University of Oregon*, 1983.

***** Associate, Morgan, Lewis & Bockius LLP; J.D., *University of Maryland School of Law*, 2002; M.S., Environmental Engineering, *Virginia Tech.*, 1995; B.S., Chemical Engineering, *Virginia Tech.*, 1983.

***** Associate, Morgan, Lewis & Bockius LLP; J.D., *Santa Clara University School of Law*, 2005; M.S., *Stanford University*, Geophysics, 1999; M.S., Solid Mechanics, *Tsinghua University*, 1995; B.S., Engineering Mechanics, Electrical Engineering and Computer Science, *Tsinghua University*, 1993.

IV. Inequitable Conduct	884
V. Claim Construction	887
A. Claim Language.....	887
B. Means-Plus-Function Claiming	895
VI. Remedies.....	896
A. Damages.....	896
B. Injunctions	898
C. Invalidity Defense	899
VII. Miscellaneous	899
A. Assignment, Inventorship, and Employment Agreements.....	899
B. Statute of Limitations	900
C. Substantial Evidence Review	901
D. Intervening Rights.....	902
E. Sovereign Immunity	903
Conclusion	904

INTRODUCTION

In its thirtieth year, the Federal Circuit continued to face an increased caseload, including a fourth-consecutive increase in patent infringement appeals from district courts. During 2012, the court issued several notable en banc opinions providing parties and practitioners with additional clarity on a range of disputed issues. For example, in *Zoltek Corp. v. United States*¹ (*Zoltek IV*), the court reversed its prior panel decision in *Zoltek III*,² which limited the scope of 28 U.S.C. § 1498(a) to direct infringement under 35 U.S.C. § 271(a). The court reexamined the premises on which *Zoltek III* was based and effectively reinstated the government’s potential liability for infringement of method claims directed to manufacturing carbon fiber sheets for the F-22 fighter, where part of the steps began in Japan. In *Marine Polymer Technologies, Inc. v. Hemcon, Inc.*,³ the court held that an amendment to the claim during reexamination, not mere argument, was necessary to invoke intervening rights. In the much-anticipated decision in *Akamai Technologies, Inc. v. Limelight Networks, Inc.*,⁴ the court overruled its decision in *BMC Resources Inc. v. Paymentech, L.P.*,⁵ in which the court held that for a party to be liable for induced infringement, some other *single* entity must be liable for direct infringement. Deliberately avoiding resolving whether direct infringement can be found when no single entity performs all of the

1. 672 F.3d 1309 (Fed. Cir. 2012) (en banc).

2. 442 F.3d 1345 (Fed. Cir. 2006) (per curiam).

3. 672 F.3d 1350 (Fed. Cir. 2012) (en banc).

4. 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (per curiam), *cert. denied*, 133 S. Ct. 1521 (2013); 133 S. Ct. 1520 (2013).

5. 498 F.3d 1373 (Fed. Cir. 2007).

claimed steps of the patent, the *Akamai* court instead focused on the issue of induced infringement squarely before it to hold that liability for induced infringement did not require a single entity to directly infringe.

The court's year was also notable for those cases in which en banc review was denied. After the panel in *Highmark, Inc. v. Allcare Health Management Systems, Inc.*⁶ held that the objective prong of the exceptional case analysis under § 285 was subject to de novo review (relying on *Bard Peripheral Vascular, Inc. v. W.L. Gore & Associates*,⁷ which held that that objective recklessness in a willfulness determination under § 284 is subject to de novo review), a narrow majority of the court denied a rehearing en banc. Additionally, in *In re Baxter International, Inc.*,⁸ a split panel upheld the Patent and Trademark Office's (PTO) determination of obviousness in the reexamination of a patent previously upheld as valid by the Federal Circuit. Although the court overwhelmingly denied the petition for rehearing en banc, a trio of judges clarified that their agreement with the majority was "premised on [the] understanding that the panel opinion does not . . . endorse administrative nullification of a final judicial decision."⁹

In 2012, the Supreme Court continued to shape key facets of patent law, namely with respect to the foundational issue of patent eligible subject matter. For example, in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*,¹⁰ the Supreme Court held that a patent directed to a medical diagnostic test was invalid under 35 U.S.C. § 101. Shortly thereafter, the Supreme Court issued an order simultaneously granting certiorari in *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*,¹¹ vacating the judgment, and remanding the case back to the Federal Circuit for further consideration in light of its decision in *Mayo*. At the Federal Circuit, a new panel reached the same conclusion as the original panel with Judge Bryson dissenting,¹² and the Public Patent Foundation and the American Civil Liberties Union

6. 687 F.3d 1300 (Fed. Cir.), *reh'g en banc denied*, 701 F.3d 1351 (Fed. Cir. 2012), *petition for cert. filed*, 81 U.S.L.W. (U.S. Mar. 25, 2013) (No. 12-1163).

7. 682 F.3d 1003 (Fed. Cir. 2012), *cert. denied sub nom.* W.L. Gore & Assocs. V. C.R. Bard, Inc., 133 S. Ct. 932 (2013).

8. 678 F.3d 1357 (Fed. Cir.), *reh'g en banc denied*, 698 F.3d 1349 (Fed. Cir. 2012).

9. 698 F.3d at 1349 (O'Malley, J., concurring from denial of rehearing en banc) (internal quotation marks omitted).

10. 132 S. Ct. 1794 (2012).

11. 133 S. Ct. 694 (2012), *granting cert. sub nom. to Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 653 F.3d 1329 (Fed. Cir. 2011).

12. *Ass'n for Molecular Pathology v. U.S. Patent & Trademark Office*, 689 F.3d 1303 (Fed. Cir. 2012).

Foundation again filed a petition for certiorari. The Supreme Court granted certiorari for a second time,¹³ and oral arguments were held on April 15, 2013.¹⁴

The past year also saw the court remain active in its efforts to rationalize and improve the efficiency of patent litigation. After Chief Judge Rader unveiled the Federal Circuit Advisory Committee's Model Order Regarding E-Discovery in Patent Cases at the end of 2011,¹⁵ the U.S. District Court for the Eastern District of Texas considered the court's model order and quickly implemented a new model order for use in patent cases in that district.¹⁶ The International Trade Commission (ITC) also considered the court's model order and proposed amendments to the ITC's rules of procedure that would limit e-discovery and address privilege claims in Commission investigations.¹⁷ In its opinions, the Federal Circuit also addressed procedural issues hotly contested by parties in the district courts, including joinder, transfer, and sanctions. For example, the court limited precluded joinder under Rule 20 in suits filed prior to the enactment of the Leahy-Smith America Invents Act¹⁸ (AIA).¹⁹ Panel decisions of the court also reversed a district court's decision denying Rule 11 sanctions against a plaintiff,²⁰ and reiterated de novo review of exceptional case status under 35 U.S.C. § 285.²¹

The year 2012 also saw continued changes in the court's composition. Judge Gajarsa retired on June 30, 2012, after serving fifteen years on the court, during which time he brought the court valuable insight based on his technical background and experience as a patent examiner. For fifteen years, the court benefited from Judge Gajarsa's perspective that was informed by his technical background and experience as a patent examiner. Judge Gajarsa's retired shortly after he authored the en banc court's opinion in *Zoltek IV* (he was a member of the majority in the *Zoltek III* panel decision). In 2012, Judge Linn took senior status. In more than a decade of active service

13. 133 S. Ct. 694 (2012).

14. No. 12-398 (U.S. argued Apr. 15, 2013).

15. E-DISCOVERY COMM., FED. CIRCUIT ADVISORY COMM., AN E-DISCOVERY MODEL ORDER (2011), available at http://www.cafc.uscourts.gov/images/stories/announcements/Ediscovery_Model_Order.pdf.

16. E.D. Tex. R. app. P, available at http://www.txed.uscourts.gov/cgi-bin/view_document.cgi?document=22218&download=true.

17. Rules of General Application, Adjudication, and Enforcement, 77 Fed. Reg. 60,952 (Oct. 5, 2012).

18. Pub L. 112-29, 125 Stat. 284 (2011) (codified in scattered sections of 35 U.S.C.).

19. *In re EMC Corp.*, 677 F.3d 1351, 1358–59 (Fed. Cir. 2012).

20. *Raylon v. Complus Data Innovations Inc.*, 700 F.3d 1361 (2012).

21. *Highmark, Inc. v. Allcare Health Management Systems, Inc.*, 687 F.3d 1300 (Fed. Cir. 2012).

on the court, Judge Linn authored several notable opinions including *NTP v. Research in Motion, Ltd.*²² in 2005, which addressed the extraterritorial reach of method claims, and *Uniloc USA, Inc. v. Microsoft Corp.*²³ in 2011, which rejected the much-maligned “25% rule” for determining a reasonable royalty, the predominant measure of damages for patent infringement.²⁴ Just after the new year in 2013, Judge Bryson also took senior status. Judge Bryson has served on the bench as an active judge since 1994, which service included authoring the court’s en banc decision in the landmark case *Phillips v. AWH Corp.*²⁵ in 2005, which clarified the hierarchy of evidentiary authority for claim construction and provided a roadmap for every lower court claim construction proceeding that followed. On February 7, 2013, President Obama nominated PTO Solicitor Raymond Chen and Todd Hughes of the Department of Justice to fill the two new vacancies. Nominated in 2011 to fill the vacancy left by Chief Judge Michel’s retirement, Richard Taranto was confirmed on March 11, 2013. If the President’s pending nominees are confirmed, then fully half of the court’s twelve active members will have less than five years on the bench. Chief Judge Rader will continue to preside over this changing of the guard on his court.

Looking forward, the Federal Circuit is set to consider en banc more heretofore unresolved issues, including the patent eligibility of computer-related claims²⁶ and the court’s jurisdiction over judgments on infringement liability before issues of damages and willfulness have been decided by the trial court.²⁷ The court will also likely increasingly receive requests to clarify provisions in the AIA, which was enacted in September 2011. In addition to including immediate changes to the law of joinder and preventing further abuse of the qui tam provision of the false marking statute, this major congressional revision contained many provisions that are only recently coming into effect. For example, the AIA’s post-grant review provisions became active in September 2012, and the world patent community awaits the full implementation of the AIA’s first-to-file provisions, which took effect in March 2013. The Federal Circuit has already addressed one direct challenge to the AIA, holding that the retroactive elimination

22. 418 F.3d 1282 (Fed. Cir. 2005).

23. 632 F.3d 1292 (Fed. Cir. 2011).

24. *Id.* at 1315.

25. 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

26. *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, No. 11-1301 (Fed. Cir. argued Feb. 8, 2013) (en banc).

27. *Robert Bosch LLC v. Pylon Mfg.*, Nos. 11-1363 (Fed. Cir. argued Feb. 8, 2013) (en banc).

of the false marking statute's qui tam provision does not violate the constitutional right to due process.²⁸ The patent bar also anticipates decisions in three patent-related cases presently at the Supreme Court, including *Bowman v. Monsanto Co.*,²⁹ *FTC v. Actavis, Inc.*³⁰ and *Myriad Genetics*.³¹ With a backdrop of a drastically revised statutory scheme and impending guidance on existing law from the Supreme Court, the Federal Circuit will be called upon early and often in the coming years to shape and retain the delicate balance of private incentives and public benefits embodied within the U.S. patent system.

I. PATENTABILITY AND VALIDITY

A. *Inventorship*

The Federal Circuit addressed an appeal from an interference proceeding under 35 U.S.C. § 135(a) in *Loughlin v. Ling*.³² Ling's Patent Application No. 11/671,404 (the '404 application) copied claim 1 of Loughlin's U.S. Patent No. 7,434,426.³³ Loughlin had filed Application No. 10/845,624 (the '624 application) on May 13, 2004, which was published on November 18, 2004.³⁴ Ling's '404 application was filed on February 5, 2007, but claimed priority under 35 U.S.C. § 120 to an application filed on January 16, 2004.³⁵

When the PTO declared an interference, Loughlin asserted that Ling was time barred under 35 U.S.C. § 135(b)(2) because the '404 application was filed more than a year after the publication of the '624 application.³⁶ The Board of Patent Appeals and Interferences (Board) concluded that the priority claim under 35 U.S.C. § 120 gave the '404 application the benefit of the earlier effective priority date and that the bar of 35 U.S.C. § 135(b)(2) does not apply.³⁷ The court agreed, and noted that the Board has consistently interpreted 35 U.S.C. § 135(b)(2) in this manner.³⁸ Although Ling attempted to argue that the Federal Circuit does not have

28. *Brooks v. Dunlop Mfg. Inc.*, 702 F.3d 624, 632 (Fed. Cir. 2012).

29. No. 10-1068 (U.S. argued Feb. 19, 2013) (patent exhaustion).

30. No. 12-416 (U.S. argued Mar. 25, 2013) (covering antitrust implications of reverse payment settlements).

31. *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, No. 12-398 (U.S. argued Apr. 15, 2013) (involving patent eligibility of isolated human genes).

32. 684 F.3d 1289 (Fed. Cir. 2012).

33. *Id.* at 1290-91.

34. *Id.* at 1290.

35. *Id.*; see 35 U.S.C. § 120 (2006).

36. *Loughlin*, 684 F.3d at 1291; see 35 U.S.C. § 135(b)(2).

37. *Loughlin*, 684 F.3d at 1291.

38. *Id.* at 1294.

jurisdiction because Loughlin requested an adverse judgment under 37 C.F.R. § 41.127(b), the court noted “that the Board’s decision on priority is a final, adverse judgment over which [the court has] jurisdiction.”³⁹

In another interference appeal, *Hollmer v. Harari*,⁴⁰ the Federal Circuit addressed a question of continuity in the chain of priority for a patent application.⁴¹ At issue was a chain of applications filed by Harari: U.S. Patent Application No. 09/310,880 (the ’880 application), which was a continuation of U.S. Patent Application No. 08/771,708 (the ’708 application), which was a continuation of U.S. Patent Application No. 08/174,768 (the ’768 application), which was a continuation of U.S. Patent Application No. 07/963,838 (the ’838 application), which was a divisional of an original U.S. Application No. 07/337,566 (the ’566 application).⁴² The ’566 application contained an incorporation by reference to another application, U.S. Patent Application No. 07/337,579 (the ’579 application) by naming the inventors, title, and stating that the ’579 application was filed on the same day.⁴³

In a previous case, the court determined that the amendment of the specification for the ’880 application to change an incorporation by reference to the ’579 application by preliminary amendment upon initial filing was held to a “reasonable examiner” standard.⁴⁴ However, when reviewing an incorporation by reference in an issued patent, a “reasonable person of ordinary skill in the art standard” should be applied.⁴⁵ The intervening ’838 and ’768 applications did not have any amendment to their specifications to refer specifically to the ’579 application, so the court had to determine whether these applications had an incorporation by reference that was sufficiently specific.⁴⁶ The court noted that, in the case of the ’566 application, there were at least three other applications co-pending by the same inventors with the same title as the one intended to be incorporated by reference and that “[s]uch ambiguity in incorporation does not suffice.”⁴⁷ As such, applying the “reasonable person of ordinary skill in the art” standard, the court held that the intervening ’838 and ’768

39. *Id.* at 1292.

40. 681 F.3d 1351 (Fed. Cir. 2012), *cert. denied*, 133 S. Ct. 989 (2013).

41. *Id.* at 1353.

42. *Id.*

43. *Id.*

44. *Id.* at 1354 (citing *Harari v. Hollmer*, 602 F.3d 1348, 1352–53 (Fed. Cir. 2010)).

45. *Id.* at 1357 (quoting *Zenon Env’tl, Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1379 (Fed. Cir. 2007)).

46. *Id.* at 1356–57.

47. *Id.* at 1358.

applications did not have the proper incorporation and that “the ’880 application is not entitled to the benefit of the priority date of the ’566 application.”⁴⁸

B. Anticipation

In a patent infringement case, *Krippelz v. Ford Motor Co.*,⁴⁹ the Federal Circuit found reversible error in the district court’s denial of Ford’s motion for judgment as a matter of law due to invalidity by anticipation.⁵⁰ While defending the validity of patent for a vehicle-mounted lamp, Krippelz submitted a declaration (from the same expert called to testify at trial), which stated that “a beam of light . . . typically has the light bulb at or near the focal point of a reflector.”⁵¹ The expert specifically described a shape of the reflector and positioning of the light source relative to the reflector, which would read on the “conical beam of light” limitation of the claim.⁵² The Federal Circuit noted that this statement, which was used during the appeal to the Board to overcome prior art cited by the examiner, constituted a disclaimer of lamps that do not have the shape and position as described.⁵³ Although not appealed by Ford, the court noted that Krippelz’s expert’s measurements based on the drawings of the prior art reference may be improper because the drawings were not drawn precisely to scale or linked to quantitative assessments in the specification.⁵⁴ Notwithstanding these measurements, the court determined that the expert’s “generic statements that the ‘conical’ limitation was unmet were . . . too conclusory to sustain the jury’s verdict.”⁵⁵

Furthermore, in response to arguments by Krippelz that “a conical beam of light ‘probably wouldn’t be a very effective way to accomplish the purpose of’ [the prior art], and . . . [the prior art] actually teaches away from using a beam,” the court reiterated that “teaching away is not relevant to an anticipation analysis.”⁵⁶ As to another limitation of the claim, the court referred to the drawings of the prior art reference and resolved that it was clear that “a person of ordinary skill” who reviewed the diagrams would comprehend that

48. *Id.*

49. 667 F.3d 1261 (Fed. Cir. 2012).

50. *Id.* at 1265.

51. *Id.* at 1267 (emphasis omitted).

52. *Id.*

53. *Id.*

54. *Id.* at 1268.

55. *Id.* at 1269.

56. *Id.* (internal quotation marks omitted) (citing *Celeritas Techs., Ltd. v. Rockwell Int’l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998)).

the diagrams illustrated the claimed subject matter, and stated that “the conclusory testimony of an expert witness, however, cannot create an issue of fact if none otherwise exists.”⁵⁷

The Federal Circuit in *In re Rambus, Inc.*⁵⁸ addressed a claim construction issue, i.e., how a claim term of a patent should be construed without contradicting the patent’s own specification and prosecution history, the same or similar term in related patents of the same family, and even the patent’s litigation history.⁵⁹

In *In re Rambus*, the two parties disputed the meaning of the claim term “memory device” relative to a prior art reference.⁶⁰ As the patentee, Rambus attempted to construe the term relatively narrowly to avoid the reference by making the following arguments: (1) the stated goals of the invention in the specification of the patent could be achieved only through the interpretation of the term proposed by Rambus; (2) the expert testimony of Hynix, the party accused of infringing the patent in a separate litigation, supports Rambus’s narrow interpretation of the term; and (3) Rambus’s narrow interpretation of the term was used to distinguish the prior art in the patent’s prosecution history.⁶¹ But the Federal Circuit rejected each of the three arguments.⁶²

As to the first argument, the Federal Circuit concluded that “[t]here are no words of manifest exclusion or clear disavowals of multichip devices [in the specification]—there are only preferred embodiments and goals of the invention that Rambus argues are better met by single chip devices.”⁶³ In other words, the meaning of a claim term is generally open-ended, and it is not recommended to read a negative limitation into the claim term unless there is a clear disclaimer of such limitation in the specification or prosecution history of the patent.⁶⁴

Second, the Federal Circuit gave little weight to the expert testimony in the district court’s litigation, which appears to support Rambus’s proposed construction because “the expert testimony is conflicting and unpersuasive.”⁶⁵

57. *Id.* (citing *Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 1001 (Fed. Cir. 2008)).

58. 694 F.3d 42 (Fed. Cir. 2012).

59. *Id.* at 45–46.

60. *Id.* at 46.

61. *Id.* at 46–48.

62. *Id.*

63. *Id.* at 47.

64. *Id.* at 47–48.

65. *Id.* at 48.

Finally, the Federal Circuit rejected the third argument because the patent's prosecution history does not support that Rambus used this argument to overcome the prior art.⁶⁶ Moreover, the Federal Circuit discussed how the claim term is used in several other patents belonging to the same family as the patent at issue.⁶⁷ Both parties agree that "unless otherwise compelled . . . the same claim term in the same patent or related patents carries the same construed meaning."⁶⁸ The court found that, for more than one occasion, Rambus's interpretation invites an invalid result under the claim differentiation principle, whereas the Board's version does not have this problem.⁶⁹

The central issue in *Leader Technologies, Inc. v. Facebook, Inc.*,⁷⁰ was whether a product developed by Leader Technologies ("Leader") was in public use and/or on sale more than one year before the critical date of the patent-in-suit, thus rendering its claims invalid under 35 U.S.C. § 102(b).⁷¹ Leader sued Facebook, alleging infringement of claims of its patent for software that allows users on a network to communicate and collaborate on a large scale.⁷² A jury found that the asserted claims of the patent-in-suit were "invalid on two independent grounds: (1) that the invention was subject to an invalidating sale; and (2) that the invention was subject to an invalidating public use."⁷³ On appeal, Leader argued that Facebook failed to provide clear and convincing evidence that the version of the software on sale or used prior to the critical date fell within the scope of the patent-in-suit's asserted claims.⁷⁴ In addition, Leader contended that even if the jury did not believe the inventor's testimony that the software was not on sale or used prior to the critical date, such discredited testimony does not constitute affirmative evidence of its opposite—that is, that the software was on sale or used prior to the critical date.⁷⁵

The Federal Circuit rejected Leader's arguments and affirmed the district court's ruling.⁷⁶ First, the Federal Circuit pointed to Leader's

66. *Id.* at 49–50.

67. *Id.* at 48.

68. *Id.* (quoting *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003)).

69. *Id.*

70. 678 F.3d 1300 (Fed. Cir. 2012), *cert. denied*, 133 S. Ct. 889 (2013).

71. 35 U.S.C. § 102(b) (2006); *Leader Techs.*, 678 F.3d at 1302.

72. *Leader Techs.*, 678 F.3d at 1301, 1304.

73. *Id.* at 1304.

74. *Id.* at 1306.

75. *Id.*

76. *Id.* at 1308.

own interrogatory responses, which admitted that the software “embodies” the asserted claims of the patent-in-suit.⁷⁷ Although Leader contended that the responses referred only to the version of the software available at the time when the responses were served, the court concluded that the lack of any reference to “date ranges” or “versions or builds of the software” supported a broader reading that includes the versions of the software prior to the critical date.⁷⁸ Finally, the court concluded that, although “‘normally’ a witness’s ‘discredited testimony is not considered a sufficient basis for drawing a contrary conclusion,’”⁷⁹ in this case, the inventor’s lack of credibility reinforced other evidence suggesting the contrary conclusion and also provided an independent reason to disbelieve his statement that he “vividly remember[ed]” that the patented technology was not incorporated into the software “until days before” the filing of the provisional patent application.⁸⁰

In *In re Antor Media Corp.*,⁸¹ Antor Media Corporation (“Antor”) appealed a decision of the Board affirming rejection on reexamination of claims in U.S. Patent 5,734,961.⁸² The question before the court was whether “prior art publications cited by an examiner [during prosecution] are presumptively enabling.”⁸³ The Federal Circuit had previously held in *Amgen Inc. v. Hoechst Marion Roussel, Inc.*,⁸⁴ that “the examiner is entitled to reject application claims as anticipated by a prior art patent without conducting an inquiry into whether or not that patent is enabled or whether or not it is the claimed material (as opposed to the unclaimed disclosures) in that patent that are at issue.”⁸⁵

Antor argued on appeal that the presumption of validity (and therefore enablement) is accorded to issued patents under 35 U.S.C. § 282, and thus non-patent publications should not be accorded the same presumption of enablement.⁸⁶ The Federal Circuit disagreed, noting that the *Amgen* court did not rely on 35 U.S.C. § 282.⁸⁷ Instead, the Federal Circuit pointed out, the *Amgen* court held that

77. *Id.* at 1306.

78. *Id.* at 1307.

79. *Id.* at 1307 (quoting *Bose Corp. v. Consumers Union of U.S., Inc.*, 466 U.S. 485, 512 (1984)).

80. *Id.* at 1304, 1307 (alteration in original).

81. 689 F.3d 1282 (Fed. Cir. 2012).

82. *Id.* at 1285.

83. *Id.* at 1287.

84. 314 F.3d 1313 (Fed. Cir. 2003).

85. *Id.* at 1355.

86. *Antor Media*, 689 F.3d at 1288.

87. *Id.*

placing the burden on the applicant is procedurally convenient because the applicant is in the best position to demonstrate why a disclosure is not enabling.⁸⁸ In justifying its extension of that reasoning to this case, the Federal Circuit stated, “[i]ndeed, as indicated with regard to unclaimed patent prior art, an examiner, who has no access to experts or laboratories, is not in a position to test each piece of prior art for enablement in citing it, and requiring him to do so would be onerous, if not impossible.”⁸⁹

In *In re Montgomery*,⁹⁰ the Federal Circuit affirmed the Board’s 35 U.S.C. § 102(b) rejection of claims based on inherent disclosure of the prior art.⁹¹ On April 29, 2005, Montgomery filed U.S. Patent Application No. 11/118,824 (the ’824 application) claiming a “method for the treatment or prevention of stroke or its recurrence” comprising administration of renin-angiotensin system (“RAS”) inhibitors to patients diagnosed as in need thereof.⁹² The examiner rejected the claims of Montgomery’s application as anticipated based on prior art that describes the administration of a known RAS inhibitor, ramipril, to subjects at risk of stroke.⁹³ Despite Montgomery’s argument that the prior art merely proposed future research and was not enabled, the Board affirmed the examiner’s rejections after finding that the prior art’s study was clearly enabled to administer ramipril as treatment for patients, including those with previous stroke.⁹⁴ Montgomery filed requests for rehearing, but the Board rejected Montgomery’s request for the same reasons.⁹⁵

On appeal to the Federal Circuit, the elements at issue were the administration of the RAS inhibitor “(1) to a patient diagnosed as in need of [stroke] treatment or prevention, (2) where such administration is for the treatment or prevention of stroke or its recurrence.”⁹⁶ The Federal Circuit concluded that the prior art disclosed both of these requirements for the following reasons.⁹⁷

The court first determined that the prior art disclosed the first of the contested elements—the administration of the RAS inhibitor to “a patient diagnosed as in need of [stroke] treatment or

88. *Id.*

89. *Id.* at 1289.

90. 677 F.3d 1375 (Fed. Cir.), *cert. denied*, 133 S. Ct. 788 (2012).

91. *Id.* at 1381–82.

92. *Id.* at 1376–77.

93. *Id.* at 1377.

94. *Id.* at 1378.

95. *Id.* at 1379.

96. *Id.* at 1380 (alteration in original) (internal quotation marks omitted).

97. *Id.*

prevention.”⁹⁸ The court noted that Montgomery did not contest that the patients in the prior art satisfy this requirement.⁹⁹ The court further pointed out that the prior art “explicitly disclosed the administration of ramipril to patients ‘at high risk for cardiovascular events such as myocardial infarction and stroke,’ and the eligibility criteria included patients with previous stroke.”¹⁰⁰

The court determined that the prior art inherently disclosed the second element at issue—that such administration is for the treatment or prevention of stroke or its recurrence—because it disclosed a protocol for the administration of the RAS inhibitor to stroke-prone patients, and administration of the inhibitor to the stroke-prone patients inevitably treats or prevents stroke.¹⁰¹

Judge Lourie dissented, however, finding no inherent anticipation by the prior art’s disclosure regarding the study because the results the proposed protocol may have achieved were neither predictable nor inevitable.¹⁰² In Judge Lourie’s view, inherency requires “description of action that inevitably produces a result, not merely description of action that might have been carried out, but was not, and might have yielded a particular result, but did not.”¹⁰³ Judge Lourie concluded that the prior art at issue failed to anticipate the claims because it only described a plan that has not been carried out, and because it is impossible to know whether or not the plan would accomplish the claimed result if it was carried out.¹⁰⁴

The majority agreed with the dissent that a result is only inherent if it “inevitably” flows from the prior art disclosure, but concluded that there was no question that treating stroke-prone patients with ramipril does in fact inevitably treat or prevent stroke.¹⁰⁵

In *Voter Verified, Inc. v. Premier Election Solutions, Inc.*,¹⁰⁶ the Federal Circuit addressed the question of when an article on the Internet qualifies as publicly available prior art.¹⁰⁷ Years ago, the court held that a dissertation indexed in a university library catalog was a

98. *Id.* (alteration in original).

99. *Id.*

100. *Id.*

101. *Id.* at 1380–81.

102. *Id.* at 1385 (Lourie, J., dissenting).

103. *Id.*

104. *Id.*

105. *Id.* at 1381 (majority opinion).

106. 698 F.3d 1374 (Fed. Cir. 2012), *petition for cert. filed*, 81 U.S.L.W. 3603 (U.S. Apr. 4, 2013) (No. 12-1227).

107. *Id.* at 1379.

publicly available printed publication,¹⁰⁸ but a thesis that was neither shelved nor catalogued was not publicly accessible.¹⁰⁹

Here, Voter Verified asserted a patent for automated voting systems, with a critical date of December 7, 1999.¹¹⁰ An article by Tom Benson provided all of the limitations of claim 49,¹¹¹ and was originally available online by subscription in 1986.¹¹² Subsequently, the Benson article was available to everyone (without a subscription) in January 1995.¹¹³

Voter Verified argued that the Benson article was not sufficiently available to qualify as prior art under 35 U.S.C. § 102(b) because “a web-based reference like the Benson article must be ‘searchable by pertinent terms over the internet’ to qualify as a prior art ‘printed publication.’”¹¹⁴ The Federal Circuit did not agree with the proposed indexing requirement.¹¹⁵ The proper inquiry is whether the reference was “sufficiently accessible to the public interested in the art” prior to the critical date.¹¹⁶ Public accessibility is determined on a case-by-case basis, and here the evidence showed that there was adequate accessibility: the Risks Digest website (where the Benson article was posted) was well-known to those concerned with electronic voting technologies, and by September 1995, the website included a search tool “that would have retrieved the Benson article in response to search terms such as ‘vote,’ ‘voting,’ ‘ballot,’ and/or ‘election.’”¹¹⁷ Because the website was well-known to those interested in the subject matter, was publicly accessible, and had a search tool, it was not required to be indexed by a commercial Internet search engine.¹¹⁸

108. See, e.g., *In re Hall*, 781 F.2d 897, 899–900 (Fed. Cir. 1986).

109. See, e.g., *In re Bayer*, 568 F.2d 1357, 1362 (C.C.P.A. 1978).

110. *Voter Verified*, 698 F.3d at 1380.

111. *Id.* at 1381 (“While the disclosures in the Benson article are not identical with the language of claim 49, we agree with the district court that the Benson article would have made the voting method of claim 49 obvious to one of ordinary skill in the art of computerized voting technology.”).

112. *Id.* at 1380; see Tom Benson, *Computerized Voting*, RISKS DIG. (Mar. 4, 1986, 4:27 PM), <http://catless.ncl.ac.uk/Risks/2.22.html#subj3.1>.

113. *Voter Verified*, 698 F.3d at 1380.

114. *Id.* at 1379.

115. *Id.* at 1380.

116. *Id.* (quoting *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989)).

117. *Id.* at 1380–81.

118. *Id.*

C. Obviousness

1. Indicia of Non-obviousness

At issue in *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*¹¹⁹ was the relative importance of the fourth factor (the so-called “secondary considerations”) as well as the legitimacy of a “burden-shifting framework.”¹²⁰ In *Cadbury*, Wrigley argued that Cadbury’s patent for chewing gum infringed upon its patent (the ’223 patent) disclosing a synergistic relationship between two cooling agents in chewing gum: menthol and an agent referred to by the trade name WS-23.¹²¹ Cadbury filed a counterclaim, asserting that Wrigley’s chewing gum infringed upon its patent (the ’893 patent).¹²² The district court granted Wrigley’s motion for summary judgment and, inter alia, found the ’223 patent to be obvious in view of prior art references teaching the use of WS-23 and menthol as possible cooling ingredients in chewing gum.¹²³ On appeal, Wrigley argued that the combination of WS-23 and menthol led to an unexpected cooling sensation—resulting in great commercial success.¹²⁴ These facts, Wrigley argued, all supported a factual conclusion of non-obviousness based on secondary considerations.¹²⁵

The Federal Circuit affirmed the district court’s summary judgment, stating that Wrigley did not demonstrate that the effect of combining WS-23 and menthol produced a significantly unexpected result that was different from the already known effect of combining WS-23 and menthol.¹²⁶ The court, however, stopped short of endorsing a burden-shifting framework, whereupon the burden of proving a claim’s validity is shifted to the patent-owner after the accused-infringer has demonstrated a prima facie case for obviousness.¹²⁷

The Federal Circuit addressed the issue of obviousness, and, in particular, hindsight reconstruction and objective indicia of non-obviousness in *Mintz v. Dietz & Watson, Inc.*¹²⁸ Marcus and Neil Mintz

119. 683 F.3d 1356 (Fed. Cir. 2012).

120. *Id.* at 1364–65.

121. *Id.* at 1358.

122. *Id.* at 1359.

123. *Id.* at 1359–60.

124. *See id.* at 1362–63 (noting that Wrigley’s evidence that the combination of WS-23 and menthol led to commercial success focused on a Cadbury study that “concluded that the flavor and cooling features of Wrigley’s products were superior to those of the Cadbury products with which they were compared”).

125. *Id.* at 1363.

126. *Id.* at 1363–65.

127. *Id.* at 1365 n.5.

128. 679 F.3d 1372 (Fed. Cir. 2012).

were co-inventors of a patent directed to knitted casing structure for meat products.¹²⁹ Package Concepts & Materials (PCM), previously a distributor of Mintz's products, began to sell products that directly compete with Mintz.¹³⁰ In 2005, PCM filed a declaratory judgment action against Mintz.¹³¹ Mintz, in turn, filed an infringement action.¹³² After consolidation of the separate suits, the California district court conducted a Markman hearing and issued a claim construction order.¹³³ The parties filed cross-motions for summary judgment on validity and infringement.¹³⁴ The district court granted PCM's motion, finding Mintz's patent obvious.¹³⁵

On appeal, the Federal Circuit vacated and remanded the district court's ruling that Mintz's patent claims were obvious.¹³⁶ The Federal Circuit found the district court's ruling faulty on several fronts. First, the district court erred by relying on a "common sense approach" and finding that it would have been obvious to try an element of the claimed invention.¹³⁷ The district court did not include in the record any showing that ordinarily skilled artisan would possess this knowledge, and the "mere recitation of the words 'common sense' without any support adds nothing to the obviousness equation."¹³⁸

Additionally, the Federal Circuit admonished the district court for essentially engaging in hindsight reconstruction when finding the claims obvious.¹³⁹ In the Federal Circuit's view, the manner in which district court stated the problem to be solved represented a form of prohibited hindsight reliance.¹⁴⁰ The district court emphasized that the problem in the prior art was merely forming a checkerboard or gridlike pattern in the knitting.¹⁴¹ The Federal Circuit noted that "[o]ften the inventive contribution lies in defining the problem in a new revelatory way."¹⁴² The court continued, "[i]n other words, when someone is presented with the identical problem and told to make the patented invention, it often becomes virtually certain that the

129. *Id.* at 1374.

130. *Id.* at 1375.

131. *Id.*

132. *Id.*

133. *Id.*

134. *Id.*

135. *Id.*

136. *Id.* at 1380.

137. *Id.* at 1377.

138. *Id.*

139. *Id.*

140. *Id.*

141. *Id.*

142. *Id.*

artisan will succeed in making the invention.”¹⁴³ To prove obviousness, PCM would need to show that an ordinarily skilled meat encasement artisan would have created the meat encasement structure in the patent to solve the adherence problem.¹⁴⁴

Further, the Federal Circuit noted the district court’s failure to consider or make findings as to Mintz’s evidence showing objective indicia of non-obviousness.¹⁴⁵ In the Federal Circuit’s view, “[t]hese objective criteria help inoculate the obviousness analysis against hindsight” bias.¹⁴⁶ Based on the several errors in the district court’s obviousness analysis, the court vacated and remanded the case to district court to determine whether further proceedings are necessary.¹⁴⁷

In *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*,¹⁴⁸ the Federal Circuit decided the issue of obviousness in a case in which the defendant pushed for special interrogatories, wherein the jury answers special factual questions and issues a general verdict.¹⁴⁹ Kinetic Concepts Inc. and Wake Forest University Health Sciences (“Wake Forest”) brought suit against Smith & Nephew, alleging infringement of two patents.¹⁵⁰ Wake Forest owns the asserted patents, and Kinetic Concepts are the exclusive licensees of the patents.¹⁵¹ Both patents protect methods and apparatuses that apply suction and negative pressure to treat difficult-to-heal wounds.¹⁵²

In the district court, the jury returned a jury verdict form determining that (1) the prior art exhibited differences from the claims, (2) there were numerous objective considerations of non-obviousness, and (3) obviousness was not established.¹⁵³ Smith & Nephew moved for judgment as a matter of law, arguing that the jury’s findings were not supported by substantial evidence.¹⁵⁴ The district court judge agreed, finding that the differences between the claimed invention and the prior art were minimal and that the objective indicia of non-obviousness did not overcome the case of obviousness.¹⁵⁵

143. *Id.*

144. *Id.* at 1377–78.

145. *Id.* at 1378.

146. *Id.*

147. *Id.* at 1380.

148. 688 F.3d 1342 (Fed. Cir. 2012).

149. *Id.* at 1353, 1359.

150. *Id.* at 1346.

151. *Id.*

152. *Id.*

153. *Id.* at 1354.

154. *Id.* at 1355.

155. *Id.* at 1356.

The Federal Circuit reversed the decision, holding that there were indeed differences between the prior art and the claims, and that Smith & Nephew offered no evidence establishing the reasons to combine the references to arrive at the claimed invention.¹⁵⁶ Moreover, the Federal Circuit found that “there is more than substantial evidence [in the record] supporting the jury’s findings of commercial success, long-felt need, copying, unexpected and superior results, wide spread acceptance in the field, and initial skepticism.”¹⁵⁷ As with its decision in *Mintz v. Dietz & Watson, Inc.*, the Federal Circuit warned about the dangers of ignoring objective indicia of non-obviousness, noting that “[t]he objective indicia of non-obviousness serve a particularly important role in a case, like this one, where there is a battle of scientific experts regarding the obviousness of the invention. In such a case, the objective indicia provide an unbiased indication regarding the credibility of that evidence.”¹⁵⁸ The overwhelming existence of secondary indicia of obviousness played a very important role in upholding the validity of the patented claims.¹⁵⁹

2. *Willful Infringement*

The Federal Circuit addressed two issues in *K-TEC, Inc. v. Vita-Mix Corp.*¹⁶⁰ Vita-Mix, a manufacturer of high-end blenders, appealed the district court’s conclusion that Vita-Mix infringed the asserted claims of K-TEC’s two patents designed to reduce the problem of cavitation.¹⁶¹ First, the court reaffirmed the applicability of the analogous art test to the obviousness-type invalidity analysis.¹⁶² Second, the court discussed the elements a patentee must prove to prevail on an allegation of willful infringement.¹⁶³

The analogous art test is used for determining the applicability of a reference to the obviousness of an invention under 35 U.S.C. § 103.¹⁶⁴ For a reference to be proper for use in an obviousness rejection under 35 U.S.C. § 103, the reference must be analogous art to the claimed invention, “i.e., it must satisfy one of the following conditions: (1) the reference must be from the same field of

156. *Id.* at 1366–67.

157. *Id.* at 1368.

158. *Id.* at 1370–71.

159. *Id.*

160. 696 F.3d 1364 (Fed. Cir. 2012).

161. *Id.* at 1368 (explaining that cavitation arises when “a pocket of air envelops the area surrounding the blender blade”).

162. *Id.* at 1375.

163. *Id.* at 1378.

164. *Id.* at 1375.

endeavor; or (2) the reference must be reasonably pertinent to the particular problem with which the inventor is involved.”¹⁶⁵

In *K-TEC*, the court rejected Vita-Mix’s arguments that two patents that depict five-sided containers should be qualified as analogous art.¹⁶⁶ First, the court reasoned that the specification of the patent-in-suit identified four problems “that the invention solves: blender speed, safety, cavitation, and the blender’s ability to blend frozen ingredients.”¹⁶⁷ To be treated as analogous art, the two references should be reasonably pertinent to at least one of the four problems.¹⁶⁸ But the problem that Vita-Mix identified in the inventor’s testimony, creating a smaller jar to fit within K-TEC’s existing quiet box, was not one of the four problems because the K-TEC’s existing jars already fit inside the quiet box.¹⁶⁹ Second, Vita-Mix’s expert report on invalidity failed to raise a genuine issue of material fact because it did not explain why the inventor would have referenced non-blending containers to uncover the commonplace designs depicted in the two references.¹⁷⁰ Third, the court held that the Board’s decision in an inter partes examination that the two references were analogous art did not raise an issue of material fact because the opinion was not issued until after the district court’s final judgment.¹⁷¹ Therefore, the district court did not have the benefit of the Board’s analysis.¹⁷²

To avoid willful infringement, “the patentee must prove (1) that the accused infringer ‘acted despite an objectively high likelihood that its actions constituted infringement of a valid patent’; and (2) that this objectively defined risk was either known or so obvious that the accused infringer should have known about it.”¹⁷³ In the instant case, the court concluded that K-TEC met these requirements. First, summary judgment properly disposed Vita-Mix’s non-infringement theory and most of its invalidity theories.¹⁷⁴ Second, rather than adopting one of many non-infringing designs, Vita-Mix opted for a design that performed so similar to K-TEC’s product such that its

165. *Id.*

166. *Id.*

167. *Id.*

168. *See id.* (“A reference is reasonably pertinent if it, as a result of its subject matter, ‘logically would have commended itself to an inventor’s attention in considering his problem.’” (quoting *Innovention Toys, LLC v. MGA Entm’t, Inc.*, 637 F.3d 1314, 1321 (Fed. Cir. 2011))).

169. *Id.* at 1375.

170. *Id.*

171. *Id.* at 1375–76.

172. *Id.*

173. *Id.* at 1378 (quoting *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc)).

174. *Id.*

customers would not be able to distinguish it from K-TEC's product.¹⁷⁵ Third, K-TEC introduced substantial evidence that Vita-Mix proceeded with its design despite having knowledge of the objectively high risk of infringing K-TEC's patent.¹⁷⁶

3. *Presumption of Validity*

The Federal Circuit weighed in on the presumption of validity in *Sciele Pharma Inc. v. Lupin Ltd.*¹⁷⁷ Lupin filed an Abbreviated New Drug Application (ANDA) seeking approval to market a generic version of the extended-release tablet, Fortamet.¹⁷⁸ Shionogi Pharma (formerly Sciele Pharma), a marketer of Fortamet, sued Lupin for patent infringement, asserting a patent listed in the Orange Book entry for Fortamet.¹⁷⁹ Despite a lack of final judgment on the merits of the case, Lupin attempted to launch its generic form of Fortamet.¹⁸⁰ In an attempt to stop Lupin from selling the generic tablet, Shionogi moved for a preliminary injunction, which the district court granted.¹⁸¹

The patent at issue was granted under unusual circumstances. Although Lupin canceled certain rejected claims, it received a notice of allowance for its pending claims, which mistakenly included those that had been canceled.¹⁸² Lupin informed the PTO of this mistake, and the PTO responded by removing the canceled claims, issuing an amended notice of allowance, and permitting amended claims.¹⁸³ Oddly, the issued patent did not consist of the claims found in the supplemental notice of allowance, but instead contained the canceled claims from the first notice.¹⁸⁴

The most significant issue in this case was the presumption of validity.¹⁸⁵ Lupin argued that the erroneous issuance of the cancelled claims should prevent the presumption of validity from attaching in this instance.¹⁸⁶ Shionogi argued that this case warranted a heightened presumption of validity because Lupin relied upon two prior art references that were before the Patent Office during the prosecution

175. *Id.* (noting that Vitamix initially made nearly a direct copy of K-TEC's five sided jar).

176. *Id.*

177. 684 F.3d 1253 (Fed. Cir. 2012).

178. *Id.* at 1256.

179. *Id.*

180. *Id.*

181. *Id.*

182. *Id.* at 1256–57.

183. *Id.* at 1257.

184. *Id.*

185. *Id.* at 1259–61.

186. *Id.* at 1259.

of this case.¹⁸⁷ Judge Moore pointed out that both parties were wrong.¹⁸⁸ The burden of proof was clear and convincing evidence of invalidity regardless of whether the Patent Office previously considered a prior art reference.¹⁸⁹ Although the PTO previously considered the prior art references, the burden does not shift to something higher, such as “extremely clear and convincing evidence or crystal clear and convincing evidence.”¹⁹⁰ While the burden is not heightened, a court or jury may assign more weight to evidence that was not previously before the Patent Office.¹⁹¹

Despite the issuance of several claims, the court ruled that the presumption of validity should apply.¹⁹² The prosecution history should, however, still be considered—including the peculiar circumstances regarding issuance of the claims and the fact that the two references were before the PTO.¹⁹³

Ultimately, the Federal Circuit ruled that the district court’s obviousness analysis was flawed.¹⁹⁴ The court rejected the district court’s finding that Lupin’s statements concerning obviousness only apply to the enablement requirement.¹⁹⁵ Instead, the court held that the statements also act as proof that modifying the tablet in this manner would be part of routine experimentation by a person of skill in the art.¹⁹⁶ The preliminary injunction was vacated and the case was remanded for further proceedings.¹⁹⁷

4. *Affirmed Rejection of Claims*

In *In re Suong-Hyu Hyon*,¹⁹⁸ the Federal Circuit affirmed the Board’s 35 U.S.C. § 103 rejection of claims, focusing particularly on the Board’s finding of the motivation to combine the prior references.¹⁹⁹

The application at issue is Reissue Application No. 10/643,674 (the “reissue application”), which originated as U.S. Patent No. 6,168,626.²⁰⁰ The claims of the reissue application involve Ultra High Molecular Weight Polyethylene (UHMWPE), particularly with regard

187. *Id.* at 1259–60.

188. *Id.* at 1260.

189. *Id.*

190. *Id.* (internal quotation marks omitted).

191. *Id.*

192. *Id.* at 1261.

193. *Id.*

194. *Id.*

195. *Id.* at 1262–63.

196. *Id.*

197. *Id.* at 1263.

198. 679 F.3d 1363 (Fed. Cir. 2012).

199. *Id.* at 1367.

200. *Id.* at 1364.

to the use of UHMWPE in artificial joints.²⁰¹ Specifically, the claims at issue recite methods comprising (1) crosslinking UHMWPE by irradiating a UHMWPE block having a molecular weight of not less than five million with a high energy radiation, (2) heating the crosslinked block to a compression deformable temperature below the melting point of the UHMWPE, (3) subjecting the block to pressure, and (iv) cooling the block.²⁰²

The examiner rejected the claims of the reissue application as being obvious over U.S. Patent No. 5,030,402 (Zachariades) in view of U.S. Patent No. 3,886,056 (Kitamaru).²⁰³ Specifically, the examiner found that Zachariades teaches each limitation of the claims except for the step of crosslinking the UHMWPE prior to compression and relied on Kitamaru instead for teaching of crosslinking the UHMWPE prior to compression.²⁰⁴ The examiner further concluded that a person of ordinary skill would obviously rely on Kitamaru's crosslinked UHMWPE in Zachariades' method because Kitamaru demonstrates that "crosslinking prior to compression deformation results in improved transparency, an increased melting point, and excellent dimensional stability."²⁰⁵

The applicant, Hyon, challenged the examiner's rejection based on the argument that there was no motivation to combine the references.²⁰⁶ The Board, however, rejected Hyon's arguments that a motivation to combine was lacking because both references are directed to the same material, UHMWPE.²⁰⁷ Moreover, the Board found that Kitamaru offers the reason for combining the teachings of the prior references "to provide UHMWPE articles with improved dimensional stability and transparency at high temperatures."²⁰⁸ The applicant did not challenge the determination as to what the references taught.²⁰⁹

Hyon appealed the Board's decision. During the appeal, Hyon noted that while Zachariades deals with artificial joints, Kitamaru addresses films or sheets. Hyon stressed the importance of this distinction, as a person of ordinary skill would have no motivation to combine references dealing with "fundamentally different material

201. *Id.*

202. *Id.*

203. *Id.*

204. *Id.* at 1365.

205. *Id.*

206. *Id.*

207. *Id.*

208. *Id.*

209. *Id.*

technologies.”²¹⁰ The court, however, disagreed with Hyon’s argument because both references pertain to UHMWPE.²¹¹ The court found that the Board’s rejections were also based on the Board’s finding, supported by substantial evidence, that despite Zachariades’ preference for crosslinking after molding, Zachariades did not state that this method was the only way to make UHMWPE products.²¹²

Hyon also argued that the Board “improperly relied on the arbitrary selection of a single feature from Kitamaru (pre-compression crosslinking) while ignoring the other features.”²¹³ The court, however, found that the Board’s selection of the precompression crosslinking step was motivated by Kitamaru’s teaching that taking this step would lead to the improved properties. The Board’s motivation demonstrated that it “did not take the teachings of Kitamaru in isolation or out of context.”²¹⁴ The court therefore concluded that the Board properly found the motivation to combine the Zachariades and Kitamaru references and affirmed the Board’s determination that the reissue claims would have been obvious in light of the combination of the prior art references.²¹⁵

Judge Newman dissented, however, and stated that “[w]hen the technologic field is mature, apparently small changes that produce unexpected results or improved properties are of heightened significance.”²¹⁶ In this case, Judge Newman determined that “[n]othing in the record suggests that a person of ordinary skill would have foreseen that Hyon’s method of slight radiation crosslinking followed by heating and compression deformation would produce the described benefits,” and that the Board indeed failed to justify any expectation that, under the Hyon method, combining the prior art references would create a superior polyethylene artificial joint.²¹⁷

In *In re Mouttet*,²¹⁸ the Federal Circuit affirmed the Board’s 35 U.S.C. § 103 rejection of claims, focusing particularly on the Board’s

210. *Id.* at 1366.

211. *Id.*

212. *Id.* (“Zachariades does not state that UHMWPE products can be made only by crosslinking after compression deformation, nor does it state or suggest that faulty or inferior products will result from crosslinking prior to compression.”).

213. *Id.* at 1366–67.

214. *Id.* at 1367.

215. *Id.*

216. *Id.* at 1371 (Newman, J., dissenting).

217. *Id.*

218. 686 F.3d 1322 (Fed. Cir. 2012).

finding that that combination of the prior references was predictable and that there was no teaching away in the prior art.²¹⁹

On April 3, 2006, sole inventor Mouttet filed U.S. Patent Application No. 11/395,232 (the '32 application) claiming a computing device comprising a crossbar array consisting of “two intersecting sets of conductive parallel wires” wherein a “thin film material or molecular component acts as a bridge between the wires” at the wire junctions or crosspoints.²²⁰

The PTO examiner rejected all of the inventor’s pending claims under 35 U.S.C. § 103(a) as unpatentable over Falk reference, Das reference, and Terepin reference, disclosing a digital signal processor.²²¹ Specifically, the examiner found that the Falk reference taught all of the limitations of the claim except for “(1) a crossbar array implemented with electrical wires rather than optical light paths, (2) crosspoints with programmable states based on electrical conductivity rather than optical intensity, and (3) conversion of analog signal outputs to digital output bit patterns in the post-processing unit.”²²² The examiner instead relied on Das “to teach the missing crossbar array using wires and crosspoints that are programmable to have electrical conductive states, and on Terepin to teach a component converting analog signals to digital bit patterns.”²²³ In light of Das and Terepin, the examiner found Mouttet’s claims over Falk to be obvious, and thus rejected the claims.²²⁴ Mouttet challenged the examiner’s rejection, but the Board affirmed the examiner’s rejection.²²⁵

On appeal, Mouttet contested the Board’s finding regarding the impact using electronic wires would have on Falk’s operation as a programmable arithmetic unit.²²⁶ The court, however, found that the Board’s decision was supported by substantial evidence because Falk’s programming and processing of junction states have nothing unique to its optical implementation, and Mouttet presented nothing to demonstrate otherwise.²²⁷ The court further noted that “a determination of obviousness based on teachings from multiple

219. *Id.* at 1334.

220. *Id.* at 1325.

221. *Id.* at 1326–27.

222. *Id.* at 1329.

223. *Id.*

224. *Id.*

225. *Id.* at 1329–30.

226. *Id.* at 1331–32 (describing Mouttet’s disagreement with the Board over whether Falk suggested that the use of electronic wires, rather than optical paths, “would destroy Falk’s ability to operate as a programmable arithmetic unit”).

227. *Id.* at 1332.

references does not require an actual, physical substitution of elements.”²²⁸

Moreover, Mouttet argued that Falk teaches away from the claimed invention based on the following passage disclosing a “fundamental difference” between circuit types and the inferiority of electrical circuits compared to the optical circuitry for certain purpose:

There is a fundamental difference between optical circuits, in which the information carriers are photons, and electronic circuits, where the carriers are electrons [I]n optical devices, there exist interconnect possibilities that do not exist with electronic hardware, in particular, interconnected parallel architectures which permit digital arithmetic and logic operations to be performed in a completely parallel, single step process. After the inputs are switched on, the output appears in the time it takes a photon to transit the device. No faster computation time is possible.²²⁹

The court, however, again found the Board’s decision was supported by substantial evidence because the above passage did not “teach away from a non-preferred embodiment containing an arithmetic/logic system having electrical circuitry with wire sets.”²³⁰ The court further noted that Mouttet failed to cite any additional reference to show that the claimed invention would not be reached using electrical circuitry.²³¹ The court therefore affirmed the Board’s determination that the claims at issue would have been obvious in light of the combination of the prior art references.²³²

The Federal Circuit affirmed the Board’s 35 U.S.C. § 103 rejection of claims in *In re Droge*,²³³ focusing particularly on the Board’s finding of a reasonable expectation of success when combining prior art references.²³⁴ The claims at issue were directed to methods of “sequence specific recombination of DNA in a eukaryotic cell” using modified bacteriophage integrase, Int-h and Int-h/218.²³⁵ The examiner rejected the claims as obvious over the combination of the Crouzet reference (U.S. Patent No. 6,143,530), which provides “a method of creating therapeutic DNA molecules using sequence-specific recombination in either a host cell or *in vitro*,” and the

228. *Id.*

229. *Id.* at 1333.

230. *Id.* at 1334.

231. *Id.*

232. *Id.*

233. 695 F.3d 1334 (Fed. Cir. 2012).

234. *Id.* at 1338–39.

235. *Id.* at 1336.

inventors' own reference, the Christ reference, and the Board affirmed the examiner's rejection.²³⁶

During the prosecution, the applicant submitted a declaration from one of the inventors, Dr. Droge, ("Droge Declaration"), explaining why there was no reasonable expectation that someone with ordinary skill in the art would have had success using the modified bacteriophage integrase to induce recombination in eukaryotic cells based on the three-dimensional structure of DNA in the cells.²³⁷ In making the decision, however, the Board determined that an article by Brenda J. Lange-Gustafson and Howard Nash refuted the assertions in the Droge Declaration and affirmed the examiner's rejection because "the wild-type integrase works in eukaryotic cells, the ordinary artisan would have had a reasonable expectation of success that [Int-h and Int-h/218] would also function at some level in eukaryotic cells."²³⁸

The applicant appealed the Board's obviousness rejection and argued that differences in the cell types and protein co-factors meant that someone skilled in the art would not expect Christ's modified integrase proteins to facilitate recombination in prokaryotic cells to work in eukaryotic cells as well.²³⁹

On appeal, however, the Federal Circuit found substantial evidence in support of the Board's conclusion that someone with ordinary skill in the art could reasonably expect to be successful in combining the prior references.²⁴⁰ In particular, the court noted that Crouzet "discloses that wild-type bacteriophage integrase Int can induce site-specific DNA recombination using the *attB* and *attP* recognition sites," and that Christ "supplies a motivation to use [a modified bacteriophage integrase] in the method taught in Crouzet . . . [for] increased affinity for core binding sites in the *att* regions."²⁴¹ With respect to the Lange-Gustafson article, the court agrees with the Board that this article discloses that Int-h "'sponsors reduced but significant levels' of recombination in the absence of IHF and that, 'in the absence of IHF, Int-h recombines supercoiled and nonsupercoiled [DNA] identically.'"²⁴² Thus, the court concluded, "[t]he article *directly* contradicts the assertion in the Droge Declaration that a skilled artisan would not expect the modified

236. *Id.*

237. *Id.* at 1337.

238. *Id.* (alteration in original).

239. *Id.*

240. *Id.* at 1338.

241. *Id.*

242. *Id.* (alteration in original).

integrases Int-h and Int-h/218 to work in eukaryotic cells based on the three-dimensional structure of DNA in those cells.”²⁴³

The court therefore unanimously affirmed the Board’s determination that the claims at issue would have been obvious under 35 U.S.C. § 103, in light of the combination of the prior art references.²⁴⁴

On September 28, 2012 in *Pozen Inc. v. Par Pharmaceutical, Inc.*,²⁴⁵ the Federal Circuit affirmed the district court’s finding that claims of U.S. Patent No. 6,060,499 (the ’499 patent), U.S. Patent No. 6,586,458 (the ’458 patent), and U.S. Patent No. 7,332,183 (the ’183 patent) were not invalid for obviousness.²⁴⁶

The claims in the ’499 and ’458 patents were directed to composition or methods of use comprising concomitant administration of sumatriptan and naproxen.²⁴⁷ The district court found that the ’499 and ’458 patents were not invalidated by the prior art references because the combination of the cited references did not “teach or suggest the simultaneous administration of sumatriptan and naproxen” and did not “disclose to one of ordinary skill in the art that the combination of sumatriptan and naproxen produces a longer lasting efficacy reducing migraine relapse compared to the administration of naproxen or sumatriptan alone.”²⁴⁸

On appeal, the applicant argued that the district court erred because the one prior art reference, Catarci, showed concomitant administration used in migraine treatment.²⁴⁹ Specifically, the patient was prescribed “a daily NSAID as a prophylactic with sumatriptan used as needed.”²⁵⁰ The Catarci reference, titled “Ergotamine-Induced Headache Can Be Sustained By Sumatriptan Daily Intake,” described “a single patient who developed ergotamine-induced headaches and subsequently replaced ergotamine with daily administration of sumatriptan.”²⁵¹

The Federal Circuit held that there was no clear error in the district court’s finding that Catarci does not invalidate the claims in the ’499 and ’458 patents.²⁵² Catarci simply concludes that

243. *Id.*

244. *Id.* at 1338–39.

245. 696 F.3d 1151 (Fed. Cir. 2012).

246. *Id.* at 1165–66.

247. *Id.* at 1157–58.

248. *Id.* at 1160.

249. *Id.* at 1164.

250. *Id.*

251. *Id.*

252. *Id.* at 1164–65.

sumatriptan and acupuncture were the only effectual treatment for the patient concerned, but does not conclude that a combination of naproxen and sumatriptan and naproxen provided migraine relief.²⁵³ The Federal Circuit also agreed with the district court's finding that Catarci actually discouraged combining the drugs to achieve the efficacy benefits claimed in the '499 and '458 patents.²⁵⁴ The court therefore held that the appellants failed to meet their burden to rebut the presumed validity of issued patents with clear and convincing evidence, and that the claims of the '499 and '458 patents thus are not invalid for obviousness.²⁵⁵

The claims of the '183 patent were directed to multilayer pharmaceutical tablets comprised of naproxen and triptan, wherein said naproxen and said triptan independently dissolve.²⁵⁶ On appeal, the appellant argued that the district court applied an incorrect construction of "independent dissolution" in its invalidity analysis, using a narrow definition of the term when the "plain and ordinary" meaning, which appellant contended the court used in finding infringement, would have rendered the claim obvious.²⁵⁷ The Federal Circuit, however, noted that the appellant neither explained the "plain and ordinary meaning" of the term nor identified how such meaning differs from the purported "narrow" meaning.²⁵⁸ Rather, the Federal Circuit determined that the district court's infringement analysis construed "independent dissolution" as defined within the patent, no differently from how the district court construed the term during its invalidity analysis.²⁵⁹ The Federal Circuit therefore affirmed the district court's holding that the claims of the '183 patent were not obvious.²⁶⁰

5. *Disclosure Under 35 U.S.C. § 102(g)*

In *Fox Group, Inc. v. Cree, Inc.*,²⁶¹ the Federal Circuit affirmed the District Court for the Eastern District of Virginia's finding of invalidity of two claims under 35 U.S.C. § 102(g).²⁶² The patentee Fox Group asserted a patent that claims a silicon carbide material

253. *Id.*

254. *Id.*

255. *Id.* at 1165.

256. *Id.* at 1158.

257. *Id.* at 1165.

258. *Id.* at 1166.

259. *Id.*

260. *Id.*

261. 700 F.3d 1300 (Fed. Cir. 2012).

262. *Id.* at 1301.

with specific properties.²⁶³ The parties did not dispute that defendant Cree, prior to the critical date, had grown a silicon carbide material that met all of the limitations of the asserted claims.²⁶⁴

Fox argued that Cree had not “conceived” of the invention because it could not demonstrate that it had a repeatable process to create the claimed silicon carbide material.²⁶⁵ The Federal Circuit identified at least two flaws with this argument.²⁶⁶ First, because Cree had “reduced the invention to practice” before the critical date of the Fox patent, it was not required to prove “conception.”²⁶⁷ Second, having reduced the invention to practice, it was not required to do so repeatedly.²⁶⁸

The Federal Circuit also pointed out that the prior inventor does not need to “establish that he recognized the invention in the same terms as those recited” in the contested patent claims.²⁶⁹ There was no dispute that the silicon carbide material that Cree made in 1995 met all of the requirements of the Fox patent claims.²⁷⁰

Fox also argued that Cree suppressed or concealed²⁷¹ the invention because “Cree (1) did not file a patent application for [the silicon carbide material it created], (2) did not present proof of commercialization that would allow for reverse engineering, and (3) did not otherwise provide adequate disclosure because it failed to reveal the details of the growth conditions under which [the material] was made.”²⁷²

The Federal Circuit explained that patenting and commercialization are two ways of making an invention available to the public, but neither is required under 35 U.S.C. § 102(g).²⁷³ Moreover, Fox’s arguments that Cree did not provide an enabling disclosure were all based on cases involving *process* claims.²⁷⁴ When a patent claims a process, a prior inventor seeking to invalidate it under 35 U.S.C. § 102(g) must prove prior invention of this process, and

263. *Id.* at 1302.

264. *Id.* at 1305.

265. *Id.* at 1304.

266. *Id.* at 1304–05.

267. *Id.*

268. *Id.* at 1305.

269. *Id.* (quoting *Dow Chem. Co. v. Astro-Valcour, Inc.*, 267 F.3d 1334, 1341 (Fed. Cir. 2001)).

270. *Id.*

271. *See* 35 U.S.C. § 102(g)(2) (2006) (“A person shall be entitled to a patent unless . . . before such person’s invention thereof, the invention was made in this country by another inventor who has not abandoned, suppressed, or concealed it.”).

272. *Fox Grp.*, 700 F.3d at 1306.

273. *Id.* (discussing printed publications as a third method).

274. *Id.* at 1307.

that this prior invention was not “abandoned, suppressed, or concealed.”²⁷⁵ Here, the asserted claims recited “a silicon carbide material” and Cree did not suppress or conceal its possession of a silicon carbide material that met all of the claim limitations.²⁷⁶

Sometimes secondary indicia of non-obviousness can overcome a prima facie showing of obviousness. In *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*,²⁷⁷ the Federal Circuit considered such secondary indicia.²⁷⁸ In an earlier appeal of a summary judgment ruling in the same case, the Federal Circuit held that two prior art references taught all of the limitations of the asserted claims and that one of the references provided a motivation to combine them.²⁷⁹ However, the court had also stated that the secondary indicia could form a strong basis for rebutting the prima facie case if the factual disputes were resolved in Transocean’s favor.²⁸⁰

The asserted patent claimed an improved apparatus for offshore drilling.²⁸¹ Conventional drilling rigs use a single-column derrick that is only capable of raising or lowering one component at a time.²⁸² Transocean’s “dual-activity” drilling apparatus, disclosed in the patents concerned, sought to increase the efficiency this process.²⁸³

Holding that “evidence of secondary considerations may often be the most probative and cogent evidence in the record,”²⁸⁴ the court upheld the jury findings that all of the secondary indicia presented favored Transocean.²⁸⁵ Transocean demonstrated commercial success of the claimed invention and a nexus between the claimed invention and the success;²⁸⁶ industry praise for the claimed invention and unexpected results;²⁸⁷ copying of the claimed invention by others, including an internal Maersk document indicating a desire to

275. *Id.*

276. *Id.* at 1302, 1307.

277. 699 F.3d 1340 (Fed. Cir. 2012).

278. *Id.* at 1349.

279. *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 617 F.3d 1296, 1303 (Fed. Cir. 2010).

280. *Id.* at 1305; *see also* Gregory A. Castanias & Douglas R. Cole, *2010 Patent Law Decisions of the Federal Circuit: The Advent of “the Rader Court,”* 60 AM. U. L. REV. 845, 934–35 (2011) (observing that the court resolved all inferences in favor of the patent holder).

281. *Transocean*, 699 F.3d at 1345.

282. *Id.* at 1346.

283. *Id.*

284. *Id.* at 1349 (quoting *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983)).

285. *Id.* at 1355.

286. *Id.* at 1350.

287. *Id.* at 1351.

incorporate the efficient dual-activity functionality of the claimed invention;²⁸⁸ industry skepticism, showing concern that in dual-activity rigs there would be clashing or colliding of two drill strings;²⁸⁹ licensing fees, demonstrating that customers and competitors were paying a premium for the claimed dual-activity rig;²⁹⁰ and long-felt yet unresolved need for rigs that operated efficiently in deep water, going back to the 1970s.²⁹¹

Based on the secondary indicia, and the substantial evidence supporting those indicia, the court concluded that Maersk had failed to prove the claims were obvious by clear and convincing evidence.²⁹² Consequently, the court reversed the judgment as a matter of law of obviousness.²⁹³

6. *Obviousness After KSR International Co. v. Teleflex Inc.*

In *C.W. Zumbiel Co. v. Kappos*,²⁹⁴ C.W. Zumbiel Co., Inc. (“Zumbiel”) challenged the Board’s determinations in reexamination regarding obviousness and non-obviousness.²⁹⁵ Zumbiel requested inter partes reexamination of Graphic Packaging International’s (Graphic) patents using several pieces of art.²⁹⁶ The patents at issue covered long, rectangular cartons that have a tear-off end.²⁹⁷ This type of carton is commonly used to sell soft drinks and other beverages.²⁹⁸ The reexamination and Board proceedings found certain, though slightly different, claims to be either obvious or patentable.²⁹⁹ The parties appealed the Board’s decision seeking to, respectively, overturn the patentability or obviousness holdings.³⁰⁰ The Federal Circuit affirmed the Board’s findings.³⁰¹

The court first addressed Graphic’s cross appeal seeking a finding of patentability over the art.³⁰² The court walked through each of Graphic’s arguments, affirming the Board in each.³⁰³ The court then

288. *Id.* at 1352.

289. *Id.* at 1352–53.

290. *Id.* at 1353.

291. *Id.* at 1354.

292. *Id.* at 1355.

293. *Id.*

294. 702 F.3d 1371 (Fed. Cir. 2012).

295. *Id.* at 1373.

296. *Id.* at 1378.

297. *Id.* at 1374–75.

298. *Id.*

299. *Id.* at 1378–79.

300. *Id.* at 1379.

301. *Id.* at 1386.

302. *Id.* at 1379–82.

303. *Id.* Graphic made three separate arguments in its appeal. First, Graphic asserted that based on previous patents, it was not obvious to provide a finger flap on

addressed Zumbiel's arguments seeking a determination of obviousness.³⁰⁴ The court assessed each of Zumbiel's arguments, affirming the Board in each.³⁰⁵ Judge Prost dissented in part and argued that *KSR International Co. v. Teleflex Inc.*³⁰⁶ compelled a finding of obvious for one of the claims.³⁰⁷ Judge Prost stated that the Board's decision, which the court reaffirmed, was contrary to the teaching of *KSR International* because the Board focused too much on the teaching of the art and too little on practical and common sense factors that are necessary components of an obviousness inquiry.³⁰⁸

In *Otsuka Pharmaceutical Co. v. Sandoz Inc.*,³⁰⁹ the Federal Circuit revisited and clarified the "lead compound"³¹⁰ analytical framework for evaluating the obviousness of chemical compounds.³¹¹ This approach, most notably associated with *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*³¹² emerges from *Otsuka Pharmaceutical* alive and well.³¹³ Judge Lourie, writing for the Federal Circuit, reiterated the two-step inquiry formulated in his earlier *Takeda* opinion.³¹⁴ First, the court must assess "whether a chemist of ordinary skill would have selected the asserted prior art compounds as lead compounds, or

the top panel of carton. *Id.* at 1379–80. The court affirmed the BPAI's decision—stating a placing a opening on the top of the carton is a "predictable variation." *Id.* Second, Graphic maintained that based on previous patents it was not obvious to use the fold line of the carton to create a dispenser. *Id.* at 1380. The court disagreed and held was obvious "to one of skill in the art in light of the prior art references." *Id.* Finally, Graphic argued that the "free-ends" and "single tear line" were both patentable. The court held, however, agreed with BPAI's legal assessment that both the "free-ends" and "single tear-line" were prior art. *Id.* at 1380–82.

304. *Id.* at 1382.

305. *Id.* at 1382–85. Zumbiel had two arguments relating to obviousness. First, Zumbiel asserted that because of prior art, the location of the finger-flap between the first and second cans was obvious. *Id.* at 1382–83. The court disagreed and held that substantial evidence affirms the BPAI's conclusion that moving the tear line on patented containers was not obvious. *Id.* at 1385. Second, Zumbiel claimed that the BPAI erred in applying the language of the preamble of various claims because the word "containers," while in the preamble, is not in the body of the claim. *Id.* The court held, however, that because the preamble is a limitation only when the claim depends on it, or when it is necessary to comprehend the terms or limitations of the claim in the body, Zumbiel's claim fails because the terms in the preamble are merely limitations. *Id.*

306. 550 U.S. 398 (2007).

307. *C.W. Zumbiel*, 702 F.3d at 1387 (Prost, J., dissenting-in-part).

308. *Id.* at 1387–88.

309. 678 F.3d 1280 (Fed. Cir. 2012), *cert. denied*, 133 S. Ct. 940 (2013).

310. *Id.* at 1291 (adopting the definition of "lead compound" from *Takeda* in which it is described as a "compound in the prior art that would be most promising to modify in order to improve its . . . activity and obtain a compound with better activity" (quoting *Takeda Chemical Indus, Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1357 (Fed. Cir. 2007))).

311. *See id.* at 1291–93.

312. 492 F.3d 1350 (Fed. Cir. 2007).

313. *See Otsuka Pharm.* 678 F.3d at 1292.

314. *See id.* at 1291–92.

starting points, for further development efforts.”³¹⁵ Second, the court must determine “whether the prior art would have supplied one of ordinary skill in the art with a reason or motivation to modify a lead compound to make the claimed compound with a reasonable expectation of success.”³¹⁶

In this case, defendants Sandoz and a group of ANDA applicants attempted to invalidate an anti-schizophrenic drug, aripiprazole, marketed by Otsuka as Abilify.³¹⁷ To this end, Sandoz argued that the claims in Otsuka’s patent were obvious in view of three prior art carbostyryl derivative compounds.³¹⁸ The district court concluded that the defendants failed to prove by clear and convincing evidence “that the asserted claims would have been obvious to one of ordinary skill” in the art.³¹⁹ In reaching this conclusion, the district court assessed the known carbostyryl derivatives, with particular emphasis on the three “lead compounds” asserted by the defendants.³²⁰ After evaluating the prior art and the claimed invention, the district court found that the asserted claims were not obvious because the prior art did not teach an ordinarily skilled chemist to choose one of the three “lead compounds” as a lead compound.³²¹

The Federal Circuit agreed, rejecting Sandoz’s contention that the district court’s lead compound analysis “f[ell] into a rigid obviousness analysis precluded by *KSR*.”³²² In the Federal Circuit’s view, the district court did not err when it found that a person “of ordinary skill in the art” would not have used the prior art compounds as lead compounds for further research or made the modifications necessary to arrive at the claimed compound.³²³ Thus, the *Takeda* two-step lead compound analysis remains the approach when evaluating the obviousness of chemical compounds.

7. *Other Issues with Obviousness*

In *Pregis Corp. v. Kappos*,³²⁴ Free-Flow Packaging International, Inc. (“Free-Flow”), a joint defendant with Kappos, appealed the denial of its motions for judgment as a matter of law after a jury verdict of non-

315. *Id.* at 1291.

316. *Id.* at 1292.

317. *Id.* at 1284, 1286.

318. *Id.* at 1286–90 (referencing unsubstituted butoxy, 2,3-dichloro propoxy, and OPC-4392).

319. *Id.* at 1286.

320. *Id.*

321. *Id.* at 1289.

322. *Id.* at 1290–91 (internal quotation marks omitted).

323. *Id.* at 1296.

324. 700 F.3d 1348 (Fed. Cir. 2012).

infringement and invalidity.³²⁵ Both Pregis and Free-Flow “are competitors in the air-filled packing cushion industry.”³²⁶ Pregis had attempted to block the issuance of two Free-Flow patents and took the “unusual step” of suing both Free-Flow and the PTO under the Administrative Procedure Act (APA).³²⁷ The district court dismissed the APA claims, holding that it lacked subject matter jurisdiction.³²⁸ Pregis cross-appealed the dismissal and sought judicial review of the PTO’s decision to issue certain Free-Flow patents.³²⁹ The court affirmed the district court’s rulings.³³⁰

The court first addressed Free-Flow’s appeal for a judgment as a matter of law based on the claimed non-obviousness of the claims.³³¹ In determining obviousness, a court must analyze four factors as set forth in *Graham v. John Deere Co.*³³²: (1) the scope and content of the prior art; (2) the differences between the prior art and the claimed invention; (3) the level of ordinary skill in the invention’s field; and (4) any objective factors such as commercial success, an anticipated but unsolved need, and copying by others.³³³ Free-Flow did not dispute that the combinations of the prior art taught its claimed elements.³³⁴ Instead, Free-Flow asserted that there was no evidence of a reason why anyone would combine the prior art in the necessary manner to create the claimed elements.³³⁵ Free-Flow asserted that “the prior art taught away” from its patented combinations.³³⁶ The court reviewed the trial record and found that there was sufficient evidence to support the obviousness determination.³³⁷

The court next considered Pregis’s APA argument as to “whether a competitor, who has been sued as an infringer, is entitled under the APA to judicial review of the PTO’s decision to grant the patents in suit.”³³⁸ Relying on the reasoning of its prior rulings considering the APA, the court held that a third party may not challenge the PTO’s decision to issue a patent by suing the PTO under the APA.³³⁹

325. *Id.* at 1350.

326. *Id.*

327. *Id.* at 1352.

328. *Id.* at 1352–53.

329. *Id.* at 1350.

330. *Id.*

331. *Id.* at 1354.

332. 383 U.S. 1 (1966).

333. *Id.* at 17–18.

334. *Pregis*, 700 F.3d at 1354.

335. *Id.*

336. *Id.*

337. *Id.* at 1354–56.

338. *Id.* at 1356.

339. *Id.* at 1356–61. The court cited to 35 U.S.C. § 131 as specifically precluding third parties from challenging PTO decisions to issue patents. *Id.* at 1357.

The Federal Circuit again addressed the issue of obviousness in *Eli Lilly & Co. v. Teva Parenteral Medicines, Inc.*³⁴⁰ Three patents related to pemetrexed, an anti-cancer drug, were assigned to the Trustees of Princeton University and licensed exclusively to Eli Lilly.³⁴¹ Teva, Barr Laboratories and APP Pharmaceuticals (“Teva”) filed ANDAs seeking approval to market generic variants of Alimta, Lilly’s brand name for pemetrexed, before Lilly’s patent expired.³⁴² Lilly responded by alleging infringement of several claims in its licensed patent.³⁴³ Teva conceded infringement but argued that the asserted claims “were invalid for obviousness-type double patenting” over claims from the two other patents licensed to Lilly that had previously expired.³⁴⁴ The district court concluded that the relevant claims of the patent at issue were not invalid for obviousness-type double patenting, and Teva appealed.³⁴⁵

In another opinion by Judge Lourie, the Federal Circuit affirmed the district court’s decision on appeal, at one point quoting *Otsuka* that an obviousness-type double patenting analysis “requires identifying some reason that would have led a chemist to modify the earlier compound to make the later compound with a reasonable expectation of success.”³⁴⁶ Teva contended that the case required the court to look only at the differences between the claims at issue and the earlier claims “so that any features held in common between the claims . . . would be excluded from consideration.”³⁴⁷ The Federal Circuit acknowledged that this was an incorrect reading of the case law (specifically, *Amgen Inc. v. F. Hoffmann-La Roche Ltd.*).³⁴⁸ In the Federal Circuit’s view, the differences between the claims must not be considered in isolation but rather as a whole.³⁴⁹

Teva also argued that disclosure in an earlier patent of a claimed intermediate in the synthesis of pemetrexed renders the later composition of matter claims invalid for obviousness-type double patenting, as the latter claims essentially appropriate an already disclosed compound and method of use.³⁵⁰ The Federal Circuit

340. 689 F.3d 1368 (Fed. Cir. 2012).

341. *Id.* at 1373, 1375.

342. *Id.*

343. *Id.* at 1375.

344. *Id.*

345. *Id.* at 1375–76.

346. *Id.* at 1378, 1381 (quoting *Otsuka Pharm. Co. v. Sandoz Inc.*, 678 F.3d 1280, 1297 (Fed. Cir. 2012)).

347. *Id.* at 1377.

348. *Id.* (quoting *Amgen Inc. v. F. Hoffmann-La Roche Ltd.*, 580 F.3d 1340, 1361 (Fed. Cir. 2009)).

349. *Id.*

350. *Id.* at 1378.

disagreed with this argument, noting that the intermediate claimed in the earlier patent and pemetrexed are structurally different, and that it is not necessary to use the claimed intermediate to produce pemetrexed.³⁵¹ In sum, the Federal Circuit held that the district court correctly concluded that the asserted claims are not invalid for obviousness-type double patenting over the earlier issued patents.³⁵²

D. Indefiniteness

In *HTC Corp. v. IPCom GmbH & Co., KG*,³⁵³ the Federal Circuit found that the district court erred in holding that IPCom's asserted claims were indefinite because they claimed both an apparatus and method steps.³⁵⁴ IPCom's claims cover a "handover" in a cellular telephone network, which occurs when a cellular telephone ("mobile station") switches from tower ("base station") to another base station.³⁵⁵ The claims describe elements performed to achieve a handover.³⁵⁶ According to the Federal Circuit, this error resulted from an erroneous claim construction wherein the district court found that the mobile station performed the enumerated functions.³⁵⁷

The Federal Circuit opined that the district court did not adequately examine the claims themselves, which demonstrated that the six previously-recited elements provided functional structure for a separately claimed network—in other words, they were not method steps.³⁵⁸ According to the court, the district court also failed to look to the specification, which would have confirmed that the network, not the mobile station, performs the six enumerated functions.³⁵⁹

While the court acknowledged that the applicant mentioned the "claimed process" during the prosecution history, it found that the district court placed too much emphasis on this because the claim language and the specification did not indicate the applicants were claiming a process.³⁶⁰ Due to its nature as an ongoing negotiation

351. *Id.* at 1380.

352. *Id.*

353. 667 F.3d 1270 (Fed. Cir. 2012).

354. *Id.* at 1277.

355. *Id.* at 1273 (illustrating as an example when a traveler in a car drives between coverage areas).

356. *Id.* at 1274.

357. *Id.* at 1274–75.

358. *Id.*

359. *Id.* at 1275–76.

360. *Id.* at 1276.

with the U.S. Patent Office, prosecution history lacks the clarity of the specification, and should have been given lesser weight.³⁶¹

While HTC failed to preserve the argument, the Federal Circuit confirmed that means-plus-function structure disclosed in a specification must be “more than simply a general purpose computer or microprocessor”—it must also disclose an algorithm for the microprocessor.³⁶² Here, the Federal Circuit did not review this issue, because as a general rule, an appellate court does not consider an issue not passed upon below.³⁶³

E. Reissue Proceedings

Broadening reissue practice allows a patentee to seek broadening of the scope of protection of an issued patent. Effectively, this practice gives the patentee a chance to have a “second bite at the apple,” subject to certain restrictions, one of which is a two-year time limit imposed by 35 U.S.C. § 251(d), i.e., a broadening reissue application must be filed at the PTO within two years after the issuance of the original patent.³⁶⁴ The patentee can also file a continuing broadening reissue application outside the two-year time limit as long as the continuation application is filed while its parent application is still pending.³⁶⁵ But a question arises here as to whether or not the continuation application is still the “second bite at the apple” under 35 U.S.C. § 251, to which the Federal Circuit gave a positive answer in *In re Staats*.³⁶⁶

In *In re Staats*, the continuing reissue application was filed almost seven years after the original patent issued and well outside the two-year limit.³⁶⁷ The Board rejected the continuing reissue application on the ground that the continuing reissue application could not “broaden patented claims beyond the statutory two-year period in a manner *unrelated* to the broadening aspect that was identified within the two-year period.”³⁶⁸ By reversing the Board’s decision, the Federal Circuit held that “after a broadening reissue application has been filed within the two year statutory period, an applicant is ‘not barred from making further broadening changes’ after the two year

361. *Id.*

362. *Id.* at 1280 (quoting *Aristocrat Techs. Austral. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008)).

363. *Id.* at 1281–83.

364. 35 U.S.C. § 251(d) (2006).

365. *See, e.g., In re Staats*, 671 F.3d 1350, 1355 (Fed. Cir. 2012).

366. 671 F.3d 1350 (Fed. Cir. 2012).

367. *Id.* at 1352–53.

368. *Id.* at 1353.

period ‘in the course of [the] prosecution of the reissue application.’”³⁶⁹ Further, the court held that “subsequently filed continuation applications relate back to a previously filed application under 35 U.S.C. § 120 only if each successive continuation application was filed while its parent application was still pending.”³⁷⁰ The Federal Circuit further rejected the Board’s standard that the continuing reissue application must be related to the broadening aspect that was identified within the two-year period because “[a] rule requiring that the new claims be related to the previously submitted claims, or be directed to the same embodiment, would be difficult to administer in a consistent and predictable way.”³⁷¹

Finally, in a concurring opinion, Judge O’Malley further addressed the Board’s policy concern that the broadened claims sought by Staats in the continuing reissue application are inconsistent with the public notice requirement of 35 U.S.C. § 251 because the limited life of the additional claims sought by Staats and the protections afforded by the intervening rights provisions in 35 U.S.C. § 252, etc., suggest that such a policy concern, even if not overstated, “would be an insufficient reed upon which to rest such a sweeping change in the law.”³⁷²

In *Rates Technology v. Mediatix Telecom, Inc.*,³⁷³ the Federal Circuit addressed whether the court should maintain a monetary sanction for discovery violations against the attorney representing the disobedient party.³⁷⁴ James Hicks was the lead attorney for Rates Technology, Inc. (“RTI”), the plaintiff in a patent infringement action involving systems for minimizing the cost of placing long-distance telephone calls.³⁷⁵ Over the course of the litigation, RTI was ordered on four separate occasions to respond to a specific contention interrogatory requested by Mediatix.³⁷⁶ Despite the repeated orders, a magistrate judge determined that RTI never adequately responded to the interrogatory and ultimately found the noncompliance to be willful.³⁷⁷ Accordingly, the magistrate judge recommended not only dismissal but also monetary sanctions of \$86,965.81 against both Mr. Hicks and RTI, divided evenly.³⁷⁸ The district court adopted the

369. *Id.* at 1355.

370. *Id.*

371. *Id.*

372. *Id.* at 1357 (O’Malley, J., concurring).

373. 688 F.3d 742 (Fed. Cir. 2012).

374. *Id.* at 746–48.

375. *Id.* at 744.

376. *Id.*

377. *Id.* at 744–45.

378. *Id.* at 745.

recommendation, and only Mr. Hicks appealed the monetary sanctions imposed against him.³⁷⁹

Mr. Hicks argued that he should not be personally sanctioned, in part because the information needed to answer the interrogatory was not within his personal possession.³⁸⁰ Additionally, Mr. Hicks argued that the discovery orders were not directed personally toward him.³⁸¹ The Federal Circuit rejected the arguments, noting that the record showed both RTI and Mr. Hicks had the information necessary to respond to Mediatix's interrogatories "yet repeatedly and willfully failed to provide adequate responses."³⁸² The Federal Circuit further noted that after ordering Mr. Hicks for a fourth time to provide an adequate response to Mediatix's contention interrogatory, the magistrate judge warned Mr. Hicks "that this is indeed the last opportunity to comply with the directives of this Court and Plaintiff proceeds at its own peril."³⁸³ Obviously, Mr. Hicks did not heed this warning.³⁸⁴

In *Intel Corp., v. Negotiated Data Solutions, Inc.*,³⁸⁵ Negotiated Data Solutions (N-Data) accused Intel of infringing certain semiconductor patents.³⁸⁶ Intel moved for summary judgment of license and non-infringement based on an agreement with N-Data's predecessor in interest, National Semiconductor Corp. ("National").³⁸⁷ N-Data countered that the patents at issue, which were created as reissues after the patents had been assigned away by National, had never been National's property, were N-Data's unique property rights, and therefore were beyond the National and Intel agreement.³⁸⁸ The court's analysis centered on whether Intel's and National's intent had been to cover reissued patents, and the court found that, under California law, the reissued patents were included in the Intel and National agreement.³⁸⁹

In so holding, the Federal Circuit dismissed Intel's argument that 35 U.S.C. § 252 operates to replace a patent nunc pro tunc, as does a certificate of correction.³⁹⁰ The court also determined that, contrary

379. *Id.*

380. *Id.* at 747.

381. *Id.* at 748 n.1.

382. *Id.* at 747.

383. *Id.* at 746.

384. *Id.*

385. 105 U.S.P.Q.2d (BNA) 1157 (Fed. Cir. 2012).

386. *Id.* at 1158.

387. *Id.*

388. *Id.*

389. *Id.* at 1160–62.

390. *Id.* at 1160.

to N-Data's interpretation, 35 U.S.C. § 251 suggests that "in the absence of contrary language in the licensing agreement[,] a license under the patent that is not directed to any specific claims, field of use, or other limited right will extend to the full extent of the protection provided by law."³⁹¹ Finally, the court determined that, given Intel's and National's broad licensing agreement language, the parties intended for reissued patents to be treated as National's patents, meaning that N-Data's reissued patents were, in fact, licensed.³⁹²

In *In re Yamazaki*,³⁹³ Yamazaki appealed a decision of the Board holding that a reissue proceeding may not be used to withdraw a terminal disclaimer from an issued patent.³⁹⁴ During prosecution of the patent at issue, Yamazaki had submitted a terminal disclaimer that dramatically shortened the patent's term (35 months instead of 17 years).³⁹⁵ After amending each independent claim of the application, such that, in Yamazaki's view, the pending claims were patentably distinct over the claims that had been terminally disclaimed, Yamazaki submitted the appropriate petition to withdraw the terminal disclaimer.³⁹⁶ The PTO had not acted on Yamazaki's petition when a Notice of Allowance was issued for the application over a year later.³⁹⁷ Yamazaki paid the requested issue fee even though his petition to withdraw the terminal disclaimer was still pending.³⁹⁸ The PTO then dismissed Yamazaki's petition under the theory that a recorded terminal disclaimer may not be nullified after the patent has issued.³⁹⁹ When Yamazaki filed a reissue application the examiner rejected the oath and declaration for failing to recite an error upon which a reissue application could be based.⁴⁰⁰ Yamazaki appealed this decision to the Board, which denied his claim.⁴⁰¹ The Federal Circuit subsequently affirmed the Board's rejection of the reissue application.⁴⁰²

Yamazaki argued that a terminal disclaimer alters the patent's expiration date, not its term, which would leave the term as

391. *Id.* at 1161.

392. *Id.*

393. 104 U.S.P.Q.2d (BNA) 2024 (Fed. Cir. 2012).

394. *Id.* at 2025.

395. *Id.*

396. *Id.*

397. *Id.*

398. *Id.*

399. *Id.* at 2026.

400. *Id.*

401. *Id.*

402. *Id.* at 2029.

something that may be recovered by correcting an erroneous expiration date imposed in prosecution.⁴⁰³ The PTO argued that the terminal disclaimer becomes part of the original patent at issuance, fixing the patent's term and eliminating the disclaimed term.⁴⁰⁴ In affirming the Board's decision, the court interpreted 35 U.S.C. § 251 and determined that the "term of the original patent" was fixed at issuance by a terminal disclaimer.⁴⁰⁵ In reaching this conclusion, the court examined 35 U.S.C. § 253, finding that a disclaimer applies to the original term of the patent as recited in 35 U.S.C. § 251.⁴⁰⁶ The court then applied its prior interpretation of 35 U.S.C. § 253 (made in the context of claim disavowal) that disclaimed matter is treated as if it never existed.⁴⁰⁷ The court found support for this interpretation in other portions of the Patent Act relating to patent term.⁴⁰⁸

F. Enablement

In *Edwards Lifesciences AG v. CoreValve, Inc.*,⁴⁰⁹ the Federal Circuit confirmed the well-known rule that patents for drugs and medical devices can be enabled based on animal or in vitro testing when experimentation on humans is inappropriate.⁴¹⁰ Here, Edwards had successfully implanted a stent device in a pig according to the procedure described in the asserted patent, and the specification explained that pigs were a standard experimental animal for heart valve research.⁴¹¹ The animal testing was held to be sufficient to establish enablement given that human testing was not feasible.⁴¹²

II. UTILITY

The court tackled a plant patent case in *In re Beineke*,⁴¹³ on direct appeal from the Board.⁴¹⁴ A divided Board rejected two plant patent applications under 35 U.S.C. § 161, which states: "[w]hoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found

403. *Id.* at 2027.

404. *Id.*

405. *Id.*

406. *Id.* at 2027–28.

407. *Id.* at 2028.

408. *Id.*

409. 699 F.3d 1305 (Fed. Cir. 2012), *petition for cert. filed*, 81 U.S.L.W. 3643 (U.S. May 6, 2013).

410. *Id.* at 1309; *see also* MPEP § 2164.02 (8th ed., Rev. Aug. 2012).

411. *Edwards*, 699 F.3d at 1310.

412. *Id.*

413. 690 F.3d 1344 (Fed. Cir. 2012), *cert. denied*, 133 S. Ct. 1243 (2013).

414. *Id.* at 1345.

seedlings, other than . . . a plant found in an uncultivated state, may obtain a patent therefor.”⁴¹⁵ Beineke had noticed two white oak trees, each over 100 years old, in the front yard of someone else’s home.⁴¹⁶ He planted acorns from the trees, asexually reproduced the trees, and then, believing he had discovered new varieties, applied for a plant patent for each tree.⁴¹⁷

The Board, relying on the 1930 Plant Patent Act⁴¹⁸ and its legislative history, found that the trees were not a “result of plant breeding or other agricultural or horticultural efforts” or that Beineke had not “*contributed to the creation of the plant* in addition to having appreciated its uniqueness and asexually reproduced it.”⁴¹⁹ Nor did Beineke meet the 1954 Plant Patent Act⁴²⁰ additions, which resulted in the current form of 35 U.S.C. § 161 adding the “newly found seedlings” allowance because the original fully mature trees were not newly found seedlings.⁴²¹ The Board concluded that 35 U.S.C. § 161 requires that the plant be “somehow the result of human activity,” but specifically did not say how much human activity satisfies the statute.⁴²²

In *Ass’n for Molecular Pathology v. United States Patent & Trademark Office*,⁴²³ the Federal Circuit heard an appeal over whether the plaintiffs-appellees had standing under the Declaratory Judgment Act to challenge patents belonging to Myriad Genetics, Inc. and the Directors of the University of Utah Research Foundation (“Myriad”).⁴²⁴ The plaintiffs-appellees asserted that claims from seven of Myriad’s patents were unpatentable under 35 U.S.C. § 101.⁴²⁵ “All but one of the challenged method claims cover methods of ‘analyzing’ or ‘comparing’ a patient’s BRCA sequence with the normal, or wild-type, sequence to identify the presence of cancer-predisposing mutations.”⁴²⁶ The last was for “a method of screening potential cancer therapeutics.”⁴²⁷ The Federal Circuit rejected these claims:

415. 35 U.S.C. § 161 (2006); *Beineke*, 690 F.3d at 1346.

416. *Beineke*, 690 F.3d at 1346.

417. *Id.*

418. Act of May 23, 1930, ch. 312, 46 Stat. 376.

419. *Beineke*, 690 F.3d at 1348 (emphasis added).

420. Act of Sept. 3, 1954, ch. 1259, 66 Stat. 804.

421. *Beineke*, 690 F.3d at 1352–53.

422. *Id.* at 1354.

423. 689 F.3d 1303 (Fed. Cir.), *cert. granted sub nom.* *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 694 (2012).

424. *Id.* at 1308.

425. *Id.* at 1309.

426. *Id.*

427. *Id.* at 1310.

Simply disagreeing with the existence of a patent on isolated DNA sequences or even suffering an attenuated, non-proximate, effect from the existence of a patent does not meet the Supreme Court's requirement for an adverse legal controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.⁴²⁸

However, with one plaintiff remaining with standing, the court addressed the subject matter of eligibility under 35 U.S.C. § 101.⁴²⁹ The court found that the composition of matter claims are patent-eligible under 35 U.S.C. § 101, but distinguished this from a finding of patentability, which was not discussed.⁴³⁰ The method claims directed toward methods of “analyzing” or “comparing” a patient's BRCA sequence were held invalid under 35 U.S.C. § 101.⁴³¹ As to the claim for a method of screening potential cancer therapeutics, the court held that it “recites patent-eligible subject matter under § 101.”⁴³² On April 15, 2013, the Supreme Court heard oral argument with respect to the petitioner's first question: whether human genes are patent-eligible.⁴³³

There were two issues in *Myspace, Inc. v. GraphOn Corp.*⁴³⁴ The first one is specifically about how broad the claim term “database” should be construed according to the specification and prosecution histories of the patents-in-suit.⁴³⁵ Judge Mayer's dissent addresses the second issue, which is whether there should be a particular order of applying different standards to determine the validity of a patent.⁴³⁶

When the Federal Circuit addressed the first issue, the majority pointed out that the two claim construction approaches, one focusing on the invention as it is described in the patent and the other one focusing on the language used by the prosecuting lawyer in the claims asserted, are not two “competing theories; rather, they are complementary.”⁴³⁷ The first approach helps understanding the actual invention itself whereas the second approach helps determining what precise words the inventor claimed.⁴³⁸ By applying both approaches to the instant case, the Federal Circuit concluded

428. *Id.* at 1323.

429. *Id.* at 1323–24.

430. *Id.* at 1333.

431. *Id.*

432. *Id.* at 1336–37.

433. No. 12-398 (U.S. argued Apr. 15, 2013).

434. 672 F.3d 1250 (Fed. Cir. 2012).

435. *Id.* at 1255.

436. *Id.* at 1264 (Mayer, J., dissenting).

437. *Id.* at 1256 (majority opinion).

438. *Id.*

that the four patents-in-suit are invalid under 35 U.S.C. §§ 102 and 103.⁴³⁹

The second issue addressed by the court was triggered by whether the patents-in-suit claim patentable subject matter under 35 U.S.C. § 101.⁴⁴⁰ Although the district court never decided the patentability of the patents-in-suit under 35 U.S.C. § 101 Judge Mayer's dissenting opinion proposed that "[t]he issue of whether a claimed method meets the subject matter eligibility requirements contained in 35 U.S.C. § 101 is an 'antecedent question' that must be addressed before this court can consider whether particular claims are invalid as obvious or anticipated."⁴⁴¹ The majority rejected Judge Mayer's proposal for two reasons. First, the majority revisited the jurisprudence surrounding the patentable subject matter under 35 U.S.C. § 101 and concluded that the courts have struggled "[w]hen it comes to explaining what is to be understood by 'abstract ideas' in terms that are something less than abstract."⁴⁴² On the one hand, the majority characterized the jurisprudence under 35 U.S.C. § 101 as a "murky morass," while on the other hand the majority argued that the validity criteria under 35 U.S.C. §§ 102, 103, and 112 are better developed and more readily understood, and if properly applied, only address the limited facts of the case at issue.⁴⁴³ Second, the majority contended that in the interest of public policy, courts that "avoid the swamp of verbiage that is 35 U.S.C. § 101 by exercising their inherent power to control the processes of litigation" would "make patent litigation more efficient, conserve judicial resources, and bring a degree of certainty to the interests of both patentees and their competitors in the marketplace."⁴⁴⁴

The topic of patent-eligible subject matter arose once again in *CLS Bank International v. Alice Corp.*⁴⁴⁵ The claims at issue recited a method, a data processing system, and a computer program product, all directed at the problem of mitigating settlement risk between financial institutions.⁴⁴⁶ The question before the court was whether the claims fell into a statutory category of patent-eligible subject matter under 35 U.S.C. § 101 (e.g., a process) or whether the claims

439. *Id.* at 1257–58; *see also* 35 U.S.C. §§ 102(b), 103(a) (2006) (describing how patents are invalid when they are either anticipated or obvious as discerned from the invention itself and the words used to describe it in the claims).

440. *Myspace*, 672 F.3d at 1258.

441. *Id.* at 1264 (Mayer, J., dissenting).

442. *Id.* at 1259 (majority opinion).

443. *Id.* at 1260.

444. *Id.*

445. 685 F.3d 1341 (Fed. Cir.), *reh'g en banc granted*, 484 F. App'x 559 (Fed. Cir. 2012).

446. *Id.* at 1343.

fell into one of the judicially created exceptions to patent-eligible subject matter that are “implicit” in the statute (e.g., abstract ideas).⁴⁴⁷ In ruling that Alice’s claims were, in fact, directed towards patent-eligible subject matter, the majority opinion urged separation of analysis under the four major statutory provisions that determine whether a patent is valid (§§ 101, 102, 103 and 112).⁴⁴⁸ The majority stated, “[i]t should be self-evident that each of these four statutory provisions—§§ 101, 102, 103 and 112—serves a different purpose and plays a distinctly different role.”⁴⁴⁹

A dissenting opinion by Judge Prost, on the other hand, suggested that the “majority resists the Supreme Court’s unanimous directive to apply the patentable subject matter test with more vigor.”⁴⁵⁰ This case has been granted en banc rehearing and thus the decision has been vacated.⁴⁵¹

III. INFRINGEMENT

A. *General Infringement Cases*

The court twice addressed the patent in *Bard Peripheral Vascular, Inc. v. W.L. Gore & Associates, Inc.*⁴⁵² On initial appeal, a divided panel held that the patent at issue, U.S. Patent No. 6,436,135 (the ‘135 patent) is valid and was willfully infringed, and that the trial court “did not abuse its discretion in awarding enhanced damages, attorneys’ fees and costs, and an ongoing royalty.”⁴⁵³ An en banc court returned the case to the panel for reconsideration on the issues of willfulness and the standard of review to be applied for willfulness.⁴⁵⁴

447. *See id.* at 1345–47 (discussing the district court’s analysis of the four claims for patent eligibility under 35 U.S.C. § 101 and the abstract concept framework as well as its ultimate finding that all four patent claims were directed to an abstract concept).

448. *Id.* at 1348, 1352–56.

449. *Id.* at 1348; *see also* 35 U.S.C. § 101 (2006) (providing a broad framework for assessing patent validity); *id.* § 102 (requiring novelty in so far as a patent cannot be previously known or used); *id.* § 103 (dictating that a valid patent must not be obvious); *id.* § 112 (mandating a certain level of specificity both as to the invention and the claim).

450. *CLS Bank*, 685 F.3d at 1356 (Prost, J., dissenting) (pointing to several recent 35 U.S.C. § 101 cases in which the Supreme Court suggested that the Federal Circuit needs to better define its subject matter patentability test).

451. *CLS Bank Int’l v. Alice Corp.*, 484 F. App’x 559 (Fed. Cir. 2012) (per curiam).

452. 682 F.3d 1003 (Fed. Cir. 2012) (en banc), *cert. denied sub nom.* *W.L. Gore & Assocs. V. C.R. Bard, Inc.*, 133 S. Ct. 932 (2013); 670 F.3d 1171 (Fed. Cir. 2012).

453. *Bard Peripheral*, 670 F.3d at 1193.

454. *Bard Peripheral*, 682 F.3d at 1005.

The Federal Circuit noted that “[t]he ultimate question of willfulness has long been treated as a question of fact.”⁴⁵⁵ However, the court has not yet articulated the standard applicable to *Seagate’s* objective test, which overruled the Federal Circuit’s negligence standard for willfulness.⁴⁵⁶ *Seagate* stands for the proposition that proof of willful patent infringement requires a showing of recklessness, which is established through a two-prong test: (1) “a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent”; and (2) “the patentee must also demonstrate that this objectively-defined risk . . . was either known or so obvious that it should have been known to the accused infringer.”⁴⁵⁷ Further, the Federal Circuit stated “[a]fter reviewing the Supreme Court’s precedent in similar contexts, as well as our own, we conclude that simply stating that willfulness is a question of fact oversimplifies the issue.”⁴⁵⁸

The Federal Circuit stated that the court is best suited for making reasonableness determinations.⁴⁵⁹ Specifically, a judge is in the best position to make objective determinations of recklessness as a question of law subject to de novo review, despite underlying mixed questions of law and fact.⁴⁶⁰ This holding is consistent with those in parallel areas of law, such as exceptional cases under 35 U.S.C. § 285,⁴⁶¹ and the Supreme Court’s precedent on “sham” litigation.⁴⁶² “Having clarified the legal standard for *Seagate’s* objective willfulness prong, we conclude that remand is appropriate so that the trial court may apply the correct standard to the question of willfulness in the first instance.”⁴⁶³ Further, the court notes that on remand, the question should be “whether a reasonable litigant could realistically expect” to prevail under the asserted defenses.⁴⁶⁴ “If, in view of the facts, the asserted defenses were not reasonable, only then can the jury’s subjective willfulness finding be reviewed for substantial evidence.”⁴⁶⁵

455. *Id.* at 1006.

456. *Id.* at 1005–06; *see also In re Seagate Tech., LLC*, 497 F.3d 1360 (Fed. Cir. 2007) (en banc).

457. *Bard Peripheral*, 682 F.3d at 1005 (quoting *Seagate*, 497 F.3d at 1371).

458. *Id.* at 1006.

459. *Id.*

460. *Id.* at 1007.

461. *See infra* notes 486–99 and accompanying text (explaining the Federal Circuit’s rationale for what constitutes an “exceptional” case under 35 U.S.C. § 285).

462. *Bard Peripheral Vascular Inc.*, 682 F.3d at 1007.

463. *Id.* at 1008 (citing *Weisgram v. Marley Co.*, 528 U.S. 440, 443 (2000)).

464. *Id.* (internal quotation marks omitted).

465. *Id.*

In *3M Co. v. Avery Dennison Corp.*,⁴⁶⁶ 3M Company (3M) appealed the district court's dismissal of its declaratory judgment action for lack of case-or-controversy.⁴⁶⁷ The Federal Circuit reiterated that the question to be asked in determining whether a declaratory judgment satisfies the case-or-controversy requirement is "whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment."⁴⁶⁸ In this case, 3M alleged the following facts:

(1) a history of patent litigation existed between the two companies (albeit unrelated to the patents-in-suit);⁴⁶⁹

(2) Avery Dennison Corp. ("Avery") had filed a reissue application for both of the patents-in-suit, presumably to place the applications in better condition for litigation;⁴⁷⁰ and

(3) Avery's chief intellectual property counsel made statements that 3M's products "may infringe," that "licenses are available," and that Avery would "send claim charts."⁴⁷¹

3M argued that these facts would support the case-or-controversy requirement.⁴⁷² The Federal Circuit noted that the first two alleged facts would not support 3M's position because of the presumptions that must be made in order to do so.⁴⁷³ Nonetheless, the court ruled that the third fact, if true, would support the case-or-controversy requirement.⁴⁷⁴ In doing so, the court stated that the use of the words "may infringe" rather than "does infringe" is immaterial, because otherwise declaratory judgments could be defeated by avoiding "magic words."⁴⁷⁵

At issue in *Meyer Intellectual Properties Ltd. v. Bodum, Inc.*⁴⁷⁶ were method claims, asserted by Meyer, describing methods for frothing milk using a container with a plunger.⁴⁷⁷ The Federal Circuit noted that the claims were generally broken into four steps: "(1) providing a container that has a height to diameter aspect ratio of 2:1; (2) pouring liquid (e.g., milk) into the container; (3) introducing a

466. 673 F.3d 1372 (Fed. Cir. 2012).

467. *Id.* at 1374.

468. *Id.* at 1376 (quoting *Md. Cas. Co. v. Pac. Coal & Oil Co.*, 312 U.S. 270, 273 (1941)).

469. *Id.* at 1374.

470. *Id.*

471. *Id.* at 1375.

472. *Id.* at 1377.

473. *Id.* at 1380.

474. *Id.* at 1381.

475. *Id.* at 1379.

476. 690 F.3d 1354 (Fed. Cir. 2012).

477. *Id.* at 1359–60.

plunger that includes at least a rod and plunger body with a screen; and (4) pumping the plunger to aerate the liquid.”⁴⁷⁸ No apparatus claims were at issue. At least three of the steps, with the possible exception of the “providing”⁴⁷⁹ step, would necessarily be performed by an end-user of the container (e.g., a customer who had purchased such a container sold by Bodum).⁴⁸⁰ The Federal Circuit concluded that Meyer had presented no evidence of direct infringement within the United States either by Bodum (e.g., during testing of their marketed product) or by an end-user.⁴⁸¹ Moreover, the court rejected the argument that a method is assumed to have been performed by an end-user of an apparatus simply because the apparatus was sold with instructions for use detailing the method.⁴⁸² Thus, Meyer had not shown by a preponderance of evidence, rather than an assumption based on an instruction manual, that direct infringement of a method claim occurred within the United States in order to prove induced infringement by the manufacturer of the apparatus.⁴⁸³ The Federal Circuit reversed-in-part, vacated-in-part, and remanded.⁴⁸⁴

In *Highmark, Inc. v. Allcare Health Management Systems, Inc.*,⁴⁸⁵ the Federal Circuit determined what constitutes an “exceptional” case under 35 U.S.C. § 285.⁴⁸⁶ Highmark filed suit against Allcare seeking a declaratory judgment of non-infringement, invalidity, and unenforceability of all claims of U.S. Patent No. 5,301,105 (the ‘105 patent).⁴⁸⁷ Following transfer to another district court, Allcare counterclaimed for infringement.⁴⁸⁸ Highmark filed a motion for summary judgment of non-infringement, which the district court granted and which was affirmed on appeal without opinion.⁴⁸⁹ While the previous appeal was pending before the Federal Circuit,

478. *Id.*

479. The term “providing a container” was not construed by the district court. However, the Federal Circuit construed the term “providing” to mean “furnishing, supplying, making available, or preparing” and found that either Bodum or the end user could satisfy the providing step. *Id.* at 1369.

480. *Id.*

481. *Id.* at 1371.

482. *Id.*

483. This decision was announced two weeks before the August 31, 2012 decision rendered in the en banc rehearing of *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (per curiam). See *infra* notes 539–50 and accompanying text (discussing *Akamai*).

484. *Bodum*, 690 F.3d at 1379.

485. 687 F.3d 1300 (Fed. Cir. 2012), *petition for cert. filed*, 81 U.S.L.W. (U.S. Mar. 25, 2013) (No. 12-1163).

486. *Id.* at 1308.

487. *Id.* at 1306–07.

488. *Id.* at 1307.

489. *Id.*

Highmark moved for an exceptional case finding and attorneys' fees and expenses under 35 U.S.C. § 285, and also for Rule 11 sanctions against Allcare's attorneys.⁴⁹⁰ The district court found the case exceptional because it concluded that Allcare had pursued frivolous infringement claims, asserted meritless legal positions during litigation, changed its claim construction positions, and made misrepresentations regarding a motion to transfer venue.⁴⁹¹

It is established law under section 285 that absent misconduct in the course of the litigation or in securing the patent, sanctions may be imposed against the patentee only if two separate criteria are satisfied: (1) the litigation is brought in subjective bad faith, and (2) the litigation is objectively baseless.⁴⁹²

An infringement allegation is objectively baseless when a reasonable litigant could not expect success on the merits.⁴⁹³ This standard applies for both patentees and alleged infringers.⁴⁹⁴ Citing *Bard*, the court noted that the "objectively baseless" prong is a question of law based on underlying mixed questions of law and fact, which must be made by the court as a matter of law, and not by the jury.⁴⁹⁵

The Federal Circuit affirmed the district court's finding that the case was exceptional under 35 U.S.C. § 285, but limited the finding to Allcare's allegations of infringement of claim 102 of the '105 patent.⁴⁹⁶ The court reversed the district court's exceptional finding for all of Allcare's other claims and actions.⁴⁹⁷ The Federal Circuit then remanded the case to the district court to determine the amount of attorneys' fees apportionable to only the frivolity of Allcare's allegations of infringement of claim 102 of the '105 patent.⁴⁹⁸ A petition for panel rehearing was denied.⁴⁹⁹

The Federal Circuit addressed an appeal of an ITC decision about two patents in *General Electric Co. v. International Trade Commission*.⁵⁰⁰ For U.S. Patent No. 7,321,221 (the '221 patent), the case turned on

490. *Id.*

491. *Id.* at 1307–08.

492. *Id.* at 1308.

493. *Id.* at 1309 (quoting *Dominant Semiconductors Sdn. Bhd. v. OSRAM GmbH*, 524 F.3d 1254, 1260 (Fed. Cir. 2008)).

494. *Id.*

495. *Id.*

496. *Id.* at 1319.

497. *Id.*

498. *Id.*

499. *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 701 F.3d 1351 (Fed. Cir. 2012) (en banc) (per curiam), *petition for cert. filed*, 81 U.S.L.W. (U.S. Mar. 25, 2013) (No. 12-1163).

500. 685 F.3d 1034 (Fed. Cir. 2012).

whether a pre-set period of time could be a proxy for measurement of a current at a predetermined value.⁵⁰¹ General Electric (GE) asserted a claim drawn toward a wind turbine that included a protective decoupling, which would be recoupled when high currents were generated (e.g., during a short circuit) and lowered to a predetermined value.⁵⁰² The Federal Circuit observed that “[n]o embodiment in the patent, no drawing, no circuitry, shows recoupling solely after a predetermined period of time.”⁵⁰³ Pursuant to 35 U.S.C. § 112, paragraph 2, the court concluded that “a possibly broader disclosure accompanied by an explicit narrow claim shows the inventor’s selection of the narrow claim scope.”⁵⁰⁴ After finding that the specification excludes a pre-set period of time from being used for a claim limitation of a predetermined value for a current, the court then determined that Mitsubishi, the alleged intervenor, does not infringe GE’s ’221 patent claim because Mitsubishi’s turbines do not measure current (or any proxy, such as voltage) and only wait for a given time period to recouple.⁵⁰⁵

With regards to the second patent, U.S. Patent No. 6,921,985 (the ’985 patent), the court reversed the ITC’s finding that GE’s products do not practice the claim at issue and that there is no domestic industry.⁵⁰⁶ Citing earlier precedent, the court reiterated that the term “coupled” requires only a connection, which does not have to be a mechanical or physical connection, such as an electrical connection in a circuit.⁵⁰⁷ Although Mitsubishi asserted that the modifications made in GE’s products may be separately patentable, the court repeated well-settled patent law in holding that “a separately patented invention may indeed be within the scope of the claims of a dominating patent.”⁵⁰⁸ Emphasizing that the patent’s scope is determined independent of whether other aspects of the technology are otherwise patented, the court explained that “[t]he domestic industry requirement is not negated if the technology as

501. *Id.* at 1039.

502. *Id.*

503. *Id.* at 1041.

504. *Id.* Paragraph 2 of 35 U.S.C. § 112 states that “[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112(b) (2006).

505. *Gen. Elec.*, 685 F.3d at 1041–42.

506. *Id.* at 1046.

507. *Id.* at 1045 (quoting *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 992 (Fed. Cir. 1999)).

508. *Id.* at 1046 (citing *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1582 (Fed. Cir. 1996); *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569, 1580 (Fed. Cir. 1984)).

employed in the domestic industry has been modified from its form when the patent was obtained.”⁵⁰⁹

In *Apple Inc. v. Samsung Electronics Co.*⁵¹⁰ (*Apple II*), the Federal Circuit held that “irreparable harm” requires a causal nexus between the allegedly infringing feature of an accused product and sales of those products.⁵¹¹ In a previous and small episode in the ongoing patent litigation between Apple and Samsung, *Apple I*,⁵¹² the issue before the Federal Circuit was whether Apple should be entitled to a preliminary injunction against Samsung’s smartphones and tablets for allegedly infringing four of Apple’s patents (three design patents and one utility patent).⁵¹³ In particular, the Federal Circuit emphasized that “[w]hile the appeal presents substantial issues of law and fact, the decision whether to issue a preliminary injunction is one that is committed to the discretion of the district court, which makes the appellant’s task in overturning that decision a difficult one.”⁵¹⁴

The court reviewed the district court’s application of the traditional four-factor analysis for preliminary injunctive relief to each of the four Apple patents-in-suit and found that an injunction should be entered for one of the patents.⁵¹⁵ The court found that three of the four Apple patents failed the four-factor analysis because Apple did not prove that it would suffer irreparable harm without the preliminary injunction.⁵¹⁶ For the two design patents-in-suit, the court concluded that “[a] mere showing that Apple might lose some insubstantial market share as a result of Samsung’s infringement is not enough.”⁵¹⁷ Further, the court agreed with the district court’s assessment that even assuming that “brand dilution” could arise from design patent infringement, “Apple has not demonstrated that brand dilution is likely to occur.”⁵¹⁸ With respect to the only utility patent-in-suit, the court concluded that “the evidence that Samsung’s employees believed it to be important to incorporate the patented feature into Samsung’s products” is relevant, but not dispositive, because “the relevant inquiry [should] focus on the objective reasons

509. *Id.*

510. 695 F.3d 1370 (Fed. Cir. 2012).

511. *Id.* at 1376.

512. 678 F.3d 1314 (Fed. Cir. 2012).

513. *Id.* at 1319.

514. *Id.* at 1316.

515. *Id.* at 1332. The court affirmed the denial of injunctive relief for the other three patents. *Id.* at 1333.

516. *Id.* at 1323–33.

517. *Id.* at 1324–25.

518. *Id.* at 1325.

as to why the patentee lost sales, not on the infringer's subjective beliefs as to why it gained them (or would be likely to gain them)."⁵¹⁹

In his dissent, Judge O'Malley found the remand of one of the patents to the district court unwarranted because "(1) remand will cause unnecessary delay, which is inconsistent with the very purpose of preliminary injunctive relief; and (2) once we reject its validity analysis, the district court's decision, taken in its entirety, reveals that all of the prerequisites for preliminary injunctive relief are satisfied."⁵²⁰

In *Apple II*, the claims in the patent at issue disclosed the value of Siri, including the "unified search" ability to access multiple data storage locations at once.⁵²¹ According to Apple's own survey, the accused "unified search" feature in the asserted patent was not one of the top five reasons consumers bought the accused Samsung phones.⁵²² According to the court, not being in the top five was "too tenuous" to establish a causal link between the alleged infringement and consumer demand, and therefore was inadequate to support a finding of irreparable harm.⁵²³ If this opinion becomes the general rule, it will limit access to injunctions for many patents that claim non-dominant features.

The Federal Circuit also concluded that "*a plurality of heuristic modules*" meant *all* heuristic modules.⁵²⁴ According to the claim language, each of the heuristic modules must employ a different heuristic algorithm.⁵²⁵ Apple thus argued that if an accused product had some plurality of heuristic modules, each with a different heuristic algorithm, then the product would satisfy the claim language.⁵²⁶ The court said no, concluding that a "plurality" referred to all heuristic modules, and thus every one of the heuristic modules must employ a different heuristic algorithm.⁵²⁷ Under this construction by the Federal Circuit, an infringing product could be converted into a non-infringing product by *adding* another heuristic module.⁵²⁸ That is, if the added heuristic module has a heuristic algorithm that matches one of the existing algorithms, the modified product would not infringe (even though the claim uses

519. *Id.* at 1327–28.

520. *Id.* at 1333–34 (O'Malley, J., concurring-in-part, dissenting-in-part).

521. *Apple II*, 695 F.3d 1370, 1376 (Fed. Cir. 2012).

522. *Id.*

523. *Id.*

524. *Id.* at 1379.

525. *Id.* at 1373, 1379.

526. *Id.* at 1379.

527. *Id.*

528. *See id.* at 1373.

“comprising”).⁵²⁹ Because the claim construction portion of this opinion was not required for the holding (the reversal of the preliminary injunction was based on an inability to show irreparable harm), future panels of the Federal Circuit are likely to ignore this claim construction that turns “a plurality” into “all.”⁵³⁰

In *Arcelormittal France v. AK Steel Corp.*,⁵³¹ the Federal Circuit reaffirmed the primacy of the intrinsic evidence, even when it is in conflict with a well established industry standard.⁵³² The technology at issue was a method for forming steel sheet.⁵³³ In the industry, the ordinary meaning of “hot-rolled steel sheet” precludes subsequent cold-rolling.⁵³⁴ Indeed, experts for both parties as well as a leading steel-making treatise confirmed this industry norm.⁵³⁵

Citing *Phillips v. AWH Corp.*,⁵³⁶ the court emphasized that the specification is the primary guide to claim interpretation.⁵³⁷ In particular, the specification of the asserted patent included many citations to an optional cold-rolling step after hot rolling, including “the sheet according to the invention . . . may be cold-rolled again depending on the final thickness desired.”⁵³⁸ The court reversed the previous ruling by refocusing the claim construction process on a more detailed analysis of the patent specification, and moving away from previous panel decisions’ heavy reliance on dictionaries.

Akamai Technologies, Inc. v. Limelight Networks, Inc.,⁵³⁹ presented the court with the opportunity to reconcile two rules with its decision. First, that direct infringement requires a single entity to perform all the steps of a claimed method. Second, that there can be no indirect infringement in the absence of direct infringement.⁵⁴⁰ The majority opinion did not provide an answer, leaving the law of divided infringement untouched as it applies to liability for direct infringement under 35 USC § 271(a).⁵⁴¹ The decision instead was directed to liability with respect to inducement under 35 USC § 271(b). The majority

529. *See id.*

530. *See id.* at 1373–77.

531. 700 F.3d 1314 (Fed. Cir. 2012).

532. *Id.* at 1319–21.

533. *Id.* at 1317–18.

534. *Id.* at 1320.

535. *Id.*

536. 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

537. *Id.*

538. *Id.*

539. 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (per curiam), *cert. denied*, 133 S. Ct. 1521 (2013); 133 S. Ct. 1520 (2013).

540. *Id.* at 1314.

541. *Id.* at 1307; *see also* W. Keith Robinson, *No “Direction” Home: An Alternative Approach to Joint Infringement*, 62 AM. U. L. REV. 59, 97–99 (2012) (criticizing the court for leaving these issues unanswered).

looked to statutory construction, precedent, legislative history, analogous fields of law, and patent policy in reaching its decision.⁵⁴²

As set forth in the opinion, nothing in 35 U.S.C. § 271(b) invokes a limitation to infringement by a sole entity; rather, inducement of patent infringement “refer[s] most naturally to the acts necessary to infringe a patent, not to whether those acts are performed by one entity or several.”⁵⁴³ The court noted that the text of the statute made no reference as to the number of entities required for inducement, while also focusing on the textual differences between 35 U.S.C. § 271(a) and the inducement provision of 35 U.S.C. § 271(b).⁵⁴⁴ Section 271(a) provides that a person who performs the acts specified in the statute “infringes the patent,”⁵⁴⁵ and 35 U.S.C. § 271(b) provides that whoever “actively induces infringement of a patent shall be liable as an infringer.”⁵⁴⁶ The court focused on this distinction and indicated that requiring proof that there has been direct infringement as a predicate for induced infringement is not the same as requiring proof that a single party would be liable as a direct infringer.⁵⁴⁷ Infringement under 35 U.S.C. § 271(b) thus refers to the acts necessary to infringe the patent, not to the number of entities that perform those acts.⁵⁴⁸

In the end, the court ultimately reversed and remanded the case for further proceedings on the theory of induced infringement, with instructions to the district court on the necessary proof required.⁵⁴⁹ The court held that Limelight can be liable for inducing infringement if it can be shown that: (1) Limelight knew of Akamai’s patent; (2) Limelight performed all but one of the steps of the method claimed in the patent; (3) Limelight induced the content providers to perform the final step of the claimed method; and (4) the content providers in fact performed that final step.⁵⁵⁰

542. *Akamai*, 692 F.3d at 1307–13 (comparing the structure of 35 U.S.C. § 271(a) and 35 U.S.C. § 271(b), analyzing legislative history of the Patent Act, and drawing on tort law).

543. *Id.* at 1309.

544. *Id.* at 1307–08.

545. 35 U.S.C. § 271(a) (2006).

546. *Id.* § 271(b).

547. *Akamai*, 692 F.3d at 1308.

548. *Id.* at 1309.

549. *Id.* at 1318–19.

550. *Id.* at 1318.

B. *Secondary Infringement*

*Toshiba Corp. v. Imation Corp.*⁵⁵¹ involves the alleged infringement by Imation of several patent claims concerning how data is written onto a DVD, specifically, claims that required the writing of a test pattern and lead-out area onto a DVD.⁵⁵² The Federal Circuit found that unfinalized DVDs do not include such a test pattern or lead-out area, and that Toshiba had failed to meet its burden to put forth evidence that the use of unfinalized DVDs was not substantial.⁵⁵³ Therefore, as Toshiba failed to show there was no substantial non-infringing use, the court held that Toshiba failed to prove contributory infringement.⁵⁵⁴

However, the court also held that “the existence of a substantial non-infringing use does not preclude a finding of inducement,” finding the district court to have erred as a matter of law by holding otherwise.⁵⁵⁵ Also, the court held that there was sufficient evidence to create a genuine issue of material fact with regard to direct infringement, which can be shown by circumstantial evidence including that “at least one person directly infringed an asserted claim during the relevant time period.”⁵⁵⁶

With regard to claim construction, the court agreed with Toshiba’s argument that the district court improperly read a “purpose” into the structural elements of the asserted claims.⁵⁵⁷ The court reasoned that the asserted claims were not limited to a *multi*-sided disc, even if all of the embodiments shown in the specification were of multi-sided discs, because the court does not read limitations from the specification into the claims.⁵⁵⁸

C. *Doctrine of Equivalents*

In *Deere & Co. v. Bush Hog, LLC*,⁵⁵⁹ the Federal Circuit addressed when the doctrine of equivalents would “vitiating” a claim element.⁵⁶⁰ The district court had construed the claim term “into engagement with” to require direct contact between two deck walls.⁵⁶¹ The district court reasoned that the deck walls either were in direct contact or

551. 681 F.3d 1358 (Fed. Cir. 2012).

552. *Id.* at 1361.

553. *Id.* at 1362–63.

554. *Id.* at 1363.

555. *Id.* at 1364 (emphasis added).

556. *Id.*

557. *Id.* at 1368.

558. *Id.* at 1368–69.

559. 104 U.S.P.Q.2d (BNA) 1881 (Fed. Cir. 2012).

560. *Id.* at 1884.

561. *Id.* at 1882.

were not, so applying the doctrine of equivalents would impermissibly vitiate the “into engagement with” claim limitation.⁵⁶²

The Federal Circuit warned against viewing a claim limitation as a “binary” choice.⁵⁶³ In particular, “the doctrine of equivalents, by definition, recognizes that an element is missing that must be supplied by the equivalent substitute.”⁵⁶⁴ In this case, a reasonable jury could conclude that a small spacer connecting the two deck walls “represents an *insubstantial difference* from direct contact.”⁵⁶⁵

As the Federal Circuit explained here, “vitiation” is not an exception to the doctrine of equivalents, but a legal conclusion after applying the “insubstantial differences” test or the “function, way, result” test.⁵⁶⁶ For example, “where the accused device contain[s] the antithesis of the claimed structure,” the proposed equivalent fails both of these tests, and is thus not an equivalent.⁵⁶⁷

In *Energy Transportation Group, Inc. v. William Demant Holding A/S, WDH Inc.*,⁵⁶⁸ two patents based on the same original application received different treatment under the doctrine of equivalents, which provides that if the accused device may still infringe the claim if they share every element.⁵⁶⁹ For both patents, the jury found no literal infringement, which the Federal Circuit affirmed.⁵⁷⁰ However, the jury found that Demant infringed the claims of the ’850 Patent under the doctrine of equivalents while the ’749 Patent did not violate the doctrine.⁵⁷¹

The technology of the patents reduced acoustic feedback in programmable digital hearing aids.⁵⁷² At the time the original application was filed in 1986, the programming of the hearing aids was performed by an external computer, reflecting the size and complexity of computing devices at that time.⁵⁷³ Advances in computer technology allowed the accused devices to relocate the programming into the hearing aid itself.⁵⁷⁴ Nonetheless, the court

562. *Id.*

563. *Id.* at 1886.

564. *Id.*

565. *Id.*

566. *Id.*

567. *Id.* (citing *Planet Bingo, LLC v. Gametech Int’l, Inc.*, 472 F.3d 1338, 1345 (Fed. Cir. 2006)).

568. 697 F.3d 1342 (Fed. Cir. 2012), *cert. denied*, 81 U.S.L.W. 3561 (U.S. Apr. 22, 2013).

569. *Id.* at 1352–54, 1358–59.

570. *Id.*

571. *Id.*

572. *Id.* at 1347.

573. *Id.* at 1349.

574. *Id.* at 1353–54 (explaining that the accused device continuously recalculated filter coefficients through electronics inside the hearing aid); *see also* *Hughes Aircraft*

held that the accused device performed the same function as the '850 patent, and in substantially the same way and with the same result.⁵⁷⁵ The Federal Circuit thus confirmed infringement of one of the '850 patent under the doctrine of equivalents.⁵⁷⁶

For the '749 patent, however, prosecution history estoppel precluded the application of the doctrine of equivalents to a key claim limitation.⁵⁷⁷ During prosecution, the claims were amended to require “measuring phase and amplitude” of received signals, which was not performed by the accused devices.⁵⁷⁸ The court explained that it requires “a strong showing—not present on this record—to satisfy the ‘very narrow’ exception to prosecution history estoppel for amendments only tangentially related to the equivalent in question.”⁵⁷⁹

The court did not accept the plaintiff’s argument that the amendment just addressed the examiner’s 35 U.S.C. § 112 rejection by “clarifying” how and where a certain operation occurs.⁵⁸⁰

IV. INEQUITABLE CONDUCT

In *1st Media, LLC v. Electronic Arts, Inc.*,⁵⁸¹ the Federal Circuit reversed the district court’s decision of inequitable conduct based on a failure to prove deliberate fraud under the standard outlined in the court’s previous *Therasense, Inc. v. Becton, Dickinson & Co.*⁵⁸² decision.⁵⁸³

1st Media, LLC (“1st Media”) is the assignee of U.S. Patent No. 5,464,946 (the '926 patent), titled “System and Apparatus for Interactive Multimedia Entertainment.”⁵⁸⁴ On November 13, 1992, Sawyer filed the application on behalf of an inventor, Lewis, and during the prosecution of the application, Sawyer also prosecuted other related patent applications for Lewis, including International Patent Application No. PCT/US93/10930 (the “PCT application”); the application that became U.S. Patent No. 5,325,423 (the '423 patent); and the application that became U.S. Patent No. 5,564,001

Co. v. United States, 140 F.3d 1470, 1472 (Fed. Cir. 1998) (relocating satellite control functions from ground control stations to the satellites).

575. *Energy Transp.*, 697 F.3d at 1354.

576. *Id.* at 1352–54.

577. *Id.* at 1358–60.

578. *Id.*

579. *Id.* at 1359.

580. *Id.*

581. 694 F.3d 1367 (Fed. Cir. 2012).

582. 649 F.3d 1276 (Fed. Cir. 2011) (en banc).

583. *1st Media*, 694 F.3d at 1369.

584. *Id.*

(the '001 patent).⁵⁸⁵ Sawyer or Lewis, however, did not disclose Bush, Baji, or Hoarty references cited in the PCT application, the '423 patent, or the '001 patent, respectively.⁵⁸⁶

On November 29, 2007, 1st Media sued Electronic Arts, Inc. (“Electronic Arts”) for infringement of the '946 patent, and Electronic Arts asserted an inequitable conduct defense, based particularly on the failure to cite the three references.⁵⁸⁷

During trial in the district court, Lewis and Sawyer both testified that they did not appreciate the materiality of the omitted references.⁵⁸⁸ Specifically, Lewis testified that “nondisclosure of the Bush reference was ‘an oversight that got lost in the cracks at that time and wasn’t a conscious decision not to report [it].’”⁵⁸⁹ Sawyer, in his previous declaration, claimed “the Bush publication itself never sparked an awareness or belief in my mind that Bush should be disclosed.”⁵⁹⁰ With respect to the Baji and Hoarty reference, Lewis and Sawyer testified that the technology in the applications that led to the '423 and '001 patents was so distinct from the '946 patent that it did not occur to them to disclose these references.⁵⁹¹ Nonetheless, the district court concluded that these explanations were not credible in view of the extensive overlap in the applications and claims.⁵⁹² The district court found that Lewis and Sawyer knew that the references were material, and further inferred intent to deceive the PTO during prosecution.⁵⁹³ The district court therefore held the '946 patent unenforceable for inequitable conduct.⁵⁹⁴ 1st Media appealed the district court’s decision.⁵⁹⁵

On appeal, the Federal Circuit noted, “*Therasense* explained that in order to show that the patentee acted with the specific intent to deceive the PTO, a defendant must prove ‘that the applicant knew of the reference, knew that it was material, and *made a deliberate decision to withhold it.*’”⁵⁹⁶ The court further stated, “[a] court can no longer infer intent to deceive from non-disclosure of a reference solely

585. *Id.* at 1369–70.

586. *Id.* at 1370.

587. *Id.* at 1370–71.

588. *Id.* at 1371.

589. *Id.*

590. *Id.*

591. *Id.*

592. *Id.* at 1371–72.

593. *Id.* at 1372.

594. *Id.*

595. *Id.*

596. *Id.* (quoting *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290 (Fed. Cir. 2011)).

because that reference was known and material.”⁵⁹⁷ Moreover, the court confirmed, “a patentee need not offer any good faith explanation for his conduct unless and until an accused infringer has met his burden to prove an intent to deceive by clear and convincing evidence.”⁵⁹⁸

In this case, the court found that the record contained no evidence that Lewis or Sawyer deliberately withheld the three references because evidence of selective disclosure was not present.⁵⁹⁹ The court therefore determined that the district court clearly erred in relying on the inability to offer a good faith explanation as a basis to infer a deliberate decision to withhold evidence of the references.⁶⁰⁰ The court reversed the district court’s decision of inequitable conduct.⁶⁰¹

In *Outside the Box Innovations, LLC v. Travel Caddy, Inc.*,⁶⁰² the Federal Circuit again reversed the district court’s decision of inequitable conduct based on a failure to prove deliberate fraud.⁶⁰³

During the declaratory judgment patent suit filed by Outside the Box Innovations, LLC against Travel Caddy, the district court determined Travel Caddy’s United States Patent No. 6,823,992 (the ’992 patent) and its continuation Patent No. 6,991,104 (the ’104 patent) unenforceable “on the grounds that (1) Travel Caddy did not disclose to the PTO the existence of the litigation on the ’992 patent during prosecution of the ’104 application, and (2) Travel Caddy paid small entity fees to the PTO but was not entitled to small entity status.”⁶⁰⁴

With respect to the failure to disclose the existence of the litigation of the ’992 patent, the district court inferred deceptive intent from the fact of non-disclosure, stating:

The Court infers from the facts in evidence that Travel Caddy intended to deceive the PTO when it failed to disclose the current litigation during the pendency of the ’104 Patent. Nelson drafted the ’104 and ’992 Patents, was the prosecuting attorney for both patents, and has been heavily involved as counsel in the current litigation. Furthermore, Nelson is clearly an experienced patent attorney and testified as to his awareness of Rule 56 and Section 2001 of the MPEP.⁶⁰⁵

597. *Id.* at 1372–73.

598. *Id.* at 1373.

599. *Id.* at 1375.

600. *Id.*

601. *Id.* at 1377.

602. 695 F.3d 1285 (Fed. Cir. 2012) (per curiam).

603. *Id.* at 1292.

604. *Id.* at 1289–90.

605. *Id.* at 1290.

The Federal Circuit, however, disagreed and concluded that the district court's ruling of inequitable conduct was in error because there was not clear and convincing evidence of withholding of information material to patentability of the claims in the application as required by the decision in *Therasense*.⁶⁰⁶ Specifically, the Federal Circuit determined that there was no suggestion of deliberate action to withhold it in order to deceive the PTO examiner.⁶⁰⁷

With respect to claiming small entity status and paying reduced PTO fees, the Federal Circuit again determined that this ruling was in error in view of the lack of suggestion of deliberate action to withhold information to pay the reduced PTO fees.⁶⁰⁸ The Federal Circuit therefore reversed and vacated the district court's decision of inequitable conduct and unenforceability of the patents at issue.⁶⁰⁹

V. CLAIM CONSTRUCTION

A. Claim Language

In *In re Abbott Diabetes Care Inc.*,⁶¹⁰ the Federal Circuit vacated the Board's rejection of the claims on the ground that the Board's construction of the claims was "unreasonable and inconsistent with the specification."⁶¹¹ The case involved numerous claims on two patents owned by Abbott—U.S. Patents Nos. 6,175,752 (the '752 patent) and 6,565,509 (the '509 patent).⁶¹² The two patents contain a common specification that describes "methods and devices for monitoring glucose levels for diabetics," primarily through contact pads placed on the skin.⁶¹³ The claimed sensor unit or assembly comprises an "electrochemical sensor," and the claimed sensor unit further recites that the electrochemical sensor is "in a substantially fixed position."⁶¹⁴

The Board determined whether the claims were anticipated through a two-step analysis. The first step is to perform a claim construction analysis, and the second step involves comparing the claims to the prior art.⁶¹⁵ Claim construction is a question of law

606. *Id.* at 1291.

607. *Id.* at 1292.

608. *Id.* at 1294–95.

609. *Id.* at 1289.

610. 696 F.3d 1142 (Fed. Cir. 2012).

611. *Id.* at 1151.

612. *Id.* at 1143.

613. *Id.* at 1143–44 (internal quotation marks omitted).

614. *Id.* at 1144 (emphasis omitted); U.S. Patent No. 6,565,509 (filed Sept. 21, 2000); U.S. Patent No. 6,175,752 (filed Apr. 30, 1998).

615. *See In re Aoyama*, 656 F.3d 1293, 1296 (Fed. Cir. 2011).

reviewed de novo.⁶¹⁶ Thus, in *Abbott*, the Board first had to determine the correct construction of the terms “electrochemical sensor” and “substantially fixed position,” and specifically whether proper construction of the former term includes wires and cable.⁶¹⁷

The only mention of cables and wires in the Abbott patents’ specification is a statement criticizing the external cables and wires of the prior art, and the embodiments in Abbott’s patents do not include any external cables or wires connecting to the sensor control unit.⁶¹⁸ Nonetheless, the Board determined that in the absence of a more express limiting statement, the broadest reasonable interpretation consistent with the specification included the external cables and wires.⁶¹⁹ The Board also found that the term “substantially fixed” would be understood “to allow for some movement sensor relative to the position of the sensor control unit.”⁶²⁰ Having construed the claims, the Board concluded that the wires of a prior art are part of the recited sensor and that, although the wires allow for some movement, “they are still somewhat restrained in movement, and are therefore ‘substantially fixed’” as recited in the claims at issue.⁶²¹ Thus, the Board affirmed the examiner’s rejections.⁶²² Abbott filed requests for rehearing, but the Board rejected Abbott’s request for the same reasons.⁶²³

On appeal to the Federal Circuit, Abbott argued that the Board improperly relied on language in its specifications.⁶²⁴ The Federal Circuit agreed with Abbott and vacated the Board’s decisions as to the patentability of Abbott’s independent claims at issue and ordered the Board to apply the correct claim construction on remand.⁶²⁵ In making the decision, the Federal Circuit recognized that the specification “does not contain an explicit statement disclaiming electrochemical sensors with external cables or wires.”⁶²⁶ The court, however, pointed out its prior decision in *Irdeto Access, Inc. v. Echostar Satellite Corp.*,⁶²⁷ which held that “[e]ven when guidance is not provided in explicit definitional format, ‘the specification may define

616. *See id.*

617. *Abbott*, 696 F.3d at 1146.

618. *Id.*

619. *Id.*

620. *Id.*

621. *Id.* at 1147.

622. *Id.*

623. *Id.* at 1147–48.

624. *Id.*

625. *Id.* at 1150.

626. *Id.* at 1149.

627. 383 F.3d 1295 (Fed. Cir. 2004).

claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.”⁶²⁸ Thus, the court determined that in the case at hand, an explicit disavowal was not necessary because the specifications “repeatedly, consistently, and exclusively” depict an electrochemical sensor without external cables or wires.⁶²⁹

With respect to the Board’s prior construction of the term “substantially fixed,” the issue was “whether ‘some movement’ includes the degree of movement in the [prior art] such that the sensor need only be ‘somewhat restrained.’”⁶³⁰ The Federal Circuit disagreed with the Board and concluded that the degree of movement allowed in the prior art exceeds both the movement allowable under the Board’s construction of the term “substantially fixed” and the movement described in the specification.⁶³¹

In *Flo Healthcare Solutions, LLC v. Kappos*,⁶³² the Federal Circuit addressed when provisions of 35 U.S.C. § 112, ¶ 6 apply to a claim limitation.⁶³³ The basic rule is simple: “use of the word ‘means’ creates a rebuttable presumption that the drafter intended to invoke 35 U.S.C. § 112, ¶ 6, while failure to use the word ‘means’ creates the rebuttable presumption that the drafter did not intend the claims to be governed by 35 U.S.C. § 112, ¶ 6.”⁶³⁴ In particular, in the absence of the term “means,” the court is unwilling to apply 35 U.S.C. § 112, ¶ 6 “without a showing that the limitation is devoid of anything that can be construed as structure.”⁶³⁵

Here, Flo Healthcare had a patent in inter partes reexamination,⁶³⁶ and an important term affecting patentability was “a height adjustment mechanism for altering the height of the horizontal tray.”⁶³⁷ Without the magic word “means,” the Federal Circuit imposed the strong presumption against invoking 35 U.S.C. § 112, ¶ 6.⁶³⁸ Although the generic term “mechanism” conveys no structure by itself, the term “height adjustment mechanism” conveyed enough structure.⁶³⁹ The term “height adjustment mechanism” appeared in the written

628. *Id.* at 1300 (quoting *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001)).

629. *Abbott*, 696 F.3d at 1150 (quoting *Iredto*, 383 F.3d at 1303).

630. *Id.* at 1150–51.

631. *Id.* at 1151.

632. 697 F.3d 1367 (Fed. Cir. 2012).

633. *Id.* at 1372–73.

634. *Id.* at 1373.

635. *Id.* at 1374.

636. *Id.* at 1369.

637. *Id.* at 1372.

638. *Id.* at 1373–74.

639. *Id.* at 1374–75.

description twenty-four times, designating structures including “a rack and pinion mechanism, a cable and pulley mechanism, a ratchet mechanism, a ball screw mechanism.”⁶⁴⁰ The court also looked at dictionaries, and concluded that the word “adjustment” conveyed structure.⁶⁴¹

In sum, the Federal Circuit really does limit the application of 35 U.S.C. § 112, ¶ 6 when the claim language does not include the word “means.”⁶⁴²

In *Thorner v. Sony Computer Entertainment America LLC*,⁶⁴³ Thorner appealed the district court’s construction of the terms “attached to said pad” and “flexible” in its patent asserted against Sony.⁶⁴⁴ Because the losing party asked the Federal Circuit to review the claim construction, case law did not preclude the Federal Circuit from deciding these claim construction issues that were not implicated by the district court’s judgment.⁶⁴⁵

The district court had limited the word “attached” to mean attached to the outside of an object, because (according to the district court) the specification “consistently use[d] the term ‘attached’ to indicate affixing an actuator to the outer surface of an object and use[d] the term ‘embedded’ when referring to an actuator inside an object.”⁶⁴⁶ On appeal, the Federal Circuit noted that the words of a claim are generally given their ordinary meaning except “[1] when a patentee sets out a definition and acts as his own lexicographer, or [(2)] when the patentee disavows the full scope of a claim term either in the specification or during prosecution.”⁶⁴⁷

The court found that the use of the term “attached” in Thorner’s specification did not meet either of these exceptions.⁶⁴⁸ With regard to the first exception, “the patentee must ‘clearly express an intent’ to redefine the term”; it is not enough to use a word in the same manner in all embodiments.⁶⁴⁹ Based on its findings that the specification did not redefine “attached,” nor (from the second

640. *Id.* at 1374.

641. *Id.*

642. *Id.*

643. 669 F.3d 1362 (Fed. Cir. 2012).

644. *Id.* at 1364–65.

645. *Id.* at 1369. The parties previously stipulated to a judgment of non-infringement. *Id.* at 1364.

646. *Id.* at 1365.

647. *Id.*

648. *Id.*

649. *Id.*

exception) did it disavow claim scope, the court concluded that the term “attached” should be given its plain and ordinary meaning.⁶⁵⁰

The district court also had construed the term “flexible” to mean “capable of being noticeably flexed with ease.”⁶⁵¹ The Federal Circuit found that neither the claims nor the specification required this meaning, noting instead that the specification only requires a semi-rigid structure.⁶⁵² According to the court, “the degree of rigidity that amounts to ‘semi-rigid,’ is part of the infringement analysis, not part of the claim construction.”⁶⁵³

In *SanDisk Corp. v. Kingston Technology Co.*,⁶⁵⁴ defendant Kingston had successfully argued before the district court that “a” and “an” should be construed to mean exactly one for certain claim elements.⁶⁵⁵ The Federal Circuit reversed, pointing out:

[T]his court has repeatedly emphasized that an indefinite article “a” or “an” in patent parlance carries the meaning of “one or more” in open-ended claims containing the transitional phrase “comprising.” That “a” or “an” can mean “one or more” is best described as a rule, rather than merely as a presumption or even a convention. *The exceptions to this rule are extremely limited: a patentee must “evince[] a clear intent” to limit “a” or “an” to “one.” The subsequent use of definite articles “the” or “said” in a claim to refer back to the same claim term does not change the general plural rule, but simply reinvoles that non-singular meaning.*⁶⁵⁶

Here, the claims recited “at least *a user data portion* and *an overhead portion*.”⁶⁵⁷ Kingston argued that the specification disclosed only a single user data portion and a single overhead data portion,⁶⁵⁸ and the district court reasoned that subsequent use of “the” and “said” in reference to “user data portion” and “overhead data portion” “leaves no doubt that [the claim] covers a method involving only one user data portion and one overhead portion.”⁶⁵⁹

Both of these arguments are contrary to basic rules of claim construction and contrary to the factual evidence in the case.⁶⁶⁰ First, “even where a patent describes only a single embodiment, claims will

650. *Id.* at 1368.

651. *Id.* at 1369.

652. *Id.*

653. *Id.*

654. 695 F.3d 1348 (Fed. Cir. 2012).

655. *Id.* at 1360.

656. *Id.* (alterations in original) (quoting *Baldwin Graphic Sys., Inc. v. Siebert*, 512 F.3d 1338, 1342 (Fed. Cir. 2008)).

657. *Id.* at 1359 (emphasis added).

658. *Id.* at 1360.

659. *Id.*

660. *See id.* at 1360–61.

not be ‘read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.’”⁶⁶¹ Here, certain dependent claims further limited the scope to embodiments that “include only one user data portion and only one overhead portion.”⁶⁶² Based on claim differentiation, there is a strong presumption that the independent claims should not be limited to a single user data portion and a single overhead data portion as in the dependent claims.⁶⁶³

Furthermore, with a claim, later use of “the” or “said” to refer back to an earlier term in the claim does not limit that earlier claim term to the singular.⁶⁶⁴ For now, patent prosecutors can still rely on “a” and “an” to mean “one or more.”⁶⁶⁵

In *ePlus, Inc. v. Lawson Software, Inc.*,⁶⁶⁶ the Federal Circuit affirmed the well-known rule that to infringe a method claim, a party must actually perform all of the method steps.⁶⁶⁷ Here, ePlus’s brief always referred “to the *capability* of the accused system, not an actual act of infringement,” thereby failing to provide any evidence that Lawson’s customers performed the data converting step.⁶⁶⁸ The court concluded that “[b]ecause ePlus did not offer any evidence that showed or even suggested that anybody performed the converting data step, no reasonable jury could have concluded that claim 28 was infringed—either directly or indirectly.”⁶⁶⁹

The Federal Circuit also held that certain claims using means-plus-function language were indefinite because the specification did not disclose any structure corresponding to “means for processing.”⁶⁷⁰ Although the district court identified three passages allegedly showing structure for the “means for processing,” none provided actual structure.⁶⁷¹ In particular, stating that such a means exists does not convey structure, nor does a black box labeled “Purchase Orders” in a figure.⁶⁷²

661. *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)).

662. *Sandisk*, 695 F.3d at 1361.

663. *Id.*

664. *Id.* at 1360 (citing *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338 (Fed. Cir. 2008)); *see also* MPEP § 2173.05 (8th ed. Rev. 9, Aug. 2012).

665. *Sandisk*, 695 F.3d at 1360.

666. 700 F.3d 509 (Fed. Cir. 2012).

667. *Id.* at 521.

668. *Id.*

669. *Id.* at 522.

670. *Id.* at 517.

671. *Id.* at 518.

672. *Id.*

ePlus also argued that it was not required to disclose a structure for the means for processing because implementing that functionality was already known prior to the patent.⁶⁷³ The Federal Circuit clarified that the indefiniteness inquiry looks at the “*disclosure* of the patent to determine if one of skill in the art would have understood that *disclosure* to encompass [the required structure].”⁶⁷⁴ By attempting to claim “everything that generates purchase orders under the sun” and not identifying any hardware, source code, or algorithms, the system claims were indefinite.⁶⁷⁵

Additionally, the case provides a warning to litigators about damages experts.⁶⁷⁶ An expert who conveys a lopsided view may be excluded as unreliable.⁶⁷⁷ ePlus had previously entered into five settlement agreements, which could have been relevant to an appropriate royalty rate in the current case.⁶⁷⁸ The licensing arrangements in the various settlements were vastly different,⁶⁷⁹ and ePlus’s expert essentially ignored the three settlements with small amounts.⁶⁸⁰ That was one of the reasons that the district court found the analytical methods of ePlus’s expert to be “flawed and unreliable.”⁶⁸¹ In addition, the licenses were obtained during litigation, and included lump sums for multiple patents.⁶⁸² Under an abuse of discretion standard, the Federal Circuit had adequate evidence to affirm the district court’s exclusion of the expert.⁶⁸³

In addition to excluding ePlus’s only damages expert, the district court also precluded ePlus from presenting any evidence of damages at trial.⁶⁸⁴ The district court was concerned that last-minute additions of damages evidence would cause unacceptable delay and expose Lawson to prejudice.⁶⁸⁵ The Federal Circuit affirmed this ruling as well, under the same abuse of discretion standard.⁶⁸⁶

673. *Id.* at 519.

674. *Id.* (alteration in original) (quoting *Aristocrat Techs. Austral. Pty. Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1337 (Fed. Cir. 2008)).

675. *Id.*

676. *See id.* at 522–23 (affirming exclusion of the testimony of a damages expert when the district court had found the expert’s methodology to be “flawed and unreliable”).

677. *Id.* at 523.

678. *Id.* at 522–23.

679. The highest paying agreement was over seventy times larger than the smallest. *Id.* at 523.

680. *Id.*

681. *Id.*

682. *Id.*

683. *Id.*

684. *Id.*

685. *Id.*

686. *Id.*

In *Technology Patents LLC v. T-Mobile (UK) Ltd.*,⁶⁸⁷ there were more than 100 defendants, most of which were foreign cellular carriers.⁶⁸⁸ In an unusual move, the Federal Circuit affirmed the dismissal of the foreign defendants on the merits rather than for lack of personal jurisdiction.⁶⁸⁹

The district court dismissed the case against the foreign carriers for lack of personal jurisdiction, and granted summary judgment of no infringement for the defendant domestic cellular carriers.⁶⁹⁰ The Federal Circuit first affirmed the summary judgment of no infringement for the domestic carriers based on a thorough review of the claim language.⁶⁹¹ Recognizing that the same analysis of the merits would demonstrate non-infringement by the foreign carriers,⁶⁹² the court affirmed the dismissal against the foreign carriers on that ground, thus avoiding a complex personal jurisdiction analysis for each of the large number of foreign carriers.⁶⁹³

The case of *MagSil Corp v. Hitachi Global Storage Technologies, Inc.*⁶⁹⁴ involved a single patent-in-suit—U.S. Patent No. 5,629,922 (the '922 patent). The '922 patent describes technology commonly used in read-and-write heads of magnetic hard-drives.⁶⁹⁵ Among other things, read-and-write heads are responsible for reading data, encoded in the form of magnetic bits, from a magnetic hard drive.⁶⁹⁶ The '922 patent describes one way to do so: by bringing a sensor with two ferromagnetic layers within close proximity of a magnetic bit. The magnetic bit causes a change in alignment of the respective magnetizations of the ferromagnetic layers, which in turns causes a change in resistance within the sensor.⁶⁹⁷ The '922 patent claims such a device, and in particular claims that reversal of relative alignment of the magnetization directions “causes a change in the resistance by at least 10% at room temperature” (claim 1, representative of the two asserted independent claims).⁶⁹⁸

687. 700 F.3d 482 (Fed. Cir. 2012), *petition for cert. filed*, 81 U.S.L.W. 3629 (U.S. Apr. 26, 2013) (No. 12-1292).

688. *Id.* at 489.

689. *Id.* at 502–03.

690. *Id.* at 489.

691. *Id.* at 497–500.

692. *Id.* at 502–03.

693. *Id.* at 503 & n.1.

694. 687 F.3d 1377 (Fed. Cir. 2012).

695. *Id.* at 1378.

696. *Id.* at 1379.

697. *Id.*

698. *Id.*

At issue in the case was whether the open-ended claim language (in particular, the claim term “causes a change in the resistance by at least 10% at room temperature”) was enabled by the specification.⁶⁹⁹ The court noted that “[t]he scope of the claims must be less than or equal to the scope of the enablement to ensure that the public knowledge is enriched by the patent specification to a degree at least commensurate with the scope of the claims.”⁷⁰⁰ The court further noted that MagSil, the plaintiff and the sole-licensee of the ’922 patent, advocated for a broad construction the claim term, and had not “disclaimed the asserted claims’ infinite scope in the area of resistive change.”⁷⁰¹ The specification, however, stated that a change in resistance of “*as much as 11.8% change was seen.*”⁷⁰² For this reason, the court held the asserted claims of the ’922 patent invalid for lack of enablement, stating, “the specification must contain sufficient disclosure to enable an ordinarily skilled artisan to make and use the entire scope of the claimed invention at the time of filing.”⁷⁰³ In this case, MagSil had failed to show enablement for much greater changes of resistances (e.g., 100% or 1000%) that nevertheless fell within the scope of the claimed invention.

B. Means-Plus-Function Claiming

In *Ergo Licensing, LLC v. CareFusion 303, Inc.*,⁷⁰⁴ the Federal Circuit weighed in on the validity of computer-implemented means-plus-function claims. More specifically, the Federal Circuit held that in order to meet the claim definiteness requirements under 35 U.S.C. § 112, paragraph 2, a computer related means-plus-function term requires disclosure in the specification of either a corresponding structure or an algorithm.⁷⁰⁵

Ergo accused CareFusion of infringing claims in Ergo’s patent relating to an infusion system for use with a medical patient.⁷⁰⁶ In construing the claims, the district court held that the terms “control means” and “programmable control means” are indefinite.⁷⁰⁷ Ergo’s patent describes an infusion system used to meter and simultaneously

699. *Id.* at 1383.

700. *Id.* at 1381 (quoting *Sitrick v. Dreamworks, LLC*, 516 F.3d 993, 999 (Fed. Cir. 2008)).

701. *Id.*

702. *Id.* at 1379 (emphasis added).

703. *Id.* at 1381.

704. 673 F.3d 1361 (Fed. Cir. 2012).

705. *Id.* at 1364–65.

706. *Id.* at 1362.

707. *Id.* at 1363.

deliver fluids from multiple fluid sources into a patient's body.⁷⁰⁸ Each fluid is individually metered using adjusting means coupled to a central device. Each different fluid may be discharged at a different rate.⁷⁰⁹ The terms "control means" and "programmable control means" are used in connection with the control device.

Ergo argued that general disclosure of a "control device" lends sufficient definiteness to the claims because a control device is a generic structure known to those skilled in the art.⁷¹⁰ Moreover, Ergo contended that disclosure of an algorithm was not required because a general purpose computer can perform the function.⁷¹¹

The Federal Circuit rejected both arguments, maintaining that Ergo must disclose more than just a "general purpose computer" that can be programmed to perform different tasks in different ways.⁷¹² Means-plus-function terms related to computer implementation must disclose a corresponding algorithm to properly define their scope.⁷¹³ The court said that patent claims will be held invalid when the specification fails to disclose either a structure or an algorithm.⁷¹⁴ With respect to the claims at issue, the Federal Circuit affirmed that the means-plus-function claims were indefinite.⁷¹⁵

Judge Newman issued a strong dissent, noting that thousands of patented claims have issued in the area of "electronic cyber-assisted technologies" with similar language.⁷¹⁶ She further emphasized that "PTO expertise in such matters as patent examination for statutory compliance warrants deference."⁷¹⁷ In the end, the Federal Circuit affirmed the district court's decision in holding that means-plus-function claims must have a corresponding structure described in the specification in order to be definite under 35 U.S.C. § 112.

VI. REMEDIES

A. Damages

In *LaserDynamics, Inc. v. Quanta Computer, Inc.*⁷¹⁸, the Federal Circuit addressed several aspects of computing a reasonable royalty. One

708. *Id.* at 1362.

709. *Id.*

710. *Id.* at 1363.

711. *Id.*

712. *Id.* at 1364.

713. *Id.*

714. *Id.* at 1364–65.

715. *Id.* at 1365.

716. *Id.* at 1365–66 (Newman, J., dissenting).

717. *Id.* at 1367.

718. 694 F.3d 51 (Fed. Cir. 2012).

aspect of computing a reasonable royalty is the proper date of the “hypothetical negotiation.”⁷¹⁹ Despite the clear rule that “the date of the hypothetical negotiation is the date that the infringement began,”⁷²⁰ the district court set the date as August, 2006, the date the lawsuit was filed.⁷²¹ The lower court reasoned that August, 2006 was the proper date because Quanta was not aware of the patent until that date, and Quanta was accused of active inducement, which requires knowledge of the patent.⁷²²

The Federal Circuit clarified the key difference between when infringement began versus when Quanta first became liable for infringement.⁷²³ In particular, the Federal Circuit identified 2003 as the hypothetical negotiation date, and reasoned that, “to permit a later notice date to serve as the hypothetical negotiation date, the damages analysis would be skewed because, as a legal construct, we seek to pin down how the prospective infringement might have been avoided via an out-of-court business solution.”⁷²⁴

The Federal Circuit also addressed when the “entire market value” rule applies.⁷²⁵ The short answer is not very often. When a patented feature is part of a larger product, the entire market value rule applies only when “the demand for the *entire product* is attributable to the patented feature.”⁷²⁶ Here, the LaserDynamics patented feature relating to optical drives was not shown to drive demand for laptop computers.⁷²⁷ The Federal Circuit held that it was not enough to show that the patented feature was “valuable, important, or even essential to the use of the laptop computer.”⁷²⁸ Indeed, if that were sufficient, “a plethora of features of a laptop computer could be deemed to drive demand for the entire product.”⁷²⁹

Instead of using the “entire market value,” the court applied the “smallest salable patent-practicing unit” standard.⁷³⁰ Here, the patented feature applies to an optical disk drive, and thus the

719. *Id.* at 75–76.

720. *Id.* at 75; *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1123 (S.D.N.Y. 1970).

721. *LaserDynamics*, 694 F.3d at 75.

722. *Id.*

723. *Id.* at 75–76.

724. *Id.* at 76.

725. *Id.* at 66–70.

726. *Id.* at 67–68.

727. *Id.* at 68.

728. *Id.*

729. *Id.*

730. *Id.* at 67–68; *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 283, 287–88 (N.D.N.Y. 2009).

smallest salable patent-practicing unit is an optical disk drive.⁷³¹ The “commodity-type” disk drives provided by Quanta were the proper royalty base, not laptop computers that include the optical drives.⁷³²

The Federal Circuit also addressed what types of existing licenses are most probative for a royalty rate calculation.⁷³³ First, licenses entered as part of settlement agreements to terminate litigation are typically not probative.⁷³⁴ In this case, LaserDynamics focused on one specific settlement agreement that was entered by a defendant facing a “severe legal and procedural disadvantage given the numerous harsh sanctions imposed on it by the district court.”⁷³⁵ The Federal Circuit referred to this license as “the least reliable license by a wide margin.”⁷³⁶

A key criterion for identifying reliable license agreements is the relevance to the patented technology.⁷³⁷ In particular, actual licenses to the asserted patent are highly probative because they “reflect the economic value of the patented technology in the marketplace.”⁷³⁸ In contrast, licenses with a “vague comparability” are not probative.⁷³⁹ Here, the Federal Circuit rejected LaserDynamics’ proposal to prove a royalty rate based on two other DVD-related patent licensing programs, because there was insufficient evidence to show they were comparable to the asserted patent.⁷⁴⁰ These unrelated patent licenses were particularly irrelevant because LaserDynamics had multiple license agreements for the actual patented technology.⁷⁴¹

B. Injunctions

Injunctions in patent cases are unique to patent law, so the procedures for applying a preliminary injunction follow Federal Circuit precedent. The Federal Circuit applied this in *Revision Military, Inc. v. Balboa Manufacturing Co.*⁷⁴² In the Federal Circuit, the likelihood of success is determined by a simple preponderance of the evidence standard, and thus the court rejected the district court’s application of a heightened standard appropriate in the Second

731. *LaserDynamics*, 694 F.3d at 68–69.

732. *Id.*

733. *Id.* at 77–81.

734. *Id.* at 77–78; *see, e.g.*, *Rude v. Westcott*, 130 U.S. 152, 164 (1889); *Deere & Co. v. Int’l Harvester Co.*, 710 F.2d 1551, 1557 (Fed. Cir. 1983).

735. *LaserDynamics*, 694 F.3d at 77–78.

736. *Id.*

737. *Id.* at 79–80.

738. *Id.* at 79.

739. *Id.*

740. *Id.* at 80.

741. *Id.*

742. 700 F.3d 524 (Fed. Cir. 2012).

Circuit.⁷⁴³ However, the weight of the likelihood is a factor in the ultimate balance of equities.⁷⁴⁴

C. *Invalidity Defense*

In *Cummins, Inc. v. TAS Distributing Co.*,⁷⁴⁵ the Federal Circuit precluded invalidity arguments that could have been made in an earlier suit for breach of a license agreement.⁷⁴⁶

TAS owned a patent on a certain diesel engine technology, and Cummins was a licensee.⁷⁴⁷ Earlier, TAS had sued Cummins for “failing to make ‘all reasonable efforts’ to market and sell the TAS technology.”⁷⁴⁸ Cummins largely prevailed, arguing that it had made reasonable efforts.⁷⁴⁹

Later, in a new action, Cummins sued for a declaration that the TAS patent was invalid.⁷⁵⁰ Because Cummins could have raised patent invalidity as a defense or counterclaim in the breach of contract suit, the Federal Circuit affirmed the application of res judicata according to the law of the regional circuit.⁷⁵¹ The Federal Circuit noted “Illinois courts have consistently held that the bar of res judicata extends not only to questions actually decided, but also to all defenses and counterclaims, which might have been presented in the prior litigation.”⁷⁵²

VII. MISCELLANEOUS

A. *Assignment, Inventorship, and Employment Agreements*

In *Preston v. Marathon Oil Co.*,⁷⁵³ the court looked at an Intellectual Property assignment clause and exclusion of an at-will employment agreement.⁷⁵⁴ After beginning an at-will employment with a Marathon subsidiary, Preston signed an employment agreement (the “Agreement”) that defined “Intellectual Property” as including “property *made or conceived* by EMPLOYEE (or for which EMPLOYEE files a patent or copyright application) within one year

743. *Id.* at 525–26.

744. *Id.* at 526.

745. 700 F.3d 1329 (Fed. Cir. 2012).

746. *Id.* at 1331.

747. *Id.*

748. *Id.* at 1332.

749. *Id.*

750. *Id.* at 1333.

751. *Id.*

752. *Id.* at 1335.

753. 684 F.3d 1276 (Fed. Cir. 2012).

754. *Id.* at 1278.

after termination of employment with MARATHON.”⁷⁵⁵ The Agreement stated that “EMPLOYEE agrees to promptly disclose to MARATHON and does hereby assign to MARATHON all Intellectual Property, and EMPLOYEE agrees to execute such other documents as MARATHON may request in order to effectuate such assignment.”⁷⁵⁶ Under the “Previous Inventions and Writing” section of the Agreement, Preston wrote simply “CH4 Resonating Manifold,” and the parties dispute whether this writing is sufficient to exclude the claimed invention from compulsory assignment by Preston to Marathon.⁷⁵⁷

The court found, after certifying the question to the Wyoming Supreme Court, that the continuation of employment is sufficient consideration to support an intellectual property assignment agreement.⁷⁵⁸ The court also determined that, because Preston “made” the invention after his employment and the Agreement included “property *made or conceived*” during employment, even if it had been only conceived before employment, it would be covered under the Agreement because “there is no dispute that Preston did not *make* his invention prior to his employment.”⁷⁵⁹ The court noted that Preston’s “vague idea” of the “CH4 Resonating Manifold” did not even rise to the level of conception.⁷⁶⁰ Finally, the court decided that the Agreement served to automatically assign the patent rights “without the need for any additional act” by operation of law.⁷⁶¹

B. Statute of Limitations

In *Raytheon Co. v. Indigo Systems Corp.*,⁷⁶² the district court granted summary judgment, dismissing Raytheon’s claims of trade secret misappropriation due to a statutory time bar.⁷⁶³ The Federal Circuit never reached the question as to whether California or Texas trade secret law should apply because it determined “that there is no meaningful difference between California and Texas law with respect to the tolling of the statute of limitations.”⁷⁶⁴ Neither state automatically puts parties on notice as to potential trade secret claims

755. *Id.* at 1279 (emphasis added).

756. *Id.*

757. *Id.* at 1285.

758. *Id.*

759. *Id.* at 1286 (emphasis added).

760. *Id.* at 1288.

761. *Id.*

762. 688 F.3d 1311 (Fed. Cir. 2012).

763. *Id.* at 1312.

764. *Id.* at 1316.

when employees move to a competitor.⁷⁶⁵ Both states' statutes of limitations start running "when the plaintiff knew or reasonably should have known of the facts that give rise to the claim," which is a question of fact.⁷⁶⁶ The court concluded that the district court improperly resolved questions of fact against the non-moving party, i.e., Raytheon, in its summary judgment decision.⁷⁶⁷ The court concluded that "[i]t was for the jury and not for the district court to determine when Raytheon should have first discovered the facts supporting its cause of action."⁷⁶⁸

C. Substantial Evidence Review

In *Norgren Inc. v. International Trade Commission*,⁷⁶⁹ the Federal Circuit accorded high deference to factual findings by the Commission that led to a holding that asserted claims were invalid.⁷⁷⁰ A key claim element was the requirement of a "four-sided, generally rectangular clamp."⁷⁷¹

The prior art device cited was an "old-style SMC connector,"⁷⁷² which is shaped generally like a STOP sign (octagonal).⁷⁷³ The dissenting opinion demonstrated that the device actually has sixteen sides.⁷⁷⁴

The Federal Circuit evaluated the evidence relied on by the Commission, including: (1) an admission by Norgren's expert that the only difference between the patent claims and the old-style SMC connector was the hinge⁷⁷⁵ (implicitly admitting that the old-style SMC connector was a four-sided, generally rectangular clamp); (2) testimony by SMC's⁷⁷⁶ expert that the four sides of the old style connector "are those required for its function and that the shape formed by those sides is generally rectangular";⁷⁷⁷ and (3) physical examination of an old-style SMC connector, from which the

765. *Id.* at 1315–16.

766. *Id.* at 1316 (citing CAL. CIV. CODE § 3426.6 (2012); TEX. CIV. PRAC. & REM. CODE ANN. § 16.010(a) (2012)).

767. *Id.* at 1318–19.

768. *Id.* at 1318.

769. 699 F.3d 1317 (Fed. Cir. 2012).

770. *Id.* at 1323.

771. *Id.* at 1320, 1323. "The dispute centers not on the construction of the claims but on the factual question of whether the old-style SMC connector . . . is four-sided and generally rectangular." *Id.* at 1323.

772. *Id.* at 1323.

773. *Id.*

774. *Id.* at 1330 (Moore, J., dissenting).

775. *Id.* at 1324 (majority opinion).

776. SMC was the respondent in the suit brought by Norgren.

777. *Norgren*, 699 F.3d at 1324–25.

Commission concluded that the four outer sides were essential to the function and were decisive when defining its shape.⁷⁷⁸

Concluding that the absence of corners did not detract from the *generally* rectangular shape of the old-style SMC connector,⁷⁷⁹ the Federal Circuit emphasized its deference on factual matters:

The responsibility of this court is not to re-weigh *de novo* the evidence on close factual questions; it is to review the decision of the Commission for substantial evidence. This court concludes that the Commission's findings are supported by substantial evidence because "a reasonable mind might accept" that the old-style SMC connector is four-sided and generally rectangular.⁷⁸⁰

The Federal Circuit affirmed the Commission because its finding that a prior art clamp made the patent obvious was supported by substantial evidence.

D. *Intervening Rights*

In the en banc Federal Circuit decision *Marine Polymer Technologies, Inc. v. Hemcon, Inc.*,⁷⁸¹ an equally divided Federal Circuit found that the district court did not err in construing Marine Polymer's patent term "biocompatible" to mean, *inter alia*, with "no detectable biological reactivity as determined by biocompatibility tests."⁷⁸² According to the Federal Circuit, the term "biocompatible" admitted of no limitation based on the context of the claims, so the district court properly turned to the teachings of the specification, which makes clear that "the p-GlcNAc *of the invention* . . . shows no detectable biological reactivity as determined by biocompatibility tests."⁷⁸³

HemCon had also argued that it should have intervening rights because Marine Polymer changed the scope of its asserted patent claims during a concurrent reexamination.⁷⁸⁴ Particularly, HemCon argued that the scope of the patent claims changed because of arguments and cancellation of claims made by Marine Polymer during the reexamination, which allegedly "effected a substantive change in the *scope* of each remaining claim."⁷⁸⁵ The majority opined that this issue "was a separate and distinct proceeding that is not

778. *Id.* at 1325.

779. *Id.*

780. *Id.* at 1326.

781. 672 F.3d 1350 (Fed. Cir. 2012) (en banc).

782. *Id.* at 1359.

783. *Id.* (internal quotation marks omitted).

784. *Id.* at 1360.

785. *Id.* at 1361 (emphasis added).

properly before us on appeal.”⁷⁸⁶ Nevertheless, as criticized by the dissent, the majority went on to discuss this issue at length in dictum as “an alternative ground for decision.”⁷⁸⁷

Particularly, the majority rejected HemCon’s intervening rights argument, stating that 35 U.S.C. § 307(b) is plain and unambiguous in specifying “that only ‘amended or new’ claims incorporated into a patent during reexamination . . . will be susceptible to intervening rights.”⁷⁸⁸ Additionally, the majority stated that: “[w]hether or not Marine Polymer’s arguments to the examiner and cancellation of claims during reexamination may have affected the remaining claims’ effective scope, they did not ‘amend’ these claims for intervening rights purposes or make them ‘new,’ which is what the statutory language requires.”⁷⁸⁹ Intervening rights are therefore unavailable under 35 U.S.C. § 307(b) as a matter of law.⁷⁹⁰

E. Sovereign Immunity

In the en banc Federal Circuit decision *Zoltek IV*,⁷⁹¹ the court found that its prior decision in *Zoltek III* was in error and must be corrected.⁷⁹² In *Zoltek III*, the Federal Circuit had found that direct infringement under 35 U.S.C. § 271(a) is a necessary predicate for government liability under 28 U.S.C. § 1498(a).⁷⁹³ Section 1498(a) allows for suit against the Government “[w]henever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right.”⁷⁹⁴

The Federal Circuit noted that “[§] 1498(a) makes no reference to direct infringement as it is defined in 35 U.S.C. § 271(c),”⁷⁹⁵ and that so interpreting 28 U.S.C. § 1498(a) is contrary to the meaning of its 1910 precursor.⁷⁹⁶ Furthermore, *Zoltek III* was erroneous because it:

786. *Id.* at 1362.

787. *Id.* at 1362–63. The dissent also believed that the issue *was* properly before them. *Id.* at 1371 (Dyk, J., dissenting in part).

788. *Id.* at 1362–63 (majority opinion).

789. *Id.* at 1363.

790. *Id.*

791. 672 F.3d 1309 (Fed. Cir. 2012) (reversing the U.S. Court of Federal Claim’s decision in *Zoltek III*).

792. *Id.* at 1314 (en banc).

793. 442 F.3d 1345, 1350 (Fed. Cir. 2006) (per curiam), *vacated en banc*, 672 F.3d 1309.

794. 35 U.S.C. § 1498(a) (2006).

795. *Zoltek IV*, 672 F.3d at 1319.

796. *Id.* As noted by the Supreme Court, the 1910 act was amended for the purpose of “reliev[ing] the contractor entirely from liability of every kind for the infringement of patents in manufacturing anything for the Government.” *Richmond Screw Anchor Co. v. United States*, 275 U.S. 331, 343 (1928).

(1) applied dictum, not a holding, from prior case law;⁷⁹⁷ (2) “render[ed] § 1498(c) superfluous, violating the canon of statutory construction that ‘a statute should be interpreted so as not to render one part inoperative,’” because 35 U.S.C. § 271(a) required the infringing activity to occur within the United States, while the same limitation is found in 28 U.S.C. §1498(c) by eliminating the Government’s liability for “a claim arising in a foreign country;” and (3) rendered 19 U.S.C. § 1337(1) ineffective.⁷⁹⁸

With regard to 19 U.S.C. § 1337, the provision prevents a patentee from barring the entry into the United States of products *for the United States* that resulted from a patented process, but 19 U.S.C. § 1337(1) gives such a patentee a remedy of “reasonable and entire compensation . . . pursuant to the procedures of section 1498 of Title 28.”⁷⁹⁹ The court found here that it was clear Congress intended that patent owners shall have a remedy under 28 U.S.C. § 1498, and that by requiring 35 U.S.C. § 271(a) liability as a predicate for liability under 28 U.S.C. § 1498(a), this intent was thwarted.⁸⁰⁰

Turning to the facts of this case, the court found that government contractor Lockheed’s importation into the U.S. of products made by the process covered by Zoltek’s patent constituted use of the invention without lawful right under 28 U.S.C. § 1498(a).⁸⁰¹ Particularly, “the products embody the [process] invention itself.”⁸⁰² Also, 28 U.S.C. § 1498(c) did not exempt the United States from liability here because both the infringing acts of use and importation occurred in the United States, not in a foreign country.⁸⁰³

CONCLUSION

The Federal Circuit continued to refine certain areas of patent law in 2012 when the opportunity presented itself. The court will have even greater challenges in the coming year with the implementation of the AIA because it will need to establish precedent for a whole new body of statutory law that shifts the paradigm from a first to invent strategy to a first to file strategy. While many of these challenges will not present themselves in the coming year, but rather in several years,

797. See *Zoltek IV*, 672 F.3d at 1319–20 (discussing *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1316 (Fed. Cir. 2005)).

798. *Id.* at 1321 (quoting *CSX Transp., Inc. v. Ala. Dep’t of Revenue*, 131 S. Ct. 1101, 1111 (2011)).

799. 19 U.S.C. § 1337(l).

800. *Zoltek IV*, 672 F.3d at 1322.

801. *Id.* at 1325–26 (panel opinion).

802. *Id.* at 1326.

803. See *id.* at 1326.

the challenges in 2013 will likely be associated with procedural elements of the AIA, which are presently open to interpretation and will be contested by both patent holders and the PTO.