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Survey of the Federal Circuit's Patent Law Decisions in 2006: A New Chapter in the Ongoing Dialogue with the Supreme Court


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Survey of the Federal Circuit's Patent Law Decisions in 2006: A New Chapter in the Ongoing Dialogue with the Supreme Court

Abstract

In 2006, the Federal Circuit decided only one portion of one patent case en banc, and that was done mainly as a procedural matter (the entire case was not argued to an en banc court) in order to reconcile prior conflicting precedent on the issue of induced patent infringement with the recent Supreme Court decision in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, involving induced copyright infringement. But in light of the Supreme Court's much more muscular review of the Federal Circuit's patent cases—which may not even reflect the full extent of the Court's interest in the Federal Circuit's patent decisions—the relative paucity of en banc decisions in 2006 is understandable, and in many ways irrelevant to gaining a better understanding of the Federal Circuit's patent law jurisprudence. In the pages that follow, we will address these and many other developments reflected in the Federal Circuit's patent jurisprudence of 2006. And, as we did in our article surveying the Federal Circuit's year 2000 jurisprudence, we again conclude with an addendum that discusses the statistical output of the Federal Circuit and its judges.

Keywords

Federal Circuit, Patent Law, Copyright infringement, Grokster, Patent jurisprudence

AREA SUMMARIES

SURVEY OF THE FEDERAL CIRCUIT'S
PATENT LAW DECISIONS IN 2006: A NEW
CHAPTER IN THE ONGOING DIALOGUE
WITH THE SUPREME COURT*GREGORY A. CASTANIAS**
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* This Article reflects the present views and considerations of the authors and does not necessarily reflect the views of Jones Day or its clients past, present, or future. The reader should be aware that the authors, or other members of their Firm, have been involved in several of the cases discussed in this Article, including: *KSR Int'l Co. v. Teleflex, Inc.*, 126 S. Ct. 2965 (2006) (order granting certiorari); *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 126 S. Ct. 2921 (2006); *Apotex Inc. v. Pfizer, Inc.*, 126 S. Ct. 2057 (order calling for views of U.S. Solicitor General) & 127 S. Ct. 379 (2006) (order denying certiorari); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 80 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2006); *Pfizer, Inc. v. Ranbaxy Labs Ltd.*, 457 F.3d 1284, 79 U.S.P.Q.2d (BNA) 1583 (Fed. Cir. 2006); *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 78 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2006); *Bonzel v. Pfizer, Inc.*, 439 F.3d 1358, 78 U.S.P.Q.2d (BNA) 1136 (Fed. Cir. 2006); *In re Tech. Licensing Corp.*, 423 F.3d 1286, 76 U.S.P.Q.2d (BNA) 1450 (Fed. Cir. 2005), *cert. denied*, 74 U.S.L.W. 3675 (U.S. June 5, 2006); and *Finisar Corp. v. DIRECTV Group, Inc.*, No. 1:05-CV-264 (E.D. Tex. July 7, 2006). The authors express their sincerest thanks to Kenneth Canfield, Andrew Sockol, Andrew Weisberg, Matthew Szwajkowski, and Julie Givner for their valuable assistance in this ambitious project.

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INTRODUCTION

In last year's Federal Circuit Review edition of the *American University Law Review*, Federal Circuit Judge Arthur Gajarsa and Dr. Lawrence Cogswell wrote of the "recent increase . . . in the frequency of Supreme Court review of our decisions,"¹ and specifically, "our patent law jurisprudence."² That increase continued in 2006, and in many ways, the Supreme Court's greater interest in issues of patent law—at a time when its docket of cases continues to shrink—was a major theme of the Federal Circuit's published patent law decisions issued in calendar year 2006.

The year 2006 brought some other important changes to the Federal Circuit. Judge Raymond Clevenger assumed Senior Judge status on February 1, 2006, and was replaced on the active bench on September 8, 2006 by Judge Kimberly Moore,³ a law professor who has published a number of books and articles, including several empirical analyses about patent law, generally, and the Federal Circuit's jurisprudence, in particular.⁴ She is the first Federal Circuit judge to come to the Court from a background of academic intellectual property scholarship.

No mention of the Federal Circuit and its judges in 2006 would be complete without marking the passing of Howard T. Markey, the first Chief Judge of the Federal Circuit (and the last Chief Judge of the Court of Customs and Patent Appeals), on May 3, 2006. Judge Markey was the first judge ever to sit with every federal appellate court in the nation, and to this day the Federal Circuit bears the stamp of his influence—an influence marked officially by the 1998

1. Arthur R. Gajarsa & Lawrence P. Cogswell, III, *Foreword: The Federal Circuit and The Supreme Court*, 55 AM. U. L. REV. 821, 843 (2006).

2. *Id.* at 823.

3. Nominated to be Circuit Judge by President George W. Bush on May 18, 2006, confirmed by the Senate on September 5, 2006, and assumed duties in office on September 8, 2006.

4. *E.g.*, KIMBERLY A. MOORE, PAUL R. MICHEL & RAPHAEL V. LUPO, *PATENT LITIGATION AND STRATEGY* (2002); Kimberly A. Moore, *Are District Court Judges Equipped to Resolve Patent Cases?*, 15 HARV. J.L. & TECH. 1 (2001); Kimberly A. Moore, *Empirical Statistics on Willful Patent Infringement*, 14 FED. CIR. B.J. 227 (2004); Kimberly A. Moore, *Essay: Juries, Patent Cases, & a Lack of Transparency*, 39 HOUS. L. REV. 779 (2002); Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation?*, 79 N.C. L. REV. 889 (2001); Kimberly A. Moore, *Judges, Juries and Patent Cases—An Empirical Peek Inside the Black Box*, 99 MICH. L. REV. 365 (2000); Kimberly A. Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 LEWIS & CLARK L. REV. 231 (2005).

decision to redesignate the National Courts Building, where the Federal Circuit sits, as the Howard T. Markey National Courts building.⁵

The end of 2006 marked the end of the bar on citing “nonprecedential” decisions issued by the Federal Circuit. Thanks to a change in the Federal Rules of Appellate Procedure, which now bars appellate courts from forbidding the citation of “unpublished” or “nonprecedential” opinions (but only those issued after January 1, 2007),⁶ the Federal Circuit’s rules have likewise been revised.⁷ Some Federal Circuit opinions may continue to be designated as “nonprecedential,”⁸ but “[p]arties are not prohibited or restricted from citing nonprecedential dispositions issued after January 1, 2007,”⁹ and the court itself “may refer to a nonprecedential disposition in an opinion and order and may look to a nonprecedential disposition for guidance or persuasive reasoning, but will not give one of its own nonprecedential dispositions the effect of binding precedent.”¹⁰

In 2006, the Federal Circuit decided only one portion of one patent case en banc,¹¹ and that was done mainly as a procedural matter (the entire case was not argued to an en banc court) in order to reconcile prior conflicting precedent on the issue of induced patent infringement¹² with the recent Supreme Court decision in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*,¹³ involving induced copyright infringement. But in light of the Supreme Court’s much more muscular review of the Federal Circuit’s patent cases—which may not even reflect the full extent of the Court’s interest in the Federal Circuit’s patent decisions—the relative paucity of en banc

5. Patricia Sullivan, *Howard Markey: First Chief Judge of Federal Circuit Appellate Court*, WASH. POST, May 5, 2006, at B6.

6. FED. R. APP. P. 32.1.

7. See FED. CIR. R. 32.1 (removing the prohibition on citing to unpublished opinions issued on or after January 1, 2007).

8. See FED. CIR. R. 32.1(a) (“An opinion or order which is designated as nonprecedential is one determined by the panel issuing it as not adding significantly to the body of law.”).

9. FED. CIR. R. 32.1(c).

10. FED. CIR. R. 32.1(d).

11. See *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1304-06, 81 U.S.P.Q.2d (BNA) 1238, 1246-47 (Fed. Cir. 2006) (en banc as to Section III(B) only).

12. Compare *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553, 16 U.S.P.Q.2d (BNA) 1587, 1594 (Fed. Cir. 1990) (“The plaintiff has the burden of showing that the alleged infringer’s actions induced infringing acts *and* that he knew or should have known that his actions would induce actual infringements.”), with *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1469, 15 U.S.P.Q.2d (BNA) 1525, 1529 (Fed. Cir. 1990) (“[P]roof of actual intent to cause the acts which constitute infringement is a necessary prerequisite to finding active inducement.”).

13. 545 U.S. 913, 931-32 (2005).

decisions in 2006 is understandable, and in many ways irrelevant to gaining a better understanding of the Federal Circuit's patent law jurisprudence.

In the pages that follow, we will address these and many other developments reflected in the Federal Circuit's patent jurisprudence of 2006. And, as we did in our article surveying the Federal Circuit's year 2000 jurisprudence,¹⁴ we again conclude with an addendum that discusses the statistical output of the Federal Circuit and its judges.

I. THE FEDERAL CIRCUIT AND THE SUPREME COURT

Almost fifteen years ago, two authors, writing in the *Federal Circuit Bar Journal*, concluded that "[t]he Supreme Court rarely grants petitions for writ of certiorari to the United States Court of Appeals for the Federal Circuit,"¹⁵ that "the Court appears to accord more deference to pronouncements of the Federal Circuit on substantive patent law issues than on other substantive law issues,"¹⁶ and that "[t]he Court . . . appears less willing to address substantive patent law than the other areas of Federal Circuit substantive law."¹⁷

No longer can any of those statements be said to be true. As 2006 ends, we appear to be in the midst of a "third wave" in the ongoing dialogue between the Supreme Court and the Federal Circuit over the content of U.S. patent law—a wave marked by more aggressive Supreme Court review of the substance of patent law and patent procedure and less deference to the Federal Circuit's views of what the content of U.S. patent law should be. This change in the Supreme Court's approach to the Federal Circuit's patent cases may well portend real and significant changes for the Federal Circuit—and perhaps for the Federal Circuit's bar as well.

A. *The First Wave (1982-1994): A Hands-Off Approach*

The Supreme Court's first review of a Federal Circuit patent decision, in 1986, was a largely inauspicious event. In *Dennison Manufacturing Co. v. Panduit Corp.*,¹⁸ the Supreme Court granted a petition for certiorari, vacated the Federal Circuit's judgment in an obviousness dispute (without receiving briefing on the merits or

14. Kenneth R. Adamo, Gregory A. Castanias, Mark N. Reiter, & Lawrence D. Rosenberg, *Survey of the Federal Circuit's Patent Law Decisions in 2000: Y2K in Review*, 50 AM. U. L. REV. 1435, 1699-1706 (2001).

15. Mark J. Abate & Edmund J. Fish, *Supreme Court Review of the United States Court of Appeals for the Federal Circuit 1982-1992*, 2 FED. CIR. B.J. 307, 307 (1992).

16. *Id.* at 308.

17. *Id.* at 333.

18. 475 U.S. 809, 809-11 (1986) (per curiam).

hearing oral argument), and remanded the case to the Federal Circuit for reevaluation of its decision in light of rule 52(a) of the Federal Rules of Civil Procedure, which governs appellate review of a district court's factual findings. In language that presaged many of the common (and contemporaneous) criticisms of the Federal Circuit's decisional processes, the Supreme Court described the petitioner's (Dennison's) contention:

Petitioner contends that the Federal Circuit ignored Federal Rule of Civil Procedure 52(a) in substituting its view of factual issues for that of the District Court. In particular, petitioner complains of the rejection of the District Court's determination of what the prior art revealed and its findings that the differences identified between respondent's patents and the prior art were obvious.¹⁹

Because "[t]he Federal Circuit . . . did not mention Rule 52(a), did not explicitly apply the clearly-erroneous standard to any of the District Court's findings on obviousness, and did not explain why, if it was of that view, Rule 52(a) had no applicability to this issue,"²⁰ the Court sent the case back to the Federal Circuit "for further consideration in light of Rule 52(a)."²¹ On remand, the Federal Circuit reinstated its earlier holding, but with an explanation expressly grounded in rule 52(a); the Supreme Court denied certiorari to review that subsequent opinion.²²

It appeared that the Federal Circuit panel was none too happy that Dennison had managed to obtain Supreme Court review, however. Then-Chief Judge Markey's opinion for the Court added a blistering "Appendix" directed at Dennison's Petition for Certiorari and Reply in support of certiorari. It began:

Dennison's Petition for Certiorari and Reply ignored our earlier opinion's explication of legal error and need to consider all evidence, presented material for the first time, and repeated misstatements of law Dennison employed before the trial court but avoided before this Court. This Appendix sets forth the more egregious of the many obfuscating assertions in the Petition and Reply.²³

Whether or not the accusations of obfuscation were merited, the message delivered to the bar was that the Federal Circuit did not appreciate Dennison's petition for certiorari, and that the Supreme

19. *Id.* at 810.

20. *Id.* at 811.

21. *Id.*

22. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1565-82, 1 U.S.P.Q.2d (BNA) 1593, 1594-1609 (Fed. Cir. 1987), *cert. denied*, 481 U.S. 1052 (1987).

23. *Id.* at 1582, 1 U.S.P.Q.2d (BNA) at 1609.

Court had been led down the proverbial primrose path by these omissions and “misstatements.”

Might the *Panduit* “Appendix” have had a chilling effect on subsequent petitions for certiorari in other Federal Circuit cases? After all, with all patent appeals now coming before a small cohort of judges in Washington, D.C., lawyers and clients may not have wanted to risk irking the court. Whether or not it had such an effect, the fact is that the next patent case to make its way to the U.S. Supreme Court arrived, in effect, with a backhanded invitation from the Federal Circuit. In *Christianson v. Colt Industries Operating Corp.*,²⁴ a case raising antitrust claims which implicated patent issues, the Seventh Circuit rejected appellate jurisdiction over the appeal and transferred the case to the Federal Circuit, “based in large part on its expansive view of the relevant Federal Circuit jurisdictional statutes.”²⁵ The Federal Circuit did not think it had jurisdiction either, though, finding “no basis or rationale . . . for an expanded, open-ended view that this court has been granted jurisdiction over all appeals in cases that contain patent issues.”²⁶ Despite finding that it lacked jurisdiction, the court nonetheless decided the merits of the case, rather than certifying the question to the Supreme Court,²⁷ because it “abhor[red]” placing an additional burden on the Supreme Court’s “already heavy workload.”²⁸ Here, again, was a statement suggesting that the Federal Circuit would take care of the patent law so that the U.S. Supreme Court would not be burdened with that task.

However, by disagreeing with the Seventh Circuit on the question of jurisdiction—creating a now-rare circuit split in a patent case—and then deciding the merits of a case over which it believed it had no jurisdiction, which ran afoul of basic Supreme Court pronouncements regarding jurisdiction,²⁹ the Federal Circuit actually made “the case . . . an ideal candidate for review.”³⁰ The ultimate result was that the Court agreed with the Federal Circuit that it lacked jurisdiction³¹ but held that the court had erred by going on to

24. 798 F.2d 1051, 1056-57 (7th Cir. 1986).

25. Gajarsa & Cogswell, *supra* note 1, at 824.

26. *Christianson v. Colt Indus. Operating Corp.*, 822 F.2d 1544, 1553, 3 U.S.P.Q.2d (BNA) 1241, 1247 (Fed. Cir. 1987), *vacated*, 486 U.S. 800 (1988).

27. See 28 U.S.C. § 1254(3) (2000) (permitting certification of questions to the Supreme Court by a court of appeals).

28. *Christianson*, 822 F.2d at 1560, 3 U.S.P.Q.2d (BNA) at 1252-53.

29. See, e.g., *Ex Parte McCardle*, 74 U.S. (7 Wall.) 506, 514 (1868) (“Without jurisdiction the court cannot proceed at all in any cause.”).

30. Gajarsa & Cogswell, *supra* note 1, at 826.

31. *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 807-13 (1988).

reach the merits.³² The Court then ordered the Federal Circuit on remand to transfer the case back to the Seventh Circuit.³³

The Court's next review of a Federal Circuit patent decision did not occur for another two years. In *Eli Lilly & Co. v. Medtronic, Inc.*,³⁴ the Court addressed a pure question of statutory interpretation:

[W]hether 35 U.S.C. § 271(e)(1) (1982 ed., Supp. V) renders activities that would otherwise constitute patent infringement noninfringing if they are undertaken for the purpose of developing and submitting to the Food and Drug Administration (FDA) information necessary to obtain marketing approval for a medical device under section 515 of the Federal Food, Drug, and Cosmetic Act (FDCA), 90 Stat. 552, 21 U.S.C. § 360e.³⁵

The Court noted that the Federal Circuit had held that such activities "could not constitute infringement if they had been undertaken to develop information reasonably related to the development and submission of information necessary to obtain regulatory approval under the FDCA."³⁶ The Supreme Court ultimately affirmed the Federal Circuit's interpretation of the statutory provision.³⁷

Another three years elapsed before the Supreme Court returned to the Federal Circuit and patent law. This time, in *Cardinal Chemical v. Morton International, Inc.*,³⁸ the Court took up another fundamental issue of appellate procedure largely limited to the Federal Circuit: whether the Federal Circuit's practice of routinely vacating declaratory judgments regarding patent validity following a determination of noninfringement could be squared with the case-or-controversy requirements of Article III of the U.S. Constitution.³⁹ In two prior cases, the Federal Circuit had established the rule that a judgment of noninfringement on a patent claim renders moot a declaratory judgment challenge to the validity of that same claim.⁴⁰ The Court noted in its opinion why it had granted certiorari: "Because the Federal Circuit has exclusive jurisdiction over appeals from all United States District Courts in patent litigation, the rule that it applied in this case, and has been applying regularly . . . is a

32. *Id.* at 818-19.

33. *Id.* at 819.

34. 496 U.S. 661 (1990).

35. *Id.* at 663-64.

36. *Id.* at 664.

37. *Id.* at 679.

38. 508 U.S. 83 (1993).

39. *Id.* at 85.

40. *Vieau v. Japax, Inc.*, 823 F.2d 1510, 1517, 3 U.S.P.Q.2d (BNA) 1094, 1100 (Fed. Cir. 1987); *Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627, 632-33, 3 U.S.P.Q.2d (BNA) 1109, 1113 (Fed. Cir. 1987).

matter of special importance to the entire Nation.”⁴¹ Ultimately, the Court reversed the Federal Circuit and held that:

[t]he Federal Circuit’s decision to rely on one of two possible alternative grounds (noninfringement rather than invalidity) did not strip it of *power* to decide the second question. . . . [T]he Federal Circuit had jurisdiction to review the declaratory judgment of invalidity. The case did not become moot when that court affirmed the finding of noninfringement.⁴²

Finally, it is worth noting that around this same time, the Supreme Court granted certiorari in one other procedural case, *Izumi Seimitsu Kogyo Kabushiki Kaisha v. U.S. Philips Corp.*,⁴³ but then dismissed the writ of certiorari as “improvidently granted.”⁴⁴ The question there was whether the courts of appeals “[s]hould . . . routinely vacate district court final judgments at the parties’ request when cases are settled while on appeal.”⁴⁵ The petition was dismissed in this case because, upon the briefing on the merits, it became apparent that there was a preliminary question—whether the petitioner (Izumi) should have been allowed to intervene to challenge the vacatur order—that was “neither presented in the petition for certiorari nor fairly included in the one question that was presented.”⁴⁶ Shortly after this dismissal, the Supreme Court granted certiorari to a Ninth Circuit case that had addressed the same issue, and ultimately sided against “routine” vacatur under these circumstances.⁴⁷

B. *The Second Wave (1995-2002): (Mostly) Only the Biggest Issues*

The tide began to turn in 1995, when the Supreme Court granted certiorari in a number of cases that struck at the core of patent infringement litigation: the rules for construing patent claims, the scope and application of the doctrine of equivalents, and the right to have a jury determine issues of patent invalidity.⁴⁸ Still, the results of most of these cases—especially the ones that went to the core of the

41. *Cardinal Chem.*, 508 U.S. at 89.

42. *Id.* at 98.

43. 507 U.S. 907 (1993), *cert. dismissed*, 510 U.S. 27 (1993) (*per curiam*).

44. 510 U.S. 27, 28 (1993) (*per curiam*).

45. *Id.* at 30.

46. *Id.* at 28.

47. *U.S. Bancorp Mortgage Co. v. Bonner Mall P’ship*, 513 U.S. 18, 18-19 (1994).

48. In January 1995, the Court also decided *Asgrow Seed Co. v. Winterboer*, 513 U.S. 179 (1995), which addressed the proper interpretation of the Plant Variety Protection Act (PVPA), 84 Stat. 1542, 7 U.S.C. §§ 2321-2583 (2000). “The PVPA extends patent-like protection to novel varieties of sexually reproduced plants (that is, plants grown from seed) which parallels the protection afforded asexually reproduced plant varieties (that is, varieties reproduced by propagation or grafting) under Chapter 15 of the Patent Act. See 35 U.S.C. §§ 161-164.” *Asgrow Seed*, 513 U.S. at 181.

patent system—were largely affirmances of the Federal Circuit’s rulings.

The first of these cases, *American Airlines, Inc. v. Lockwood*,⁴⁹ never yielded a decision. The Federal Circuit had held, in a panel decision, that the patent owner (Lockwood) had a Seventh Amendment jury trial right in a declaratory judgment action to determine patent validity.⁵⁰ Three judges dissented from the denial of rehearing en banc,⁵¹ and the Supreme Court granted certiorari to review the question of the jury trial right.⁵² However, shortly after certiorari was granted, Lockwood withdrew his request for a jury trial, thereby mooting the case.⁵³ Although the Federal Circuit has addressed the Seventh Amendment issue in related contexts since then,⁵⁴ the Supreme Court has not seen fit to reach out to consider this issue again in the last eleven years.

Markman v. Westview Instruments, Inc.,⁵⁵ the case that gave its name to the now-ubiquitous “*Markman* hearing,” was decided by the U.S. Supreme Court as a Seventh Amendment jury trial issue. The Federal Circuit had taken the *Markman* case en banc to resolve two contrary lines of its precedents: One line had said that patent claim construction was to be determined by the court as a matter of law; the other had held that it was appropriate to submit disputed issues of claim construction to a jury. The en banc Federal Circuit held that claim interpretation was a matter of law for the court, and that there was no Seventh Amendment right to have such issues decided by a jury.⁵⁶ The *Markman* petition for certiorari presented only a single question: “In a patent infringement action for damages, is there a right to a jury trial under the Seventh Amendment of the United States Constitution of genuine factual disputes about the meaning of

49. 515 U.S. 1182 (1995) (order vacating cert.).

50. *In re Lockwood*, 50 F.3d 966, 980, 33 U.S.P.Q.2d (BNA) 1406, 1417 (Fed. Cir. 1995).

51. *Id.* at 980-90 (Nies, J., dissenting) (joined by Chief Judge Archer and Judge Plager).

52. *Am. Airlines, Inc. v. Lockwood*, 515 U.S. 1121, *cert. vacated*, 515 U.S. 1182 (1995).

53. *Am. Airlines*, 515 U.S. 1182 (order vacating cert.).

54. *Compare* *Teagal Corp. v. Tokyo Electron America, Inc.*, 257 F.3d 1331, 1351-52, 59 U.S.P.Q.2d (BNA) 1385, 1401 (Fed. Cir. 2001) (granting jury trial where accused infringer had raised invalidity as a separate claim), *with In re Technology Licensing Corp.*, 423 F.3d 1286, 1291, 76 U.S.P.Q.2d (BNA) 1450, 1454-55 (Fed. Cir. 2005) (denying jury trial where accused infringer raised invalidity only as a defense), *cert. denied*, 74 U.S.L.W. 3675 (U.S. June 5, 2006). Note: One of the authors served as counsel to the respondent in *In re Tech. Licensing Corp.* in the U.S. Supreme Court.

55. 517 U.S. 370 (1996).

56. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 971, 976-79, 983-88, 34 U.S.P.Q.2d (BNA) 1321, 1322, 1327-29, 1333-37 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

a patent?”⁵⁷ The Supreme Court answered that particular constitutional question “no.”⁵⁸ What may prove to be most important about the Supreme Court’s *Markman* decision in coming years is understanding what the Court did, and did not, decide. It clearly did decide that the interpretation of a patent claim term “is an issue for the judge, not the jury.”⁵⁹ But it arguably did not decide that claim construction is a “question of law,”⁶⁰ nor did it decide that all issues of claim construction must be reviewed de novo on appeal.⁶¹ The latter two issues remain a matter of some contention in the Federal Circuit.⁶²

Next, the Supreme Court waded into the undercurrents of the doctrine of equivalents in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*⁶³ There, the Court affirmed another en banc decision of the Federal Circuit and rejected the petitioner’s (Warner-Jenkinson’s) argument that the 1952 Patent Act had done away with the doctrine.⁶⁴ In the course of affirming the Federal Circuit, the Court offered some important subsidiary holdings. It endorsed the Federal Circuit’s longstanding “all elements” rule,⁶⁵ it held that prosecution-history estoppel was an important limitation on the application of the doctrine of equivalents but did not foreclose entirely a patentee’s recourse to the doctrine,⁶⁶ it established a presumption that patent amendments bear a substantial relationship to patentability,⁶⁷ it held that intent is not an element of the doctrine,⁶⁸ it concluded that equivalents are not limited to those disclosed in the patent itself,⁶⁹ and it declined to decide whether the doctrine of equivalents was an issue for judge or jury. However, the Court noted that “[t]here was

57. Petition for a Writ of Certiorari at i, *Markman*, 517 U.S. 370 (No. 95-26).

58. *Markman*, 517 U.S. at 391.

59. *Id.*

60. *Id.* at 378, 388 (characterizing claim construction as a “mongrel practice” that may “fall[] somewhere between a pristine legal standard and a simple historical fact” (quoting *Miller v. Fenton*, 474 U.S. 104, 114 (1985))).

61. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1455-56, 46 U.S.P.Q.2d (BNA) 1169, 1173-75 (Fed. Cir. 1998) (en banc).

62. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1328, 75 U.S.P.Q.2d (BNA) 1321, 1338 (Fed. Cir. 2005) (en banc) (declining to address the issues of whether claim construction is a question of law, and whether issues of claim construction should be granted any deference upon appellate review).

63. 520 U.S. 17 (1997).

64. *Id.* at 25-28.

65. *Id.* at 29-30; see *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 935, 4 U.S.P.Q.2d (BNA) 1737, 1739-40 (Fed. Cir. 1987) (en banc) (applying the “all elements” rule within the doctrine of equivalents).

66. *Warner-Jenkinson*, 520 U.S. at 30-31.

67. *Id.* at 33-34.

68. *Id.* at 36.

69. *Id.* at 37.

ample support in our prior cases for [the Federal Circuit's] holding" that "it was for the jury to decide whether the accused process was equivalent to the claimed process."⁷⁰

The Court's next foray into patent law again resulted in an affirmation of the Federal Circuit. In *Pfaff v. Wells Electronics, Inc.*,⁷¹ which involved the frequently invoked on-sale bar under 35 U.S.C. § 102(b), the Court granted certiorari to resolve a conflict between Federal Circuit precedent and pre-Federal Circuit precedents from the regional courts of appeals regarding whether an invention has to be reduced to practice before the on-sale bar can apply.⁷² The Court concluded that two conditions must be satisfied before the on-sale bar can apply: One, "the product must be the subject of a commercial offer for sale,"⁷³ and two, "the invention must be ready for patenting."⁷⁴

A few months later, the Federal Circuit suffered a reversal on a procedural issue in *Dickinson v. Zurko*.⁷⁵ Zurko, a patent applicant, had been denied a patent by the Patent and Trademark Office ("PTO"). A Federal Circuit panel applied the "clearly erroneous" standard of review to the PTO's factual findings,⁷⁶ and the en banc Federal Circuit agreed.⁷⁷ The Supreme Court granted the government's petition for certiorari and ultimately reversed, holding that the standards of review established by the Administrative Procedure Act ("APA")—"arbitrary, capricious, abuse of discretion, or . . . [in limited cases subject to sections 556 and 557 of the APA] unsupported by substantial evidence"⁷⁸—controls judicial review of findings of fact made by the PTO.⁷⁹ The Court rejected the argument, advanced by the applicant, that the pre-APA practice of the Court of Customs and Patent Appeals had been to review Patent Office determinations for clear error, and thus that the preexisting

70. *Id.* at 38 (citing *Union Paper-Bag Mach. Co. v. Murphy*, 97 U.S. 120, 125 (1878) and *Winans v. Denmead*, 56 U.S. (15 How.) 330, 344 (1854)).

71. 525 U.S. 55 (1998).

72. *Id.* at 60 (citing *Timely Prods. Corp. v. Arron*, 523 F.2d 288, 299-302, 187 U.S.P.Q. (BNA) 257, 265-68 (2d Cir. 1975) and *Dart Indus., Inc. v. E.I. Du Pont De Nemours & Co.*, 489 F.2d 1359, 1365 n.11, 179 U.S.P.Q. (BNA) 392, 397 n.11 (7th Cir. 1973)).

73. *Id.* at 67.

74. *Id.*

75. 527 U.S. 150 (1999).

76. *In re Zurko*, 111 F.3d 887, 889, 42 U.S.P.Q.2d (BNA) 1476, 1478 (Fed. Cir. 1997), *reh'g granted*, 142 F.3d 1447, 46 U.S.P.Q.2d (BNA) 1691 (Fed. Cir. 1998) (en banc), *rev'd*, *Dickinson v. Zurko*, 527 U.S. 150 (1999).

77. *See In re Zurko*, 142 F.3d 1447, 1449, 46 U.S.P.Q.2d (BNA) 1691, 1693 (Fed. Cir. 1998) (en banc), *rev'd*, *Dickinson v. Zurko*, 527 U.S. 150 (1999) (following the previous Federal Circuit decision in again applying a "clearly erroneous" standard).

78. *Dickinson*, 527 U.S. at 152 (quoting, in relevant part, 5 U.S.C. § 706).

79. *Id.* at 157-59.

“clearly erroneous” standard was an “additional requirement[] . . . recognized by law.”⁸⁰

The Federal Circuit was again reversed less than two weeks later in *Florida Prepaid Postsecondary Education Expense Board v. College Savings Bank*.⁸¹ The issue there was whether Congress had, in the Patent and Plant Variety Protection Remedy Clarification Act,⁸² validly abrogated the States’ sovereign immunity.⁸³ The Federal Circuit had held that Congress had acted within its constitutional power because it had made its intent clear and because it was permissibly creating a money-damages remedy against states to prevent states from depriving patent owners of their property (patents) without due process of law, and that such a remedy was a proportionate response to patent infringement by states.⁸⁴ The Supreme Court, which was in the process of reasserting a more muscular version of state sovereign immunity in several cases, reversed by a 5-4 vote.⁸⁵ It held that Congress did not have the authority to abrogate state sovereign immunity by invoking its Commerce Clause power under Article I, Section 8 of the Constitution, but could only abrogate immunity, if at all, by a proper exercise of its enforcement powers under the Reconstruction Amendments.⁸⁶ It further held that Congress had overstepped its power by not merely enforcing a constitutional right of due process, but by changing what the right was.⁸⁷ In particular, the Court noted that there had been no particular history of states infringing patents, let alone a history so compelling to warrant congressional enforcement power under Section 5 of the Fourteenth Amendment. Therefore, the Court held that the congressionally enacted remedies, giving a sweeping right to sue states for money damages in patent-infringement cases, “are ‘so out of proportion to a supposed remedial or preventive object that [they] cannot be understood as responsive to, or designed to prevent, unconstitutional behavior.’”⁸⁸

80. 5 U.S.C. § 559 (2000); see *Dickinson*, 527 U.S. at 170-72 (Rehnquist, C.J., dissenting) (noting that until the decision in *Dickinson* the “clearly erroneous” standard was a requirement imposed upon the Patent & Trademark Office by § 559).

81. 527 U.S. 627 (1999).

82. 35 U.S.C. §§ 271(h), 296(a) (2000).

83. *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 630 (1999).

84. *Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 148 F.3d 1343, 1347-55, 47 U.S.P.Q.2d (BNA) 1161, 1163-70 (Fed. Cir. 1998), *rev’d*, 527 U.S. 627 (1999).

85. *Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. at 629.

86. *Id.* at 645-47.

87. *Id.* at 645-46.

88. *Id.* at 646 (quoting *City of Boerne v. Flores*, 521 U.S. 507, 532 (1997)).

A year passed before the Court considered another Federal Circuit patent decision, this one a narrow procedural issue, in *Nelson v. Adams USA, Inc.*⁸⁹ In this unusual case, Ohio Cellular Products (“OCP”) had sued Adams USA for patent infringement, but OCP’s claim was eventually dismissed with fees and costs awarded to Adams.⁹⁰ Adams, fearing that OCP might not be sufficiently solvent to pay the award, moved to amend its pleadings to have OCP’s president and sole shareholder, Nelson, added as a party under rule 15 of the Federal Rules of Civil Procedure; the district court granted the motion, which had the curious effect of simultaneously making Nelson a party and entering a judgment against him.⁹¹ The Federal Circuit affirmed, over a dissent from Judge Newman,⁹² but the Supreme Court unanimously reversed, holding that the procedures of rule 15 had not been followed, and that Nelson should have been, consistent with due process, allowed to contest the effort to make him liable for the judgment after being added as a party to the suit; “instead, he was adjudged liable the very first moment his personal liability was legally at issue.”⁹³

Two terms later, the Federal Circuit was affirmed in *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*,⁹⁴ a case presenting the question of whether utility patents may be issued for plants.⁹⁵ J.E.M. had argued that in view of two previously enacted federal statutes, the Plant Variety Protection Act of 1970 on the one hand,⁹⁶ and the Plant Patent Act of 1930 on the other,⁹⁷ there was no room to interpret section 101 of the Patent Act to allow other kinds of plants, not addressed in these two statutes, to receive patent protection.⁹⁸ The Federal Circuit and the Supreme Court disagreed, concluding that neither act was intended by Congress to be an exclusive means of providing patent protection to plants, and that both statutes could be reconciled with the general, broad terms of section 101.⁹⁹

89. 529 U.S. 460 (2000).

90. *Id.* at 462-63.

91. *Id.*

92. *Id.* at 464-65.

93. *Id.* at 468.

94. 534 U.S. 124 (2001).

95. *Id.* at 127.

96. Pub. L. No. 91-577, 84 Stat. 1542 (codified as amended at 7 U.S.C. §§ 2321-2583 (2000)).

97. 35 U.S.C. §§ 161-164 (2000).

98. *J.E.M. Ag Supply*, 534 U.S. at 131-32.

99. *Id.* at 132-41.

C. *The Third Wave (2002-present): Is Everything In Play?*

The Federal Circuit had been treated well by the Supreme Court on the biggest issues of patent law—claim construction, the doctrine of equivalents, and the on-sale bar—with affirmances across the board on these seminal issues for the first twenty years of the Federal Circuit's existence.

But that began to change in 2002, when the Supreme Court vacated the Federal Circuit's ruling in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*¹⁰⁰ The Federal Circuit had held, en banc, that “[w]hen a claim amendment creates prosecution history estoppel with regard to a claim element, there is no range of equivalents available for the amended claim element. Application of the doctrine of equivalents to the claim element is completely barred (a ‘complete bar’).”¹⁰¹ This holding “overruled the entire *Hughes Aircraft* line of ‘flexible bar’ cases”¹⁰² and yielded the clear (but rigid) rule that where an amendment to a claim is made for reasons of patentability, the doctrine of equivalents could not be asserted. The Supreme Court's vacatur of the Federal Circuit's ruling represented a fundamental disagreement with the Federal Circuit's stated views and tempered the harshness of the Federal Circuit's rule, essentially adopting the “presumption” approach that had been advocated by the U.S. Solicitor General in his brief.¹⁰³ Justice Kennedy's opinion for a unanimous Court adopted a presumptive bar, not a “complete” one.¹⁰⁴ A minor change to the law, perhaps, but the Court's opinion did not mince words: The Federal Circuit had “ignored the guidance of *Warner-Jenkinson*, which instructed that courts must be cautious before adopting changes that disrupt the settled expectations of the inventing community.”¹⁰⁵ The Federal Circuit's new rule “risk[ed] destroying the legitimate expectations of inventors in their property,”¹⁰⁶ and there was “no justification for applying a new and more robust estoppel to those who relied on prior doctrine.”¹⁰⁷

100. 535 U.S. 722 (2002), *vacating* 234 F.3d 558, 56 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2000) (en banc).

101. *Festo*, 234 F.3d at 569, 56 U.S.P.Q.2d (BNA) at 1872 (en banc), *vacated*, 535 U.S. 722 (2002).

102. Adamo et al., *supra* note 14, at 1636.

103. Brief for the United States as Amicus Curiae Supporting Vacatur and Remand at 11-26, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002) (No. 00-1543).

104. *Festo*, 535 U.S. at 740-41.

105. *Id.* at 739.

106. *Id.*

107. *Id.*

Less than a week later, the Supreme Court reminded bench and bar alike that the Federal Circuit did not have jurisdiction over all patent issues arising anywhere in a federal case. In *Holmes Group, Inc. v. Vornado Air Circulation Systems, Inc.*,¹⁰⁸ the Court reminded the Federal Circuit that its jurisdiction was limited to cases “arising under” the patent laws, meaning that the patent law basis for Federal Circuit jurisdiction had to be present on the face of the “well-pleaded complaint,” and could not be found in a counterclaim.¹⁰⁹ The Federal Circuit had asserted jurisdiction over a case where the only issue of patent law had been injected into the case by the defendant’s compulsory counterclaim; the well-pleaded complaint had been one for trade-dress infringement.¹¹⁰ Not only did the Court reiterate the “well-pleaded complaint” rule, but it also specifically rejected the argument that “whenever a patent-law counterclaim is raised,” the Federal Circuit has exclusive appellate jurisdiction.¹¹¹ Justice Stevens, concurring, accurately presaged the Court’s heightened interest in issues of patent law:

Necessarily . . . other circuits will have some role to play in the development of this area of the law. An occasional conflict in decisions may be useful in identifying questions that merit this Court’s attention. Moreover, occasional decisions by courts with broader jurisdiction will provide an antidote to the risk that the specialized court may develop an institutional bias.¹¹²

Taken together, *Festo* and *Holmes Group* appear to have signaled the end of Supreme Court fealty to the Federal Circuit’s views of patent law. In the span of six days in 2002, the Supreme Court had accused the Federal Circuit of “ignor[ing]” Supreme Court precedent¹¹³ and creating new rules with “no justification,”¹¹⁴ and one Justice had even raised the spectre that “the specialized court” might be infected with “institutional bias.”¹¹⁵ Even then, it would be a few more years before the “third wave” reached its crest in 2005.

In the interim, the Court granted certiorari in *Zapata Industries, Inc. v. W.R. Grace & Co.-Connecticut*,¹¹⁶ involving the question of whether the time limit for filing a cross-appeal was a hard-and-fast

108. 535 U.S. 826 (2002).

109. *Id.* at 830-32.

110. *Id.* at 828.

111. *Id.* at 832, 833-34.

112. *Id.* at 839 (Stevens, J., concurring in part).

113. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 739 (2002).

114. *Id.* at 739.

115. *Holmes Group*, 535 U.S. at 839 (Stevens, J., concurring in part).

116. 536 U.S. 990 (2002), *cert. dismissed*, 537 U.S. 1025 (2002).

jurisdictional rule; the circuits were irretrievably split on that question, and the Federal Circuit had sided with those circuits viewing the time limit as a hard, jurisdictional one.¹¹⁷ But after certiorari was granted, Zapata (the petitioner) withdrew its petition for certiorari, and the writ was dismissed.¹¹⁸

The year 2005 was truly the watershed year in the Supreme Court's continuing dialogue with the Federal Circuit. It was certainly the beginning of a time of transition for the Supreme Court as well. The end of the October 2004 term of the Supreme Court in June 2005 effectively marked the end of the "Rehnquist Court"—Justice O'Connor would announce her retirement (effective upon the confirmation of her successor) in July 2005, and Chief Justice Rehnquist would pass away in September 2005, leading to the appointments and confirmations of Chief Justice Roberts and Justice Alito. Some have speculated that these two additions will bring to the Court a greater awareness of business issues, and in particular patent law issues, that "presages continuing high patent activity before the [C]ourt for the foreseeable future."¹¹⁹

And while there is no doubt that the interest in patent cases has continued apace since the arrival of Chief Justice Roberts and Justice Alito, the fact is that the Court had already jumped into the patent law waters in 2005 with a big splash when these changes in composition came upon the Court. In June 2005, with Chief Justice Rehnquist and Justice O'Connor joining Justice Scalia's unanimous opinion for the Court, it decided *Merck KGAA v. Integra Lifesciences I, Ltd.*,¹²⁰ vacating the Federal Circuit's interpretation of the preclinical research exemption of 35 U.S.C. § 271(e)(1) and concluding that the safe harbor contained in that statutory provision was somewhat broader than the Federal Circuit had read it to be.¹²¹ Before the retirement of Justice O'Connor and the death of Chief Justice Rehnquist, the Court had already granted certiorari in *Unitherm Food Systems, Inc. v. Swift-Eckrich, Inc.*,¹²² dealing with a procedural issue (the requirement of a motion for judgment as a matter of law under Rule

117. *Zapata Indus. v. W.R. Grace & Co.-Conn.*, 34 F. App'x. 688, 690 n.* (Fed. Cir. 2002), *cert. granted*, 536 U.S. 990 (2002), *cert. dismissed*, 537 U.S. 1025 (2002).

118. *Zapata Indus. v. W.R. Grace & Co.-Conn.*, 537 U.S. 1025 (2002) (order dismissing cert.).

119. See, e.g., Kenneth R. Adamo & Susan M. Gerber, *Reigning Supreme Over the U.S. Patent System*, PAT., TRADEMARK & COPYRIGHT J. (BNA), Sept. 22, 2006, at 550.

120. 545 U.S. 193 (2005).

121. *Id.* at 206-07; Gregory A. Castanias & Laura A. Coruzzi, The Supreme Court Widens the Range of Preclinical Studies, IP Frontline (June 23, 2005), <http://www.ipfrontline.com/depts/article.asp?id=4414&deptid=7> (last visited Feb. 1, 2007).

122. 375 F.3d 1341, 71 U.S.P.Q.2d 1705 (Fed. Cir. 2004), *cert. granted*, 543 U.S. 1186 (2005).

50 of the Federal Rules of Civil Procedure after the jury's verdict in order to preserve a sufficiency-of-the-evidence challenge for appeal) important to, but not unique to, patent litigation; it had also granted certiorari to *Illinois Tool Works, Inc. v. Independent Ink, Inc.*,¹²³ dealing with the question of whether the fact that a product is patented supports a presumption of market power in that product under the antitrust laws (it was held that it does not).¹²⁴ And although Chief Justice Roberts had already joined the Court and initially voted on whether to grant the petition for certiorari in *Laboratory Corporation of America Holdings v. Metabolite Laboratories, Inc.*,¹²⁵ he ultimately recused himself from the case; the Court then re-voted on whether to grant certiorari and confirmed the grant of certiorari without his participation.¹²⁶ (The case was ultimately dismissed on the ground that the writ of certiorari had been improvidently granted, owing largely to the way the issue had been framed in the lower courts.¹²⁷) The Court's interest in *Laboratory Corporation of America Holdings* had gone back even further; however—with both Chief Justice Rehnquist and Justice O'Connor still on the Court, it had asked the then-Acting Solicitor General to file a brief on the question of whether the Metabolite patent was attempting to claim “laws of nature, natural phenomena, and abstract ideas” in contravention of the patent laws.¹²⁸

Perhaps the most noted patent case taken up by the Court over the past two years was *eBay Inc. v. MercExchange, LLC*.¹²⁹ For years, the Federal Circuit had hewn to the virtually inflexible rule that, when a patent owner obtained a judgment of infringement, a permanent injunction followed as a matter of course. As the Federal Circuit had put it in its decision in the *eBay* case, there exists a “general rule that courts will issue permanent injunctions against patent infringement absent exceptional circumstances.”¹³⁰ Despite the Solicitor General's endorsement of the Federal Circuit's rule, a unanimous Supreme

123. 96 F.3d 1342, 73 U.S.P.Q.2d 1705 (Fed. Cir. 1996), *cert. granted*, 545 U.S. 1127 (2005).

124. *Illinois Tool Works, Inc. v. Indep. Ink, Inc.*, 126 S. Ct. 1281, 1293 (2006).

125. 547 U.S. 28 (2005), *vacated*, 126 S. Ct. 601 (2005) (mem.).

126. 370 F.3d 1354, 71 U.S.P.Q.2d 1081 (Fed. Cir. 2004), *cert. granted*, 126 S. Ct. 601 (2005) (mem.), *cert. dismissed*, 126 S. Ct. 2921 (2006) (mem.).

127. *Lab. Corp. of Am. Holdings*, 126 S. Ct. 2921 (2006) (mem.), *dismissing cert. as improvidently granted by*, 126 S. Ct. 601 (2005) (mem.).

128. *Lab. Corp. of Am. Holdings*, 543 U.S. 1185 (2005) (mem.) (quoting *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)) (order calling for the views of the Acting Solicitor General).

129. 126 S. Ct. 1837 (2006).

130. *MercExchange LLC v. eBay Inc.*, 401 F.3d 1323, 1339, 74 U.S.P.Q.2d (BNA) 1225, 1238 (Fed. Cir. 2005), *vacated*, 126 S. Ct. 1837 (2006).

Court reversed, holding that “well-established principles of equity” require that a party seeking an injunction, even if the party had obtained a judgment of patent infringement, still must satisfy the traditional four-factor test for obtaining an injunction.¹³¹ As Chief Justice Roberts noted in his concurring opinion, “[f]rom at least the early 19th century, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases.”¹³² While it is far too early to ascertain meaningful trends in the case law, particularly in the absence of Federal Circuit precedent, some district courts applying the *eBay* standard after a judgment of patent infringement have denied injunctive relief in cases where the patent owner is not in competition with the infringer in the marketplace¹³³—the sort of patent holder sometimes referred to as a “patent troll” and excoriated in Justice Kennedy’s concurring opinion in *eBay*.¹³⁴

As this article goes to press, the Supreme Court has just decided *MedImmune, Inc. v. Genentech, Inc.*,¹³⁵ which again reversed the Federal Circuit, scuttled its rule that a patent licensee must terminate or breach its patent license before obtaining declaratory-judgment jurisdiction in an action to challenge that license or the patents underlying it,¹³⁶ and raises serious questions regarding the survival of the “reasonable apprehension of suit” standard that governs declaratory-judgment jurisdiction in most circuits.¹³⁷ It has heard argument in, but not yet decided, *KSR International Co. v. Teleflex*,

131. *eBay*, 126 S. Ct. at 1839.

132. *Id.* at 1841 (Roberts, C.J., concurring).

133. See, e.g., *Visto Corp. v. Seven Networks, Inc.*, No. 2:03-CV-333-TJW, 2006 WL 3741891, at *4-5 (E.D. Tex. Dec. 19, 2006) (granting permanent injunction to competitor patentee); *Paice LLC v. Toyota Motor Co.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *4-6 (E.D. Tex. Aug. 16, 2006) (denying permanent injunction to non-competitor patentee); *Wald v. Mudhopper Oilfield Servs., Inc.*, No. CIV-04-1693-C, 2006 WL 2128851, at *4-5 (W.D. Okla. July 27, 2006) (granting permanent injunction to competitor patentee); *Finisar Corp. v. DIRECTV Group, Inc.*, No. 1:05-CV-264, 2006 U.S. Dist. LEXIS 70300, at *14 (E.D. Tex. July 7, 2006) (denying permanent injunction to non-competitor patentee); *z4 Techs. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 444 (E.D. Tex. 2006) (denying permanent injunction to non-competitor patentee). Note: One of the authors served as counsel to the defendants in the *Finisar v. DIRECTV Group* case.

134. See *eBay*, 126 S. Ct. at 1842 (Kennedy, J., concurring) (“An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees.”).

135. 127 S. Ct. 764 (2007).

136. *Id.* at 773-74.

137. *Id.* at 774 n.11. See also *SanDisk Corp. v. STMicroelectronics, Inc.*, No. 05-1300, 2007 WL 881008, at *7 (Fed. Cir. Mar. 26, 2007) (“The Supreme Court’s opinion in *MedImmune* represents a rejection of our reasonable apprehension of suit test.”); *id.* at *12 (Bryson, J., concurring) (expressing “reservations” at this apparent “sweeping change in our law”).

Inc.,¹³⁸ which presents a challenge to the Federal Circuit's longstanding teaching-suggestion-motivation test for determining obviousness under section 103 of the Patent Act, and which seems to have inspired several decisions from the Federal Circuit in 2006 that attempted to explain the flexibility of the teaching-suggestion-motivation test.¹³⁹ It has also heard argument in *Microsoft Corp. v. AT&T Corp.*,¹⁴⁰ which involves the question of whether software object code can be a "component[] of a patented invention under Section 271(f) of the Patent Act," and if so, whether copies of software object code are "supplie[d]" from the United States under that subsection when the copies are created overseas by replicating a master version supplied from the United States.¹⁴¹ The Court's decision in this latter case may bring an increased emphasis on issues of extraterritorial application of the U.S. patent laws, issues that have been recurring in a number of recent Federal Circuit cases (in addition to *Microsoft Corp. v. AT&T Corp.*).¹⁴²

Even beyond these grants of certiorari and decisions, however, there is another gauge of the Supreme Court's apparently enhanced interest in the patent law jurisprudence of the Federal Circuit. The Court has been following the practice of issuing orders calling for the views of the Solicitor General (known colloquially as a "CVSG order") when seriously considering a grant of certiorari in a patent case. It did so before granting certiorari in *Microsoft Corp. v. AT&T Corp.*,¹⁴³ *KSR International Co. v. Teleflex, Inc.*,¹⁴⁴ *Laboratory Corporation of America Holdings v. Metabolite Laboratories, Inc.*,¹⁴⁵ and *Merck KGAA v. Integra*

138. 119 F. App'x. 282 (Fed. Cir. 2005), *cert. granted*, 126 S. Ct. 2965 (2006) (mem.).

139. *In re Kahn*, 441 F.3d 977, 78 U.S.P.Q.2d (BNA) 1329 (Fed. Cir. 2006); *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1306, 79 U.S.P.Q.2d (BNA) 1931, 1936 (Fed. Cir. 2006); *Alza Corp. v. Mylan Labs. Inc.*, 464 F.3d 1286, 80 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 2006); *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 80 U.S.P.Q.2d (BNA) 1641 (Fed. Cir. 2006).

140. 414 F.3d 1366, 75 U.S.P.Q.2d 1506 (Fed. Cir. 2005), *cert. granted*, 127 S. Ct. 467 (2006) (mem.).

141. Petition for a Writ of Certiorari at i, *Microsoft Corp. v. AT&T Corp.*, No. 05-1056 (U.S. Feb. 17, 2006) (internal quotations omitted).

142. *E.g.*, *Union Carbide Corp. v. Shell Oil Co.*, 425 F.3d 1366, 76 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2005); *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 75 U.S.P.Q.2d (BNA) 1763 (Fed. Cir. 2005); *Eolas Techs. v. Microsoft Corp.*, 399 F.3d 1325, 73 U.S.P.Q.2d (BNA) 1782 (Fed. Cir. 2005); *cf. Voda v. Cordis Corp.*, No. 05-1238, 2007 WL 269431, at *15 (Fed. Cir. Feb. 1, 2007) (holding that it was an abuse of discretion to grant leave to amend a U.S. patent-infringement complaint in order to add claims of infringement of five foreign patents under the supplemental-jurisdiction statute, 28 U.S.C. § 1367 (2000)).

143. 127 S. Ct. 1901 (2006) (mem.).

144. 126 S. Ct. 327 (2005) (mem.).

145. 543 U.S. 1185 (2005) (mem.).

Lifesciences I, Ltd.,¹⁴⁶ just to name a few recent examples. But it has also issued CVSG orders in patent cases where it ultimately did not grant certiorari, including, recently, *SmithKline Beecham Corp. v. Apotex Corp.*,¹⁴⁷ presenting the question of whether the “unwitting” or “unappreciated” prior creation of a product can constitute an inherent anticipation under section 102 of the Patent Act; *Apotex Inc. v. Pfizer Inc.*,¹⁴⁸ presenting a question regarding declaratory judgment jurisdiction for cases filed by generic pharmaceutical manufacturers; and *Federal Trade Commission v. Schering-Plough Corp.*,¹⁴⁹ a case arising in the Eleventh Circuit but presenting the question of whether an agreement between a pharmaceutical patent holder and a would-be generic competitor, in which the patent owner makes a substantial payment to the generic manufacturer allegedly to delay the generic challenger’s entry into the market, constitutes an unreasonable restraint of trade.

While each of these cases was ultimately deemed unworthy of certiorari by the Supreme Court, the Court’s interest in these issues should not go unnoticed by the practicing bar, for they did capture enough of the Court’s interest to seek out the views of the United States on each case. These developments, too, provide further confirmation of the exponential leap in the Supreme Court’s interest in the development of the U.S. patent laws.

D. *Surfing the Third Wave: Lessons for the Bar*

Since it now appears that an era of active U.S. Supreme Court review of Federal Circuit decisions is upon us, what can we learn from the recent dialogue between the Federal Circuit and the Supreme Court? We suggest a few lessons:

1. The Supreme Court will be a more aggressive policeman of the Federal Circuit’s decisions than it was over the first twenty years of that court’s existence. (*Festo*,¹⁵⁰ *Holmes Group*,¹⁵¹ *eBay*,¹⁵² *KSR*¹⁵³).

146. 543 U.S. 805 (2004) (mem.).

147. 126 S. Ct. 1133 (2006) (mem.), *cert. denied*, 126 S. Ct. 2887 (2006).

148. 126 S. Ct. 2057 (2006) (mem.), *cert. denied*, 127 S. Ct. 379 (2006) (mem.).
Note: One of the authors served as counsel to respondent in this case.

149. 126 S. Ct. 544 (2005) (mem.), *cert. denied*, 126 S. Ct. 2929 (2006) (mem.).

150. See 535 U.S. 722, 739-41 (2002), *vacating* 234 F.3d 558, 56 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2000) (en banc) (vacating the Federal Circuit’s ruling on the ground, *inter alia*, that, due to inventors’ expectations, the Federal Circuit ought to have been more cautious in its attempt to change the existing estoppel rule).

151. See 535 U.S. 826, 832-34 (2002) (holding that the Federal Circuit’s subject matter jurisdiction is limited to cases “arising under” the patent laws; thus, a patent-law basis for federal jurisdiction must be present in the complaint in order for the claim to be heard in federal court); *supra* text accompanying notes 108-112.

2. Lines of Federal Circuit authority, even those of long-standing application, should be critically evaluated at the beginning of a case to determine whether a challenge to that authority should be raised and preserved in the lower courts or agencies. (*MedImmune*,¹⁵⁴ *KSR*,¹⁵⁵ *eBay*¹⁵⁶).

3. Old (pre-Federal Circuit) Supreme Court authority, and not just that in the patent area, should be considered and urged, where appropriate, on the Federal Circuit and the lower courts. (*MedImmune*,¹⁵⁷ *KSR*,¹⁵⁸ *eBay*¹⁵⁹).

4. The same rules apply to litigation involving patents as in ordinary, non-patent litigation. (*MedImmune*,¹⁶⁰ *Unitherm*,¹⁶¹ *Panduit v. Dennison*¹⁶²).

5. Lawyers need to start thinking about these issues, substantive or procedural, and how to properly frame them for Supreme Court review, as soon as the case is filed, and not just when the case reaches the Federal Circuit or afterward. (*Laboratory Corp.*,¹⁶³ *Unitherm*¹⁶⁴).

152. See 126 S. Ct. 1837, 1839 (2006) (vacating the Federal Circuit's decision, which had objected to the seemingly mandatory requirement for courts to issue a permanent injunction upon a judgment of infringement, on the grounds that injunctions are to be issued if required by the four-factor test).

153. 126 S. Ct. 2965 (2006) (order granting certiorari).

154. See 127 S. Ct. 764, 773-74 (2007); *supra* text accompanying notes 135-137 (indicating that the Supreme Court's reversal of the *MedImmune* decision raises concern about the weight the "reasonable apprehension of suit" standard, which governs declaratory-judgment jurisdiction in most circuits, will be given in the future).

155. See 126 S. Ct. 2965 (2006) (mem.) (order granting certiorari); *supra* note 138 and accompanying text (noting that the Supreme Court recently heard arguments that challenge the Federal Circuit's longstanding teaching-suggestion-motivation test for determining obviousness under section 103 of the Patent Act but has yet to make a ruling).

156. See 126 S. Ct. at 1839 (rejecting the Federal Circuit's challenge to the general rule that permanent injunctions should be issued once the court concludes that there has been a patent infringement).

157. See 127 S. Ct. 764.

158. See 126 S. Ct. 2965 (2006) (mem.).

159. See 126 S. Ct. at 1839-41 (applying the four-factor test historically employed by courts of equity).

160. See 127 S. Ct. at 774 (applying declaratory judgment rules).

161. See 543 U.S. 1186 (2005) (order granting certiorari) (noting that the Court would address a procedural issue—the requirement of a motion for summary judgment under Fed. R. Civ. P. 50—which is not unique to patent litigation).

162. See 475 U.S. 809, 811 (1986) (remanding the case for reconsideration in light of Fed. R. Civ. P. 52(a)).

163. See 126 S. Ct. 543 (2005) (*per curiam*); *supra* note 127 and accompanying text (indicating that the case was dismissed on the ground that, because of how the issue had been framed in the lower courts, the writ of certiorari had been improperly granted).

164. See 543 U.S. at 1186 (order granting certiorari) (noting that the Court would be addressing whether a court of appeals may review the sufficiency of evidence supporting a jury verdict when the motion for such a review was made prior to submission of the case to a jury).

6. The support of the U.S. Solicitor General may be useful in some cases (*Festo*¹⁶⁵), but the Court will not blindly accept the Solicitor General's position (*eBay*¹⁶⁶).

At bottom, the single most important lesson from the Supreme Court's recent dialogue with the Federal Circuit may be this: The Supreme Court is still "supreme," even when it comes to issues of patent law that fall within the aegis of "the specialized court."¹⁶⁷ That lesson may have been forgotten in the early years of the Federal Circuit, when patent cases were not reviewed frequently, and later, when the Federal Circuit was affirmed by the Supreme Court on the major issues of the day. But the world has changed, and that lesson now has profound importance for the way cases are litigated up through, and past, the United States Court of Appeals for the Federal Circuit.

Keep these principles in mind as we consider the patent law work of the Federal Circuit in 2006.

II. FEDERAL COURT AND AGENCY PRACTICE

The cases decided by the Federal Circuit in the year 2006 involved numerous procedural issues. Perhaps the most significant of these were a number of decisions addressing the use of summary judgment to resolve inequitable conduct disputes, as well as two decisions addressing the application of the local "patent rules" that apply in several district courts around the country.

We have organized the discussion of the Federal Circuit's procedural rulings in roughly the order in which they are encountered in litigation: jurisdictional and other issues involved in initiating the case, pre-trial matters, trial issues, and post-trial matters. After a discussion of the special case of local patent rules, we then turn to appellate procedural issues, and conclude with a discussion of some procedural issues unique to the U.S. Patent and Trademark Office.

165. See 535 U.S. 722, 739-41 (2002); *supra* note 104 and accompanying text (discussing how the Supreme Court adopted the "presumption" approach that had been advocated by the U.S. Solicitor General in his brief).

166. See 126 S. Ct. 1837, 1839 (2007); *supra* note 131 and accompanying text (noting that the Supreme Court disagreed with the Federal Circuit's objection to permanent injunctions even though the Solicitor General had given his support to the argument).

167. *Holmes Group, Inc. v. Vornado Air Circ. Sys., Inc.*, 535 U.S. 826, 839 (2002) (Stevens, J., concurring in part).

*A. District Court Practice**1. Initiating the case**a. Standing*

A party has standing to bring suit only if it has a legally sufficient “personal stake” in a dispute to justify exercise of a court’s remedial powers on its behalf.¹⁶⁸ The Patent Act provides that a “patentee” may bring an action for “infringement of his patent.”¹⁶⁹ The term “patentee” includes “not only the patentee to whom the patent was issued but also the successors in title to the patentee.”¹⁷⁰ The courts have recognized that in some instances a patent licensee may have standing to sue for infringement, but in others it may not.¹⁷¹

Issues of standing arose a few times in 2006.¹⁷² In *Aspex Eyewear, Inc. v. Miracle Optics*,¹⁷³ the district court had concluded that neither Contour Optik (the original patent assignee) nor Aspex Eyewear (a sublicensee) had standing to sue for infringement of an eyeglass-frame patent because neither possessed the “rights of the patentee” when the original complaint was filed, and because the sublicense agreement between Aspex and Chic (a licensee of Contour’s) was executed after the complaint was filed.¹⁷⁴ The Federal Circuit vacated, however, holding that the Contour-Chic agreement “did not constitute a transfer from Contour to Chic of all substantial rights to the ‘747 patent, and hence it was not an assignment” under *Waterman v. Mackenzie*.¹⁷⁵ Although the Chic-Contour agreement contained provisions that “strongly favor a finding of an assignment, not a license,”¹⁷⁶ the dispositive factor to the Federal Circuit was the limited

168. See, e.g., *Warth v. Seldin*, 422 U.S. 490, 498-99 (1975) (invoking “personal stake” as the primary element in determining standing and justiciability of the case or controversy).

169. See 35 U.S.C. § 281 (2000) (declaring the right to a civil action as a “remedy for infringement” under the Patent Act).

170. *Id.* § 100(d).

171. Compare *Waterman v. Mackenzie*, 138 U.S. 252, 255 (1891) (holding that an exclusive territorial licensee has standing to sue for patent infringement) and *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870, 875-76, 20 U.S.P.Q.2d (BNA) 1045, 1049-50 (Fed. Cir. 1991) (holding same), with *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1551-52, 35 U.S.P.Q.2d (BNA) 1065, 1074 (Fed. Cir. 1995) (en banc) (holding that a non-exclusive licensee does not have standing to sue for patent infringement).

172. See also *infra* notes 704-23, and accompanying text.

173. 434 F.3d 1336, 77 U.S.P.Q.2d (BNA) 1456 (Fed. Cir. 2006).

174. *Id.* at 1339, 77 U.S.P.Q.2d (BNA) at 1458.

175. See *id.* at 1341-42, 77 U.S.P.Q.2d (BNA) at 1460 (noting that in *Waterman* the Supreme Court held that an assignee has standing to bring suit if it has an exclusive right to the patented invention).

176. *Id.* at 1342, 77 U.S.P.Q.2d (BNA) at 1460.

time of the agreement—“As of March 16, 2006, Contour, absent an amendment of the agreement, will regain all of the rights under the ‘747 patent that it had previously transferred to Chic. It is thus the unquestioned owner of the patent”¹⁷⁷ The court remanded for the district court to consider whether Aspex was an exclusive licensee who was a necessary party required to be joined—an issue the district court had not addressed.¹⁷⁸

In *Bicon, Inc. v. Strautmman Co.*,¹⁷⁹ the district court had dismissed Bicon as a party on the ground that it was a nonexclusive licensee and thus lacked standing to sue.¹⁸⁰ The legal principle at issue was unexceptional and agreed-to by the parties—“an exclusive licensee may sue on a patent, if the patent owner is joined as a party, but . . . a nonexclusive licensee may not.”¹⁸¹ Bicon’s only argument was that the district court should not have resolved this issue on summary judgment, because Bicon’s president had testified that the licensed right to practice the invention of the patent was “exclusive at the moment”—but, as the Federal Circuit pointed out, that testimony was further qualified by the statement that the license was only “exclusive” in that Bicon was the only licensee of the patent at the time.¹⁸² That was not enough to overcome summary judgment, and so the Federal Circuit affirmed.¹⁸³

b. Subject-matter jurisdiction

A federal court must have subject-matter jurisdiction over a controversy before it can reach the merits of that controversy; for a federal court to proceed to the merits without assuring itself of jurisdiction “carries the courts beyond the bounds of authorized judicial action and thus offends fundamental principles of separation of powers.”¹⁸⁴ In most patent cases, the basis for federal subject-matter jurisdiction is section 1338(a) of the Judicial Code, which provides for “jurisdiction . . . exclusive of the courts of the states in

177. *Id.*, 77 U.S.P.Q.2d (BNA) at 1460.

178. *Id.* at 1344, 77 U.S.P.Q.2d (BNA) at 1462.

179. 441 F.3d 945, 78 U.S.P.Q.2d (BNA) 1267 (Fed. Cir. 2006).

180. *Id.* at 956, 78 U.S.P.Q.2d (BNA) at 1277.

181. *Id.*, 78 U.S.P.Q.2d (BNA) at 1277 (citing *Schreiber Foods, Inc. v. Beatrice Cheese, Inc.*, 402 F.3d 1198, 1202-03, 74 U.S.P.Q.2d (BNA) 1204, 1207-08 (Fed. Cir. 2005) and *Ortho Pharm. Corp. v. Genetics Inst., Inc.*, 52 F.3d 1026, 1031, 34 U.S.P.Q.2d (BNA) 1444, 1446-47 (Fed. Cir. 1995)).

182. *Id.*, 78 U.S.P.Q.2d (BNA) at 1277.

183. *Id.*, 78 U.S.P.Q.2d (BNA) at 1277.

184. *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 94 (1998); *see Ruhrgas AG v. Marathon Oil Co.*, 526 U.S. 574, 587-88 (1999) (noting that federal court inquiries into subject-matter jurisdiction should be answered prior to questions of personal jurisdiction so as to show “expedition and sensitivity to state courts’ coequal share”).

patent, plant variety protection and copyright cases.”¹⁸⁵ But jurisdictional issues crop up under other statutes and constitutional provisions—most notably when sovereign immunity (domestic or foreign) is at issue.

In fact, the major developments in subject-matter jurisdiction in 2006 dealt with these sources of immunity. In *Intel Corp. v. Commonwealth Scientific and Industrial Research Organisation*,¹⁸⁶ the court addressed the question of jurisdiction under the Foreign Sovereign Immunities Act (“FSIA”),¹⁸⁷ as the defendant, the Commonwealth Scientific and Industrial Research Organisation (“CSIRO”), was Australia’s national science agency.¹⁸⁸ CSIRO had engaged in ultimately unsuccessful licensing negotiations with United States companies such as Dell, Intel, Microsoft, Hewlett-Packard, and Netgear; when the discussions ended, each of the U.S. companies filed declaratory judgment actions against CSIRO.¹⁸⁹ CSIRO claimed that it was immune from suit, and specifically urged that the “commercial activity” exception to foreign sovereign immunity¹⁹⁰ did not apply to “patent licensing negotiations that do not result in a fully-executed, binding contract.”¹⁹¹ The district court disagreed with CSIRO, but, because denials of claims of immunity are immediately appealable under the collateral-order doctrine, CSIRO was able to take an immediate appeal to the Federal Circuit.¹⁹² In deciding this “issue of first impression for this court,”¹⁹³ the Federal Circuit affirmed, noting that “CSIRO’s acts of (1) obtaining a United States patent and then (2) enforcing its patent so it could reap the profits thereof—whether by threatening litigation or by proffering licenses to putative infringers—certainly fall within the . . . category” of “exercis[ing] only those powers that can also be exercised by private citizens,” which are not “powers peculiar to sovereigns.”¹⁹⁴ The licensing discussions with United States companies were therefore “commercial activity” under the FSIA, and the U.S. companies’

185. 28 U.S.C. § 1338(a) (2000).

186. 455 F.3d 1364, 79 U.S.P.Q.2d (BNA) 1508 (Fed. Cir. 2006).

187. 28 U.S.C. §§ 1602-1611; *see id.* § 1604 (stating that “a foreign state shall be immune from the jurisdiction of the courts of the United States”).

188. *Intel*, 455 F.3d at 1366, 79 U.S.P.Q.2d (BNA) at 1509.

189. *Id.* at 1366-68, 79 U.S.P.Q.2d (BNA) at 1509-11.

190. *See* 28 U.S.C. §§ 1605(a)(2), 1603(d) (indicating that foreign states engaging in “a regular course of commercial conduct or a particular commercial transaction” in the United States will not be immune from jurisdiction).

191. *Intel*, 455 F.3d at 1369, 79 U.S.P.Q.2d (BNA) at 1512.

192. *Id.*, 79 U.S.P.Q.2d (BNA) at 1511.

193. *Id.*, 79 U.S.P.Q.2d (BNA) at 1512.

194. *Id.* at 1370, 79 U.S.P.Q.2d (BNA) at 1512 (quoting *Republic of Argentina v. Weltover*, 504 U.S. 607, 614 (1992)).

declaratory-judgment actions were “based on” those commercial activities of obtaining and asserting a U.S. patent.¹⁹⁵

Another immunity issue that arises with increasing frequency in the Federal Circuit is the question of the states’ sovereign immunity.¹⁹⁶ This issue recurs with some regularity because state universities (which are arms of the state for purposes of the Eleventh Amendment) have become more active in the business of patent procurement and enforcement, and in several cases are accused infringers. For instance, in *Pennington Seed, Inc. v. Produce Exchange No. 299*,¹⁹⁷ Pennington Seed attempted to sue the University of Arkansas and four of its officers for “actively growing, marketing, offering for sale, promoting and selling a product containing” Pennington Seed’s patented fescue grass.¹⁹⁸ The district court found the action barred by the Eleventh Amendment, and the Federal Circuit affirmed, rejecting Pennington Seed’s argument that Arkansas’s state-law claims procedures provided no adequate remedies for patent infringement on the ground that Congress made no specific finding that these state procedures were so inadequate that it “abrogated state sovereign immunity” to allow a patent infringement suit for damages to proceed in federal court.¹⁹⁹ The court also noted that although injunctive relief against state officials for continuing violations of federal law might be theoretically available under *Ex Parte Young*;²⁰⁰ here there was no proper allegation that the state university officials themselves were involved in any ongoing violation of federal law.²⁰¹

Sovereign immunity was also at issue in *Tegic Communications Corp. v. Board of Regents of the University of Texas System*.²⁰² The district court held that the University of Texas had not waived its sovereign immunity to a declaratory judgment suit brought by Tegic by filing a covenant not to sue, by obtaining patent rights and enforcing them in other federal court actions, or (with respect to its immunity from suit in Washington State) by filing suit in Texas as to the same

195. *Id.* at 1370-71, 79 U.S.P.Q.2d (BNA) at 1512-13.

196. *See* U.S. CONST. amend. XI (“The Judicial powers of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.”).

197. 457 F.3d 1334, 79 U.S.P.Q.2d (BNA) 1777 (Fed. Cir. 2006).

198. *Id.* at 1338, 79 U.S.P.Q.2d (BNA) at 1778.

199. *Id.* at 1340-41, 79 U.S.P.Q.2d (BNA) at 1780.

200. *See* 209 U.S. 123 (1908) (holding that a state’s sovereign immunity cannot insulate the unconstitutional actions of a state official because, upon violation of the Constitution, that individual is stripped of his or her official capacity).

201. *Pennington Seed*, 457 F.3d at 1341-43, 79 U.S.P.Q.2d (BNA) at 1780-82.

202. 458 F.3d 1335, 80 U.S.P.Q.2d (BNA) 1201 (Fed. Cir. 2006).

patent.²⁰³ The Federal Circuit affirmed, holding that the University's assertion of its patents against certain telephone companies in a Texas federal court waived its immunity as to any compulsory counterclaims arising out of the same transaction or occurrence, but did not extend to Tegic's declaratory suit in Washington federal court.²⁰⁴

*Fuji Photo Film Co. v. Benun*²⁰⁵ presented an interesting question of subject-matter jurisdiction vis-à-vis the district courts and the International Trade Commission ("ITC").²⁰⁶ Ordinarily, a patent owner can bring actions regarding importations of allegedly infringing products in both a federal district court and before the ITC.²⁰⁷ The bases for jurisdiction (and the scope of the available remedies) differ in the two fora: ITC jurisdiction is in rem, not in personam, the only available remedies there are exclusion orders enforceable at the border by the U.S. Customs Service against any infringing product, and damages are unavailable.²⁰⁸ An exclusion order may be specific (as it is typically) or general (which is less common): A specific exclusion order excludes from the United States only those articles at issue in the investigation; a general exclusion order typically excludes all infringing articles, whether or not included in the investigation, and whether or not imported by any of the respondents in the investigation.²⁰⁹ In *Fuji Photo Film*, the defendants urged, in a federal court action following an ITC action, that the ITC's earlier issuance of a general exclusion order had precluded a district court from granting injunctive relief, or, as the Federal Circuit described the argument, "once the [ITC] issues a general exclusion order, the statutory scheme that allows an importer to challenge a seizure of its goods under such an order also prevents a district court from considering importation issues involving those same goods."²¹⁰ The Federal Circuit rejected this argument, noting that 28 U.S.C. § 1581(a), which grants the Court of International Trade exclusive jurisdiction over denials of protests of general exclusion orders,²¹¹ "says nothing about district court jurisdiction over

203. *Id.* at 1339, 80 U.S.P.Q.2d (BNA) at 1203.

204. *Id.* at 1341-43, 80 U.S.P.Q.2d (BNA) at 1205.

205. 463 F.3d 1252 (Fed. Cir. 2006).

206. *Id.* at 1253.

207. *Id.* at 1254; *Texas Instruments Inc. v. Tessera, Inc.*, 231 F.3d 1325, 1330, 56 U.S.P.Q.2d (BNA) 1674, 1678 (Fed. Cir. 2000). Three of the authors were counsel to Texas Instruments in this case.

208. *Id.* at 1330, 56 U.S.P.Q.2d (BNA) at 1678.

209. 19 U.S.C. § 1337(d) (2000).

210. *Fuji Photo*, 463 F.3d at 1254.

211. 28 U.S.C. § 1581(a) (2000).

patent infringement claims . . . or injunctions”²¹² This statute only gives the Court of International Trade exclusive jurisdiction over actions “commenced to contest the denial of a protest,”²¹³ and because a district court patent infringement action is not a “contest” to “the denial of a protest,” the Federal Circuit affirmed the district court’s rejection of the defendants’ jurisdictional challenge.²¹⁴

In *Thompson v. Microsoft Corp.*,²¹⁵ the court held that a state law claim of unjust enrichment, based on a claim that Microsoft improperly filed a patent application for an invention that the plaintiff alleged he invented, did not “arise under” the U.S. patent laws for purposes of the Federal Circuit’s subject-matter jurisdiction.²¹⁶ The Federal Circuit’s decision in *Thompson* applied two of the most important principles undergirding the well-pleaded complaint rule for purposes of ascertaining federal subject-matter jurisdiction: one, if a cause of action is not on its face one for patent infringement, it only “arises under” patent law if “patent law is a necessary element of [a] well-pleaded [non-patent-law] claim;”²¹⁷ and two, even a defense on federal preemption grounds—which Microsoft had interposed as a defense to Thompson’s unjust-enrichment claim—will not support “arising under” subject-matter jurisdiction.²¹⁸ Because the Federal Circuit’s own appellate jurisdiction depends on a finding that the district court’s jurisdiction “arises under” the U.S. patent laws,²¹⁹ the court concluded that it lacked jurisdiction over Thompson’s appeal and ordered the appeal transferred to the United States Court of Appeals for the Sixth Circuit.²²⁰

c. Personal jurisdiction

A federal district court has personal jurisdiction over a party so long as two basic requirements are fulfilled: “First, a defendant must be amenable to process in the forum state. Second, the court’s exercise of personal jurisdiction must comply with the precepts of federal due process.”²²¹ A party is “amenable to service of process” if

212. *Fuji Photo*, 463 F.3d at 1255.

213. 28 U.S.C. § 1581(a).

214. *Fuji Photo*, 463 F.3d at 1255-56.

215. 471 F.3d 1288, 81 U.S.P.Q.2d (BNA) 1155 (Fed. Cir. 2006).

216. *Id.* at 1292, 81 U.S.P.Q.2d (BNA) at 1158.

217. *Id.* at 1291, 81 U.S.P.Q.2d (BNA) at 1158 (quoting *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 797, 808-09 (1988)).

218. *Id.* at 1292, 81 U.S.P.Q.2d (BNA) at 1158.

219. 28 U.S.C. § 1338(a) (2000).

220. *Thompson*, 471 F.3d at 1292, 81 U.S.P.Q.2d (BNA) at 1158.

221. *LSI Indus., Inc. v. Hubbell Lighting, Inc.*, 232 F.3d 1369, 1371, 56 U.S.P.Q.2d (BNA) 1965, 1966 (Fed. Cir. 2000) (citing *Int’l Shoe Co. v. Wash. Office of Unemployment Comp. & Placement*, 326 U.S. 310 (1945)).

it could be “subjected to the jurisdiction of a court of general jurisdiction in the state in which the district court is located,” such as under a state “long-arm” jurisdictional statute or “nonresident motorist statute.”²²²

In *Breckenridge Pharmaceutical, Inc. v. Metabolite Laboratories, Inc.*,²²³ the Federal Circuit addressed several of these issues and attempted to synthesize the law with respect to personal jurisdiction in the context of “cease and desist” letters.²²⁴ A Florida district court had held that Metabolite’s sending of certain “cease and desist” letters into Florida from its Colorado home did not meet the due process standards for personal jurisdiction.²²⁵ The Federal Circuit disagreed and held that there were sufficient contacts between Metabolite and parties in the State of Florida to satisfy the constitutional personal-jurisdiction requirement.²²⁶ The court surveyed several of its prior cases, which reached differing results on similar (though not identical) facts, and set forth these guiding principles:

[W]here a defendant has sent cease and desist letters into a forum state that primarily involve a legal dispute unrelated to the patent at issue, such as an injunction obtained for misappropriation of trade secrets, the exercise of jurisdiction is improper.²²⁷

....

[A] defendant may not be subjected to personal jurisdiction if its only additional activities in the forum state involve unsuccessful attempts to license the patent there.²²⁸

....

A defendant may not be subjected to personal jurisdiction where the defendant “has successfully licensed the patent in the forum state, even to multiple non-exclusive licenses, but does not, for example, exercise control over the licensees’ sales activities and, instead, has no dealings with those licensees beyond the receipt of royalty income.”²²⁹

....

222. FED. R. CIV. P. 4(k)(1)(A).

223. 444 F.3d 1356, 78 U.S.P.Q.2d (BNA) 1581 (Fed. Cir. 2006).

224. *Id.* at 1366, 78 U.S.P.Q.2d (BNA) at 1587-88; *see infra* notes 227-232 and accompanying text (laying out the court’s summary of the relevant case law).

225. *Breckenridge*, 444 F.3d at 1360, 78 U.S.P.Q.2d (BNA) at 1584.

226. *Id.* at 1369, 78 U.S.P.Q.2d (BNA) at 1590.

227. *Id.* at 1366, 78 U.S.P.Q.2d (BNA) at 1587 (citing *Silent Drive, Inc. v. Strong Indus., Inc.*, 326 F.3d 1194, 1202, 66 U.S.P.Q.2d (BNA) 1602, 1607 (Fed. Cir. 2003)).

228. *Id.*, 78 U.S.P.Q.2d (BNA) at 1587 (citing *Hildebrand v. Steck Mfg. Co., Inc.*, 279 F.3d 1351, 1356, 61 U.S.P.Q.2d (BNA) 1696, 1700 (Fed. Cir. 2002)).

229. *Id.*, 78 U.S.P.Q.2d (BNA) at 1587-88 (citing *Red Wing Shoe Co. v. Hockerson-Halberstadt, Inc.*, 148 F.3d 1355, 1361-62, 47 U.S.P.Q.2d (BNA) 1192, 1197 (Fed. Cir. 1998)).

In contrast, the defendant is subject to personal jurisdiction in the forum state by virtue of its relationship with its exclusive forum state licensee if the license agreement, for example, requires the defendant-licensor, and grants the licensee the right, to litigate infringement claims.²³⁰

....

[T]he defendant will also be subject to personal jurisdiction in the forum state if the exclusive licensee (or licensee equivalent) with which it has established a relationship is not headquartered in the forum state, but nonetheless conducts business there.²³¹

Thus, the Federal Circuit summarized,

the crux of the due process inquiry should focus first on whether the defendant has had contact with parties in the forum state beyond the sending of cease and desist letters or mere attempts to license the patent there. Where a defendant-licensor has a relationship with an exclusive licensee headquartered or doing business in the forum state, the inquiry requires close examination of the license agreement. In particular, our case law requires that the license agreement contemplate a relationship beyond royalty or cross-licensing payment, such as granting both parties the right to litigate infringement cases or granting the licensor the right to exercise control over the licensee's sales or marketing activities.²³²

Applying these standards, which are a matter of Federal Circuit law because of their close relationship to matters of substantive patent law,²³³ the Federal Circuit held that the district court had erred in finding no personal jurisdiction over defendant Metabolite because: Metabolite had entered into an exclusive license arrangement with PamLab, a company that does business in Florida; that license agreement resulted in an ongoing relationship under which PamLab was granted "full control of the prosecution or maintenance" of any patent or application for a patent that Metabolite abandons or lets lapse; and the agreement also resulted in PamLab and Metabolite cooperating in sending cease-and-desist letters and in litigating infringement claims in Florida and elsewhere.²³⁴

In *Pennington Seed, Inc. v. Produce Exchange No. 299*,²³⁵ the court affirmed a Missouri district court's decision that it lacked personal

230. *Id.*, 78 U.S.P.Q.2d (BNA) at 1588 (citing *Akro Corp. v. Luker*, 45 F.3d 1541, 1546, 33 U.S.P.Q.2d (BNA) 1505, 1509 (Fed. Cir. 1995)).

231. *Id.*, 78 U.S.P.Q.2d (BNA) at 1588 (citing *Genetic Implant Sys., Inc. v. Core-Vent Corp.*, 123 F.3d 1455, 1457-59, 43 U.S.P.Q.2d (BNA) 1786, 1788-90 (Fed. Cir. 1997)).

232. *Id.*, 78 U.S.P.Q.2d (BNA) at 1588.

233. *Id.* at 1362, 78 U.S.P.Q.2d (BNA) at 1585.

234. *Id.* at 1366-67, 78 U.S.P.Q.2d (BNA) at 1588.

235. 457 F.3d 1334, 79 U.S.P.Q.2d (BNA) 1777 (Fed. Cir. 2006).

jurisdiction over officials of the University of Arkansas.²³⁶ Noting that it was only necessary for Pennington Seed to make out a prima facie case of personal jurisdiction in its complaint, the court nonetheless concluded that the complaint was wholly lacking in any allegation that these officials had any contacts with the State of Missouri.²³⁷ “Even if their residence is within sixty miles of the Missouri border, as Pennington states in its brief to this court, such a fact does not demonstrate activities directed at Missouri or claims arising out of activities in Missouri.”²³⁸

d. Specific issues affecting the initiation of a case

In addition to these essential legal jurisdictional requirements, there are other jurisdictional (and related) doctrines that are occasionally invoked at the outset of a case, often involving discretionary determinations by district courts. A few of the doctrines that cropped up in the 2006 decisions of the Federal Circuit are discussed below.

i. Declaratory judgments

As noted above,²³⁹ the Supreme Court’s recent decision in *MedImmune, Inc. v. Genentech, Inc.*²⁴⁰ raises substantial questions about the continued vitality of the Federal Circuit’s “reasonable apprehension of suit” (or “reasonable apprehension of *imminent* suit”) test, which has governed the question of declaratory-judgment jurisdiction over the years.²⁴¹ The pre-*MedImmune* decisions that the Federal Circuit rendered in 2006 should therefore be evaluated with a critical eye to determine what effect they may have, post-*MedImmune*.

In *Microchip Technology Inc. v. Chamberlain Group, Inc.*,²⁴² the Federal Circuit relied on the 2005 decision in *MedImmune, Inc. v. Centocor, Inc.*,²⁴³ concluding that an existing settlement agreement, which the declaratory judgment plaintiff believed had brought “patent peace” between the parties, demonstrated that the declaratory plaintiff had

236. *Id.* at 1344-45, 79 U.S.P.Q.2d (BNA) at 1783.

237. *Id.* at 1344, 79 U.S.P.Q.2d (BNA) at 1783.

238. *Id.*, 79 U.S.P.Q.2d (BNA) at 1783.

239. *See supra* notes 119-121 and accompanying text.

240. 127 S. Ct. 764 (2007).

241. *Id.* at 774 n.11 (quoting *Teva Pharm. USA, Inc. v. Pfizer, Inc.*, 395 F.3d 1324, 1332-33, 74 U.S.P.Q.2d (BNA) 1088, 1093-94 (Fed. Cir. 2005)).

242. 441 F.3d 936, 78 U.S.P.Q.2d (BNA) 1294 (Fed. Cir. 2006).

243. 409 F.3d 1376, 74 U.S.P.Q.2d (BNA) 1942 (Fed. Cir. 2005), *vacated*, 127 S. Ct. 1118 (2007).

no “reasonable apprehension of suit.”²⁴⁴ However, the U.S. Supreme Court vacated the Federal Circuit’s judgment in *MedImmune v. Centocor*, remanding the case for the Federal Circuit to reconsider its decision in light of the Supreme Court decision in *MedImmune v. Genentech*.²⁴⁵ So, as this article goes to press, it is unclear what weight, if any, the *Microchip Technology* case will have in the future.

In *Plumtree Software, Inc. v. Datamize, LLC*,²⁴⁶ the Federal Circuit again applied the “reasonable apprehension of suit” test but determined based on the totality of the circumstances that Datamize’s earlier suit against Plumtree regarding a parent patent created a reasonable apprehension of a suit in relation to later patents on related technology, thereby making Plumtree’s declaratory-judgment suit appropriate.²⁴⁷ The court rejected Datamize’s argument that the passage of time since that earlier suit had minimized or eliminated that apprehension, “because, between the two lawsuits, Datamize continued to ‘engage[] in a course of conduct that show[ed] a willingness to protect [its] technology’”—it had sued nine other defendants (not Plumtree) in another suit in federal district court in Texas and had stated in discovery responses in that Texas suit that it also believed Plumtree was infringing these patents.²⁴⁸ “Plumtree was aware of the Texas action, and whether or not the interrogatory response was actually communicated to Plumtree, the response is probative of Datamize’s intentions.”²⁴⁹

ii. Supplemental jurisdiction

Under 28 U.S.C. § 1367, a federal district court may exercise “supplemental jurisdiction” over a state law claim for which the federal court would not otherwise have jurisdiction, if the state law claim arises from the same common nucleus of operative fact as the claim or claims properly in the federal court.²⁵⁰ In 2006, the Federal Circuit issued a pronouncement on supplemental jurisdiction in

244. *Microchip Tech.*, 441 F.3d at 942, 78 U.S.P.Q.2d (BNA) at 1298.

245. No. 05-656, 2007 U.S. LEXIS 1012 (Jan. 16, 2007).

246. 473 F.3d 1152, 81 U.S.P.Q.2d (BNA) 1251 (Fed. Cir. 2006).

247. *Id.* at 1159, 81 U.S.P.Q.2d (BNA) at 1255-56.

248. *Id.*, 81 U.S.P.Q.2d (BNA) at 1256 (quoting *Goodyear Tire & Rubber Co. v. Releasomers, Inc.*, 824 F.2d 953, 956, 3 U.S.P.Q.2d (BNA) 1310, 1312 (Fed. Cir. 1987)).

249. *Plumtree Software*, 473 F.3d at 1159, 81 U.S.P.Q.2d (BNA) at 1256.

250. See 28 U.S.C. § 1367(a) (2000) (granting the district courts supplemental jurisdiction over “all other claims that are so related to claims in the action within such original jurisdiction that they form part of the same case or controversy under Article III of the United States Constitution”); see also *United Mine Workers of Am. v. Gibbs*, 383 U.S. 715, 725 (1966) (indicating that a federal court may hear both state and federal claims if those claims arise out of a common nucleus of operative facts).

*Highway Equipment Co. v. FECO, Ltd.*²⁵¹ The court held that a district court had “erred in exercising supplemental jurisdiction” over a state law counterclaim (between two nondiverse parties) for wrongful termination of a dealership agreement, because the wrongful termination claim and the federal patent infringement claim did not arise out of a common nucleus of operative facts.²⁵² The contract relating to the distribution of Highway Equipment’s products was completely unrelated to the patent, which dealt with a product manufactured by FECO; and the dealership agreement was terminated in 2002, a year before the patent being contested at the federal level was even issued.²⁵³

iii. Forum non conveniens

Under the doctrine of *forum non conveniens*, a district court, despite otherwise having jurisdiction over a claim or parties, may nonetheless decline to hear a case if it determines that the dispute is one better heard in a foreign forum.²⁵⁴ In *Bonzel v. Pfizer, Inc.*,²⁵⁵ the Federal Circuit affirmed the district court’s alternative holding that the suit was properly dismissed under the *forum non conveniens* doctrine because “the contract at issue was made in Germany and by its terms requires interpretation and application of German law.”²⁵⁶

251. 469 F.3d 1027, 81 U.S.P.Q.2d (BNA) 1120 (Fed. Cir. 2006).

252. *Id.* at 1038-39, 81 U.S.P.Q.2d (BNA) at 1128-29.

253. *See id.*, 81 U.S.P.Q.2d (BNA) at 1129 (comparing the situation to *Mars, Inc. v. Kabushiki-Kaisha Nippon Conlux*, 24 F.3d 1368, 30 U.S.P.Q.2d (BNA) 1621 (Fed. Cir. 1994) and *Ideal Instruments, Inc. v. Rivard Instruments, Inc.*, 434 F. Supp. 2d 598 (N.D. Iowa 2006), two cases in which supplemental jurisdiction was denied because the respective agreements, products, and alleged acts were different, indicating that there was not a “common nucleus of operative facts”).

254. *See, e.g., Sinochem Int’l Co. Ltd. v. Malaysia Int’l Shipping Corp.*, 127 S. Ct. 1184, 1188 (2007) (Under the doctrine of *forum non conveniens*, “a federal district court may dismiss an action on the ground that a court abroad is the more appropriate and convenient forum for adjudicating the controversy.”); *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501, 511-12 (1947), *superseded by statute*, 28 U.S.C. § 1404(a) (2000), *as recognized in Quackenbush v. Allstate Ins. Co.*, 517 U.S. 706 (1996) (finding the New York court’s refusal of jurisdiction on the basis of *forum non conveniens* appropriate because the negligence suit, which was brought by a Virginia resident against a Pennsylvania company (conducting business in both New York and Virginia) after a fire at the company’s Virginia warehouse had destroyed the plaintiff’s goods, could best be heard in Virginia); *see also Am. Dredging Co. v. Miller*, 510 U.S. 443 (1994) (finding that state law regarding the doctrine of *forum non conveniens* is not preempted by federal law in admiralty cases filed in state court under the Jones Act and the “saving to suitors clause”). One of the authors was counsel to Sinochem in the first-cited case in this footnote.

255. 439 F.3d 1358, 78 U.S.P.Q.2d (BNA) 1136 (Fed. Cir. 2006). One of the authors was counsel to Pfizer, Inc. in this case.

256. *Id.* at 1363, 78 U.S.P.Q.2d (BNA) at 1140. The district court had dismissed the case for lack of federal jurisdiction, either “arising under” the patent laws or diversity jurisdiction, and the Federal Circuit had affirmed that dismissal prior to

iv. Stays pending arbitration

Section 3 of the Federal Arbitration Act (“FAA”) provides that, where a federal district court is satisfied that an issue in a court dispute is “referable to arbitration” under a written instrument providing for such arbitration, “the court in which such suit is pending . . . shall on application of one of the parties stay the trial of the action until such arbitration has been had in accordance with the terms of the agreement”²⁵⁷ In *Qualcomm Inc. v. Nokia Corp.*,²⁵⁸ the Federal Circuit concluded that the Qualcomm-Nokia agreement clearly and unmistakably provided that the question of arbitrability was to be decided by the arbitrator, but remanded the case for the district court to determine whether Nokia’s claim of arbitrability, as to the particular issues claimed to be arbitrable, was “wholly groundless.”²⁵⁹ The district court had, in denying the request for arbitration, misunderstood its task as determining whether the asserted issues were in fact arbitrable; because the agreement assigned arbitrability questions to the arbitrator, not the court, only the limited “wholly groundless” inquiry avoids “inva[di]ng] the province of the arbitrator.”²⁶⁰

2. Pre-trial matters

a. Leave to amend the complaint

Rule 15(a) of the Federal Rules of Civil Procedure provides that leave to amend a complaint after a responsive pleading is filed “shall be freely given when justice so requires.”²⁶¹ However, leave to amend a complaint need not be granted when there has been undue or prejudicial delay, the moving party acted in bad faith, or an amendment is legally futile.²⁶² Moreover, where a district court has entered a scheduling order under rule 16 of the Federal Rules of Civil Procedure and the deadline for amendment under that order has passed, a party seeking amendment must also demonstrate “good cause” for the amendment.²⁶³ In *Kemin Foods, L.C. v. Pigmentos Vegetales Del Centro S.A. de C.V.*,²⁶⁴ the Federal Circuit applied these

reaching the alternative *forum non conveniens* holding. *Id.* at 1362-63, 78 U.S.P.Q.2d (BNA) at 1139-40.

257. 9 U.S.C. § 3 (2000).

258. 466 F.3d 1366, 80 U.S.P.Q.2d (BNA) 1669 (Fed. Cir. 2006).

259. *Id.* at 1373-74, 80 U.S.P.Q.2d (BNA) at 1674-75.

260. *Id.* at 1374, 80 U.S.P.Q.2d (BNA) at 1675.

261. FED. R. CIV. P. 15(a).

262. *Foman v. Davis*, 371 U.S. 178, 182 (1962).

263. FED. R. CIV. P. 16(b).

264. 464 F.3d 1339, 80 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2006).

principles (under Eighth Circuit law) and held that two proposed amended counterclaims, and three proposed new counterclaims, which the defendant attempted to add after trial, were indeed futile.²⁶⁵ The two proposed amended counterclaims were legally foreclosed by the earlier judgment as to patent invalidity and unenforceability, and the three proposed new counterclaims had not been shown by the defendant to be sufficiently supportable that they would survive summary judgment.²⁶⁶ Accordingly, the Federal Circuit affirmed the district court's denial of leave to amend.²⁶⁷

b. Res judicata, collateral estoppel, and judicial estoppel

The doctrines of res judicata (or claim preclusion) and collateral estoppel (or issue preclusion) serve to prevent unnecessary multiple lawsuits on matters that parties have had a "full and fair opportunity to litigate."²⁶⁸ Under the doctrine of res judicata/claim preclusion, "a final judgment on the merits bars further claims by parties or their privies based on the same cause of action."²⁶⁹ Thus, such a judgment prevents relitigation of claims that were or could have been brought in the first action.²⁷⁰ Under the doctrine of collateral estoppel/issue preclusion, "once an issue is actually and necessarily determined by a court of competent jurisdiction, that determination is conclusive in subsequent suits based on a different cause of action involving a party to the prior litigation."²⁷¹

In 2006, the Federal Circuit had several opportunities to apply these and related doctrines. In *Applied Medical Resources Corp. v. U.S. Surgical Corp.*,²⁷² the court (applying Ninth Circuit law) held that an earlier determination of a seven percent reasonable royalty for infringement damages as to an earlier version of U.S. Surgical's infringing trocars (surgical devices used as access ports in laparoscopic abdominal surgery) did not have collateral-estoppel effect in a later suit involving a redesigned U.S. Surgical trocar

265. *Id.* at 1356, 80 U.S.P.Q.3d (BNA) at 1397.

266. *Id.* at 1355-56, 80 U.S.P.Q.2d (BNA) at 1394-97.

267. *Id.* at 1356, 80 U.S.P.Q.2d (BNA) at 1397.

268. *See* *Montana v. United States*, 440 U.S. 147, 153-54 (1979) (noting that preclusion under these doctrines "conserves judicial resources" and fosters reliance on judicial precedent "by minimizing the possibility of inconsistent decisions").

269. *Id.* at 153 (emphasis added) (citing *Cromwell v. County of Sac*, 94 U.S. 351, 352 (1877)).

270. *See* *Rivet v. Regions Bank of La.*, 522 U.S. 470, 476 (1998) (referring to FED. R. CIV. P. 8(c), which states that claim preclusion is an affirmative defense that must be pleaded in the initial action).

271. *Montana*, 440 U.S. at 153 (emphasis added) (citing *Parklane Hosiery Co. v. Shore*, 439 U.S. 322, 326 n.5 (1979)).

272. 435 F.3d 1356, 77 U.S.P.Q.2d (BNA) 1666 (Fed. Cir. 2006).

because the issues in the two cases were not the same.²⁷³ The court explained that the infringements were not the same because there were vast differences in the products, timing, and market.²⁷⁴ Furthermore, “[b]ecause the determination of reasonable royalty damages is tied to the infringement being redressed, a separate infringement beginning at a different time requires a separate evaluation of reasonable royalty damages.”²⁷⁵ As such, the issues were not the same in the two cases, and collateral estoppel could not apply.²⁷⁶

The Federal Circuit addressed two recurring issues of claim preclusion in *Pactiv Corp. v. Dow Chemical Co.*²⁷⁷ There, Pactiv and Dow had (in 1998) resolved an earlier case between them through a joint stipulation and a dismissal with prejudice.²⁷⁸ Pactiv did not dispute that claim preclusion would apply to its later suit, but contended that two exceptions to that doctrine applied: It had reserved its rights in the joint stipulation to later challenge two Dow patents,²⁷⁹ and it had not had a full and fair opportunity to litigate these issues in the earlier case as the result of “fraudulent misrepresentations” by Dow in the earlier action.²⁸⁰ The court rejected both of Pactiv’s assertions.²⁸¹ As to the first, the court acknowledged that an “express” reservation in an earlier stipulated judgment will avoid claim preclusion in a second case,²⁸² but held that Pactiv “ha[d] the standard backwards”—it was arguing that nothing in the stipulation precluded a later challenge to the patents, when its burden was to demonstrate that there had been an express reservation of the otherwise—applicable claim-preclusive effect of the stipulation.²⁸³ And as to the second, the court held that the only proper ground for concluding that a party lacked a full and fair opportunity to litigate an issue in a prior action was upon showing that the deprivation amounted to a denial of due process; Pactiv’s “fraud” allegation did not rise to that level, and was, besides,

273. *Id.* at 1361, 77 U.S.P.Q.2d (BNA) at 1670.

274. *Id.* at 1362, 77 U.S.P.Q.2d (BNA) at 1670-71.

275. *Id.*, 77 U.S.P.Q.2d (BNA) at 1670-71.

276. *Id.*, 77 U.S.P.Q.2d (BNA) at 1670-71.

277. 449 F.3d 1227, 78 U.S.P.Q.2d (BNA) 1939 (Fed. Cir. 2006).

278. *Id.* at 1229, 78 U.S.P.Q.2d (BNA) at 1940.

279. *Id.* at 1230-31, 78 U.S.P.Q.2d (BNA) at 1941.

280. *Id.* at 1232-33, 78 U.S.P.Q.2d (BNA) at 1943.

281. *Id.* at 1231, 78 U.S.P.Q.2d (BNA) at 1942.

282. *Id.*, 78 U.S.P.Q.2d (BNA) at 1942 (citing RESTATEMENT (SECOND) OF JUDGMENTS § 26(1)(a) (1982); *id.* § 26 cmt. A; and 18 Charles Alan Wright & Arthur R. Miller, FEDERAL PRACTICE AND PROCEDURE § 4415, at 354 (2d ed. 2002)).

283. *Id.*, 78 U.S.P.Q.2d (BNA) at 1942.

inappropriately invoked as a defense to claim preclusion.²⁸⁴ According to the court, such an attack on a prior judgment properly lies under rule 60(b), but would not be permitted in a collateral attack to the application of res judicata.²⁸⁵

The doctrine of “judicial estoppel” applies when a party asserts a position, succeeds, and attempts later to switch positions; in that circumstance, the switching of positions will generally be barred.²⁸⁶ In *Bonzel v. Pfizer, Inc.*,²⁸⁷ the Federal Circuit (somewhat obliquely) appeared to endorse application of judicial estoppel in a jurisdictional dispute, noting that “[t]he district court observed that Dr. Bonzel had successfully obtained a transfer back to state court in the earlier federal case, on the position that there is no substantial question of patent law and that this is an action to enforce a contract, not to decide patent infringement.”²⁸⁸ The district court and the Federal Circuit both rejected Bonzel’s efforts to claim, in this later case, that resolution of the contract issues “necessarily depend[s] on resolution of a substantial question of federal [patent] law.”²⁸⁹ Nonetheless, the panel disclaimed “primar[y]” reliance on estoppel, because “Dr. Bonzel sufficiently changed his complaint [in the second case] to require a fresh look in the district court.”²⁹⁰

c. Summary judgment

In the past, we (and others) have chronicled the extensive use of summary judgment in patent cases.²⁹¹ For the year 2006, it is worth focusing on the use of summary judgment in a particular class of cases: those involving inequitable conduct.

284. *Id.* at 1233, 78 U.S.P.Q.2d (BNA) at 1943.

285. *Id.* at 1234, 78 U.S.P.Q.2d (BNA) at 1944.

286. *See, e.g.,* *New Hampshire v. Maine*, 532 U.S. 742 (2001) (holding that judicial estoppel barred New Hampshire from claiming that the Piscataqua River boundary runs along the shore of Maine because the State had previously agreed (after litigation) that the boundary fell in the middle of the river); *U.S. Philips Corp. v. Sears Roebuck & Co.*, 55 F.3d 592, 34 U.S.P.Q.2d (BNA) 1699 (Fed. Cir. 1995) (finding that the doctrine of judicial estoppel prevented an alleged infringer, Windmere Corporation, from relitigating its antitrust counterclaims in Illinois, having already litigated antitrust claims in Florida).

287. 439 F.3d 1358, 78 U.S.P.Q.2d (BNA) 1136 (Fed. Cir. 2006).

288. *Id.*, 78 U.S.P.Q.2d (BNA) at 1139-40.

289. *Id.* at 1363, 78 U.S.P.Q.2d (BNA) at 1140 (quoting *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 809 (1988)).

290. *Id.*, 78 U.S.P.Q.2d (BNA) at 1140.

291. *See* Adamo et al., *supra* note 14, at 1439-41 & n.8 (reviewing the numerous Federal Circuit patent cases that were decided via summary judgment in 2000); Paul R. Michel, *The Court of Appeals for the Federal Circuit Must Evolve to Meet the Challenges Ahead*, 48 AM. U. L. REV. 1177, 1187-88 (1999) (noting that “[s]ummary judgments . . . make up a large portion of [the Federal Circuit] caseload” and proceeding to discuss several key cases decided by summary judgment).

“Determining at summary judgment that a patent is unenforceable for inequitable conduct is permissible, but uncommon.”²⁹² That statement, from the Federal Circuit’s decision in *Digital Control, Inc. v. Charles Machine Works*, served as a theme for several of the decisions that would follow it in 2006. In synthesizing its prior decisions in *Digital Control*, the court stated, “we have upheld grants of summary judgment on inequitable conduct where, for example, ‘the affidavits submitted to explain the representations made to the PTO were “bare declaration[s] of lack of intent to mislead” and . . . the explanations provided in the affidavits were either “nonresponsive” or lacked evidentiary support.’”²⁹³ On the other hand, the Federal Circuit has

refused summary judgment where the plaintiff submitted an affidavit that “set[] forth a non-frivolous explanation that could lead a finder of fact to determine that his declaration [to the PTO] was not false or misleading,” or where the plaintiff “state[d] facts supporting a plausible justification or excuse for the misrepresentation.”²⁹⁴

In *Digital Control* itself, the court reversed a determination of inequitable conduct on the ground that the district court had improperly determined, on summary judgment, that the failure to cite a particular patent (the Rorden patent) was a material omission.²⁹⁵ Because “the scope and content of the prior art and what the prior art teaches are questions of fact,” and because the parties had a material factual dispute over what the Rorden patent disclosed and taught (under one version of the facts, it was merely cumulative; under another, it was not), summary judgment on the issue of materiality was inappropriate.²⁹⁶

However, in *Ferring B.V. v. Barr Laboratories, Inc.*,²⁹⁷ decided only one week after *Digital Control*, a divided panel of the Federal Circuit upheld a summary judgment of inequitable conduct.²⁹⁸ On the issue

292. *Digital Control, Inc. v. Charles Machine Works*, 437 F.3d 1309, 1313, 77 U.S.P.Q.2d (BNA) 1823, 1826-27 (Fed. Cir. 2006).

293. *Id.*, 77 U.S.P.Q.2d (BNA) at 1827 (quoting *Monsanto Co. v. Bayer BioScience N.V.*, 363 F.3d 1235, 1240, 70 U.S.P.Q.2d (BNA) 1257, 1261 (Fed. Cir. 2004), in turn quoting *Paragon Podiatry Lab., Inc. v. KLM Labs., Inc.*, 984 F.2d 1182, 1191-92, 25 U.S.P.Q.2d (BNA) 1561, 1568-69 (Fed. Cir. 1993)).

294. *Id.* at 1314, 77 U.S.P.Q.2d (BNA) at 1827 (quoting *Monsanto*, 363 F.3d at 1240, 70 U.S.P.Q.2d (BNA) at 1261-62, in turn quoting *Paragon Podiatry*, 984 F.2d at 1191, 25 U.S.P.Q.2d (BNA) at 1569).

295. *Id.* at 1319, 77 U.S.P.Q.2d (BNA) at 1831.

296. *Id.*, 77 U.S.P.Q.2d (BNA) at 1831 (citing *Para-Ordnance Mfg., Inc. v. SGS Imps. Int'l, Inc.*, 73 F.3d 1085, 1088, 37 U.S.P.Q.2d (BNA) 1237, 1239 (Fed. Cir. 1995)).

297. 437 F.3d 1181, 78 U.S.P.Q.2d (BNA) 1161 (Fed. Cir. 2006).

298. *Id.* at 1194, 78 U.S.P.Q.2d (BNA) at 1171.

of materiality, the court upheld the district court's conclusion that the inventors' failure to disclose the prior business relationships between several declarants (on a highly material issue—the understanding of the term “peroral” in the relevant art) and the inventors' employer (and ultimate assignee of the patent) was a failure to disclose a material fact.²⁹⁹ “A witness's interest is always pertinent to his credibility and to the weight to be given to his testimony, and relevant interests are not limited to direct financial interests.”³⁰⁰ Similarly, the court upheld summary judgment on the issue of intent, concluding (as did the district court) that it was proper to infer culpable intent from the high materiality of the withheld information.³⁰¹ While not being willing to “attempt to lay down a general rule as to when intent may be or must be inferred from the withholding of material information by an applicant,” the court did recognize “three conditions” under which summary judgment on the issue of intent would be appropriate: “(1) the applicant knew of the information; (2) the applicant knew or should have known of the materiality of the information; and (3) the applicant has not provided a credible explanation for the withholding.”³⁰² The fatal flaw in appellants' efforts to overcome summary judgment, the court said, was in the third condition: “In short, appellants' argument concerning credible explanations consists entirely of speculation. Conclusory allegations and attorney arguments are insufficient to overcome a motion for summary judgment.”³⁰³ Indeed, the court added, “[f]ar from there being a credible explanation for the withholding, there is evidence in the summary judgment record supporting a conclusion that the past relationships were deliberately concealed.”³⁰⁴

Judge Newman “respectfully, but urgently, dissent[ed].”³⁰⁵ In her view, the panel decision had returned the court to the pre-*Kingsdown* era of inequitable-conduct law,³⁰⁶ the benighted era when inequitable-

299. *Id.* at 1188-90, 78 U.S.P.Q.2d (BNA) at 1166-68.

300. *Id.* at 1188, 78 U.S.P.Q.2d (BNA) at 1167.

301. *Id.* at 1194, 78 U.S.P.Q.2d (BNA) at 1171.

302. *Id.* at 1191, 78 U.S.P.Q.2d (BNA) at 1169.

303. *Id.* at 1193, 78 U.S.P.Q.2d (BNA) at 1170 (citing *Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc.*, 249 F.3d 1341, 1353, 58 U.S.P.Q.2d (BNA) 1737, 1745 (Fed. Cir. 2001) and *Glaverbel Societe Anonyme v. Northlake Marketing & Supply, Inc.*, 45 F.3d 1550, 1561-62, 33 U.S.P.Q.2d (BNA) 1496, 1503 (Fed. Cir. 1995)).

304. *Id.*, 78 U.S.P.Q.2d (BNA) at 1171.

305. *Id.* at 1197, 78 U.S.P.Q.2d (BNA) at 1173 (Newman, J., dissenting).

306. See *Kingsdown Med. Consultants, Ltd. v. Hollister, Inc.*, 863 F.2d 827, 873-74, 9 U.S.P.Q.2d (BNA) 1384, 1389-91 (Fed. Cir. 1988) (en banc in relevant part) (limiting potential claims of inequitable conduct by holding that: (1) a failure to realize that a patent claim does not correspond to an amended version of another

conduct claims were present in virtually every case, placing a “scourge” on U.S. patent litigation.³⁰⁷ In particular, she saw the majority’s error as embracing a “casually subjective standard,” and imposing a “positive inference of wrongdoing, replacing the need for evidence with a ‘should have known’ standard of materiality, from which deceptive intent is inferred, even in the total absence of evidence.”³⁰⁸ Ferring’s petition for rehearing was denied, over the dissents (without opinion) of Judges Newman, Lourie, and Gajarsa.³⁰⁹

Another summary judgment of inequitable conduct, and another Federal Circuit reversal, occurred in *M. Eagles Tool Warehouse, Inc. v. Fisher Tooling, Inc.*³¹⁰ The patent was directed to an invention for removing decals from motor vehicles, and in connection with the application, the inventor submitted a declaration stating that “he was not aware of any relevant prior art”³¹¹ Eventually, the examiner allowed the claims “because none of the art of record shows all of the detailed internal workings of the instant claims including [various listed components].”³¹² The district court granted summary judgment of inequitable conduct, in particular because the patentee had sold a prior-art product (for twenty years) that contained the components listed by the examiner as missing from the prior art,³¹³ and from this omission—and the lack of a good faith explanation for the omission—the district court inferred culpable intent.³¹⁴ In an opinion by Judge Lourie, the Federal Circuit reversed, holding that “[w]hen the absence of a good faith explanation is the only evidence of intent, however, that evidence alone does not constitute clear and convincing evidence warranting an inference of intent.”³¹⁵ There is some obvious tension between this holding of *M. Eagles* and the court’s decision, just weeks earlier, in *Ferring*, yet the *M. Eagles* court

claim does not necessarily demonstrate inequitable conduct, and (2) it is not inequitable to file a patent application in order to lawfully exclude a competitor’s product from the marketplace).

307. *Ferring*, 437 F.3d at 1195, 78 U.S.P.Q.2d (BNA) at 1172 (Newman, J., dissenting) (quoting Michael D. Kaminski, *Effective Management of U.S. Patent Litigation*, 18 INTELL. PROP. & TECH. L.J. 13, 24 (2006)).

308. *Id.* at 1196, 78 U.S.P.Q.2d (BNA) at 1173 (Newman, J., dissenting).

309. *Ferring B.V. v. Barr Labs., Inc.*, No. 05-1284, 2006 U.S. App. LEXIS 10811 (Fed. Cir. Apr. 12, 2006).

310. 439 F.3d 1335, 78 U.S.P.Q.2d (BNA) 1229 (Fed. Cir. 2006).

311. *Id.* at 1336, 78 U.S.P.Q.2d (BNA) at 1231.

312. *Id.* at 1337, 78 U.S.P.Q.2d (BNA) at 1231.

313. *Id.* at 1338, 78 U.S.P.Q.2d (BNA) at 1232.

314. *Id.*, 78 U.S.P.Q.2d (BNA) at 1232.

315. *Id.* at 1341, 78 U.S.P.Q.2d (BNA) at 1235.

did not even cite the *Ferring* decision, and its author, Judge Lourie, later dissented from the denial of en banc rehearing in *Ferring*.³¹⁶

Moving away from the context of inequitable conduct, the Federal Circuit issued an important exposition on summary judgment procedure and burdens of proof and production in *Exigent Technology, Inc. v. Atrana Solutions, Inc.*³¹⁷ There, Atrana had successfully moved for summary judgment of non-infringement in the district court, and the Federal Circuit affirmed that grant despite Exigent's argument that "Atrana did not properly support its motion for summary judgment of non-infringement with evidence sufficient to establish non-infringement."³¹⁸ The court's opinion explained that, under *Celotex Corp. v. Catrett*,³¹⁹ the summary judgment movant need not produce evidence on issues where the non-movant bears the burden of proof to prevail:³²⁰ "In the light of *Celotex*, we conclude that nothing more is required than the filing of a summary judgment motion stating that the patentee had no evidence of infringement and pointing to the specific ways in which accused systems did not meet the claim limitations."³²¹

Another important procedural aspect of summary judgment practice addresses the level of detail required of an expert affidavit or declaration to demonstrate a "genuine issue of material fact." A bare or conclusory affidavit will not suffice; some level of detail is required.³²² In *Applied Medical Resources Corp. v. U.S. Surgical Corp.*,³²³ the court reversed a grant of summary judgment where the district court had concluded that a witness declaration was "conclusory and lacking particularized testimony and linking argument necessary to establish equivalence."³²⁴ The Federal Circuit disagreed, finding the declaration in question was "not overly conclusory," and sufficiently particularized to meet the doctrine-of-equivalents standards.³²⁵

316. See *Ferring B.V. v. Barr Labs., Inc.*, 2006 U.S. App. LEXIS 10811, at *2 (Fed. Cir. Apr. 12, 2006) (noting that Judges Newman, Lourie, and Gajarsa would have heard the appeal en banc).

317. 442 F.3d 1301, 78 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2006).

318. *Id.* at 1307, 78 U.S.P.Q.2d (BNA) at 1325.

319. 477 U.S. 317 (1986).

320. *Exigent*, 442 F.3d at 1307, 78 U.S.P.Q.2d (BNA) at 1325 (quoting *Celotex*, 477 U.S. at 325); *id.* at 1307 n.6, 78 U.S.P.Q.2d (BNA) at 1325 n.6 (quoting *Saab Cars USA, Inc. v. United States*, 434 F.3d 1359, 1368-69 (Fed. Cir. 2006)).

321. *Id.* at 1308-09, 78 U.S.P.Q.2d (BNA) at 1326.

322. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, No. SACV 03-1267, 2005 U.S. Dist. LEXIS 42653, at *25 (C.D. Cal. Mar. 7, 2005).

323. 448 F.3d 1324, 78 U.S.P.Q.2d (BNA) 1807 (Fed. Cir. 2006).

324. *Id.* at 1335, 78 U.S.P.Q.2d (BNA) at 1814.

325. *Id.*, 78 U.S.P.Q.2d (BNA) at 1814.

d. Attorney-client privilege and work-product protection

In 2006, the Federal Circuit in *In re EchoStar Communications Corp.*³²⁶ invoked the extraordinary procedure of a writ of mandamus to address several important issues regarding the scope of waiver (of both attorney-client privilege and work-product protection) when an advice-of-counsel defense is asserted to a willful-infringement claim.³²⁷ The district court had found a waiver of both attorney-client privilege and work-product protection, and issued a sweeping discovery order.³²⁸ EchoStar and its law firm, Merchant & Gould, P.C., sought mandamus from the Federal Circuit, which was granted in limited part.³²⁹ EchoStar urged that there had been no waiver of the attorney-client privilege because it relied solely on an “in-house investigation supervised by in-house counsel.”³³⁰ The court rejected that argument, noting that in-house counsel are still lawyers, and reliance on the conclusions of in-house counsel constitutes reliance on a legal opinion, which thereby waives the attorney-client privilege.³³¹

EchoStar’s argument about the work-product doctrine had more success.³³² The court noted three categories of work-product relevant here:

- (1) documents that embody a communication between the attorney and client concerning the subject matter of the case, such as a traditional opinion letter;
- (2) documents analyzing the law, facts, trial strategy, and so forth that reflect the attorney’s mental impressions but were not given to the client; and
- (3) documents that discuss a communication between attorney and client concerning the subject matter of the case but are not themselves communications to or from the client.³³³

The Federal Circuit concluded that, where an advice-of-counsel defense is proffered, the “waiver extends to the third category [of work-product] but does not extend so far as the second.”³³⁴ Mandamus was thus granted, in limited form, to protect that second category of documents from disclosure.³³⁵

326. 448 F.3d 1294, 78 U.S.P.Q.2d (BNA) 1676 (Fed. Cir. 2006), *cert. denied*, 127 S. Ct. 846 (2006) (mem.).

327. *Id.* at 1296, 78 U.S.P.Q.2d (BNA) at 1677.

328. *Id.* at 1297, 78 U.S.P.Q.2d (BNA) at 1677-78.

329. *Id.* at 1297-98, 78 U.S.P.Q.2d (BNA) at 1678-79.

330. *Id.* at 1299, 78 U.S.P.Q.2d (BNA) at 1679.

331. *Id.*, 78 U.S.P.Q.2d (BNA) at 1679.

332. *Id.* at 1300-05, 78 U.S.P.Q.2d (BNA) at 1680-84.

333. *Id.* at 1302, 78 U.S.P.Q.2d (BNA) at 1682.

334. *Id.* at 1303, 78 U.S.P.Q.2d (BNA) at 1682.

335. *Id.* at 1305, 78 U.S.P.Q.2d (BNA) at 1684.

e. Rule 54(b)

Under rule 54(b) of the Federal Rules of Civil Procedure, a district court may, in appropriate cases, enter a partial final judgment on one or more, but fewer than all, of the claims in a case (or as to all claims involving one or more, but fewer than all, parties to a case).³³⁶ The ability to obtain an early partial final judgment (for example, on a claim on which summary judgment has been granted) is important to the ability to secure immediate appellate review over that partial dismissal while the rest of the case continues in the trial court.³³⁷ When counterclaims (or other claims) remain pending in the trial court, rule 54(b) may be the only practical way of securing immediate appellate review.³³⁸ Thus, in *Exigent Technology, Inc. v. Atrana Solutions, Inc.*,³³⁹ the Federal Circuit had identified, after the case had been fully briefed and the day after argument, that “counterclaims concerning invalidity and unenforceability remained pending in the district court.”³⁴⁰ The court thus instructed the parties to return to the district court and seek a *nunc pro tunc* order entering a partial final judgment under rule 54(b).³⁴¹ This is a frequent problem of appeals to the Federal Circuit, and subsequent panels of the court dealing with the same issue have not been so charitable.³⁴²

3. Trial

a. Right to jury trial

As noted above, the question of when, in a patent case, the parties are entitled to a trial by jury under the Seventh Amendment to the U.S. Constitution has reached the U.S. Supreme Court, but the Court

336. FED. R. CIV. P. 54(b).

337. See, e.g., *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1315, 78 U.S.P.Q.2d (BNA) 1097, 1099 (Fed. Cir. 2006) (noting that the district court had entered partial final judgment under Rule 54(b) “with respect to the invalidity of the ‘944 patent”).

338. See *Exigent Tech., Inc. v. Atrana Solutions, Inc.*, 442 F.3d 1301, 1311, 78 U.S.P.Q.2d (BNA) 1321, 1328 (Fed. Cir. 2006) (citing *Senza-Gel Corp. v. Seiffhart*, 803 F.2d 661, 667, 231 U.S.P.Q. (BNA) 363, 367 (Fed. Cir. 1986) (explaining that under rule 54, interlocutory decisions can be reviewed by the district court prior to the entry of a final judgment)).

339. *Id.* at 1301, 78 U.S.P.Q.2d (BNA) 1321.

340. *Id.* at 1305 n.2, 78 U.S.P.Q.2d (BNA) at 1324 n.2.

341. *Id.*, 78 U.S.P.Q.2d (BNA) at 1324 n.2 (citing *State Contracting & Eng'g Co. v. Florida*, 258 F.3d 1329, 1334-35, 59 U.S.P.Q.2d (BNA) 1498, 1501-02 (Fed. Cir. 2001)).

342. See, e.g., *Int'l Elec. Tech. Corp. v. Hughes Aircraft Corp.*, 2007 WL 189341, at *2, 81 U.S.P.Q.2d (BNA) 1543, 1544 (Fed. Cir. 2007) (“[T]he parties and other members of the bar are hereby placed on notice that the court shall in the future begin to cite counsel for failure to determine whether or not the appealed judgment is final.”).

has never issued a decision on that issue.³⁴³ The Supreme Court has yet to address the issue again, despite several opportunities to do so, in varying factual contexts, over the years. And the Federal Circuit continues to reach divided opinions when the subject arises. In *Agfa Corp. v. Creo Products, Inc.*,³⁴⁴ Agfa urged that it was entitled to a jury trial on Creo's inequitable-conduct defense (the district court, sitting without a jury, had held all of Agfa's patents unenforceable).³⁴⁵ The court found Agfa's case indistinguishable from the Federal Circuit's prior decision in *Gardco Manufacturing, Inc. v. Herst Lighting Co.*,³⁴⁶ with the exception of two slight procedural differences. *Gardco* was a declaratory judgment case, and involved a "claim" of inequitable conduct rather than a defense, but the court explained that those type of procedural differences have no "bearing on the question of the right to a jury trial."³⁴⁷ The court rejected Agfa's analogy to the Supreme Court's decision in *Beacon Theatres, Inc. v. Westover*,³⁴⁸ which had held that there was a Seventh Amendment jury trial right on even equitable claims, when the resolution of the equitable claim would resolve issues that are "common" with a jurable claim; while acknowledging that the inequitable conduct defense and the invalidity defense "overlap to some degree," the court concluded that "they [were] not 'common' issues as in *Beacon Theatres*."³⁴⁹ The court also rejected Agfa's analogy to the writ of *scire facias*, where jury trials were allowed at common law, distinguishing away "some dicta in a footnote in *In re Lockwood* . . ."³⁵⁰ suggesting that "[t]he contemporary analog of the writ [of *scire facias*] is . . . an action for a declaration of unenforceability due to inequitable conduct not due to invalidity."³⁵¹ While acknowledging that this footnote is "easy to misread,"³⁵² the court ultimately held that "a writ of *scire facias* was not, in fact, a suit at common law analogous to modern inequitable conduct."³⁵³ Judge

343. See *supra* notes 49-50 and accompanying text (describing that the jury trial issue became moot after the Supreme Court granted certiorari to resolve this issue).

344. 451 F.3d 1366, 79 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2006).

345. *Id.* at 1369, 79 U.S.P.Q.2d (BNA) at 1386-87.

346. 820 F.2d 1209, 2 U.S.P.Q.2d (BNA) 2015 (Fed. Cir. 1987).

347. See *Agfa*, 451 F.3d at 1372, 79 U.S.P.Q.2d (BNA) at 1389 (explaining that the "right to jury trial is examined without regard to the alignment of the parties or the posture of the issue, i.e. a defense or separate claim") (citing *In re Tech. Licensing Corp.*, 423 F.3d 1286, 1288, 1290-91, 76 U.S.P.Q.2d (BNA) 1450, 1452, 1454 (Fed. Cir. 2005)).

348. 359 U.S. 500 (1959).

349. *Agfa*, 451 F.3d at 1372, 79 U.S.P.Q.2d (BNA) at 1389.

350. *Id.* at 1373, 79 U.S.P.Q.2d (BNA) at 1390.

351. *Id.*, 79 U.S.P.Q.2d (BNA) at 1390 (quoting *In re Lockwood*, 50 F.3d 966, 974 n.9, 33 U.S.P.Q.2d (BNA) 1406, 1412 n.9 (Fed. Cir. 1995), *vacated sub nom.* Am. Airlines, Inc. v. Lockwood, 515 U.S. 1182 (1995)).

352. *Id.*, 79 U.S.P.Q.2d (BNA) at 1390.

353. *Id.* at 1374, 79 U.S.P.Q.2d (BNA) at 1390.

Newman dissented, urging that she would have ordered a jury trial based upon the court's prior opinion in *Lockwood* and her own research on English common law (and early American) practice with respect to the writ of *scire facias*.³⁵⁴

b. Stipulated judgments

On occasion, parties will stipulate to a judgment of non-infringement after the district court reaches a claim construction. This allows the loser on the claim-construction issues to make the adverse judgment final and immediately appealable, and it saves the parties (and the district court) the time and expense of a trial that the parties would view as an academic exercise. (To our knowledge, through the end of 2006, the Federal Circuit had never granted an interlocutory appeal under 28 U.S.C. § 1292(c)(1) on a question of claim construction, even after the *Markman* decision established that patent claim construction is a question of law, ordinarily decided on a limited, intrinsic record. Just before this Article went to press, the Federal Circuit did just that, but in a case having an "unusual" procedural posture—the same patent claims were before the Federal Circuit in a parallel appeal.³⁵⁵) In *Wilson Sporting Goods Co. v. Hillerich & Bradsby*,³⁵⁶ the parties utilized the stipulated judgment option; the procedural question before the Federal Circuit was the appropriate appellate standard for reviewing the court's judgment.³⁵⁷ The court rejected the analogy to a summary judgment ruling, where appellate review is *de novo*,³⁵⁸ and instead accepted the Seventh Circuit's analogy to a bench trial—"review[ing] the district court's legal conclusions *de novo* and any factual inferences for clear error."³⁵⁹

At the same time, however, Judge Rader's opinion for the court again expressed a general displeasure with such appeals from stipulated judgments.³⁶⁰ Similar to his recent opinions,³⁶¹ he wrote in *Wilson Sporting Goods* that:

354. *Id.* at 1380-84, 79 U.S.P.Q.2d (BNA) at 1395-98 (Newman, J., dissenting).

355. *Regents of Univ. of Cal. v. Dako N. Am., Inc.*, 2007 WL 471167, at *1, 81 U.S.P.Q.2d (BNA) 1926, 1927 (Feb. 14, 2007).

356. 442 F.3d 1322, 78 U.S.P.Q.2d (BNA) 1382 (Fed. Cir. 2006).

357. *Id.* at 1324, 1326-27, 78 U.S.P.Q.2d (BNA) at 1383-84, 1385-86.

358. *Id.* at 1326, 78 U.S.P.Q.2d (BNA) at 1385.

359. *Id.*, 78 U.S.P.Q.2d (BNA) at 1385 (citing *Hess v. Hartford Life & Accident Ins. Co.*, 274 F.3d 456, 461 (7th Cir. 2001)).

360. *See id.* at 1327, 78 U.S.P.Q.2d (BNA) at 1386 (explaining that the "sparse record lacks the complete context for accurate claim construction").

361. *See, e.g., Serio-US Indus., Inc. v. Plastic Recovery Techs. Corp.*, 459 F.3d 1311, 1319, 80 U.S.P.Q.2d (BNA) 1065, 1070 (Fed. Cir. 2006) ("a trial court may consult the accused device for context that informs the claim construction process"); *Lava Trading, Inc. v. Sonic Trading Mgmt.*, 445 F.3d 1348, 1350-51, 78 U.S.P.Q.2d (BNA) 1624, 1625-26 (Fed. Cir. 2006) ("Without the vital contextual knowledge of the

[t]his court reviews claim construction only as necessary to reach that final judgment on an infringement cause of action. Therefore, in reviewing claim construction in the context of infringement, the legal function of giving meaning to claim terms always takes place in the context of a specific accused infringing device or process. While a trial court should certainly not prejudge the ultimate infringement analysis by construing claims with an aim to include or exclude an accused product or process, knowledge of that product or process provides meaningful context for the first step of the infringement analysis, claim construction.³⁶²

Nonetheless, despite those complaints, the court reviewed the claim-construction issues presented there.³⁶³

c. Evidentiary rulings

Reversals by the Federal Circuit on evidentiary issues are rare indeed. This is a consequence of the extremely limited, deferential standard of review that applies, as well as the requirement that any such error be seriously prejudicial in the context of the trial.³⁶⁴ The concomitant facts (1) that the Federal Circuit applies regional circuit law to such issues, and (2) that evidentiary rulings have limited importance to the court's mandate to bring unity and coherence to the patent law, may also affect the relative lack of sweeping developments in this area.³⁶⁵

The deferential standard of review was summarized (under Ninth Circuit law) in *Applied Medical Resources Corp. v. U.S. Surgical Corp.*:³⁶⁶ "The Ninth Circuit reviews evidentiary rulings for abuse of discretion; to reverse, we must conclude both that the district court abused its discretion and that the error was prejudicial so that it more probably than not tainted the verdict."³⁶⁷ As a consequence, each of the

accused products or processes, this appeal takes on the attributes of something akin to an advisory opinion on the scope of the '982 patent."); *Bayer AG v. Biovail Corp.*, 279 F.3d 1340, 1349, 61 U.S.P.Q.2d (BNA) 1675, 1682 (Fed. Cir. 2002) ("[I]t would be premature for this court to engage in its own claim construction without, for instance, evidence of the meaning of the terms to one of skill in the art at the time of invention.").

362. *Wilson Sporting Goods*, 442 F.3d at 1326-27, 78 U.S.P.Q.2d (BNA) at 1386.

363. *Id.* at 1327-28, 78 U.S.P.Q.2d (BNA) at 1386-87.

364. *See Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1365, 77 U.S.P.Q.2d (BNA) 1666, 1673 (Fed. Cir. 2006) (requiring both abuse of discretion and prejudicial error to reverse an evidentiary ruling).

365. *See id.*, 77 U.S.P.Q.2d (BNA) at 1673 (noting that the Federal Circuit applies regional circuit law to evaluate evidentiary rulings).

366. *Id.* 1356, 77 U.S.P.Q.2d (BNA) 1666.

367. *Id.* at 1365, 77 U.S.P.Q.2d (BNA) at 1673.

Federal Circuit's 2006 decisions involving contested evidentiary admission or exclusion resulted in affirmances on these points.³⁶⁸

d. Jury instructions

The content of the law that a jury applies is provided through the instructions read to the jury before its deliberation.³⁶⁹ Rule 51 of the Federal Rules of Civil Procedure governs most questions regarding jury instructions; it provides that a party must object to jury instructions "before the jury retires to consider its verdict, stating distinctly the matter objected to and the grounds for objection."³⁷⁰ Although it is ordinarily said that compliance with rule 51 is a matter of regional circuit law,³⁷¹ the Federal Circuit has honored this rule more in the breach than in the observance. Indeed, in some cases, it has required more than the distinct objection and grounds that rule 51 requires on its face.³⁷² For example, in *Advanced Display Systems, Inc. v. Kent State University*,³⁷³ it set forth four requirements for "[a] party seeking to alter a judgment based on erroneous jury instructions[:] . . . (1) it made a proper and timely objection to the jury instructions, (2) those instructions were legally erroneous, (3) the errors had prejudicial effect, and (4) it requested alternative instructions that would have remedied the error."³⁷⁴ Yet in *Primos, Inc. v. Hunter's Specialties, Inc.*,³⁷⁵ the court cited *Advanced Display Systems* and said that "[a] party seeking to alter a judgment based on erroneous jury instructions must establish" only two things: "that 'those instructions were legally erroneous,' and that 'the errors had prejudicial effect.'"³⁷⁶ *Advanced Display Systems* purported to apply Fifth Circuit law;³⁷⁷ *Primos* applied Eighth Circuit law.³⁷⁸

368. *Id.* at 1365-66, 77 U.S.P.Q.2d (BNA) at 1673-74; *see, e.g.*, *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1309-10, 81 U.S.P.Q.2d (BNA) 1238, 1249-50 (Fed. Cir. 2006); *Cook Biotech, Inc. v. Acell, Inc.*, 460 F.3d 1365, 1379 n.8, 79 U.S.P.Q.2d (BNA) 1865, 1875 n.8 (Fed. Cir. 2006); *Primos, Inc. v. Hunter's Specialties, Inc.*, 451 F.3d 841, 850-51, 79 U.S.P.Q.2d (BNA) 1129, 1136-37 (Fed. Cir. 2006).

369. *See* FED. R. CIV. P. 51(b)(3) ("The court . . . may instruct the jury at any time after trial begins and before the jury is discharged.").

370. *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1281-82, 54 U.S.P.Q.2d (BNA) 1673, 1679 (Fed. Cir. 2000) (quoting FED. R. CIV. P. 51).

371. *See, e.g., id.* at 1282, 54 U.S.P.Q.2d (BNA) at 1679.

372. *See, e.g., id.* at 1281, 54 U.S.P.Q.2d (BNA) at 1679 (explaining that there are four requirements that a party must satisfy to alter a judgment based on an erroneous jury instruction).

373. *Id.*, 212 F.3d 1272, 54 U.S.P.Q.2d (BNA) 1673.

374. *Id.* at 1281, 54 U.S.P.Q.2d (BNA) at 1679 (citations omitted).

375. 451 F.3d 841, 79 U.S.P.Q.2d (BNA) 1129 (Fed. Cir. 2006).

376. *Id.* at 852, 79 U.S.P.Q.2d (BNA) at 1138 (quoting *Advanced Display Sys.*, 212 F.3d at 1281, 54 U.S.P.Q.2d (BNA) at 1679).

377. *Advanced Display Sys.*, 212 F.3d at 1282, 54 U.S.P.Q.2d (BNA) at 1679.

378. *Primos*, 451 F.3d at 847, 79 U.S.P.Q.2d (BNA) at 1134.

In any event, it is crucial to make the timely objection required by rule 51; otherwise, the appellant will be relegated to arguing plain error under rule 51(d)(2) of the Federal Rules of Civil Procedure, which is an extremely narrow standard of appellate review.³⁷⁹ This situation occurred in *Serio-US Industries, Inc. v. Plastic Recovery Technology Corp.*³⁸⁰—the appellant failed to object as required by Rule 51, which limited the Federal Circuit’s plain error review (under Fourth Circuit law) to finding a “miscarriage of justice.”³⁸¹

e. Resolving inconsistent verdicts

Regional circuit law applies to the review of inconsistent jury verdicts.³⁸² The only Federal Circuit case in 2006 to deal with this issue, *L & W, Inc. v. Shertech, Inc.*,³⁸³ addressed not only the reconciliation of inconsistent verdicts, but the question of waiver. In this case, L & W sought to challenge the adverse verdict as inconsistent; however, it failed to raise the issue with the trial court before the jury was discharged:

Trial counsel could have objected either before the court discharged the jury or immediately thereafter, when the court directed the jurors to return to the jury room and asked counsel, ‘Anything anybody would like the record to reflect at this time?’ If counsel had raised the issue of verdict inconsistency at that point, it would have been a simple matter for the court to recall the jury and direct it to resume its deliberations until the inconsistency in the verdict was resolved.³⁸⁴

The Federal Circuit was unpersuaded by L & W’s claim “that the return of the verdict, the poll of the jury, and the discharge of the jury all occurred within six minutes, and that counsel therefore ‘did not have adequate time to evaluate the verdicts for the first time.’”³⁸⁵ And, it declined to apply a plain-error exception to the waiver rule despite L & W’s urging; it concluded that the Sixth Circuit would look unkindly upon such an analysis:

No published Sixth Circuit opinion has recognized such an exception with respect to inconsistent verdicts, and we think that

379. See *Serio-US Indus., Inc. v. Plastic Recovery Tech. Corp.*, 459 F.3d 1311, 1317, 80 U.S.P.Q.2d (BNA) 1065, 1068 (Fed. Cir. 2006) (concluding that in the absence of an objection, an appeal is not permitted unless there is “plain error”).

380. *Id.*, 80 U.S.P.Q.2d (BNA) 1065.

381. *Id.* at 1317-18, 80 U.S.P.Q.2d (BNA) at 1068-69.

382. *L & W, Inc. v. Shertech, Inc.*, 471 F.3d 1311, 1318, 81 U.S.P.Q.2d (BNA) 1198, 1203 (Fed. Cir. 2006).

383. *Id.*, 471 F.3d 1311, 81 U.S.P.Q.2d (BNA) 1198.

384. *Id.* at 1319, 81 U.S.P.Q.2d (BNA) at 1203-04.

385. *Id.*, 81 U.S.P.Q.2d (BNA) at 1204.

the pragmatic justification behind the waiver doctrine—preventing misuse of procedural rules to obtain a new trial when inconsistencies are most efficiently resolved by the original jury—would lead the Sixth Circuit to reject such an exception if it were asked to create one.³⁸⁶

4. *Post-trial matters*

a. *Post-trial motions under rules 50, 52, and 59*

The most significant development in the area of post-trial motions came in the Supreme Court decision *Unitherm Food Systems, Inc. v. Swift-Eckrich, Inc.*³⁸⁷ There, the Court held that courts of appeals lack “power” to review the sufficiency of the evidence—even to order a new trial under rule 59 rather than order judgment as a matter of law (“JMOL”) under rule 50—in the absence of a proper and timely motion in the district court.³⁸⁸

As with most procedural matters (so long as not unique to patent law), regional circuit law applies to issues arising under rules 50, 52, and 59.³⁸⁹

With respect to rule 50 practice, perhaps the most important issues include timing of the motions and the requirement that issues raised in a rule 50(b) motion be first timely and properly raised in a rule 50(a) motion.³⁹⁰ That is certainly a principal lesson of the Supreme Court’s *Unitherm* decision, and it was also controlling in *Syngenta Seeds, Inc. v. Delta Cotton Co-op., Inc.*³⁹¹ In *Syngenta Seeds*, applying Eighth Circuit law, the court noted that “a post-verdict motion for judgment as a matter of law may not raise issues not previously raised in a pre-verdict motion.”³⁹² Accordingly, because the pre-verdict motion only addressed the issue of sufficiency of the evidence, appellate review of

386. *Id.*, 81 U.S.P.Q.2d (BNA) at 1204.

387. 546 U.S. 394 (2006).

388. *Id.*

389. *See, e.g.*, *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1302, 81 U.S.P.Q.2d (BNA) 1238, 1244 (Fed. Cir. 2006) (stating the the court evaluates a motion for a new trial under an abuse of discretion standard); *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1314, 78 U.S.P.Q.2d (BNA) 1705, 1708-09 (Fed. Cir. 2006) (explaining that the Federal Circuit applies the district court’s standard for evaluating a JMOL motion); *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1358, 78 U.S.P.Q.2d (BNA) 1004, 1007-08 (Fed. Cir. 2006) (describing that the court would apply Fifth Circuit law to determine whether granting a rule 52(b) motion was appropriate).

390. *Unitherm Food Sys.*, 546 U.S. at 985-87.

391. 457 F.3d 1269, 79 U.S.P.Q.2d (BNA) 1576 (Fed. Cir. 2006).

392. *Id.* at 1274, 79 U.S.P.Q.2d (BNA) at 1579 (citing *Walsh v. Nat’l Computer Sys.*, 332 F.3d 1150, 1158 (8th Cir. 2003)).

the denial of the post-verdict motion could not expand beyond that one issue.³⁹³

In *Golden Blount, Inc. v. Robert H. Peterson Co.*,³⁹⁴ the court addressed procedural issues relating to rule 52, which allows a court to alter or amend its findings on motion made within ten days of judgment.³⁹⁵ Peterson, the defendant, argued that the district court had clearly erred by vacating *all* of its non-infringement findings since Golden Blount's rule 52(b) motion only sought to amend *some* of the court's findings.³⁹⁶ The Federal Circuit rejected that argument, concluding that the district court had acted within its discretion by vacating its prior findings and entering findings of infringement that had been proposed, subsequently, by Golden Blount.³⁹⁷

Finally, *DSU Medical Corp. v. JMS Co.*³⁹⁸ is a good example of the various issues that might be raised on a motion for a new trial under rule 59. There, DSU moved for a new trial on a variety of grounds: that the jury's verdict was "against the clear weight of the evidence,"³⁹⁹ that the trial court improperly admitted or excluded evidence,⁴⁰⁰ or that the damages were inadequate or excessive.⁴⁰¹ DSU also illustrates the difficulty of obtaining appellate reversal of an order denying a motion for a new trial due to the deferential standard of appellate review: All of DSU's new trial arguments were rejected by the trial court and affirmed on appeal.⁴⁰²

b. Post-judgment relief under rule 60(b)

Although requests for relief under rule 60(b) are often coupled with requests for a new trial under rule 50(b), rule 60(b) relief is of a different type entirely.⁴⁰³ Rule 60(b) allows relief from a judgment, sometimes years after it is entered (even after it has been subject to appellate review), when newly discovered evidence, changed circumstances, fraud, or other exceptional circumstances justify this extraordinary relief.⁴⁰⁴ Regional circuit law ordinarily applies to rule

393. *Id.*, 79 U.S.P.Q.2d (BNA) at 1579.

394. 438 F.3d 1354, 78 U.S.P.Q.2d (BNA) 1004 (Fed. Cir. 2006).

395. FED. R. CIV. P. 52(b).

396. *Golden Blount*, 438 F.3d at 1357, 78 U.S.P.Q.2d (BNA) at 1007.

397. *Id.* at 1358, 78 U.S.P.Q.2d (BNA) at 1008.

398. 471 F.3d 1293, 81 U.S.P.Q.2d (BNA) 1238 (Fed. Cir. 2006).

399. *Id.* at 1302-03, 1306-07, 1311, 81 U.S.P.Q.2d (BNA) at 1244, 1247-48, 1250-51.

400. *Id.* at 1308-09, 1310-11, 81 U.S.P.Q.2d (BNA) at 1248-49, 1250-51.

401. *Id.* at 1307, 81 U.S.P.Q.2d (BNA) at 1248.

402. *Id.* at 1310-11, 81 U.S.P.Q.2d (BNA) at 1250-51.

403. Compare FED. R. CIV. P. 50(b) (stating that a party can file a motion within ten days to renew a request for a judgment as a matter of law), with FED. R. CIV. P. 60(b) (describing that parties can file a motion for relief of judgment based on certain circumstances such as mistake, new evidence, and fraud).

404. FED. R. CIV. P. 60(b)(1)-(6).

60(b) motions, and district court rulings on those motions are reviewed for abuse of discretion.⁴⁰⁵

In *Louisville Bedding Co. v. Pillowtex Corp.*,⁴⁰⁶ Louisville Bedding sought relief under rule 60(b)(6) of the Federal Rules of Civil Procedure, which allows relief where there is “any other reason justifying relief from the operation of the judgment.”⁴⁰⁷ Previously, Louisville Bedding and Pillowtex had been engaged in litigation involving a Louisville Bedding patent;⁴⁰⁸ the case ended, after claim construction, with a settlement agreement between the parties providing for a license, and a court order determining that Pillowtex’s accused bedding material did not infringe the asserted claims of the Louisville Bedding patent, as construed by the trial court.⁴⁰⁹ Pillowtex, however, dissolved, and Louisville wanted to assert its patent against another bedding manufacturer.⁴¹⁰ In the subsequent case against this second manufacturer, Perfect Fit, the “[district] court determined that it would give the claim construction from the earlier Pillowtex action collateral estoppel effect.”⁴¹¹ The district court denied Louisville Bedding’s rule 60(b)(6) motion, and the Federal Circuit affirmed.⁴¹² Explaining that rule 60(b)(6) motions are to be granted only in the case of “exceptional or extraordinary circumstances,” the court concluded that this was not such a case, “[b]ecause businesses fail every day,”⁴¹³ and “[p]ublic policy dictates that there be an end of litigation”⁴¹⁴ It is worth noting that the Federal Circuit might equally well have decided this case under the rubric of *U.S. Bancorp Mortgage Co. v. Bonner Mall Partnership*,⁴¹⁵ which held that vacatur of lower-court judgments when cases settle on appeal should only be granted in “exceptional circumstances”⁴¹⁶ because of the interest in “the orderly operation of the federal judicial system,”⁴¹⁷ but the court did not cite *U.S. Bancorp*.

405. See, e.g., *Louisville Bedding Co. v. Pillowtex Corp.*, 455 F.3d 1377, 1379-80, 79 U.S.P.Q.2d (BNA) 1698, 1700 (Fed. Cir. 2006).

406. *Id.*, 455 F.3d 1377, 79 U.S.P.Q.2d (BNA) 1698.

407. FED. R. CIV. P. 60(b)(6).

408. *Louisville Bedding*, 455 F.3d at 1378, 79 U.S.P.Q.2d (BNA) at 1699.

409. *Id.* at 1378, 79 U.S.P.Q.2d (BNA) at 1699.

410. *Id.* at 1378-79, 79 U.S.P.Q.2d (BNA) at 1699-1700.

411. *Id.* at 1379, 79 U.S.P.Q.2d (BNA) at 1700.

412. *Id.* at 1379-80, 79 U.S.P.Q.2d (BNA) at 1700-01.

413. *Id.* at 1380, 79 U.S.P.Q.2d (BNA) at 1701.

414. *Id.* at 1380-81, 79 U.S.P.Q.2d (BNA) at 1701 (quoting *Baldwin v. Iowa State Traveling Men’s Ass’n*, 283 U.S. 522, 525 (1931)).

415. 513 U.S. 18 (1994).

416. *Id.* at 29.

417. *Id.* at 27.

In *Venture Industries Corp. v. Autoliv ASP, Inc.*,⁴¹⁸ the Federal Circuit addressed both timing and substance issues in connection with a rule 60(b)(2) (newly discovered evidence) and 60(b)(3) (fraud, misrepresentation, etc.) motion based on the use of fraudulent company financial statements by an expert witness, which was only discovered after trial and during appeal.⁴¹⁹ The fraud was discovered after Venture's SEC disclosures came to light, while the appeal was pending, so the Federal Circuit stayed the appeal to allow Autoliv to file its 60(b) motion with the district court.⁴²⁰ Ultimately, the district court denied Autoliv's motion based on an expert's testimony at an evidentiary hearing that the fraudulent financial statements had no effect on his calculation of damages.⁴²¹ Although the district court did not expressly address the merits of Autoliv's rule 60(b)(3) motion, it did hold that Autoliv had failed to establish prejudice under rule 60(b)(2).⁴²² Ordinarily, one might think that the finding of lack of prejudice under rule 60(b)(2) would simply carry over to the rule 60(b)(3) analysis, but the Federal Circuit concluded that—under governing Sixth Circuit law—the standards for showing prejudice are different under the two subsections of rule 60(b);⁴²³ under subsection (3), where fraud, misrepresentations, or other misconduct are shown, the burden shifts to the non-movant to demonstrate that the misconduct had no effect on the judgment.⁴²⁴ Accordingly, the court vacated the denial of Autoliv's rule 60(b)(3) motion and remanded for consideration of this issue.⁴²⁵

5. *Local patent rules*

A signal development in the Federal Circuit in 2006 was its consideration of the interpretation and application of local patent rules, which have gained popularity in several district courts around the country, including two of the most active venues for patent cases—the Northern District of California and the Eastern District of Texas. The two 2006 decisions implicating local patent rules came out of these two districts; both opinions were written by Judge Dyk.

In *Massachusetts Institute of Technology v. Abacus Software*,⁴²⁶ the Federal Circuit held that the district court for the Eastern District of

418. 457 F.3d 1322, 79 U.S.P.Q.2d (BNA) 1758 (Fed. Cir. 2006).

419. *Id.* at 1323, 79 U.S.P.Q.2d (BNA) at 1759-60.

420. *Id.* at 1327, 79 U.S.P.Q.2d (BNA) at 1762.

421. *Id.* at 1326-27, 79 U.S.P.Q.2d (BNA) at 1762.

422. *Id.* at 1332, 79 U.S.P.Q.2d (BNA) at 1766.

423. *Id.* at 1333-34, 79 U.S.P.Q.2d (BNA) at 1766-67.

424. *Id.* at 1333, 79 U.S.P.Q.2d (BNA) at 1766-67.

425. *Id.* at 1334, 79 U.S.P.Q.2d (BNA) at 1767.

426. 462 F.3d 1344, 80 U.S.P.Q.2d (BNA) 1225 (Fed. Cir. 2006).

Texas had erred by barring plaintiffs from asserting Microsoft Windows as an infringing product based on the application of that court's local patent rules.⁴²⁷ The district judge had entered a Docket Control Order ("DCO") setting a September 3, 2002 deadline for the parties' preliminary infringement contentions;⁴²⁸ after claim construction (which was issued on July 3, 2003), the district court entered an amended DCO requiring those infringement contentions to be updated by November 21, 2003 (later extended to December 22, 2003).⁴²⁹ Along with the amended DCO, the court notified the parties—for the first time—that "Judge Ward's Rules" for patent cases would apply, and that under those rules, preliminary infringement contentions could be amended only upon a showing of "good cause."⁴³⁰ MIT nonetheless attempted (timely, under the DCO) to update its infringement contentions to add Microsoft Windows as an infringing product, but the district court rejected that effort on the ground that no "good cause" had been shown.⁴³¹

The Federal Circuit, although acknowledging that "district courts are afforded broad discretion in interpreting their own orders," nonetheless held that the court had failed to provide clear notice of the requirements of those rules.⁴³² The court "conclude[d] that MIT was not provided with sufficient notice that its preliminary infringement contentions would be deemed final or that they could only be updated upon a showing of good cause."⁴³³ Chief Judge Michel dissented because he did not find abuse of discretion in the district court's application of its own rules.⁴³⁴

By contrast, the court in *02 Micro International Ltd. v. Monolithic Power Systems, Inc.*,⁴³⁵ affirmed the Northern District of California's application of its "good cause" requirement with respect to a party's attempted amendment of final infringement contentions based on newly discovered evidence; the Federal Circuit ruled that 02 Micro's lack of diligence in seeking the amendment amply supported the district court's refusal to allow it.⁴³⁶

We can expect to see more such challenges in the coming years, as more federal districts adopt local patent rules.

427. *Id.* at 1347, 80 U.S.P.Q.2d (BNA) at 1226-27.

428. *Id.* at 1349, 80 U.S.P.Q.2d (BNA) at 1228.

429. *Id.* at 1358, 80 U.S.P.Q.2d (BNA) at 1234.

430. *Id.*, 80 U.S.P.Q.2d (BNA) at 1234.

431. *Id.*, 80 U.S.P.Q.2d (BNA) at 1234.

432. *Id.* at 1358-59, 80 U.S.P.Q.2d (BNA) at 1234-35 (citing FED. R. CIV. P. 83(b)).

433. *Id.* at 1359, 80 U.S.P.Q.2d (BNA) at 1235.

434. *Id.* at 1364-67, 80 U.S.P.Q.2d (BNA) at 1238-41 (Michel, C.J., dissenting).

435. 467 F.3d 1355, 80 U.S.P.Q.2d (BNA) 1769 (Fed. Cir. 2006).

436. *Id.* at 1367-68, 80 U.S.P.Q.2d (BNA) at 1777-78.

*B. Federal Circuit Practice**1. Appellate jurisdiction*

As noted earlier,⁴³⁷ the Federal Circuit has exclusive appellate jurisdiction over all cases where the well-pleaded complaint in the district court shows that the case “arises under” the patent laws, or where an issue of federal patent law is a necessary element of one of the well-pleaded claims. Moreover, *Christianson v. Colt Industries Operating Corp.*⁴³⁸ provides that where another appellate court makes a “plausible” decision to transfer a case to the Federal Circuit, that decision should be respected by the Federal Circuit lest the courts engage in a “jurisdictional ping-pong” match that has to be settled by the Supreme Court, as with the *Colt* decision.⁴³⁹ In *Parental Guide of Texas v. Thomson, Inc.*,⁴⁴⁰ the court applied both of these principles, respecting the Fifth Circuit’s decision to transfer a case involving a breach-of-contract claim that required the court to interpret section 284 of the Patent Code, which was an essential part of the contract claim.⁴⁴¹

Contrast that holding with that of *Thompson v. Microsoft Corp.*⁴⁴² There, the Federal Circuit concluded that it had no jurisdiction over a complaint sounding in unjust enrichment under Michigan law because even though Thompson’s unjust enrichment claim involved a claim that Microsoft had filed a patent application for something Thompson had invented, neither that, nor Microsoft’s federal preemption defense, made the case one where federal patent law was an essential element of the claim.⁴⁴³ The court thus transferred the case to the U.S. Court of Appeals for the Sixth Circuit.⁴⁴⁴

As noted above in connection with rule 54(b) of the Federal Rules of Civil Procedure,⁴⁴⁵ the final-judgment rule imposes an important limitation on the power of the Federal Circuit to hear appeals. Interlocutory appeals are rare in the Federal Circuit, but they do arise occasionally. In *Gemmy Industries Corp. v. Chrisha Creations, Ltd.*,⁴⁴⁶ the

437. See *supra* notes 208-210 and accompanying text (explaining that the patent issue must be part of the well-pleaded complaint for the court to have subject matter jurisdiction over the case).

438. 486 U.S. 800 (1988).

439. *Id.* at 818-19.

440. 446 F.3d 1265, 78 U.S.P.Q.2d (BNA) 1629 (Fed. Cir. 2006).

441. *Id.* at 1268, 78 U.S.P.Q.2d (BNA) at 1631-32.

442. 471 F.3d 1288, 81 U.S.P.Q.2d (BNA) 1155 (Fed. Cir. 2006).

443. *Id.* at 1291-92, 81 U.S.P.Q.2d (BNA) at 1157-58.

444. *Id.* at 1292, 81 U.S.P.Q.2d (BNA) at 1158.

445. See *supra* notes 337-338 and accompanying text (explaining that a court can enter a partial final judgment to expedite appellate review).

446. 452 F.3d 1353, 79 U.S.P.Q.2d (BNA) 1172 (Fed. Cir. 2006).

court noted that it had allowed an appeal from an otherwise-interlocutory grant of a summary-judgment motion on invalidity to be appended to an appeal as of right from a preliminary-injunction ruling, “on the basis that the preliminary injunction depends on the ruling of invalidity.”⁴⁴⁷ This is an unusual procedure, under the doctrine of “pendent appellate jurisdiction,” whose validity in interlocutory appeals is still a matter of some question.⁴⁴⁸

2. *Appealability and cross-appeals*

In *Nautilus Group, Inc. v. Icon Health and Fitness, Inc.*,⁴⁴⁹ on a motion to dismiss Icon’s cross-appeal, the court (writing per curiam) reiterated the ordinary rule of appealability and cross-appeals: “A party has no right of cross-appeal from a decision in its favor. Similarly, a party who prevails on noninfringement has no right to file a ‘conditional’ cross-appeal to introduce new arguments or challenge a claim construction, but may simply assert alternative grounds in the record for affirming the judgment.”⁴⁵⁰ The court thus dismissed Icon’s cross-appeal, which was styled as a conditional cross-appeal on certain claim-construction issues “in the event that Nautilus prevails on appeal.”⁴⁵¹

3. *Waiver and preservation of error*

The rule for preserving error on appeal is this: “Absent exceptional circumstances, a party cannot raise on appeal legal issues not raised and considered in the trial forum.”⁴⁵² We have already seen applications of this general rule in connection with JMOL and

447. *Id.* at 1354, 79 U.S.P.Q.2d (BNA) at 1173.

448. *Swint v. Chambers County Comm’n*, 514 U.S. 35, 44 n.2 (1995). The Seventh Circuit has referred to *Swint* as reflecting “profound skepticism concerning judge-created doctrines of appellate jurisdiction” and as leaving the doctrine “hang[ing] by a thread.” *In re Rimsat, Ltd.*, 98 F.3d 956, 964 (7th Cir. 1996). Yet the doctrine still survives, even twelve years later. See *Clinton v. Jones*, 520 U.S. 686, 707 n.41 (1997) (describing that the two legal issues were “inextricably intertwined” (quoting *Swint*, 514 U.S. at 51)); *Johnson v. Jones*, 515 U.S. 304, 318 (1995) (explaining that it would assume that exercising “pendent appellate jurisdiction” can sometimes be appropriate).

449. 437 F.3d 1376, 77 U.S.P.Q.2d (BNA) 2012 (Fed. Cir. 2006) (*per curiam*).

450. *Id.* at 1377, 77 U.S.P.Q.2d (BNA) at 2013 (quoting *Phillips v. AWH Corp.*, 363 F.3d 1207, 1216, 70 U.S.P.Q.2d (BNA) 1417, 1423 (Fed. Cir. 2004), *vacated*, 376 F.3d 1382, 71 U.S.P.Q.2d (BNA) 1765 (Fed. Cir. 2004)).

451. *Id.*, 77 U.S.P.Q.2d (BNA) at 2012.

452. *Sw. Software, Inc. v. Harlequin Inc.*, 226 F.3d 1280, 1289 n.7, 56 U.S.P.Q.2d (BNA) 1161, 1167 n.7 (Fed. Cir. 2000).

new-trial motions, as well as jury instructions and inconsistent verdicts.⁴⁵³

With respect to waiver on appeal, two cases decided by the Federal Circuit applied the cardinal rule that issues and arguments must be made in the opening appellate brief or they will be considered waived.⁴⁵⁴ As the court concluded in *Smithkline Beecham Corp. v. Apotex Corp.*,⁴⁵⁵ “[o]ur law is well established that arguments not raised in the opening brief are waived.”⁴⁵⁶ The same rule of waiver was applied by the Federal Circuit in *Optivus Technology, Inc. v. Ion Beam Applications, S.A.*⁴⁵⁷ There are corollaries to this rule, too: “[M]ere statements of disagreement with the district court . . . do not amount to a developed argument”; those, too, are waived.⁴⁵⁸ So, too, “arguments raised in footnotes are not preserved.”⁴⁵⁹ While the court always retains “discretion” to consider issues not properly raised,⁴⁶⁰ parties cannot rely on courts to exercise this discretion.⁴⁶¹

4. Cardinal Chemical issues

As noted above,⁴⁶² the Supreme Court in *Cardinal Chemical*⁴⁶³ concluded that a holding of noninfringement on appeal did not “moot” a declaratory judgment counterclaim of invalidity.⁴⁶⁴ This continues to be a source of some controversy in the Federal Circuit. In *Old Town Canoe Co. v. Confluence Holdings Corp.*,⁴⁶⁵ the panel split on

453. See *supra* notes 368-373, 381-385, 389-393, and 399-402, and accompanying text (identifying the recent case developments regarding JMOL, motions for a new trial, jury instructions, and inconsistent verdicts).

454. See *Optivus Tech., Inc. v. Ion Beam Applications, S.A.*, 469 F.3d 978, 80 U.S.P.Q.2d (BNA) 1839 (Fed. Cir. 2006); *Smithkline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 78 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2006).

455. 439 F.3d 1312, 78 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2006).

456. *Id.* at 1319, 78 U.S.P.Q.2d (BNA) at 1102 (citing *Cross Med. Prods. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1320-21 n.3, 76 U.S.P.Q.2d (BNA) 1662, 1683 n.3 (Fed. Cir. 2005)).

457. 469 F.3d 978, 989, 80 U.S.P.Q.2d (BNA) 1839, 1847-48 (Fed. Cir. 2006).

458. *Smithkline*, 439 F.3d at 1320, 78 U.S.P.Q.2d (BNA) at 1103.

459. *Id.*, 78 U.S.P.Q.2d (BNA) at 1103 (citing *Cross Med. Prods.*, 424 F.3d at 1320-21 n.3, 76 U.S.P.Q.2d (BNA) at 1683 n.3; *Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1375 n.4, 73 U.S.P.Q.2d (BNA) 1678, 1684 n.4 (Fed. Cir. 2005); *Graphic Controls Corp. v. Utah Med. Prods.*, 149 F.3d 1382, 1385, 47 U.S.P.Q.2d (BNA) 1622, 1624 (Fed. Cir. 1998)).

460. *Id.* at 1320 n.9, 78 U.S.P.Q.2d (BNA) at 1103 n.9 (citing *Becton Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 800, 17 U.S.P.Q.2d (BNA) 1097, 1103 (Fed. Cir. 1990)).

461. See *id.* at 1320 n.9, 78 U.S.P.Q.2d (BNA) at 1103 n.9 (“But here, as in *Becton*, we see no reason to exercise that discretion.”).

462. See *supra* note 36 and accompanying text (discussing the Court’s resolution of whether a non-infringement judgment moots the declaratory judgment issue).

463. *Cardinal Chem. Co. v. Morton Int’l, Inc.*, 508 U.S. 83 (1993).

464. *Id.* at 98.

465. 448 F.3d 1309, 78 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

the question of *Cardinal's* applicability. The majority affirmed the district court's noninfringement finding, but then addressed the issues of invalidity and unenforceability raised by the defendant's counterclaims (and cross-appeal).⁴⁶⁶ Judge Mayer dissented from this procedure, contending that there was no longer a live case or controversy for the declaratory judgment counterclaims once the infringement risk had been removed by the panel's affirmance of the noninfringement finding⁴⁶⁷ because there was "no longer . . . any reasonable apprehension of suit."⁴⁶⁸ (Query, however, whether Judge Mayer's analysis can survive the Supreme Court's recent *MedImmune v. Genentech* opinion, or at least the dicta regarding the "reasonable apprehension of suit" requirement.⁴⁶⁹)

5. *Reassignment on remand*

Ordinarily, the reassignment of a case to another judge on remand is an extraordinary request, and granted by an appellate court only in "rare and compelling circumstances."⁴⁷⁰ But in the Seventh Circuit and the Northern District of Illinois, local rules exist that require, in most cases, that actions remanded to the district court for a new trial be reassigned to a new judge.⁴⁷¹ The Federal Circuit has no such rule. Thus, in *Eolas Technologies Inc. v. Microsoft Corp.*,⁴⁷² the Federal Circuit granted permission for an interlocutory appeal on this issue, and ultimately held that because the question of reassignment was not a question unique to the Federal Circuit, the Seventh Circuit's reassignment rule would apply to Federal Circuit remands to district courts within the Seventh Circuit.⁴⁷³ This decision will have repercussions in any case remanded for a new trial from the district courts in Illinois, Indiana, and Wisconsin, which, as a circuit,

466. *Id.* at 1318-22, 78 U.S.P.Q.2d (BNA) at 1711-15.

467. *Id.* at 1323, 78 U.S.P.Q.2d (BNA) at 1715-16 (Mayer, J., dissenting).

468. *Id.*, 78 U.S.P.Q.2d (BNA) at 1716 (Mayer, J., dissenting).

469. *MedImmune, Inc. v. Genentech, Inc.*, 127 S. Ct. 764, 774 n.11 (2007).

470. *Int'l Rectifier Corp. v. Samsung Elecs. Co.*, 424 F.3d 1235, 1244, 76 U.S.P.Q.2d (BNA) 1506, 1512-13 (Fed. Cir. 2005), *cert. denied*, 126 S. Ct. 2021 (2006) (mem.); *see, e.g.*, *Juicy Whip, Inc. v. Orange Bang, Inc.*, 382 F.3d 1367, 1373-74, 72 U.S.P.Q.2d (BNA) 1385, 1389 (Fed. Cir. 2004) (denying reassignment since there was no showing of personal bias or unusual circumstances); *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1122, 1126, 65 U.S.P.Q.2d (BNA) 1695, 1697, 1700 (Fed. Cir. 2003) (denying reassignment since the party did not provide evidence of bias or favoritism). Two of the authors were counsel to Micro Chemical, Inc. in the last-cited case in this footnote.

471. 7TH CIR. R. 36; N.D. ILL. R. 40.5.

472. 163 F. App'x. 899, 900 (Fed. Cir. 2006).

473. *Eolas Tech. Inc. v. Microsoft Corp.*, 457 F.3d 1279, 1282-84, 79 U.S.P.Q.2d (BNA) 1597, 1598-1600 (Fed. Cir. 2006).

produced the second-most published decisions from the Federal Circuit in 2006.⁴⁷⁴

C. Patent and Trademark Office Practice

Finally, the Federal Circuit had three occasions to consider matters of practice and procedure before the U.S. Patent and Trademark Office ("PTO"). In *Brown v. Barbacid*,⁴⁷⁵ the Federal Circuit held that, in an interference, prior conception must be proven with corroborated evidence,⁴⁷⁶ and that waiver for failure to raise arguments below will apply in PTO practice, as it does in court practice. *Barbacid* argued that *Brown* was required to show diligence measured from the date of *Barbacid*'s date of conception, not *Barbacid*'s date of reduction to practice, but the Federal Circuit held that *Brown*'s prior silence on this issue, including in a prior Federal Circuit appeal in the same case, "waived the issue of the length of the period during which diligence should be shown."⁴⁷⁷

In *Lacavera v. Dudas*,⁴⁷⁸ the Federal Circuit held that the PTO's decision to grant an alien attorney only limited recognition, and not full registration, was not an abuse of its discretion under the PTO's governing statutes and regulations.⁴⁷⁹ The court rejected the applicant's arguments that the PTO's reliance on the applicant's visa restrictions was: (1) an unreasonable interpretation of the PTO's own regulations, (2) beyond the PTO's statutorily granted powers, and (3) a denial of equal protection based on alienage.⁴⁸⁰

In *Sheinbein v. Dudas*,⁴⁸¹ the court upheld the PTO's decision to exclude *Sheinbein* from PTO practice based on his disbarment in other jurisdictions (for illegally assisting his son to flee the country after learning that the son was being investigated in connection with a murder).⁴⁸² The court also held that the five-year statute of limitations imposed by 28 U.S.C. § 2462 did not begin to run until his disbarment by the State Bar of Maryland (the condition precedent to

474. See *infra* tbl. 4B.

475. 436 F.3d 1376, 77 U.S.P.Q.2d (BNA) 1848 (Fed. Cir. 2006).

476. *Id.* at 1380, 77 U.S.P.Q.2d (BNA) at 1851 (citing *In re Jolley*, 308 F.3d 1317, 1328, 64 U.S.P.Q.2d (BNA) 1901, 1909 (Fed. Cir. 2002)).

477. *Id.* at 1379-80, 77 U.S.P.Q.2d (BNA) at 1851 (citing *Barrow v. Falck*, 11 F.3d 729, 730 (7th Cir. 1993)).

478. 441 F.3d 1380, 77 U.S.P.Q.2d (BNA) 1955 (Fed. Cir. 2006), *cert. denied*, 75 U.S.L.W. 3106 (U.S. Feb. 20, 2007).

479. *Id.* at 1383, 77 U.S.P.Q.2d (BNA) at 1957.

480. *Id.* at 1383-84, 77 U.S.P.Q.2d (BNA) at 1957-58.

481. 465 F.3d 493, 80 U.S.P.Q.2d (BNA) 1537 (Fed. Cir. 2006).

482. *Id.* at 495-96, 80 U.S.P.Q.2d (BNA) at 1538-40.

his exclusion from PTO practice under the appropriate regulations); it did not run from the acts that led to his Maryland disbarment.⁴⁸³

III. PATENTABILITY AND VALIDITY

Perhaps the most significant development in 2006 in the area of patentability and validity was the dialogue that the Federal Circuit and the Supreme Court had over the proper standard for determining obviousness. As this article goes to press, the Supreme Court has yet to issue its decision in *KSR International Co. v. Teleflex, Inc.*,⁴⁸⁴ involving the appropriate standard to use in determining an obviousness challenge. Even before the Supreme Court has decided *KSR*, however, the decision to grant certiorari in that case has prompted the Federal Circuit to defend its “motivation-teaching-suggestion” test in several of its 2006 decisions, and, at the same time, to engage in a remarkable conversation with the Supreme Court and the members of the bar on this issue.

While the Federal Circuit’s obviousness cases have demonstrated (even before a Supreme Court decision in *KSR*) that the court is making obviousness into a more muscular defense to a patent’s validity, the court’s cases are also suggesting a similarly more muscular anticipation defense, and they further show that the court is closely scrutinizing attempts to invalidate a patent on the ground of inequitable conduct. Additionally, the Federal Circuit in 2006 invalidated, for the first time, a dependent claim for failure to meet the drafting requirements set forth in 35 U.S.C. § 112, ¶ 4. And the court gave further guidance on the doctrine of recapture. These and other issues of patentability and invalidity arising out of the court’s 2006 cases are surveyed below.

A. *Validity in the Preliminary-Injunction Context*

For a moving party to obtain a preliminary injunction, it must establish: “(1) a reasonable likelihood of its success on the merits; (2) irreparable harm if an injunction is not granted; (3) a balance of hardships tipping in its favor; and (4) the injunction’s . . . impact on the public interest.”⁴⁸⁵ In *Sanofi-Synthelabo v. Apotex, Inc.*,⁴⁸⁶ the Federal Circuit considered the patent challenger’s request to overturn, on

483. *Id.* at 496, 80 U.S.P.Q.2d (BNA) at 1539-40.

484. 126 S. Ct. 2965 (2006) (mem.).

485. *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1374, 81 U.S.P.Q.2d (BNA) 1097, 1100 (Fed. Cir. 2006); *accord* *Abbott Labs. v. Andrx Pharm., Inc.*, 452 F.3d 1331, 1334, 79 U.S.P.Q.2d (BNA) 1321, 1323-24 (Fed. Cir. 2006).

486. 470 F.3d 1368, 81 U.S.P.Q.2d (BNA) 1097.

invalidity grounds, the district court's grant of a preliminary injunction.⁴⁸⁷ The court explained that an order granting a preliminary injunction will be overturned on appeal only if "the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings."⁴⁸⁸ The Federal Circuit affirmed the grant of the preliminary injunction and held that the challenger had not sufficiently demonstrated a clearly erroneous finding and an abuse of discretion.⁴⁸⁹

When seeking a preliminary injunction, a patent holder bears the burden of proving a likelihood of success in establishing the patent's validity.⁴⁹⁰ The presumption of validity created by 35 U.S.C. § 282 assists, but does not relieve the patentee of this burden.⁴⁹¹

487. *Id.* at 1373-74, 81 U.S.P.Q.2d at 1100; *cf. Abbott*, 452 F.3d at 1332, 79 U.S.P.Q.2d (BNA) at 1322 (granting motion to review the validity of a preliminary injunction).

488. *See Sanofi-Synthelabo*, 470 F.3d at 1374, 81 U.S.P.Q.2d (BNA) at 1100 (quoting *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1364, 42 U.S.P.Q.2d (BNA) 1001, 1003 (Fed. Cir. 1997)); *see also Abbott*, 452 F.3d at 1335, 79 U.S.P.Q.2d (BNA) at 1324 ("An abuse of discretion in granting or denying a preliminary injunction may be found 'by showing that the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings.'") (quoting *Polymer Techs., Inc. v. Bridwell*, 103 F.3d 970, 973, 41 U.S.P.Q.2d (BNA) 1185, 1188 (Fed. Cir. 1996)); *see also Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1378, 77 U.S.P.Q.2d (BNA) 1988, 1992 (Fed. Cir. 2006) ("The court's determination can be overturned only on a showing that it abused its discretion, committed an error of law, or seriously misjudged the evidence.") (quoting *We Care, Inc. v. Ultra-Mark Int'l Corp.*, 930 F.2d 1567, 1570, 18 U.S.P.Q.2d (BNA) 1562, 1564 (Fed. Cir. 1991)).

489. *See Sanofi-Synthelabo*, 470 F.3d at 1385, 81 U.S.P.Q.2d (BNA) at 1108; *cf. PHG Tech., LLC v. St. John Co., Inc.*, 469 F.3d 1361, 1369, 81 U.S.P.Q.2d (BNA) 1088, 1093-94 (Fed. Cir. 2006) (vacating preliminary injunction where patentee failed to establish likelihood of success on merits weighs in its favor); *Gemmy Indus. Corp. v. Chrisha Creations Ltd.*, 452 F.3d 1353, 1354-55, 79 U.S.P.Q.2d (BNA) 1172, 1173 (Fed. Cir. 2006) (vacating summary judgment of invalidity, thus vacating preliminary injunction as to patent marking); *Abbott*, 452 F.3d at 1332, 79 U.S.P.Q.2d (BNA) at 1322 (vacating preliminary injunction where alleged infringer raised substantial issues as to the validity of asserted claims); *Curtiss-Wright*, 438 F.3d at 1381-82, 77 U.S.P.Q.2d (BNA) at 1994 (vacating preliminary injunction where district court erred in its claim construction, thus subsequent infringement analysis was flawed).

490. *See Sanofi-Synthelabo*, 470 F.3d at 1375, 81 U.S.P.Q.2d (BNA) at 1101; *see also Abbott*, 452 F.3d at 1335, 79 U.S.P.Q.2d (BNA) at 1324 ("When moving for the extraordinary relief of a preliminary injunction, a patentee need not establish the validity of a patent beyond question. The patentee must, however, present a clear case supporting the validity of the patent in suit.") (citing *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1359, 57 U.S.P.Q.2d (BNA) 1747, 1758 (Fed. Cir. 2001)).

491. *See Sanofi-Synthelabo*, 470 F.3d at 1375, 81 U.S.P.Q.2d (BNA) at 1101; *see also PHG Tech.*, 469 F.3d at 1365, 81 U.S.P.Q.2d (BNA) at 1090 (Fed. Cir. 2006) ("Our case law and logic both require that a movant cannot be granted a preliminary injunction unless it establishes both of the first two factors, *i.e.*, likelihood of success on the merits and irreparable harm.") (citing *Amazon.com*, 239 F.3d at 1350, 57 U.S.P.Q.2d (BNA) at 1751).

Accordingly, to show a likelihood of success, the patentee must demonstrate that: (1) the alleged infringer's product likely infringes; and (2) the patentee will likely withstand the alleged infringer's challenges to validity and enforceability.⁴⁹² In *Sanofi-Synthelabo*, the alleged infringer stipulated to infringement, thus only the second inquiry was at issue.⁴⁹³ The Federal Circuit explained that the likelihood-of-success factor is properly satisfied if the alleged infringer fails to raise a substantial question concerning validity.⁴⁹⁴ The party resisting a preliminary injunction need not make out a case of actual invalidity, but instead must raise a substantial question as to invalidity.⁴⁹⁵ The court examined each validity challenge proffered by the alleged infringer and reviewed the district court's ruling on each defense.⁴⁹⁶ The Federal Circuit concluded that the district court did not err in determining that the alleged infringer failed to raise a substantial question of invalidity.⁴⁹⁷

Having ruled that the first factor for a preliminary injunction was satisfied, the Federal Circuit turned to the remaining three factors and concluded that the district court did not clearly err in ruling for the patentee nor abuse its discretion in granting preliminary injunctive relief.⁴⁹⁸ Further, the Federal Circuit noted that it considered the district court's grant of the preliminary injunction in the context of the standard applicable to a motion for a preliminary injunction, and that the district court is not bound to its prior conclusions at later stages of the litigation.⁴⁹⁹

B. Standard of Review for Validity in JMOL Context

In *SRAM Corp. v. AD-II Engineering Inc.*,⁵⁰⁰ the Federal Circuit reviewed a district court's ruling (made on cross-motions for summary judgment) that prior art did not invalidate a claim of the patent in suit.⁵⁰¹ In its decision, the Federal Circuit repeated the well-known standard under 35 U.S.C. § 282 that patents enjoy a

492. See *Sanofi-Synthelabo*, 470 F.3d at 1374, 81 U.S.P.Q.2d (BNA) at 1100.

493. See *id.*, 81 U.S.P.Q.2d (BNA) at 1100.

494. See *id.*, 81 U.S.P.Q.2d (BNA) at 1100.

495. See *Abbott*, 452 F.3d at 1335, 79 U.S.P.Q.2d (BNA) at 1324 (“[]Vulnerability is the issue at the preliminary injunction stage, while validity is the issue at trial. The showing of a substantial question as to invalidity thus requires less proof than the clear and convincing showing necessary to establish invalidity itself.[]”) (citing *Amazon.com*, 239 F.3d at 1359, 57 U.S.P.Q.2d (BNA) at 1758).

496. *Sanofi-Synthelabo*, 470 F.3d at 1374-75, 81 U.S.P.Q.2d (BNA) at 1100-01.

497. *Id.* at 1379, 81 U.S.P.Q.2d (BNA) at 1103.

498. *Id.* at 1385, 81 U.S.P.Q.2d (BNA) at 1108.

499. *Id.*, 81 U.S.P.Q.2d (BNA) at 1108.

500. 465 F.3d 1351, 80 U.S.P.Q.2d (BNA) 1363 (Fed. Cir. 2006).

501. *Id.* at 1355-56, 80 U.S.P.Q.2d (BNA) at 1366.

presumption of validity that can be overcome only by clear and convincing evidence of invalidity.⁵⁰² To invalidate a patent on summary judgment, therefore, the moving party must submit clear and convincing evidence of invalidity to the extent that no reasonable jury could find otherwise.⁵⁰³ Moreover, in the context of a summary-judgment motion, the panel noted that the evidence must be viewed in the light most favorable to the non-moving party.⁵⁰⁴

C. Anticipation

The Federal Circuit's year 2006 cases addressing anticipation to any significant degree began by stating that anticipation is a question of fact.⁵⁰⁵ Therefore, the Federal Circuit will affirm a jury verdict if it is supported by substantial evidence.⁵⁰⁶ The Federal Circuit reviews a

502. *Id.* at 1357, 80 U.S.P.Q.2d (BNA) at 1367 (citing *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1563, 41 U.S.P.Q.2d (BNA) 1225, 1232 (Fed. Cir. 1997); *see also* *Aero Prods. Int'l Corp. v. Intex Recreation Corp.*, 466 F.3d 1000, 1015, 80 U.S.P.Q.2d (BNA) 1481, 1490-91 (Fed. Cir. 2007); *Abbott Labs. v. Baxter Pharm. Prods. Inc.*, 471 F.3d 1363, 1367, 80 U.S.P.Q.2d (BNA) 1860, 1862-63 (Fed. Cir. 2006); *Impax Labs., Inc. v. Aventis Pharms. Inc.*, 468 F.3d 1366, 1378, 81 U.S.P.Q.2d (BNA) 1001, 1009 (Fed. Cir. 2006); *Alza Corp. v. Mylan Labs. Inc.*, 464 F.3d 1286, 1290, 80 U.S.P.Q.2d (BNA) 1001, 1003 (Fed. Cir. 2006); *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1336-37, 79 U.S.P.Q.2d (BNA) 1813, 1818 (Fed. Cir. 2006); *Gemmy Indus. Corp. v. Chrisa Creations Ltd.*, 452 F.3d 1353, 1358, 79 U.S.P.Q.2d (BNA) 1172, 1176 (Fed. Cir. 2006); *Kao Corp. v. Unilever U.S. Inc.*, 441 F.3d 963, 968, 78 U.S.P.Q.2d (BNA) 1257, 1260 (Fed. Cir. 2006); *Stern v. Trs. of Columbia Univ.*, 434 F.3d 1375, 1377, 77 U.S.P.Q.2d (BNA) 1702, 1704 (Fed. Cir. 2006)).

503. *SRAM*, 465 F.3d at 1357, 80 U.S.P.Q.2d (BNA) at 1367; *see also* *L & W Inc. v. Shertech, Inc.*, 471 F.3d 1311, 1320, 81 U.S.P.Q.2d (BNA) 1198, 1204 (Fed. Cir. 2006) (quoting *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893, 221 U.S.P.Q. (BNA) 669, 673 (Fed. Cir. 1984)).

504. *SRAM*, 465 F.3d at 1357, 80 U.S.P.Q.2d (BNA) at 1367 (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986)).

505. *See, e.g.,* *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 471 F.3d 1369, 1375, 81 U.S.P.Q.2d (BNA) 1324, 1328 (Fed. Cir. 2006) (positing that anticipation is a question of fact); *Impax Labs., Inc. v. Aventis Pharm., Inc.* 468 F.3d 1366, 1381 (Fed. Cir. 2006) (remarking that anticipation is a factual matter); *SRAM*, 465 F.3d at 1357, 80 U.S.P.Q.2d (BNA) at 1367 (stating that anticipation is a question of fact); *Kim v. ConAgra Foods Inc.*, 465 F.3d 1312, 1325, 80 U.S.P.Q.2d (BNA) 1495, 1503 (Fed. Cir. 2006) (“What a prior art reference discloses in an anticipation analysis is a factual determination.”) (quoting *Novo Nordisk Pharms., Inc. v. Bio-Tech. Gen. Corp.*, 424 F.3d 1347, 1355, 76 U.S.P.Q.2d (BNA) 1811, 1816 (Fed. Cir. 2005); *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1300, 79 U.S.P.Q.2d (BNA) 1705, 1713 (Fed. Cir. 2006) (commenting that anticipation under 35 U.S.C. § 102 is a question of fact); *Atofina v. Great Lakes Chemical Corp.*, 441 F.3d 991, 995, 78 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2006) (noting that anticipation is a question of fact)).

506. *L & W*, 471 F.3d at 1320, 81 U.S.P.Q.2d (BNA) at 1204 (“In reviewing the sufficiency of the evidence to support the jury’s verdict, we may inquire only whether the findings necessary to the jury’s verdict are supported by the evidence . . .”); *Kim*, 465 F.3d at 1326, 80 U.S.P.Q.2d (BNA) at 1503 (holding that jury verdict that claims are not invalid was supported by substantial evidence).

district court finding of anticipation for clear error.⁵⁰⁷ In the context of summary judgment, however, the Federal Circuit reviews de novo a district court's ruling on an anticipation issue.⁵⁰⁸ And, in the context of a district court ruling on a preliminary injunction, the Federal Circuit reviews a finding of anticipation under an abuse of discretion standard.⁵⁰⁹

There are two steps to an anticipation analysis: (1) claim construction, and (2) a comparison of the construed claim to the prior art.⁵¹⁰ “[I]nvalidity by anticipation requires that the four corners of a single, prior art document describe every element of the claimed invention.”⁵¹¹ The elements can be described explicitly or inherently.⁵¹² “[A]nticipation by inherent disclosure is appropriate only when the reference discloses prior art that must necessarily include the unstated limitation.”⁵¹³ Additionally, a “reference may anticipate even when the relevant properties of the thing disclosed were not appreciated at the time.”⁵¹⁴

Furthermore, “[i]n order to anticipate, a prior art reference must not only disclose all of the limitations of the claimed invention, but also be enabled.”⁵¹⁵ And to be enabling, a prior art reference must disclose the claimed subject matter so that one skilled in the art may

507. *Amgen*, 457 F.3d at 1304, 79 U.S.P.Q.2d (BNA) at 1713 (“Anticipation under 35 U.S.C. § 102 is a question of fact, which we review for clear error after a bench trial.”); *Atofina*, 441 F.3d at 995, 78 U.S.P.Q.2d (BNA) 1417 (“[W]e review [anticipation] for clear error.”).

508. *Go Med. Indus. Pty. Ltd. v. Inmed Corp.*, 471 F.3d 1264, 1270, 80 U.S.P.Q.2d (BNA) 1629, 1633 (Fed. Cir. 2006) (noting that summary judgment of invalidity is reviewed without deference); *SRAM*, 465 F.3d at 1356, 80 U.S.P.Q.2d (BNA) at 1367 (“We review a district court’s grant of summary judgment without deference.”).

509. *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1374, 81 U.S.P.Q.2d (BNA) 1097, 1100 (Fed. Cir. 2006).

510. *SRAM*, 465 F.3d at 1352-53, 80 U.S.P.Q.2d (BNA) at 1364 (vacating partial summary judgment because district court erred in claim construction, and remanding to district court for decision under new claim construction); *Amgen*, 457 F.3d at 1304, 79 U.S.P.Q.2d (BNA) at 1713 (vacating and remanding for new ruling on anticipation based on a new claim construction); *In re Johnston*, 435 F.3d 1381, 77 U.S.P.Q.2d (BNA) 1788 (Fed. Cir. 2006) (upholding the United States Patent and Trademark Office Board of Patent Appeals and Interference’s construction of claims and ruling of anticipation based on construction).

511. *Xerox Corp. v. 3Com Corp.*, 458 F.3d 1310, 1322, 80 U.S.P.Q.2d (BNA) 1916, 1927 (Fed. Cir. 2006) (quoting *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282, 54 U.S.P.Q.2d (BNA) 1673, 1679 (Fed. Cir. 2000)).

512. *Atofina*, 441 F.3d at 999, 78 U.S.P.Q.2d (BNA) at 1423 (“Anticipation requires a showing that each limitation of a claim is found in a single reference, either expressly or inherently.”).

513. *Id.* at 1000, 78 U.S.P.Q.2d (BNA) at 1424.

514. *Abbott Labs. v. Baxter Pharm. Prods., Inc.*, 471 F.3d 1363, 1367, 80 U.S.P.Q.2d (BNA) 1860, 1863 (Fed. Cir. 2006).

515. *Amgen*, 457 F.3d at 1306, 79 U.S.P.Q.2d (BNA) at 1714 (Fed. Cir. 2006).

make or use it.⁵¹⁶ Importantly, however, “[t]he enablement requirement for prior art to anticipate under section 102 does not require utility, unlike the enablement requirement for patents under section 112. . . . [P]roof of efficacy is not required”⁵¹⁷

Many of the Federal Circuit’s anticipation decisions engage in a detailed analysis in construing the claims and applying those claim constructions to the specific prior art at issue.⁵¹⁸ A recitation of each case and its facts thus provides limited insight into the overall state of Federal Circuit law. Nevertheless, some of the decisions warrant an examination of relevant legal principles as articulated in their specific factual contexts.

In *SmithKline Beecham Corp. v. Apotex Corp.*,⁵¹⁹ the Federal Circuit was faced with a product-by-process claim directed to paroxetine, an anti-depressant, made by an allegedly novel, dry admixing process.⁵²⁰ The court ruled that it need not reach the issue of whether the claims should be construed “broadly to cover the product made by any process or narrowly to cover only the product made by a dry admixing process,” because “[e]ither way, anticipation by an earlier product disclosure . . . cannot be avoided. While the process set forth in the product-by-process claim may be new, that novelty can only be captured by obtaining a process claim.”⁵²¹

The Federal Circuit faced the question of new uses of known processes in *Abbott Laboratories v. Baxter Pharmaceutical Products, Inc.*, which dealt with method claims directed to adding water to the inhalation anesthetic sevoflurane to prevent degradation by certain acids.⁵²² The prior art taught adding water to sevoflurane, but did not appreciate that adding the water would prevent such degradation.⁵²³ Nonetheless, the Federal Circuit held that the claim was anticipated. While noting that new uses of known processes may be patentable,

516. *Impax Labs., Inc. v. Aventis Pharm., Inc.* 468 F.3d 1366, 1381, 81 U.S.P.Q.2d (BNA) 1001, 1011 (Fed. Cir. 2006).

517. *Id.* at 1381-82, 81 U.S.P.Q.2d (BNA) at 1012.

518. *See supra* note 510 and accompanying text; *see also* *Planet Bingo, LLC. v. Gametech Int’l, Inc.*, 472 F.3d 1338, 81 U.S.P.Q.2d (BNA) 1145 (Fed. Cir. 2006) (construing claims as part of infringement analysis and then applying same construction in finding claims invalid).

519. 439 F.3d 1312, 78 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2006).

520. *Id.* at 1314, 78 U.S.P.Q.2d (BNA) at 1098. A product-by-process claim is “one in which the product is defined at least in part in terms of the method or process by which it is made.” *Id.* at 1315, 78 U.S.P.Q.2d (BNA) at 1099 (quoting *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 158-59 n.*, 9 U.S.P.Q.2d (BNA) 1847, 1859 n.1 (1989)). “[I]t is clear that such claims are always to a product, not a process.” *Id.* at 1317, 78 U.S.P.Q.2d (BNA) at 1100.

521. *Id.* at 1318-19, 78 U.S.P.Q.2d (BNA) at 1102.

522. 471 F.3d 1363, 1365, 80 U.S.P.Q.2d (BNA) 1860, 1864 (Fed. Cir. 2006).

523. *Id.* at 1366, 80 U.S.P.Q.2d (BNA) at 1864.

both the prior art and present purpose was the delivery of a safe, effective sevoflurane anesthetic. The prior art taught removing the added water from the solution during the manufacturing process to remove impurities. The patent at issue accomplished that goal mainly by adding water, but the use was the same.⁵²⁴

In a number of cases the Federal Circuit was asked to determine whether a genus disclosed in a prior-art reference anticipated a claimed species falling within that genus.⁵²⁵ “It is well established that the disclosure of a genus in the prior art is not necessarily a disclosure of every species that is a member of that genus. . . . [However,] a very small genus can be a disclosure of each species within the genus.”⁵²⁶ The problem is often viewed as one of enablement: A person having ordinary skill in the art should be able to “‘at once envisage *each member* of th[e] . . . class’ for the individual compounds, *i.e.*, species, to be enabled. . . . If the members cannot be envisioned, the reference does not disclose the species and the reference is not enabling.”⁵²⁷ The court also looks for a “pattern of preferences” that can limit a “generic” class to a “narrow class” including the claimed element.⁵²⁸

The Federal Circuit applied these principles in *Atofina v. Great Lakes Chemical Corp.*⁵²⁹ The patent claim disclosed a preferred temperature range of 330 to 450 degrees Celsius for synthesizing the chemical difluoromethane, and the prior art reference disclosed a range of 100 to 500 degrees Celsius.⁵³⁰ The court found no anticipation, because “[a] temperature range of over 100 degrees is not a small genus, and the range of temperatures of [the prior art reference] does not disclose Atofina’s temperature range.”⁵³¹ The

524. *Id.*, 80 U.S.P.Q.2d (BNA) at 1864.

525. See *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1377, 81 U.S.P.Q.2d (BNA) 1097, 1102 (Fed. Cir. 2006); *Impax Labs., Inc. v. Aventis Pharm., Inc.*, 468 F.3d 1366, 1383, 81 U.S.P.Q.2d (BNA) 1001, 1013 (Fed. Cir. 2006); *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 999, 78 U.S.P.Q.2d (BNA) 1417, 1423 (Fed. Cir. 2006).

526. *Atofina*, 441 F.3d at 999, 78 U.S.P.Q.2d (BNA) at 1423 (internal citations omitted).

527. *Impax*, 468 F.3d at 1383, 81 U.S.P.Q.2d (BNA) at 1013 (Fed. Cir. 2006) (quoting *In re Petering*, 301 F.2d 676, 681, 133 U.S.P.Q. (BNA) 275, 280 (C.C.P.A. 1962)).

528. See *Sanofi-Synthelabo*, 470 F.3d at 1377, 81 U.S.P.Q.2d (BNA) at 1102 (Fed. Cir. 2006).

529. 441 F.3d 991, 78 U.S.P.Q.2d (BNA) 1417.

530. *Id.* at 999, 78 U.S.P.Q.2d (BNA) at 1423.

531. *Id.*, 78 U.S.P.Q.2d (BNA) at 1423. “Given the considerable difference between the claimed range and the range in the prior art, no reasonable fact finder could conclude that the prior art described the claimed range with sufficient specificity to anticipate this limitation of the claim.” *Id.*

court further noted that the prior art “disclosure is only that of a range, not a specific temperature in that range”⁵³²

In *Impax Laboratories, Inc. v. Aventis Pharmaceuticals Inc.*,⁵³³ the Federal Circuit dealt with an enablement question in a genus-species context with two prior art references.⁵³⁴ The issue was whether the references, a patent and an application to which the prior art patent claimed priority, disclosed riluzole, a compound used to treat amyotrophic lateral sclerosis (“ALS”). The patent reference disclosed a large genus of compounds and specifically mentioned riluzole. The district court concluded that the patent was not enabling, however, because it did not disclose that riluzole was “effective” in treating ALS.⁵³⁵ The Federal Circuit explained that efficacy is not required, and remanded to the court to make the proper determination on enablement.⁵³⁶ The application did not specifically mention riluzole, and the Federal Circuit held that it was not enabling, because of “the large number of compounds included” in the disclosed formula and lack of a “specific identification.”⁵³⁷

In *Sanofi-Synthelabo v. Apotex, Inc.*,⁵³⁸ the challenged patent covered clopidogrel bisulfate, which inhibits platelets from aggregating and is used to reduce thrombotic events such as heart attacks or strokes.⁵³⁹ The Federal Circuit concluded that the prior art lacked a “pattern of preferences” serving to narrow the prior art class of compounds to one that included the claimed compound.⁵⁴⁰ Thus, the district court did not abuse its discretion in granting a preliminary injunction, because the patentee was likely to succeed against the accused infringer’s anticipation challenge.⁵⁴¹

532. *Id.* at 1000, 78 U.S.P.Q.2d (BNA) at 1424. The court distinguished *Atofina* from *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 782, 227 U.S.P.Q. (BNA) 773, 779 (Fed. Cir. 1985), which stands for the proposition that an earlier species reference anticipates a later genus claim, not that an earlier genus anticipates a narrow species. *Atofina*, 441 F.3d at 999, 78 U.S.P.Q.2d (BNA) at 1423.

533. 468 F.3d 1366, 81 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 2006).

534. *Id.* at 1381-83, 81 U.S.P.Q.2d (BNA) at 1012-13.

535. *Id.* at 1381, 81 U.S.P.Q.2d (BNA) at 1012.

536. *Id.*, 81 U.S.P.Q.2d (BNA) at 1012.

537. *Id.* at 1383, 81 U.S.P.Q.2d (BNA) at 1013.

538. *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 81 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2006).

539. *Id.* at 1372, 81 U.S.P.Q.2d (BNA) at 1099.

540. *Id.* at 1377, 81 U.S.P.Q.2d (BNA) at 1103. “The principal, obvious distinction is that the generic formula [of the prior art] does not include a salt. On this basis alone, we find that clopidogrel bisulfate is not a species of any genus comprised by [the prior art].” *Id.* at 1377, 81 U.S.P.Q.2d (BNA) at 1102-03.

541. *Id.* at 1384, 81 U.S.P.Q.2d (BNA) at 1107.

D. On-Sale Bar and Public Use Bar

A claimed invention will trigger the on-sale bar to patentability of 35 U.S.C. § 102(b) if it is sold or offered for sale more than one year before the filing date of the patent application.⁵⁴² The statute guards against undue delay in commencing the patenting process, while providing a year wherein an inventor may assess the commercial potential of the invention without losing the opportunity of patenting it in the United States.⁵⁴³ The determination of whether an invention was on sale within the meaning of Section 102(b) is a question of law to be reviewed without deference.⁵⁴⁴ Because patents bear a presumption of validity, invalidity based on the on-sale bar must be established by clear and convincing evidence.⁵⁴⁵

In *Plumtree Software, Inc. v. Datamize, LLC*,⁵⁴⁶ the Federal Circuit vacated a summary judgment invalidating a patent for a computer program based on the on-sale bar.⁵⁴⁷ The court reiterated the Supreme Court's two-part test in *Pfaff v. Wells Electronics, Inc.*⁵⁴⁸ for determining whether there was a sale or offer for sale for purposes of 35 U.S.C. § 102(b): "First, the product must be the subject of a commercial [sale or] offer for sale. . . . Second, the invention must be ready for patenting."⁵⁴⁹ In *Plumtree*, the court noted that the patent challenger could meet *Pfaff's* first prong by either: (1) showing there was a commercial offer to perform the patented method before the 1-year on-sale bar cut-off date; or (2) showing that the patentee, in fact, performed each of the steps of the patented process before the critical date pursuant to a contract.⁵⁵⁰ The Federal Circuit held that the record did not establish that this *Pfaff* prong was satisfied, and the court therefore vacated the district court's order of summary judgment of invalidity due to the on-sale bar.

Gemmy Industries Corp. v. Chrisha Creations Ltd.,⁵⁵¹ also vacated a summary judgment based on the on-sale bar. In *Gemmy*, the district court bound the plaintiff to statements in its sworn affidavit despite contradictory evidence. In reversing, the Federal Circuit explained

542. *Plumtree Software, Inc. v. Datamize, LLC*, 473 F.3d 1152, 1163, 81 U.S.P.Q.2d (BNA) 1251, 1255 (Fed. Cir. 2006).

543. *Gemmy Indus. Corp. v. Chrisha Creations Ltd.*, 452 F.3d 1353, 1358, 79 U.S.P.Q.2d (BNA) 1172, 1176 (Fed. Cir. 2006).

544. *Plumtree*, 473 F.3d at 1160, 81 U.S.P.Q.2d (BNA) at 1256.

545. *Gemmy*, 452 F.3d at 1358, 79 U.S.P.Q.2d (BNA) at 1176.

546. 473 F.3d 1152, 81 U.S.P.Q.2d (BNA) 1251.

547. *Id.* at 1164, 81 U.S.P.Q.2d (BNA) at 1259.

548. 525 U.S. 55 (1998).

549. *Id.* at 67.

550. 473 F.3d at 1162, 81 U.S.P.Q.2d (BNA) at 1258.

551. 452 F.3d 1353, 79 U.S.P.Q.2d (BNA) 1172 (Fed. Cir. 2006).

that a party can overcome the averments in its own sworn affidavit regarding the dates its invention was “ready for patenting” or when it made the first “commercial offer of sale” if there is credible evidence supporting the contradiction.⁵⁵² Without undisputed evidence that a patented invention is “fully disclosed” in that the product displayed for sale is the product that is claimed in the patent, summary judgment is not appropriate on the ground of the on-sale bar of § 102(b).⁵⁵³

Also included within § 102(b), and almost identical in application to the “on-sale bar,” is the so-called “public use bar.” Under § 102, a patent will not be awarded if “the invention was . . . in public use . . . in this country, more than one year prior to the application for patent in the United States.”⁵⁵⁴ Public use includes “any public use of the claimed invention by a person other than the inventor who is under no limitation, restriction or obligation of secrecy to the inventor.”⁵⁵⁵ In assessing whether a particular use is “public” within the meaning of § 102(b), the Federal Circuit considers the policies underlying the public-use bar.⁵⁵⁶

In *Eli Lilly & Co. v. Zenith Goldline Pharmaceuticals, Inc.*,⁵⁵⁷ the court considered whether a drug, olanzapine, used in clinical trials for over one year was subject to the public-use bar to patentability. The court held that the experimental character of the trials negated any statutory bar, stating that “even a use that occurs in the open may not invoke a bar when undertaken to experiment on or with the claimed invention.”⁵⁵⁸ The Federal Circuit then quoted the U.S. Supreme Court from *City of Elizabeth v. American Nicholson Pavement Co.*:⁵⁵⁹ “The use of an invention by the inventor himself, or of any other person under his direction, by way of experiment, and in order to bring the invention to perfection, has never been regarded as [a public] use.”⁵⁶⁰

In *Eli Lilly*, the Federal Circuit listed six indicia that may be considered to determine the experimental character of a use for negating the public use bar: (1) the length of the test period, (2) any confidentiality agreement, (3) any records of testing, (4) any

552. *Id.* at 1359, 79 U.S.P.Q.2d (BNA) at 1176-77.

553. *Id.* at 1360, 79 U.S.P.Q.2d (BNA) at 1177, *citing Pfaff*, 525 U.S. at 68.

554. 35 U.S.C. § 102(b) (2002).

555. *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 471 F.3d 1369, 1380, 81 U.S.P.Q.2d (BNA) 1324, 1332 (Fed. Cir. 2006) (quoting *In re Smith*, 714 F.2d 1127, 1134, 218 U.S.P.Q. (BNA) 976, 983 (Fed. Cir. 1983)).

556. *Id.*, 81 U.S.P.Q.2d (BNA) at 1332.

557. *Id.* at 1369, 81 U.S.P.Q.2d (BNA) 1324.

558. *Id.* at 1381, 81 U.S.P.Q.2d (BNA) at 1332.

559. 97 U.S. 126, 134 (1877).

560. *Eli Lilly*, 471 F.3d at 1381, 81 U.S.P.Q.2d (BNA) at 1332.

monitoring and control of the test results, (5) the number of tests, and (6) the length of the test period in relation to tests of similar inventions.⁵⁶¹

E. Obviousness

The appropriate legal standard for obviousness determinations led to an unusual dialogue in 2006 between the Federal Circuit and the Supreme Court. The Patent Act defines obviousness in section 103(a):

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.⁵⁶²

The Federal Circuit has uniformly defined obviousness as a question of law based on underlying factual issues.⁵⁶³ The court reviews obviousness *de novo*, because the ultimate conclusion of obviousness is a legal conclusion, but it reviews a district court's determination of the underlying factual issues for clear error.⁵⁶⁴ For

561. *Id.*, 81 U.S.P.Q.2d (BNA) at 1332.

562. 35 U.S.C. § 103(a) (2000 & Supp. 2005).

563. *Alza Corp. v. Mylan Labs. Inc.*, 464 F.3d 1286, 1289, 80 U.S.P.Q.2d (BNA) 1001, 1003 (Fed. Cir. 2006) ("Obviousness is a question of law . . . based upon underlying factual questions . . ."); *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1306, 79 U.S.P.Q.2d (BNA) 1931, 1936 (Fed. Cir. 2006) ("Obviousness is a legal question where, as here, the relevant underlying facts are undisputed."); *In re Kahn*, 441 F.3d 977, 985, 78 U.S.P.Q.2d (BNA) 1329, 1334 (Fed. Cir. 2006) ("The ultimate determination of whether an invention would have been obvious is a legal conclusion based on underlying findings of fact."); *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1164, 77 U.S.P.Q.2d (BNA) 1865, 1869 (Fed. Cir. 2006) ("Obviousness . . . is a legal conclusion . . . based in turn on underlying factual determinations . . .").

564. *Eli Lilly*, 471 F.3d at 1377, 81 U.S.P.Q.2d (BNA) at 1329 (noting that the court reviews the obviousness determination without deference, but it reviews a district court's determination of the underlying factual determinations for clear error); *Alza*, 464 F.3d at 1289, 80 U.S.P.Q.2d (BNA) at 1003 ("Obviousness is a question of law, reviewed *de novo*, based upon underlying factual questions which are reviewed for clear error following a bench trial."); *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1319, 78 U.S.P.Q.2d (BNA) 1705, 1715 (Fed. Cir. 2006) (vacating a district court's judgment as a matter of law of non-invalidity for obviousness, because patent challenger produced clear and convincing evidence that prior art references, in combination, disclose every element, and evidence that there was a motivation to combine the prior art references, thereby establishing an issue of fact for the jury); *Medichem*, 437 F.3d at 1164, 77 U.S.P.Q.2d (BNA) at 1869 ("Obviousness . . . is a legal conclusion that is reviewed *de novo*; however it is based in turn on factual determinations which are reviewed for clear error.").

orders originating from the patent office and jury verdicts, the Federal Circuit reviews the factual record for the presence or absence of substantial evidence.⁵⁶⁵

The Supreme Court defined the underlying factual questions in *Graham v. John Deere Co.*⁵⁶⁶ to include the following: “(1) [the] scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.”⁵⁶⁷ Examples of the fourth factor, also called “secondary considerations,” include “commercial success, long-felt but unsolved needs, and failure of others,”⁵⁶⁸ and also unexpected results.⁵⁶⁹ The Federal Circuit has considered two subsidiary factual inquiries pertinent to the *Graham* analysis: the “presence or absence of a motivation to combine the references”⁵⁷⁰ and the “presence or absence of a ‘reasonable expectation of success’ from making such a combination.”⁵⁷¹

Of all the factors recited by the Federal Circuit regarding obviousness, the court focused most on the issue of “motivation to combine.”⁵⁷² This increased focus appears to be, at least in significant

565. *Kim v. ConAgra Foods Inc.*, 465 F.3d 1312, 1320, 80 U.S.P.Q.2d (BNA) 1495, 1503 (Fed. Cir. 2006) (reviewing jury verdict for substantial evidence); *Kemin Foods L.C. v. Pigmentos Vegetales Del Centro S.A. de C.V.*, 464 F.3d 1339, 1344, 80 U.S.P.Q.2d (BNA) 1385, 1388 (Fed. Cir. 2006) (reviewing jury verdict for substantial evidence); *Kahn*, 441 F.3d at 985, 78 U.S.P.Q.2d (BNA) at 1344 (reviewing the United States PTO Board of Patent Appeals and Interference’s decisions on the underlying factual determinations for substantial evidence).

566. 383 U.S. 1, 17-18 (1966) (stating that several factual inquiries must be satisfied to determine patent validity).

567. *Alza*, 464 F.3d at 1289, 80 U.S.P.Q.2d (BNA) at 1003 (quoting *In re Dembiczak*, 175 F.3d 994, 998, 50 U.S.P.Q.2d (BNA) 1614, 1616 (Fed. Cir. 1999)). See *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360, 80 U.S.P.Q.2d (BNA) 1641, 1645 (Fed. Cir. 2006); *Kahn*, 441 F.3d at 985, 78 U.S.P.Q.2d (BNA) at 1334-35 (“[I]n assessing whether the subject matter would have been non-obvious under § 103, the Board follows the guidance of the Supreme Court in *Graham v. John Deere Co.*”); *Medichem*, 437 F.3d at 1164, 77 U.S.P.Q.2d (BNA) at 1869 (“The ultimate determination of whether an invention would have been obvious under 35 U.S.C. § 103(a) is a legal conclusion based on the factual *Graham* findings . . .”).

568. *DyStar*, 464 F.3d at 1360, 80 U.S.P.Q.2d (BNA) 1641, 1645 (citing *Graham*, 383 U.S. at 17, 148 U.S.P.Q. (BNA) at 467 (1966)). See *Eli Lilly*, 471 F.3d at 1380, 81 U.S.P.Q.2d (BNA) at 1331.

569. See *id.* at 1380, 81 U.S.P.Q.2d (BNA) at 1331; *Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 970, 78 U.S.P.Q.2d (BNA) 1257, 1261 (Fed. Cir. 2006) (holding that the patentee overcame a prima facie case of obviousness by providing evidence of unexpected results).

570. *Alza*, 464 F.3d at 1289, 80 U.S.P.Q.2d (BNA) at 1003 (quoting *In re Gartside*, 203 F.3d 1305, 1316, 53 U.S.P.Q.2d (BNA) 1769, 1776 (Fed. Cir. 2000)). See *DyStar*, 464 F.3d at 1360-61, 1372, 80 U.S.P.Q.2d (BNA) at 1645.

571. *Alza*, 464 F.3d at 1289, 80 U.S.P.Q.2d (BNA) at 1003 (quoting *Medichem*, 437 F.3d at 1165, 77 U.S.P.Q.2d (BNA) at 1870).

572. See *supra* note 570 and accompanying text; see also *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1307, 79 U.S.P.Q.2d (BNA) 1931, 1938 (Fed. Cir. 2006);

part, a reaction to the Supreme Court's grant of certiorari in a case involving this test, *KSR International Co. v. Teleflex, Inc.*⁵⁷³ Under the Federal Circuit's "motivation to combine" inquiry, it is not enough to find each element of a claimed invention in the prior art;⁵⁷⁴ rather, "a court must ask 'whether a person of ordinary skill in the art, possessed with the understandings and knowledge reflected in the prior art, and motivated by the general problem facing the inventor, would have been led to make the combination recited in the claims.'"⁵⁷⁵ "The 'motivation-suggestion-teaching' requirement protects against the entry of hindsight into the obviousness analysis"⁵⁷⁶

In light of the Supreme Court's grant of certiorari, the Federal Circuit has taken several opportunities to emphasize that its "motivation-suggestion-teaching" test is not an inflexible, categorical rule:

In contrast to the characterization of some commentators, the suggestion test is not a rigid categorical rule. The motivation need not be found in the references sought to be combined, but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself.⁵⁷⁷

In re Kahn, 441 F.3d at 986, 78 U.S.P.Q.2d (BNA) at 1335 (explaining that to make a prima facie case of obviousness, the Board must "explain the reasons one of ordinary skill in the art would have been motivated to select the references and combine them to render the claimed invention obvious") (quoting *In re Rouffet*, 149 F.3d 1350, 1357-59, 47 U.S.P.Q.2d (BNA) 1453, 1459 (Fed. Cir. 1998)); *Medichem*, 437 F.3d at 1164, 77 U.S.P.Q.2d (BNA) at 1871.

573. 126 S. Ct. 2965 (2006) (mem.). See also *DyStar*, 464 F.3d at 1367 n.3, 80 U.S.P.Q.2d (BNA) at 1654 n.3 (acknowledging the Supreme Court's grant of certiorari).

574. See *Eli Lilly*, 471 F.3d at 1377, 81 U.S.P.Q.2d (BNA) at 1329.

575. *Alza*, 464 F.3d 1286 at 1290, 80 U.S.P.Q.2d (BNA) at 1003 (quoting *Kahn*, 441 F.3d at 998, 78 U.S.P.Q.2d (BNA) at 1337).

576. *Kahn*, 441 F.3d at 986, 78 U.S.P.Q.2d (BNA) at 1337.

577. *DyStar*, 464 F.3d at 1361, 80 U.S.P.Q.2d (BNA) at 1645. *DyStar* surmised that confusion about this aspect of the test probably led to the Court's grant of certiorari in *KSR*:

DyStar's argument and the above-cited commentary highlight the danger inherent in focusing on isolated dicta rather than glean the law of a particular area from careful reading of the full text of a group of related precedents for all they say that is dispositive and for what they hold. When parties like *DyStar* do not engage in such careful, candid, and complete legal analysis, much confusion about the law arises and, through time, can be compounded.

Id. at 1367, 80 U.S.P.Q.2d (BNA) at 1650. See *Alza*, 464 F.3d at 1290-91, 80 U.S.P.Q.2d (BNA) at 1004 (quoting *Kahn*, 441 F.3d at 987-88, 78 U.S.P.Q.2d (BNA) at 1336-37); *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1307-09, 79 U.S.P.Q.2d (BNA) 1931, 1937-39 (Fed. Cir. 2006) (citing *Kahn*, 441 F.3d at 987-88, 78 U.S.P.Q.2d (BNA) at 1366); *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1319, 78 U.S.P.Q.2d (BNA) 1705, 1712-13 (Fed. Cir. 2006) (finding that the defendant introduced enough evidence that a motivation to combine would have been inherent in the techniques known in the art and the nature of a problem to be

However, while “common knowledge and common sense” are sufficient to establish a motivation to combine, “assumptions about common sense cannot *substitute* for evidence thereof”⁵⁷⁸ Put another way, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”⁵⁷⁹ Particularly because they played such a notorious role in the briefing and argument before the Supreme Court in *KSR*, a brief discussion of these decisions is worthwhile.

In *In re Kahn*,⁵⁸⁰ which was decided before the Supreme Court granted certiorari in *KSR*, the Federal Circuit upheld a decision by the PTO’s Board of Patent Appeals and Interferences that claims in a patent application for a “reading machine” for blind readers were unpatentable as obvious.⁵⁸¹ Kahn’s claimed invention concerned a device operated by eye control and sound localization that can read a word “looked at” by a totally blind user, in a fashion that the user can tell, by the direction of the sound, the area of the screen where he was looking.⁵⁸² The Board and the Federal Circuit focused on a combination of three references: a patent to Garwin, one of two patents to Anderson, and a patent to Stanton. Garwin disclosed an eye-controlled processor that sensed where on a visual display the user looked, presented the user with a number of targets (such as words), and provided feedback to indicate a selection has been received. Two Anderson references, which were used interchangeably, each disclosed an interactive “electronic teaching aid” that enabled a user viewing text to select a portion for vocalization. Stanton disclosed an acoustical imaging system allowing a user to locate the position of a sound; the preferred embodiment

solved in order to create a factual issue for a jury); *Kahn*, 441 F.3d at 987, 78 U.S.P.Q.2d (BNA) at 1336 (“A suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as ‘the teaching motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references’”) (quoting *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d (BNA) 1313, 1317 (Fed. Cir. 2000) (internal citations omitted)); *In re Johnston*, 435 F.3d 1381, 1385-86, 77 U.S.P.Q.2d (BNA) 1788, 1791 (Fed. Cir. 2006) (finding motivation with respect to an invention relating to a large diameter, shaped, spiral pipe for two references to be combined because they deal with the same field of technology and show spirally formed pipe of large diameter, even though the motivation was not explicit in the prior art).

578. *DyStar*, 464 F.3d at 1367, 80 U.S.P.Q.2d (BNA) at 1650.

579. *Kahn*, 441 F.3d at 987-88, 78 U.S.P.Q.2d (BNA) at 1336.

580. *Id.*, 78 U.S.P.Q.2d (BNA) at 1336.

581. *Id.*, 78 U.S.P.Q.2d (BNA) at 1336.

582. *Id.* at 980-81, 78 U.S.P.Q.2d (BNA) at 1331.

had four speakers at the corners of a vertical display that produce a directional sound based on the location of a cursor.⁵⁸³

Kahn did not dispute that each element of his claimed invention could be found in either the Garwin, Anderson, or Stanton references, or that a person having ordinary skill in the art would have been motivated to combine Anderson and Garwin.⁵⁸⁴ Rather, Kahn challenged the Board's finding of a motivation to apply Stanton.⁵⁸⁵ The Federal Circuit agreed with the Board, however, noting that a skilled artisan who knew of a "learning machine" capable of reading aloud the word on a screen at which a user is looking, and who desired to permit a visually impaired user to better control the device, would have had reason to add Stanton's teaching that a two-dimensional sound could help a blind person locate a point in space.⁵⁸⁶ In so deciding, the Court noted that "[t]he use of patents as references is not limited to what the patentees describe as their own inventions"⁵⁸⁷ and "the skilled artisan need not be motivated to combine Stanton for the same reason contemplated by Kahn."⁵⁸⁸

In *Ormco Corp. v. Align Technology, Inc.*,⁵⁸⁹ decided by the Federal Circuit after the grant of certiorari in *KSR*, the court applied its rule that the motivation to combine need not be explicit in the prior art.⁵⁹⁰ The invention was a series of retainers to progressively move teeth and instructions to a patient regarding the order of use of the retainers.⁵⁹¹ The court held that providing the medical devices in one package as opposed to multiple packages did not make the claim distinct, based on the well-known practice of packaging things in the most convenient manner.⁵⁹² Also, adding the instructions was obvious based on a general practice of providing instructions on how to use medical devices, along with regulations under the Food, Drug, and Cosmetic Act that generally require such instructions.⁵⁹³ Additionally,

583. *Id.* at 982-83, 78 U.S.P.Q.2d (BNA) at 1332.

584. *Id.* at 988-99, 78 U.S.P.Q.2d (BNA) at 1336.

585. *Id.* at 988-89, 78 U.S.P.Q.2d (BNA) at 1336.

586. *Id.* at 989, 78 U.S.P.Q.2d (BNA) at 1337.

587. *Id.* at 990, 78 U.S.P.Q.2d (BNA) at 1338 (quoting *In re Heck*, 699 F.2d 1331, 1333, 216 U.S.P.Q. (BNA) 1038, 1039 (Fed. Cir. 1983) (internal quotations omitted)).

588. *Id.* at 990, 78 U.S.P.Q.2d (BNA) at 1338.

589. 463 F.3d 1299, 79 U.S.P.Q.2d (BNA) 1931 (Fed. Cir. 2006).

590. *Id.* at 1313, 79 U.S.P.Q.2d (BNA) at 1942.

591. *Id.* at 1302, 79 U.S.P.Q.2d (BNA) at 1933-34.

592. *Id.* at 1309, 79 U.S.P.Q.2d (BNA) at 1939.

593. *Id.*, 79 U.S.P.Q.2d (BNA) at 1939.

the court ruled that there were no secondary consideration of commercial success to rebut the prima facie case of obviousness.⁵⁹⁴

In *Alza Corp. v. Mylan Laboratories, Inc.*,⁵⁹⁵ the Federal Circuit upheld a bench trial finding of obviousness.⁵⁹⁶ The court explained that a motivation to combine need not be found in the prior art, and it ruled that the district court did not make a clear error in finding motivation based on expert testimony, which the Federal Circuit found consistent with the prior-art references.⁵⁹⁷ In *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*,⁵⁹⁸ the court ruled that the patent claims were invalid as a matter of law for obviousness, notwithstanding a jury finding of non-invalidity.⁵⁹⁹ Both *Alza* and *DyStar*, too, came after the Supreme Court's grant of certiorari in *KSR*, and both took pains to claim that the indictment of the teaching-suggestion-motivation test offered in the Supreme Court by *KSR* and its amici curiae was unfounded.⁶⁰⁰ (Notably, all four decisions resulted in appellate holdings of obviousness.)

One way in which patentees "negate" a motivation to combine is to show that one prior art reference teaches away from the modifications required to reach the claimed invention.⁶⁰¹ "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant."⁶⁰² In *Optivus Technology, Inc. v. Ion Beam Applications S.A.*,⁶⁰³ the court found that the prior art disclosing a neutron beam for cancer therapy did not teach away from an invention involving a proton beam.⁶⁰⁴ The patentee argued that if the neutron beam, which worked by shooting a proton beam at beryllium to produce neutrons, were modified so

594. *Id.* at 1312, 79 U.S.P.Q.2d (BNA) at 1941 (noting that while the requirement that "the commercial success [be] due to the patented invention" is presumed when the product is successful, in this case "the evidence clearly rebuts the presumption that [the] success was due to the claimed and novel features").

595. 464 F.3d 1286, 80 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 2006).

596. *Id.* at 1290-91, 80 U.S.P.Q.2d (BNA) at 1006-07.

597. *Id.*, 80 U.S.P.Q.2d (BNA) at 1006-07 (also finding that there exists clear and convincing evidence a person having ordinary skill in the art would have perceived a reasonable likelihood of success).

598. 464 F.3d 1356, 80 U.S.P.Q.2d (BNA) 1641 (Fed. Cir. 2006).

599. *Id.* at 1372, 80 U.S.P.Q.2d (BNA) at 1654.

600. *DyStar*, 464 F.3d at 1364-71, 80 U.S.P.Q.2d (BNA) at 1648-53; *Alza*, 464 F.3d at 1290-91, 80 U.S.P.Q.2d (BNA) at 1006-07.

601. *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1308, 79 U.S.P.Q.2d (BNA) 1931, 1938 (Fed. Cir. 2006).

602. *Id.*, 79 U.S.P.Q.2d (BNA) at 1938 (quoting *In re Kahn*, 441 F.3d 977, 990, 78 U.S.P.Q.2d (BNA) 1329, 1338 (Fed. Cir. 2006)) (citations omitted).

603. 469 F.3d 978, 80 U.S.P.Q.2d (BNA) 1839 (Fed. Cir. 2006).

604. *Id.* at 991, 80 U.S.P.Q.2d (BNA) at 1848.

that it was directed at a patient in the fashion of the claimed proton beam, it would be a “death ray,” and thus the neutron beam teaches away from such a modification.⁶⁰⁵ The court rejected the argument, responding that a person having ordinary skill in the art would know to adjust the intensity of the beam.⁶⁰⁶ On the other hand, in *Eli Lilly* the court accepted a “teach away” argument, ruling that the prior art showed a preference for halogenated compounds to treat schizophrenia, and therefore taught away from the present invention, which used a hydrogen atom instead of a halogen atom.⁶⁰⁷

The Federal Circuit also had occasion in 2006 to address issues other than the “motivation to combine” and related questions. The court at least twice addressed the issue of rendering claimed ranges obvious. In *Ormco*, the court held that a prior-art range of 14-21 days for using a particular device rendered obvious the claimed range of 2-20 days.⁶⁰⁸ The court explained: “Where a claimed range overlaps with a range disclosed in the prior art, there is a presumption of obviousness. The presumption can be rebutted if it can be shown that the prior art teaches away from the claimed range, or the claimed range produces new and unexpected results.”⁶⁰⁹ Applying this principle in *DyStar*, the court ruled that a reference disclosing a thirty-percent aqueous solution of leuco indigo renders obvious a claimed range of ten to thirty-five percent.⁶¹⁰ Also, it ruled that expert testimony that a reference discloses a solution containing 5.1% alkali and claim language from the reference disclosing at least 6.5% alkali render obvious a claimed range of two to ten percent.⁶¹¹

The Federal Circuit also addressed a threshold question as to what references can serve as prior art for obviousness purposes. In one case, the court noted that while a prior art reference must be enabled to anticipate a claim,⁶¹² it need not be enabled to be used in an obviousness analysis.⁶¹³ In another, the court concluded that a Canadian patent application was valid prior art for obviousness

605. *Id.* at 989, 80 U.S.P.Q.2d (BNA) at 1848.

606. *Id.*, 80 U.S.P.Q.2d (BNA) at 1848.

607. *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 471 F.3d 1369, 1378, 81 U.S.P.Q.2d (BNA) 1324, 1330 (Fed. Cir. 2006).

608. *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1309-11, 79 U.S.P.Q.2d (BNA) 1931, 1940 (Fed. Cir. 2006).

609. *Id.* at 1311, 79 U.S.P.Q.2d (BNA) at 1940.

610. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1372, 80 U.S.P.Q.2d (BNA) 1641, 1654 (Fed. Cir. 2006).

611. *Id.*, 80 U.S.P.Q.2d (BNA) at 1654.

612. *Amgen Inc. v. Hoechst Marion Roussel*, 457 F.3d 1293, 1306, 79 U.S.P.Q.2d (BNA) 1705, 1714 (Fed. Cir. 2006).

613. *Id.* at 1307-08, 79 U.S.P.Q.2d (BNA) at 1715-16 (noting its reason for remand in a previous order in the same case) (citing *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1357, 65 U.S.P.Q.2d (BNA) 1385, 1417-18 (Fed. Cir. 2003)).

purposes, because a reasonably diligent person of ordinary skill in the art could have located the application based on the information provided in the patent issuing from it.⁶¹⁴ In a third case, the court held that there was no evidence that a prior invention was suppressed or concealed, which would exclude the device as prior art under 35 U.S.C. § 102(g)(2).⁶¹⁵

F. Enablement

Section 112, paragraph one, requires a patent application to describe the invention “in such full, clear, concise, and exact terms so as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same”⁶¹⁶ “In order to enable the claims of a patent pursuant to § 112, the patent specification must teach those of ordinary skill in the art ‘how to make and use the full scope of the claimed invention without undue experimentation.’ Some experimentation is permissible although it cannot be unduly excessive.”⁶¹⁷ In *Falko-Gunter Falkner v. Inglis*,⁶¹⁸ the Federal Circuit explained that whether undue experimentation is required is a

conclusion reached by weighing many factual considerations . . . includ[ing] (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art,

614. *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1375, 78 U.S.P.Q.2d (BNA) 1684, 1686 (Fed. Cir. 2006) (finding the application qualifies as a “printed publication” under 35 U.S.C. § 102(b) (2000)).

615. *Flex-Rest, LLC v. Steelcase, Inc.*, 455 F.3d 1351, 1358-60, 80 U.S.P.Q.2d (BNA) 1620, 1624-25 (Fed. Cir. 2006) (finding that no evidence supports a jury instruction that prior invention was abandoned, suppressed, or concealed, either intentionally or by inference). The jury found the claims invalid for anticipation as well as obviousness. *Id.* at 1354, 80 U.S.P.Q.2d (BNA) at 1621.

616. 35 U.S.C. § 112 (2000 & Supp. 2005).

617. *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1224, 79 U.S.P.Q.2d (BNA) 1094, 1104 (Fed. Cir. 2006) (quoting *Bruning v. Hirose*, 161 F.3d 681, 686, 48 U.S.P.Q.2d (BNA) 1934, 1938 (Fed. Cir. 1998)). See *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1338, 79 U.S.P.Q.2d (BNA) 1813, 1819 (Fed. Cir. 2006) (noting that the fact that some experimentation may be required does not invalidate the patent); *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1365, 79 U.S.P.Q.2d (BNA) 1001, 1006 (Fed. Cir. 2006) (accepting United States PTO Board of Patent Appeals and Interference analysis that “the mere fact that experimentation may have been difficult and time consuming does not mandate a conclusion that such experimentation would have been considered ‘undue’ in this art”).

618. *Id.* 1357, 79 U.S.P.Q.2d (BNA) 1006.

(7) the predictability or unpredictability of the art, and (8) the breadth of the claims.⁶¹⁹

“Enablement is a question of law involving underlying factual inquiries.”⁶²⁰ The ultimate determination of enablement is reviewed de novo.⁶²¹ The Federal Circuit reviews jury determination of the factual inquiries to determine whether substantial evidence supports the verdict,⁶²² and judge determinations of the inquiries for clear error.⁶²³ For decisions of the PTO’s Board of Patent Appeals and Interference, the court will “set aside actions of the Board if they are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, and . . . set aside factual findings that are unsupported by substantial evidence.”⁶²⁴

In *Monsanto Co. v. Scruggs*,⁶²⁵ the Federal Circuit dealt with enablement in the context of genetic material. The Federal Circuit affirmed the district court’s grant of summary judgment of validity, explaining that “because of the level of skill in the art and the publicly available information about [the claimed genetic material], no specific gene sequence needed to be claimed for someone of ordinary skill in the art to understand how to make and use the invention.”⁶²⁶ The court also addressed the issue of undue experimentation, holding that the “fact that *some* experimentation may be necessary to produce the invention does not render the [claims] invalid for lack of enablement.”⁶²⁷

G. Utility

The Federal Circuit did not meaningfully address the utility requirement of § 101 in any precedential opinions in 2006.⁶²⁸ The

619. *Id.* at 1363, 79 U.S.P.Q.2d (BNA) at 1005. The court went on to note that “[a] patent need not teach, and preferably omits, what is well known in the art.” *Id.*, 79 U.S.P.Q.2d (BNA) at 1006.

620. *Id.* at 1363, 79 U.S.P.Q.2d (BNA) at 1005.

621. *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1320, 78 U.S.P.Q.2d (BNA) 1705, 1713 (Fed. Cir. 2006) (“Enablement is a matter of law that we review without deference . . .”).

622. *Id.* at 1320, 78 U.S.P.Q.2d (BNA) 1713 (“[T]his court reviews the factual underpinnings of enablement to determine whether there was sufficient evidence to support a verdict by jury.”).

623. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1307, 79 U.S.P.Q.2d (BNA) 1705, 1715 (Fed. Cir. 2006) (noting that “the underlying factual inquiries made by the district court are reviewed for clear error” in dealing with the issue of enablement with respect to an alleged anticipating reference).

624. *Falko-Gunter Falkner*, 448 F.3d at 1363, 79 U.S.P.Q.2d (BNA) at 1005.

625. 459 F.3d 1328, 79 U.S.P.Q.2d (BNA) 1813 (Fed. Cir. 2006).

626. *Id.* at 1338, 79 U.S.P.Q.2d (BNA) at 1819.

627. *Id.*, 79 U.S.P.Q.2d (BNA) at 1819.

628. *See* 35 U.S.C. § 101 (2000 & Supp. 2005) (granting patent protection only to “new and useful” inventions).

court, however, considered the issue in *Classified Cosmetics, Inc. v. Del Laboratories, Inc.*,⁶²⁹ a non-precedential opinion in which the court reversed and remanded for further proceedings the district court's grant of summary judgment in favor of the alleged infringer.⁶³⁰ Under the § 101 utility requirement, an invention must be operable to achieve useful results.⁶³¹ In *Classified Cosmetics*, the Federal Circuit noted that "[a] claim is inoperable when it contains a limitation that is impossible to meet."⁶³² The court ruled that the expert opinion relied upon by the alleged infringer did not establish inoperability as a matter of law.⁶³³

In another case, *Impax Laboratories, Inc. v. Aventis Pharmaceuticals Inc.*,⁶³⁴ the Federal Circuit commented on the close relationship between utility and enablement issues.⁶³⁵ In *Impax Labs.*, the court considered, *inter alia*, whether a prior-art reference anticipated a claim.⁶³⁶ The court noted that, to anticipate, a prior art reference must be enabling,⁶³⁷ and explained that "[p]rior art is not enabling so as to be anticipating if it does not enable a person of ordinary skill in the art to carry out the invention."⁶³⁸ The court, however, stressed that "[t]he enablement requirement for prior art to anticipate under [§ 102] does not require utility, unlike the enablement requirement for patents under [§ 112]."⁶³⁹ The Federal Circuit vacated the district court's determination that the claims at issue were not invalid by reason of anticipation.⁶⁴⁰ The court held that the effectiveness of the prior art was not relevant to whether it was enabling for anticipation purposes and remanded the issue to the district court to determine whether the prior art satisfied the enablement requirement by

629. No. 06-1010, 2006 WL 3615511 (Fed. Cir. Dec. 12, 2006).

630. *Id.* at *3.

631. See 1 DONALD S. CHISUM, PATENTS § 4.04 (2005) (adding that the inventor must also disclose how an invention is operable, and an element of prior reduction to practice).

632. *Classified Cosmetics*, slip op. at *2 (citing *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1359, 52 U.S.P.Q.2d (BNA) 1029, 1035 (Fed. Cir. 1999)).

633. *Id.*

634. 468 F.3d 1366, 81 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 2006); see 3 DONALD S. CHISUM, PATENTS § 7.03[6] (2005) ("There is a close relation between the how-to-use aspect of the enablement requirement under Section 112 and the utility requirement under Section 101.").

635. 468 F.3d at 1381, 81 U.S.P.Q.2d (BNA) at 1011-12.

636. See *Impax Labs.*, 468 F.3d at 1380-83, 81 U.S.P.Q.2d (BNA) at 1010-13.

637. *Id.* at 1381, 81 U.S.P.Q.2d (BNA) at 1011-12.

638. *Id.*, 81 U.S.P.Q.2d (BNA) at 1012.

639. *Id.*, 81 U.S.P.Q.2d (BNA) at 1012 (citing *Rasmusson v. SmithKline Beecham Corp.*, 413 F.3d 1318, 1326, 75 U.S.P.Q.2d (BNA) 1297, 1302 (Fed. Cir. 2005) ("[A] prior art reference need not demonstrate utility in order to serve as an anticipating reference under section 102.")).

640. *Id.* at 1384, 81 U.S.P.Q.2d (BNA) at 1014.

describing the claimed invention sufficiently to permit a person of ordinary skill in the art to carry it out.⁶⁴¹

In *Zoltek Corp. v. United States*,⁶⁴² an infringement and Fifth Amendment Takings Clause case under the Tucker Act, Judge Gajarsa wrote a concurring opinion in which he distinguished, as “fundamentally different,”⁶⁴³ the concept of utility for a device from that for a process.⁶⁴⁴ As Judge Gajarsa explained, “[w]hereas utility can be extracted from a device only after it has been ‘made,’ utility is extracted from a process concurrent with its being ‘practiced.’”⁶⁴⁵

H. Adequate Written Description

The requirement that a patent contain an adequate written description of an invention is set forth in 35 U.S.C. § 112, ¶ 1:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.⁶⁴⁶

The purpose of the written description requirement is to ensure that the scope of the exclusion right does not exceed the ambit of the inventor’s contribution to the field of art.⁶⁴⁷ “[T]he applicant must . . . convey to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention.”⁶⁴⁸ Although “‘reduction to practice ordinarily provides the best evidence that an invention is complete[,] . . . it does not follow that proof of reduction to practice is necessary in every case.’ . . . *Pfaff* makes clear that an invention can be ‘complete’ even where an actual reduction to

641. *Id.* at 1383-84, 81 U.S.P.Q.2d (BNA) at 1013-14.

642. 442 F.3d 1345, 78 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

643. *Id.* at 1365, 78 U.S.P.Q.2d (BNA) at 1495 (Gajarsa, J., concurring).

644. *Id.*, 78 U.S.P.Q.2d (BNA) at 1495.

645. *Id.*, 78 U.S.P.Q.2d (BNA) at 1495 (“Because a process is nothing more than the sequence of actions of which it is comprised, the use of a process necessarily involves doing or performing each of the steps recited. This is unlike use of a system as a whole, in which the components are used collectively, not individually.”) (citing *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1318, 75 U.S.P.Q.2d (BNA) 1763, 1790 (Fed. Cir. 2005)).

646. 35 U.S.C. § 112 (2000 & Supp. 2005).

647. *See Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1336, 79 U.S.P.Q.2d (BNA) 1813, 1818 (Fed. Cir. 2006) (“The written description requirement helps to ensure that the patent applicant actually invented the claimed subject matter and was in possession of the patented invention at the time of filing.”).

648. *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1365, 79 U.S.P.Q.2d (BNA) 1001, 1007 (Fed. Cir. 2006) (quoting *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 U.S.P.Q.2d (BNA) 1111, 1117 (Fed. Cir. 1991)).

practice is absent.”⁶⁴⁹ Additionally, it is not necessary to provide examples in the specification explicitly covering the claims as long as the specification describes the claimed invention to one of ordinary skill in the art.⁶⁵⁰

The adequacy of a written description is “a question of fact, judged from the perspective of one of ordinary skill in the art as of the relevant filing date.”⁶⁵¹ The court reviews a trial court’s determination for clear error.⁶⁵²

In 2006, the Federal Circuit twice addressed the written description requirement in the context of biotechnology inventions. The invention in *Falko-Gunter Falkner v. Inglis*⁶⁵³ related to making vaccines safer by deleting or inactivating an essential gene from a viral vector’s genome.⁶⁵⁴ The case came to the Federal Circuit as an appeal by a patentee who lost an interference; the subject matter of the interference was specifically related to the case where the vector virus was a poxvirus.⁶⁵⁵ The court resolved whether the interference winner’s application described the invention, addressing three written description-related questions.⁶⁵⁶ First, it held that the absence of examples involving poxviruses did not render the written description inadequate.⁶⁵⁷ Second, it held that a patentee may meet the written description requirement even without an actual reduction to practice.⁶⁵⁸ Third, it held that there is “no *per se* rule that an adequate written description of an invention that involves a biological macromolecule must contain a recitation of a known structure.”⁶⁵⁹ The court explained that “where, as in this case, accessible literature sources clearly provided, as of the relevant date, genes and their nucleotide sequences . . . , satisfaction of the written description

649. *Id.* at 1367, 79 U.S.P.Q.2d (BNA) at 1008 (quoting *Pfaff v. Wells Elecs.*, 525 U.S. 55, 66 (1998)) (emphasis omitted).

650. *Id.* at 1366, 79 U.S.P.Q.2d (BNA) at 1007 (“A claim will not be invalidated . . . simply because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language . . . because the patent specification is written for a person of skill in the art”) (quoting *LizardTech, Inc. v. Earth Resource Mapping, PTY, Inc.*, 424 F.3d 1336, 1345, 76 U.S.P.Q.2d (BNA) 1724, 1732 (Fed. Cir. 2005)).

651. *Id.* at 1363, 79 U.S.P.Q.2d (BNA) at 1005; *see also* *Kao Corp. v. Unilever U.S., Inc.*, 441 F.3d 963, 967, 78 U.S.P.Q.2d (BNA) 1257, 1260 (Fed. Cir. 2006) (explaining that “compliance with the written description requirement is a question of fact”).

652. *Id.* at 967, 78 U.S.P.Q.2d (BNA) at 1260.

653. 448 F.3d 1357, 79 U.S.P.Q.2d (BNA) 1001.

654. *Id.* at 1360, 79 U.S.P.Q.2d (BNA) at 1002.

655. *Id.* at 1359-60, 79 U.S.P.Q.2d (BNA) at 1001-02.

656. *Id.* at 1366, 79 U.S.P.Q.2d (BNA) at 1007.

657. *Id.*, 79 U.S.P.Q.2d (BNA) at 1007.

658. *Id.*, 79 U.S.P.Q.2d (BNA) at 1007.

659. *Id.*, 79 U.S.P.Q.2d (BNA) at 1007.

requirement does not require either the recitation or incorporation by reference . . . of such genes and sequences.”⁶⁶⁰

In a second biotechnology case, *Monsanto Co. v. Scruggs*,⁶⁶¹ the invention related to genetically modified soybean and cotton seeds.⁶⁶² The Federal Circuit affirmed the district court’s grant of summary judgment of no invalidity, ruling that the written description was sufficient.⁶⁶³ The infringer argued that the asserted claims failed the written description requirement for not disclosing specific gene sequences.⁶⁶⁴ The court first stated a general rule for applying the requirement to inventions involving DNA: the disclosure must provide “sufficiently detailed, relevant identifying characteristics . . . i.e., complete or partial structure, other physical and/or chemical properties, functional characteristics when coupled with a known or disclosed correlation between function and structure, or some combination of such characteristics.”⁶⁶⁵ Then, as it did in *Falko-Gunter*,⁶⁶⁶ the court found that “[g]iven the knowledge in the art, it was unnecessary . . . to include specific gene sequences.”⁶⁶⁷

I. Best Mode

Under 35 U.S.C. § 112, ¶ 1, a patent specification must set forth the “best mode contemplated by the inventor of carrying out his invention.”⁶⁶⁸ In *Old Town Canoe Co. v. Confluence Holdings Corp.*,⁶⁶⁹ the court stated the traditional two-part factual inquiry used to determine compliance with the “best mode” requirement.⁶⁷⁰ Under the subjective prong of that inquiry, “[f]irst, the fact-finder must determine whether at the time an applicant filed an application for a patent, [the applicant] had a best mode of practicing the invention.”⁶⁷¹ Under the next, objective prong, “if the inventor had a

660. *Id.* at 1368, 79 U.S.P.Q.2d (BNA) at 1008-09.

661. 459 F.3d 1328, 79 U.S.P.Q.2d (BNA) 1813 (Fed. Cir. 2006).

662. *Id.* at 1332-33, 79 U.S.P.Q.2d (BNA) at 1817.

663. *Id.* at 1332, 1337, 79 U.S.P.Q.2d (BNA) at 1817-18.

664. *Id.* at 1337, 79 U.S.P.Q.2d (BNA) at 1818.

665. *Id.* at 1336, 79 U.S.P.Q.2d (BNA) at 1818 (quoting *Enzo Biochem Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 964, 63 U.S.P.Q.2d (BNA) 1609, 1613 (Fed. Cir. 2002) (citation omitted)).

666. *See Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1365, 79 U.S.P.Q.2d (BNA) 1001, 1007 (Fed. Cir. 2006) (finding, inter alia, that the patentee did not need to provide examples or demonstrate actual reduction to practice to meet the written description requirement).

667. *Monsanto*, 459 F.3d at 1337, 79 U.S.P.Q.2d (BNA) at 1818.

668. 35 U.S.C. § 112, ¶ 1 (2005 & Supp. 2005).

669. 448 F.3d 1309, 78 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

670. *Id.* at 1321, 78 U.S.P.Q.2d (BNA) at 1714.

671. *Id.*, 78 U.S.P.Q.2d (BNA) at 1714 (quoting *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1064, 46 U.S.P.Q.2d (BNA) 1097, 1101 (Fed. Cir. 1998) (citations omitted)).

best mode of practicing the invention, the fact-finder must determine whether the best mode was disclosed in sufficient detail to allow a skilled artisan to practice it without undue experimentation.”⁶⁷²

Old Town Canoe involved a challenge to a patent covering a technique and device for making plastic laminate boat hulls by rotational molding.⁶⁷³ The challenging party alleged that “at the time of [the] filing of the patent application, the inventor had a preferred way of using the invention” that was not disclosed, and further that “it would not have been clear to a person of ordinary skill in the art” how to implement the invention.⁶⁷⁴ In support of that allegation, the challenging party offered a document, drafted by the inventor before the patent filing, in which he described the process at issue.⁶⁷⁵ The Federal Circuit determined that a reasonable juror could have found a violation of the “best mode” requirement, and vacated the district court’s grant of judgment as a matter of law to the inventor on that ground.⁶⁷⁶

In *Liquid Dynamics Corp. v. Vaughan Co.*,⁶⁷⁷ a jury found that Vaughan had infringed a patent for a system of pumps in storage tanks, and that Vaughan had failed to prove that the patent was invalid. The district court denied Vaughan’s motion for judgment as a matter of law on the issues of invalidity, infringement, and willfulness.⁶⁷⁸ In upholding that determination on the “best mode” issue, the Federal Circuit pointed to evidence from the proponent of the patent that the improvements alleged by Vaughan would not change the patented process or invention, as well as evidence that the alleged improvements did not need to be disclosed to a person of ordinary skill in the art.⁶⁷⁹

However, in *Go Medical Industries Pty. Ltd. v. Inmed Corp.*,⁶⁸⁰ the patent applicant was deemed to be in violation of the “best mode” requirement. In its analysis of the first prong of the inquiry—whether the inventor had a “best mode” for practicing the invention when the patent application was filed—the court observed that the patent applicant had altered his usage of the urinary catheter design in dispute before he had filed the application with the PTO, and that

672. *Id.*, 78 U.S.P.Q.2d (BNA) at 1714.

673. *Id.* at 1312, 78 U.S.P.Q.2d (BNA) at 1707.

674. *Id.* at 1320, 78 U.S.P.Q.2d (BNA) at 1713.

675. *Id.*, 78 U.S.P.Q.2d (BNA) at 1713.

676. *Id.* at 1321, 78 U.S.P.Q.2d (BNA) at 1714.

677. 449 F.3d 1209, 79 U.S.P.Q.2d (BNA) 1094 (Fed. Cir. 2006), *cert. denied*, 75 U.S.L.W. 3263 (U.S. Nov. 13, 2006).

678. *Id.* at 1213, 79 U.S.P.Q.2d (BNA) at 1096.

679. *Id.* at 1224, 79 U.S.P.Q.2d (BNA) at 1104.

680. 471 F.3d 1264, 80 U.S.P.Q.2d (BNA) 1629 (Fed. Cir. 2006).

he considered the new usage “the preferred embodiment at that stage.”⁶⁸¹ As for the objective component of the inquiry, the applicant did not clearly disclose the preferred design.⁶⁸² On the basis of these rulings, the Federal Circuit affirmed the district court’s grant of summary judgment and its determination of invalidity for failure to meet the “best mode” requirement.⁶⁸³

J. Indefiniteness

A determination of whether a claim adequately recites the subject matter of a claimed invention and is sufficiently definite to satisfy 35 U.S.C. § 112 is a legal conclusion that the Federal Circuit reviews de novo.⁶⁸⁴ A patent is presumed valid, and the party asserting invalidity as to any claim of a patent bears the burden of establishing it by clear and convincing evidence.⁶⁸⁵

If a claim cannot be construed, it is indefinite under § 112.⁶⁸⁶ However, if a claim is amenable to construction, “even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree,” the claim is not indefinite.⁶⁸⁷ Claim definiteness is analyzed “not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.”⁶⁸⁸

In *Energizer Holdings v. International Trade Commission*,⁶⁸⁹ a case concerning a patent for mercury-free alkaline batteries, the patent was found to be invalid for indefiniteness by the U.S. International Trade Commission on the grounds that the term “said zinc anode” in a claim had no antecedent basis.⁶⁹⁰ The requirement of antecedent basis is a rule of patent drafting, administered during patent examination.⁶⁹¹ The Federal Circuit noted that “[t]he *Manual of Patent Examining Procedure* states that ‘[o]bviously, however, the

681. *Id.* at 1271, 80 U.S.P.Q.2d (BNA) at 1634.

682. *Id.*, 80 U.S.P.Q.2d (BNA) at 1633.

683. *Id.* at 1272, 80 U.S.P.Q.2d (BNA) at 1633.

684. *Aero Prods. Int’l Inc. v. Intex Recreation Corp.*, 466 F.3d 1000, 1015, 80 U.S.P.Q.2d (BNA) 1481, 1491 (Fed. Cir. 2006).

685. *Id.*, 80 U.S.P.Q.2d (BNA) at 1490-91.

686. *Id.*, 80 U.S.P.Q.2d (BNA) at 1490-91.

687. *Id.*, 80 U.S.P.Q.2d (BNA) at 1491 (citing *Exxon Res. & Eng’g Co. v. United States*, 265 F.3d 1371, 1375, 60 U.S.P.Q.2d (BNA) 1272, 1276 (Fed. Cir. 2001)).

688. *Energizer Holdings v. Int’l Trade Comm.*, 435 F.3d 1366, 1370, 77 U.S.P.Q.2d (BNA) 1625, 1628 (Fed. Cir. 2006) (quoting *In re Moore*, 439 F.2d 1232, 1235, 169 U.S.P.Q. (BNA) 236, 238 (C.C.P.A. 1971)).

689. *Id.* at 1366, 77 U.S.P.Q.2d (BNA) 1625.

690. *Id.* at 1370, 77 U.S.P.Q.2d (BNA) at 1628.

691. *Id.* at 1370, 77 U.S.P.Q.2d (BNA) at 1626.

failure to provide explicit antecedent basis for terms does not always render a claim indefinite.”⁶⁹² The court then made clear that where the meaning of the claim would reasonably be understood by persons of ordinary skill when read in light of the specification, the claim is not subject to invalidity from the patent-drafting protocol of “antecedent basis.”⁶⁹³ Despite the absence of an explicit antecedent basis for the term at issue, the court held that the claim could be construed by implication and that “a claim that is amenable to construction is not invalid on the ground of indefiniteness.”⁶⁹⁴

In *Aero Products International Inc. v. Intex Recreation Corp.*,⁶⁹⁵ the Federal Circuit considered whether the terms “complete hermetic seal” and “substantially hermetic seal” appearing in a claim containing only one seal rendered that claim indefinite.⁶⁹⁶ Both the district court and Federal Circuit accepted Aero’s explanation that the term “complete hermetic seal” referred to the mechanical completeness of the seal, while the term “substantially hermetic seal” referred to the quality of the seal, and determined that “[t]hese terms when read in combination and in light of the specification of the [patent], would be understandable to a person of ordinary skill in the art.”⁶⁹⁷

Xerox Corp. v. 3Com Corp. was an appeal from a district court’s holding that a patent for a computerized handwritten text interpretation system was invalid for indefiniteness. The Federal Circuit reversed, stating that the term “sloppiness space,” and accompanying descriptions, “[w]hile not rigorously precise[,] . . . provide adequate guidance . . . particularly in light of articulating a more exact standard for the concept.”⁶⁹⁸

692. *Id.*, 77 U.S.P.Q.2d (BNA) at 1628, (citing MANUAL OF PATENT EXAMINING PROCEDURE § 2173.05(e) (8th ed. Rev. 2, May 2004)).

693. *See id.*, 77 U.S.P.Q.2d (BNA) at 1628 (“Whether this claim, despite lack of explicit antecedent basis for ‘said zinc anode,’ nonetheless has a reasonably ascertainable meaning must be decided in context.”).

694. *Id.* at 1371, 77 U.S.P.Q.2d (BNA) at 1628; *see id.* at 1371, 77 U.S.P.Q.2d (BNA) at 1628 (holding that “the term ‘anode gel’ is by implication the antecedent basis for ‘said zinc anode’”).

695. 466 F.3d 1000, 80 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

696. *Id.* at 1009, 80 U.S.P.Q.2d (BNA) at 1486.

697. *Id.* at 1016, 80 U.S.P.Q.2d (BNA) at 1491.

698. *Xerox Corp. v. 3Com Corp.*, 458 F.3d 1310, 1323, 80 U.S.P.Q.2d (BNA) 1916, 1927 (Fed. Cir. 2006) (citing *Bancorp Servs. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1371, 69 U.S.P.Q.2d (BNA) 1996, 1998 (Fed. Cir. 2004) (holding that a claim will not be held invalid if the “meaning of the claim is discernable, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree”)).

K. Dependent Claims

The statutory requirements for dependent claims are set forth in 35 U.S.C. § 112, ¶ 4:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.⁶⁹⁹

In 2006, for the first time,⁷⁰⁰ the Federal Circuit held a claim invalid for failing to meet the requirements of this section, as the dependent claim at issue, claim six, did not “narrow the scope” of the dependent claim to which it directly depended, claim two; “instead, the two claims deal[t] with non-overlapping subject matter.”⁷⁰¹ While the court recognized that “the patentee was attempting to claim what might otherwise have been patentable subject matter” and “claim [six] could have been properly drafted either as dependent from claim [one] or as an independent claim,” it explained that it “should not rewrite claims to preserve validity.”⁷⁰² The court explained that invoking the fourth paragraph of § 112 as an invalidating provision “does not exalt form over substance,” and “is consistent with the overall statutory scheme that requires applicants to satisfy certain requirements before obtaining a patent, some of which are more procedural or technical than others.”⁷⁰³

699. 35 U.S.C. § 112 (2000 & Supp. 2005).

700. See *Pfizer, Inc. v. Ranbaxy Labs. Ltd.*, 457 F.3d 1284, 1291-92, 79 U.S.P.Q.2d (BNA) 1583, 1589 (Fed. Cir. 2006) (agreeing with the district court that at the time the district court wrote its opinion, “there was no applicable Federal Circuit precedent,” and noting that after the district court decision, the Federal Circuit issued an opinion where it “suggested that a violation of a § 112 ¶ 4 renders a patent invalid”). In the prior opinion that suggested such invalidity, *Curtiss-Wright Flow Control Corp. v. Velan Inc.*, the court did not actually hold a patent invalid under § 112 ¶ 4, but merely suggested it might be possible. 438 F.3d 1374, 1380, 77 U.S.P.Q.2d (BNA) 1988, 1993 (Fed. Cir. 2006). Note: Two of the authors were counsel to Pfizer, Inc. in this case.

701. *Pfizer*, 457 F.3d at 1291, 79 U.S.P.Q.2d (BNA) at 1589.

702. *Id.* at 1292, 79 U.S.P.Q.2d (BNA) at 1590 (quoting *Nazomi Commc’ns, Inc. v. Arm Holdings, PLC*, 403 F.3d 1364, 1368, 74 U.S.P.Q.2d (BNA) 1458, 1461 (Fed. Cir. 2005)).

703. *Id.* at 1292, 79 U.S.P.Q.2d (BNA) at 1590. The court also cited to 35 U.S.C. § 282(3), noting that “[i]nvalidity of the patent or any claim in suit for failure to comply with any requirement of sections 112 or 251 of this title’ is expressly included among the available defenses to an infringement suit.” *Id.* at 1292, 79 U.S.P.Q.2d (BNA) at 1589-90 (quoting 35 U.S.C. § 282(3) (2000)).

L. Patent Ownership

An issue of standing to sue in a patent case is a jurisdictional one,⁷⁰⁴ and one that the Federal Circuit reviews de novo.⁷⁰⁵ “A patentee shall have remedy by civil action for infringement of his patent.”⁷⁰⁶ The term “patentee encompasses not only the patentee to whom the patent was issued but also to the successors in title to the patentee.”⁷⁰⁷ A patentee may transfer title to a patent by assignment, and the assignee may be deemed the effective patentee under § 285 for purposes of standing to sue another for patent infringement.⁷⁰⁸ While a licensee normally does not have standing to sue without joinder of the patentee, an exclusive license may amount to an assignment if it conveys to the licensee all substantial rights to the patent at issue.⁷⁰⁹ As the Federal Circuit stated in *Aspex Eyewear, Inc. v. Miracle Optics, Inc.*,⁷¹⁰ “the essential issue regarding the right to sue on a patent is who owns the patent.”⁷¹¹

In *Aspex Eyewear*, the Federal Circuit found that Contour (the licensor) transferred to Chic (the licensee) certain rights with respect to a patented eyeglass frame.⁷¹² Chic, the licensee, received: (1) the exclusive right to make, use, and sell products covered by the patent, (2) the right to sue for infringement of the patent, and (3) a virtually unrestricted authority to sublicense its rights under the agreement.⁷¹³ Despite the transfer of these rights, the court held that the agreement “did not constitute a transfer of all substantial rights to the [patent]”⁷¹⁴ and hence it was not an assignment.⁷¹⁵ The Federal Circuit held that the licensee’s rights, “however substantial in other respects, were unquestionably valid for only a limited period of time” pursuant to the licensing agreement.⁷¹⁶ Because the licensor would regain all of the rights under the patent as of a specific date, it remained the “unquestioned owner of the patent”—it had conferred a limited license, not an assignment, of the patent.⁷¹⁷

704. See also *supra* notes 172-83, and accompanying text..

705. *Aspex Eyewear, Inc. v. Miracle Optics, Inc.*, 434 F.3d 1336, 1339, 77 U.S.P.Q.2d (BNA) 1456, 1458 (Fed. Cir. 2006).

706. *Id.*, 77 U.S.P.Q.2d (BNA) at 1458 (quoting 35 U.S.C. § 281 (2000)).

707. *Id.* at 1340, 77 U.S.P.Q.2d (BNA) at 1458 (quoting 35 U.S.C. § 100(d) (2000)).

708. *Id.*, 77 U.S.P.Q.2d (BNA) at 1458.

709. *Id.*, 77 U.S.P.Q.2d (BNA) at 1458.

710. 434 F.3d 1336, 77 U.S.P.Q.2d (BNA) 1456.

711. *Id.* at 1341, 77 U.S.P.Q.2d (BNA) at 1460.

712. *Id.* at 1342, 77 U.S.P.Q.2d (BNA) at 1460.

713. *Id.* at 1338, 1341, 77 U.S.P.Q.2d (BNA) at 1457, 1460.

714. *Id.* at 1341, 77 U.S.P.Q.2d (BNA) at 1460.

715. *Id.*, 77 U.S.P.Q.2d (BNA) at 1460.

716. *Id.* at 1342, 77 U.S.P.Q.2d (BNA) at 1460.

717. *Id.* at 1342-43, 77 U.S.P.Q.2d (BNA) at 1460-61.

Aspex Eyewear distinguished the license agreement from an exclusive license with all substantial rights that was only defeasible in the event of a default or bankruptcy, or some other condition subsequent.⁷¹⁸ In holding that the licensee, Chic, did not have standing to sue for patent infringement despite the clear wording of the contract, the Federal Circuit referred to its decision in *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, stating that “while considering the importance of an agreement’s right to sue provision, we noted the public policy in favor of preventing multiple lawsuits on the same patent against the same accused infringer.”⁷¹⁹ The court expressed concern that if it considered Chic an assignee instead of a licensee, Chic could assert that patent against an accused infringer during the term of the agreement without Contour’s (the licensor/assignor) participation in the lawsuit, leaving Contour unconstrained by principles of collateral estoppel or res judicata to later assert the patent against the same accused infringer once the agreement expired.⁷²⁰ Conversely, the court undertook to prevent, as a matter of policy, a party with lesser rights from bringing a lawsuit that may put the licensed patent at risk of being held invalid or unenforceable without the involvement of the patentee.⁷²¹ Citing its opinion in *Evident Corp. v. Church & Dwight Co.*,⁷²² the Federal Circuit stated that “policy counsels against allowing Chic, who only putatively had rights under the patent for a limited time, to bring a patent infringement action without Contour, who would own the patent rights for a much longer period of time, and thereby unilaterally jeopardize Contour’s future enjoyment of the [patent].”⁷²³

M. Inequitable Conduct

Patent applicants have a duty of candor and good faith when making disclosures to the PTO, “including a duty to disclose information known to the applicants to be material to patentability.”⁷²⁴ If an application contains a false material fact or an affirmative misrepresentation of a material fact (or omits a material

718. *Id.* at 1342, 77 U.S.P.Q.2d (BNA) at 1461.

719. *Id.* at 1343, 77 U.S.P.Q.2d (BNA) at 1461 (citing *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870, 875-76, 20 U.S.P.Q.2d (BNA) 1045, 1048-49 (Fed. Cir. (1991))).

720. *Id.* at 1343, 77 U.S.P.Q.2d (BNA) at 1461.

721. *Id.*, 77 U.S.P.Q.2d (BNA) at 1461 (citing *Evident Corp. v. Church & Dwight Co.*, 399 F.3d 1310, 1314, 73 U.S.P.Q.2d (BNA) 1910, 1912-13 (Fed. Cir. 2005)).

722. 399 F.3d 1310, 73 U.S.P.Q.2d (BNA) 1910.

723. *Id.* at 1343, 77 U.S.P.Q.2d (BNA) at 1461.

724. *Purdue Pharma L.P. v. Endo Pharm., L.P.*, 438 F.3d 1123, 1128, 77 U.S.P.Q.2d (BNA) 1767, 1771 (Fed. Cir. 2006) (internal citations omitted).

fact), and if this defective disclosure is made with an intent to deceive or mislead the PTO, a court may set aside the application or find the patent invalid on the grounds of inequitable conduct.⁷²⁵

A threshold showing of inequitable conduct must be made by clear and convincing evidence, both as to the materiality and intent requirements.⁷²⁶ Once this threshold is satisfied, the court must weigh the evidence “to determine whether the equities warrant a conclusion that inequitable conduct occurred.”⁷²⁷ The inquiries into materiality and intent are not independent; that is, when a misrepresentation or omission is highly material, less evidence of intent is required.⁷²⁸ Likewise, “the less material the information, the greater the proof must be.”⁷²⁹ If the district court makes findings after a trial, factual findings regarding materiality and intent are reviewed for clear error, while the overall finding of inequitable conduct is reviewed for abuse of discretion.⁷³⁰ At the summary judgment stage,⁷³¹ all rulings on the issue of inequitable conduct are reviewed de novo.⁷³²

The standard for the materiality of a misrepresentation or omission is set forth in PTO rule 56.⁷³³ Under this rule, a misrepresentation or omission is material when it is not cumulative of information already given, and it “establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim, . . . [or] refutes, or is inconsistent with, a position the applicant takes in . . . [o]pposing an argument of unpatentability relied upon by the [PTO], . . . or [when] asserting an argument of patentability.”⁷³⁴

As for the intent requirement, “the involved conduct, viewed in the light of all the evidence, including evidence of good faith, must indicate sufficient culpability to require a finding of intent to deceive.”⁷³⁵ Although a finding of intent does not require direct

725. *Id.*, 77 U.S.P.Q.2d (BNA) at 1771.

726. *Id.*, 77 U.S.P.Q.2d (BNA) at 1771.

727. *Id.*, 77 U.S.P.Q.2d (BNA) at 1771.

728. *Id.* at 1128-29, 77 U.S.P.Q.2d (BNA) at 1771.

729. *Id.* at 1129, 77 U.S.P.Q.2d (BNA) at 1771.

730. *Digital Control Inc. v. The Charles Mach. Works*, 437 F.3d 1309, 1313, 77 U.S.P.Q.2d (BNA) 1823, 1826 (Fed. Cir. 2006).

731. *See also supra* notes 291-316, and accompanying text.

732. *Id.*, 77 U.S.P.Q.2d (BNA) at 1826.

733. 37 C.F.R. § 1.56(b) (2006). This rule was amended on January 17, 1992, and the current discussion reflects the amended standard. *See Duty of Disclosure*, 57 Fed. Reg. 2,021 (Jan. 17, 1992) (incorporating the prima facie elements of unpatentability into the section 1.56(b) standard).

734. 37 C.F.R. § 1.56(b).

735. *M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co., Inc.*, 439 F.3d 1335, 1341, 78 U.S.P.Q.2d (BNA) 1229, 1234 (Fed. Cir. 2006) (internal citations omitted).

evidence,⁷³⁶ and may be inferred from the facts and circumstances of the patent application, there still must be a factual basis for a finding of intent.⁷³⁷ Thus, “intent to deceive cannot be inferred simply from the decision to withhold the reference where the reasons given for the withholding are plausible.”⁷³⁸

In *Purdue Pharma L.P. v. Endo Pharmaceuticals, Inc.*,⁷³⁹ the Federal Circuit considered whether the patentee of OxyContin® pain medication had engaged in inequitable conduct when it represented to the PTO that it had “surprisingly discovered” that its medication was effective over a four-fold dosage range instead of an eight-fold dosage range, without disclosing that it based this discovery on insight rather than scientific proof.⁷⁴⁰ The Federal Circuit declined to disturb the district court’s finding of materiality, given the applicant’s use of language that “suggested the existence of clinical results supporting the reduced dosage range.”⁷⁴¹ However, the Federal Circuit vacated the district court’s finding of intent because it had considered documents prepared in the course of the FDA approval process (and not designated for the patent application), and because it failed to properly balance the low level of materiality of this evidence in its intent calculus.⁷⁴²

In *Digital Control Inc. v. The Charles Machine Works*,⁷⁴³ an applicant was found guilty of inequitable conduct by virtue of misstatements made in his rule 131 declaration,⁷⁴⁴ and a failure to appropriately

736. *Impax Labs., Inc. v. Aventis Pharm. Inc.*, 468 F.3d 1366, 1375, 81 U.S.P.Q.2d (BNA) 1001, 1007 (Fed. Cir. 2006).

737. *L & W, Inc. v. Shertech, Inc.*, 471 F.3d 1311, 1321, 81 U.S.P.Q.2d (BNA) 1198 (Fed. Cir. 2006); *M. Eagles Tool Warehouse*, 439 F.3d at 1341, 78 U.S.P.Q.2d (BNA) at 1234.

738. *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 471 F.3d 1369, 1382, 81 U.S.P.Q.2d (BNA) 1324, 1333 (Fed. Cir. 2006) (citations omitted).

739. 438 F.3d 1123, 77 U.S.P.Q.2d (BNA) 1767 (Fed. Cir. 2006).

740. *Id.* at 1130, 77 U.S.P.Q.2d (BNA) at 1772.

741. *Id.* at 1133, 77 U.S.P.Q.2d (BNA) at 1774; *see id.*, 77 U.S.P.Q.2d (BNA) at 1774 (noting that the level of materiality was not especially high, in that the applicant had not expressly misrepresented that it had obtained experimental results supporting the claims but merely “impl[ie]d that an empirical basis existed for its discovery”).

742. *See id.* at 1134-35, 77 U.S.P.Q.2d (BNA) at 1775 (“In a case such as this, when the materiality of the undisclosed information is relatively low, there is less basis for inferring intent from materiality alone.”). The district court was directed to reconsider its intent finding, and if a threshold showing of intent were to be found on remand, to reweigh the factors of materiality and intent in determining whether the sanction of inequitable conduct was appropriate. *Id.*, 77 U.S.P.Q.2d (BNA) at 1775.

743. 437 F.3d 1309, 77 U.S.P.Q.2d (BNA) 1823 (Fed. Cir. 2006).

744. A declaration under PTO Rule 131 is a sworn statement that an invention predates a prior art reference. 37 C.F.R. § 1.131; *see Digital Control*, 437 F.3d at 1312, 77 U.S.P.Q.2d (BNA) at 1826 (affirming a district court determination of inequitable conduct predicated upon material misstatements made in a rule 131 declaration).

disclose prior art.⁷⁴⁵ Although the Federal Circuit agreed that the applicant had made material misrepresentations in connection with his rule 131 declaration, in that it contained a number of false statements (such as a demonstration of the invention which did not occur), it vacated the district court's finding of inequitable conduct because it was based both on the rule 131 declaration and non-disclosure of prior art.⁷⁴⁶ With regard to the latter issue, the Federal Circuit held that genuine issues of material fact existed as to whether the applicant's disclosures cumulated the allegedly omitted prior art, such that the lower court improperly decided the issue on a summary judgment motion.⁷⁴⁷

In *M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co.*,⁷⁴⁸ the Federal Circuit considered whether a district court appropriately found an intent to deceive when no direct or circumstantial evidence indicated that the applicants had intentionally withheld prior art, and when the applicants insisted they had been unaware of its relevance.⁷⁴⁹ The district court found inequitable conduct because the applicants had not shown that their failure to disclose the prior art was inadvertent, and did not proffer a good faith explanation for their failure.⁷⁵⁰ However, the Federal Circuit ruled that the patentee's lack of a good faith explanation did not rise to the level of an intent to deceive the PTO, and vacated the lower court's finding.⁷⁵¹

In *Kao Corp. v. Unilever United States, Inc.*,⁷⁵² the district court found that although the inventing entity had made material omissions when it "selectively disclosed only the most positive available data,"⁷⁵³ the applicant lacked the intent to deceive because it eventually supplied the omitted data to the PTO—even though the supplemental

745. *Id.* at 1319, 77 U.S.P.Q.2d (BNA) at 1831.

746. *Id.* at 1318-19, 77 U.S.P.Q.2d (BNA) at 1833.

747. *See id.* at 1317, 1319, 77 U.S.P.Q.2d (BNA) at 1826, 1829 (stating generally that it is difficult to decide the scope of prior art at the summary-judgment stage in that it is an inherently fact-intensive inquiry).

748. 439 F.3d 1335, 78 U.S.P.Q.2d (BNA) 1229 (Fed. Cir. 2006).

749. *See id.* at 1340-41, 78 U.S.P.Q.2d (BNA) at 1234.

750. *See id.*, 78 U.S.P.Q.2d (BNA) at 1234.

751. *See id.* at 1343, 78 U.S.P.Q.2d (BNA) at 1236 (reiterating that there must be a factual basis for a finding of intent, whether direct or circumstantial). The Federal Circuit observed that "[t]he district court's finding of inequitable conduct based on the non-disclosure of the Model 220 essentially amounted to a finding of strict liability for nondisclosure . . . [s]uch is not the law." *Id.*, 78 U.S.P.Q.2d (BNA) at 1236.

752. 441 F.3d 963, 78 U.S.P.Q.2d (BNA) 1257 (Fed. Cir. 2006).

753. *Id.* at 971, 78 U.S.P.Q.2d (BNA) at 1263. The inventors failed to disclose that they had also tested a product variant, and did not reveal their margin for testing error, while affirmatively (and untruthfully) asserting that "there is no reason to expect any significant difference . . . for other polymers within the claimed genus." *Id.*, 78 U.S.P.Q.2d (BNA) at 1263.

disclosure occurred over one year after the original application.⁷⁵⁴ The Federal Circuit ruled that the district court did not abuse its discretion in making this determination, stating that “although there certainly was evidence from which the trial court could have concluded that [the applicant] acted with intent to deceive, we are very reluctant to question the judgment of the finder of fact.”⁷⁵⁵

In *Atofina v. Great Lakes Chemical Corp.*,⁷⁵⁶ the Federal Circuit reviewed a district court finding that a patent for the manufacture of difluoromethane was invalid due to inequitable conduct.⁷⁵⁷ The district court found that the patent applicants had an English translation of a Japanese publication that included every limitation of the claims contained in the patent,⁷⁵⁸ and that the applicants had misrepresented and mischaracterized the Japanese publication to the PTO.⁷⁵⁹ However, the Federal Circuit held that the district court clearly erred in its findings and therefore abused its discretion when it found inequitable conduct.⁷⁶⁰ Noting parenthetically that “the duty at issue in this case is the duty of candor, not the duty of translation,”⁷⁶¹ the court ruled that the disclosures actually made to the PTO were consistent with the full translation of the Japanese documents, noting only minor and immaterial discrepancies (such as the use of the descriptor “mainly” versus the undisclosed term “chiefly”).⁷⁶²

In *Old Town Canoe Co. v. Confluence Holdings Corp.*,⁷⁶³ the challenging party alleged that a patent applicant’s usage of a technique for manufacturing canoes before filing for patent protection constituted inequitable conduct, and also demonstrated a failure to disclose the “best mode” of practicing the manufacture technique.⁷⁶⁴ In rejecting this argument and affirming the district court, the Federal Circuit stated that “since the failure to disclose the

754. *See id.* at 972, 78 U.S.P.Q.2d (BNA) at 1263.

755. *Id.* at 971-71, 78 U.S.P.Q.2d (BNA) at 1263. The Federal Circuit noted in dicta that “[g]iven a blank slate, we might weigh the evidence differently [than did the district court].” *Id.*, 78 U.S.P.Q.2d (BNA) at 1263.

756. 441 F.3d 991, 78 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2006).

757. *Id.* at 992, 78 U.S.P.Q.2d (BNA) at 1418.

758. *Id.* at 995, 78 U.S.P.Q.2d (BNA) at 1420. According to the district court, that the publication anticipated every claim satisfied the materiality requirement. *Id.*, 78 U.S.P.Q.2d (BNA) at 1420.

759. *Id.*, 78 U.S.P.Q.2d (BNA) at 1420. According to the district court, this misrepresentation and mischaracterization amply demonstrated the required intent. *Id.*, 78 U.S.P.Q.2d (BNA) at 1420.

760. *Id.* at 1003, 78 U.S.P.Q.2d (BNA) at 1426.

761. *Id.* at 1001, 78 U.S.P.Q.2d (BNA) at 1425 (citation omitted).

762. *Id.* at 1002, 78 U.S.P.Q.2d (BNA) at 1417.

763. 448 F.3d 1309, 78 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

764. *Id.* at 1321-22, 78 U.S.P.Q.2d (BNA) at 1714-15.

best mode is not excused even if unintentional, but inequitable conduct requires a ‘threshold’ level of intent, the failure to disclose the best mode will not constitute inequitable conduct in every case.”⁷⁶⁵ In this case, since no evidence of intent to deceive the PTO was alleged, the claim of inequitable conduct necessarily failed.⁷⁶⁶

In *Liquid Dynamics Corp. v. Vaughan Co.*,⁷⁶⁷ the analysis again turned on intent to deceive, and the court again decided in favor of the party seeking to defend the validity of a patent from allegations of inequitable conduct. Although the Federal Circuit disagreed with the district court’s reasoning on the materiality issue,⁷⁶⁸ it ruled that the district court did not commit reversible error in finding that the patentee did not act with an intent to deceive.⁷⁶⁹

However, the court found an intent to deceive and upheld a determination of inequitable conduct in *Agfa Corp. v. Creo Products, Inc.*⁷⁷⁰ Specifically, the Federal Circuit upheld the district court’s finding that there were numerous instances of intentionally undisclosed prior art and the patent applicant’s position was inconsistent with the undisclosed prior art.⁷⁷¹ Additional evidence supported that determination, including that the applicant had submitted misleading answers to direct queries by the patent examiner, and had “admitted that he could not have made the arguments he did make in response to the Examiner’s request if he had disclosed the [prior art].”⁷⁷²

In *Kemin Foods L.C. v. Pigmentos Vegetales Del Centro S.A. de C.V.*,⁷⁷³ a patent challenger argued that an article in a trade journal constituted prior art in that it “[taught] all the limitations of claim [one] of the

765. *Id.* at 1322, 78 U.S.P.Q.2d (BNA) at 1715.

766. *Id.*, 78 U.S.P.Q.2d (BNA) at 1714-15.

767. 449 F.3d 1209, 79 U.S.P.Q.2d (BNA) 1094 (Fed. Cir. 2006), *cert. denied*, 75 U.S.L.W. 3263 (U.S. Nov. 13, 2006).

768. *Id.* at 1226-27, 79 U.S.P.Q.2d (BNA) at 1106 (noting that the inventor had used previous iterations of a design for pumps in storage tanks, before seeking to patent the design). The challenging party alleged that these iterations constituted prior art which were required to have been disclosed. *Id.*, 79 U.S.P.Q.2d (BNA) at 1106. The Federal Circuit stated that “[t]he [district] court focused on whether the prior installations actually embody the invention, when the correct analysis asks whether a reasonable examiner would find it important”. *Id.* at 1226-27, 79 U.S.P.Q.2d (BNA) at 1106.

769. *See id.* at 1227, 79 U.S.P.Q.2d (BNA) at 1106 (declining to reweigh the credibility of testimony from the patent applicant on the issue of intent to deceive, and reminding that the applicant asserted that he lacked awareness of the need to disclose the prior iterations because they were not “embodiments of the invention and were similar to other disclosures”).

770. 451 F.3d 1366, 79 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2006).

771. *Id.* at 1377, 79 U.S.P.Q.2d (BNA) at 1392.

772. *Id.*, 79 U.S.P.Q.2d (BNA) at 1393.

773. 464 F.3d 1339, 80 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2006).

[patent].”⁷⁷⁴ The challenger further argued that the patent applicant knew of this article and of its materiality to the patent prosecution, and withheld the article from the PTO with deceptive intent.⁷⁷⁵ The district court found that the article was not “highly” material, because there was “little persuasive . . . evidence [that] the method disclosed [in the article] actually produces the composition disclosed.”⁷⁷⁶ On the issue of intent, the district court found credible the patent applicant’s testimony that he believed the trade journal article to be merely another paper that was irrelevant to the prosecution of the patent.⁷⁷⁷ The Federal Circuit declined to disturb these findings on appeal.⁷⁷⁸

Lastly, in *Eli Lilly and Co. v. Zenith Goldline Pharmaceuticals, Inc.*,⁷⁷⁹ the Federal Circuit reviewed a finding by the district court that inequitable conduct had not occurred. The challenger argued that the patent applicant had made different (but not inconsistent) statements to Swedish authorities and to the PTO, in response to questions regarding the effects of a pharmaceutical.⁷⁸⁰ These statements and other alleged non-disclosures were not deemed “material omission[s] nor done with an intent to deceive,” because the PTO had received all of the information it had requested.⁷⁸¹

N. Inventorship

The Federal Circuit adheres to the principle that one must “contribute to the conception of an invention” to be considered an inventor for purposes of a patent claim.⁷⁸² “Conception is defined as ‘the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it [will] be applied in practice.’”⁷⁸³ Furthermore, the process of conception is only “complete when ‘the idea is so clearly defined in the inventor’s mind that only ordinary skill would be necessary to reduce the

774. *Id.* at 1344, 80 U.S.P.Q.2d (BNA) at 1388.

775. *Id.* at 1345, 80 U.S.P.Q.2d (BNA) at 1389.

776. *Id.*, 80 U.S.P.Q.2d (BNA) at 1389.

777. *Id.* at 1346, 80 U.S.P.Q.2d (BNA) at 1390.

778. *Id.*, 80 U.S.P.Q.2d (BNA) at 1390.

779. 471 F.3d 1369, 81 U.S.P.Q.2d (BNA) 1324 (Fed. Cir. 2006).

780. *Id.* at 1382, 81 U.S.P.Q.2d (BNA) at 1333 (detailing that while the Swedish Board had inquired about idiosyncratic blood toxicity as the inventor sought to conduct human clinical studies in Scandinavia, the PTO had inquired only about blood cholesterol levels).

781. *Id.* at 1383, 81 U.S.P.Q.2d (BNA) at 1334.

782. *Stern v. Trs. of Columbia Univ.*, 434 F.3d 1375, 1378, 77 U.S.P.Q.2d (BNA) 1702, 1704 (Fed. Cir. 2006) (stating further that “conception is the touchstone of inventorship”).

783. *Id.*, 77 U.S.P.Q.2d (BNA) at 1704 (internal citations omitted).

invention to practice, without extensive research or experimentation.”⁷⁸⁴ A putative joint inventor must have corroborating evidence of his alleged contribution to the conception of an invention.⁷⁸⁵ Inventorship itself is “a question of law that is reviewed *de novo*,” but factual findings made in connection with an analysis of an inventorship claim are reviewed for clear error if made after a trial.⁷⁸⁶

In *Stern v. Trustees of Columbia University*,⁷⁸⁷ a Columbia professor employed a research assistant to investigate the effects of prostaglandins on the intraocular pressure of various animals. The research assistant’s efforts helped establish that topical application of prostaglandins reduced intraocular pressure (“IOP”) in rhesus monkeys and cats.⁷⁸⁸ After the assistant’s departure from the university, the professor’s work eventually led to the issuance of a patent for glaucoma treatment, and the assistant challenged the patent on the basis of joint inventorship.⁷⁸⁹

The research assistant’s claim of co-ownership failed for several reasons.⁷⁹⁰ First, his experiments were duplicative of the professor’s earlier work.⁷⁹¹ In addition, the court found that the assistant “did not have an understanding of the claimed invention,” that he “did not conceive of the idea of the use of prostaglandins to reduce IOP in primates,” and that “there was no collaboration between [the assistant and the professor] in developing a glaucoma treatment.”⁷⁹² The claimant also proffered no corroborated evidence of co-ownership.⁷⁹³

In *Cook Biotech Inc. v. Acell, Inc.*,⁷⁹⁴ the district court found that the named inventor had already completed his invention by the time he had engaged in discussions with the purported joint inventor on the topic, and that those discussions had not “contributed in [a] significant manner”⁷⁹⁵ to the invention—thus necessarily precluding a

784. *Id.*, 77 U.S.P.Q.2d (BNA) at 1704 (internal citations omitted).

785. *See id.*, 77 U.S.P.Q.2d (BNA) at 1704 (explaining that unwitnessed laboratory books and journals are insufficient on their own to corroborate a claim of inventorship).

786. *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1373, 79 U.S.P.Q.2d (BNA) 1865, 1870 (Fed. Cir. 2006).

787. 434 F.3d at 1377, 77 U.S.P.Q.2d (BNA) at 1703.

788. *Id.*, 77 U.S.P.Q.2d (BNA) at 1703.

789. *Id.*, 77 U.S.P.Q.2d (BNA) at 1703.

790. *Id.* at 1378, 77 U.S.P.Q.2d (BNA) at 1704.

791. *Id.*, 77 U.S.P.Q.2d (BNA) at 1704.

792. *Id.*, 77 U.S.P.Q.2d (BNA) at 1704.

793. *Id.*, 77 U.S.P.Q.2d (BNA) at 1704.

794. *See Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1381, 79 U.S.P.Q.2d (BNA) 1865, 1876 (Fed. Cir. 2006).

795. *See id.*, 79 U.S.P.Q.2d (BNA) at 1876.

finding of joint inventorship.⁷⁹⁶ The district court's rulings on these issues were affirmed by the Federal Circuit.⁷⁹⁷

O. Double Patenting

In *Sanofi-Synthelabo v. Apotex, Inc.*,⁷⁹⁸ Sanofi successfully obtained a preliminary injunction against Apotex on the basis of an infringement of its patent for clopidogrel bisulfate, a pharmaceutical designed to inhibit blood platelet aggregation and reduce the risk of heart attack or stroke.⁷⁹⁹ Apotex appealed the district court's grant of a preliminary injunction, alleging that the patent was invalid on a number of grounds, including obviousness and obviousness-type double patenting.⁸⁰⁰ In considering Apotex's claim that the district court had "committed clear error in concluding that the double patenting inquiry was subsumed by the broader obviousness inquiry,"⁸⁰¹ the Federal Circuit pointed out that Apotex had "fail[ed] to set forth any arguments on appeal that raise[d] a substantial question with respect to the validity of claim 3 based on that defense," and declined to reverse the grant of the preliminary injunction.⁸⁰² Due to this infirmity on appeal, the court did not address Apotex's contention that "an obviousness inquiry is distinct from the double patenting inquiry and should have been independently analyzed."⁸⁰³

P. Recapture Doctrine

In *Medtronic, Inc. v. Guidant Corp.*,⁸⁰⁴ the Federal Circuit considered whether certain claims of a reissue patent were "invalid by reason of violation of the rule against recapturing surrendered subject matter."⁸⁰⁵ The court explained that 35 U.S.C. § 251 permits a patentee to broaden the scope of an existing patent to include subject matter that had been erroneously excluded from the patent.⁸⁰⁶

796. *Id.*, 79 U.S.P.Q.2d (BNA) at 1876.

797. *Id.* at 1382, 79 U.S.P.Q.2d (BNA) at 1877.

798. 470 F.3d 1368, 81 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2006).

799. *Id.* at 1372, 81 U.S.P.Q.2d (BNA) at 1099.

800. *Id.* at 1374, 81 U.S.P.Q.2d (BNA) at 1100.

801. *Id.* at 1380, 81 U.S.P.Q.2d (BNA) at 1104.

802. *Id.*, 81 U.S.P.Q.2d (BNA) at 1105.

803. *Id.*, 81 U.S.P.Q.2d (BNA) at 1104.

804. 465 F.3d 1360, 80 U.S.P.Q.2d (BNA) 1558 (Fed. Cir. 2006).

805. *Id.* at 1364, 80 U.S.P.Q.2d (BNA) at 1560. The court also considered the issue in *Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 80 U.S.P.Q.2d (BNA) 1495 (Fed. Cir. 2006), and *Medrad, Inc. v. Tyco Healthcare Group L.P.*, 466 F.3d 1047, 80 U.S.P.Q.2d (BNA) 1526 (Fed. Cir. 2006), which are discussed below.

806. See 465 F.3d at 1372, 80 U.S.P.Q.2d (BNA) at 1566 (quoting 35 U.S.C. § 251) (finding the reissue of a patent permissible where "the patent is, through error without any deceptive intention, deemed wholly or partly inoperative or

The Federal Circuit recognized that this rule “is ‘based on fundamental principles of equity and fairness, and should be construed liberally.’”⁸⁰⁷ The court further recognized that “attorney[] failure to appreciate the full scope of [an] invention” is one of the most common sources of patent defect and that such error is generally sufficient to justify reissue.⁸⁰⁸

Reissue proceedings, however, cannot be used to obtain subject matter that could not have been included in the original patent. Under the “recapture” rule, the deliberate surrender of a claim to certain subject matter during the original prosecution of the application for the patent “made in an effort to overcome a prior art rejection” is not such “error” as will allow the patentee to recapture that subject matter in a reissue.⁸⁰⁹ The court explained that surrender can occur by argument or amendment.⁸¹⁰

The Federal Circuit applied the three-step analysis for the recapture rule: (1) “whether, and in what respect, the reissue claims are broader in scope than the original patent claims;” (2) “whether the broader aspects of the reissue claims relate to subject matter surrendered in the original prosecution;” and (3) “whether the reissue claims were materially narrowed in other respects . . . [to] avoid the recapture rule.”⁸¹¹ The court noted that whether the claims of a reissued patent violate § 251 is a question of law, however, the legal conclusion of whether a particular applicant has met the statutory requirements of § 251 is based on underlying findings of fact, which the court will sustain unless they are shown to be clearly erroneous.⁸¹²

In *Medtronic*, the challenger argued that the reissue patent improperly recaptured two subject matters covered in the claims at issue.⁸¹³ The Federal Circuit recognized that the first subject matter was disclosed in the initial patent application, but was removed before filing.⁸¹⁴ The court explained that cancellation “alone does

invalid, . . . by reason of the patentee claiming more or less than he had a right to claim in the patent. . . .”

807. *See id.*, 80 U.S.P.Q.2d (BNA) at 1566 (quoting *Hester Indus., Inc. v. Stein, Inc.*, 142 F.3d 1472, 1479, 46 U.S.P.Q.2d (BNA) 1641, 1647 (Fed. Cir. 1998)).

808. *See id.*, 80 U.S.P.Q.2d (BNA) at 1566 (quoting *In re Wilder*, 736 F.2d 1516, 1519, 222 U.S.P.Q. (BNA) 369, 371 (Fed. Cir. 1984) (other citations omitted)).

809. *See id.* at 1372-73, 80 U.S.P.Q.2d (BNA) at 1566 (quoting *In re Clement*, 131 F.3d 1464, 1468-69, 45 U.S.P.Q.2d (BNA) 1161, 1164 (Fed. Cir. 1997)).

810. *See id.*, 80 U.S.P.Q.2d (BNA) at 1566.

811. *See id.*, 80 U.S.P.Q.2d (BNA) at 1566 (quoting *N. Am. Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 1349, 75 U.S.P.Q.2d (BNA) 1545, 1556 (Fed. Cir. 2005)).

812. *See id.*, 80 U.S.P.Q.2d (BNA) at 1566 (citations omitted).

813. *See id.* at 1370, 80 U.S.P.Q.2d (BNA) at 1564.

814. *See id.* at 1375, 80 U.S.P.Q.2d (BNA) at 1568.

not mean that the [subject matter] was surrendered.”⁸¹⁵ Whether recapture applies is fact-specific and depends “particularly on the reasons for the cancellation.”⁸¹⁶ The Federal Circuit concluded that “no deliberate surrender of subject matter to obtain allowance of the claims” occurred, because the prosecution history made clear that neither the examiner nor the prosecuting attorney considered the subject matter a part of the invention.⁸¹⁷ The court agreed with the district court that, because the claims at issue were not amended over prior art and because the amendments were clarifying amendments, there was no clear admission that the amended claims were not patentable.⁸¹⁸

On the second issue, the Federal Circuit agreed with the district court that the amendment was never disclosed in the original application, and that it thus it could not have been surrendered by amendment.⁸¹⁹ The Federal Circuit noted that during prosecution of the original claim, the patentee’s attorney argued that the art at issue was distinguishable and more narrow from prior art.⁸²⁰ “[W]hen a reissue claim, while broader in certain respects than the original patent claim, is materially narrowed in other respects, the recapture rule does not apply.”⁸²¹ The court affirmed the district court’s determination and held that the reissue patent was not invalid, because the subject matter of the claims at issue was not surrendered by amendment or by argument during the prosecution of the original patent application.⁸²²

In another case, *Kim v. ConAgra Foods, Inc.*,⁸²³ the Federal Circuit affirmed, in pertinent part, the district court’s determination that certain patent claims were not invalid.⁸²⁴ The court held that the patentee’s amending limitations were not added to overcome rejection.⁸²⁵ In so holding, the court applied only the second step of the three-step recapture rule, because the patentee conceded that the

815. *Id.*, 80 U.S.P.Q.2d (BNA) at 1568.

816. *Id.*, 80 U.S.P.Q.2d (BNA) at 1568.

817. *Id.*, 80 U.S.P.Q.2d (BNA) at 1568 (“This is the kind of inadvertence that the reissue doctrine was meant to remedy.”). The Federal Circuit also agreed with the district court that the patentee’s attorney did not surrender the subject matter by argument. *Id.*, 80 U.S.P.Q. (BNA) at 1568.

818. *Id.* at 1375-76, 80 U.S.P.Q.2d (BNA) at 1568.

819. *Id.* at 1377, 80 U.S.P.Q.2d (BNA) at 1569.

820. *Id.* at 1378, 80 U.S.P.Q.2d (BNA) at 1570.

821. *Id.*, 80 U.S.P.Q.2d (BNA) at 1570 (citing *N. Am. Container*, 415 F.3d 1335, 1349, 75 U.S.P.Q.2d 1545 (BNA) 1556 (Fed. Cir. 2005)).

822. *Id.* at 1379, 80 U.S.P.Q.2d (BNA) at 1571.

823. 465 F.3d 1312, 80 U.S.P.Q.2d (BNA) 1495 (Fed. Cir. 2006).

824. *Id.* at 1316, 80 U.S.P.Q.2d (BNA) at 1496.

825. *Id.* at 1323-24, 80 U.S.P.Q.2d (BNA) at 1502.

reissue claims were broader than the original patented claims.⁸²⁶ Thus, the Federal Circuit considered only whether the broader aspects of the claims concerned surrendered subject matter.⁸²⁷ Notably, the court rejected the patentee's argument for increased deference due to her *pro se* status during some parts of the prosecution and her argument "that she was not responsible for the original amendment made with her acquiescence by the examiner."⁸²⁸

The Federal Circuit reiterated the well-established rule that the challenger to a reissue patent must establish surrender "by clear and convincing evidence."⁸²⁹ The court, however, rejected the district court's suggestion that the patentee's subjective intent bears on the surrender determination. The Federal Circuit noted:

Some of our recapture decisions explain that "error under the reissue statute does not include a *deliberate* decision to surrender specific subject matter in order to overcome prior art," and that the prerequisite error for a reissue can exist if "there is no evidence that the applicant *intentionally* omitted or abandoned the claimed subject matter."⁸³⁰

The court, however, made it clear that "these cases do not suggest that the patentee's subjective intent is pertinent to the question of surrender," but rather "simply distinguish between a patentee's inadvertent 'error' (for which the reissue statute provides a remedy), and a patentee's 'surrender' (for which the recapture rule prevents a reissue)."⁸³¹

Finally, in *Medrad, Inc. v. Tyco Healthcare Group LP*,⁸³² the Federal Circuit reversed the district court's grant of summary judgment of invalidity.⁸³³ In *Medrad*, the patentee filed an application for reissue stating that it had claimed less than it had a right to claim in the original application (an "underclaiming" error).⁸³⁴ "During prosecution of the reissue, [the patentee] narrowed the scope of various claims (correcting an 'overclaiming' error) and corrected inventorship in addition to correcting the underclaiming error."⁸³⁵

826. *Id.* at 1322, 80 U.S.P.Q.2d (BNA) at 1501.

827. *Id.*, 80 U.S.P.Q.2d (BNA) at 1501.

828. *Id.*, 80 U.S.P.Q.2d (BNA) at 1501.

829. *Id.*, 80 U.S.P.Q.2d (BNA) at 1501.

830. *Id.* at 1322, 80 U.S.P.Q.2d (BNA) at 1501 (quoting, respectively, *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992, 996, 27 U.S.P.Q.2d (BNA) 1521, 1525 (Fed. Cir. 1993) and *Ball Corp. v. United States*, 729 F.2d 1429, 1435, 221 U.S.P.Q. 289, 294 (Fed. Cir. 1984)).

831. *Id.*, 80 U.S.P.Q.2d (BNA) at 1501-02 (citation omitted).

832. 466 F.3d 1047, 80 U.S.P.Q.2d (BNA) 1526 (Fed. Cir. 2006).

833. *Id.* at 1049, 80 U.S.P.Q.2d (BNA) at 1526-27.

834. *Id.*, 80 U.S.P.Q.2d (BNA) at 1527.

835. *Id.*, 80 U.S.P.Q.2d (BNA) at 1527.

The patentee, however, failed to “submit supplemental reissue declarations regarding the overclaiming or inventorship errors as required by 37 C.F.R. § 1.175.”⁸³⁶

The district court ruled that the reissue patent was invalid because the error that the patentee corrected was “procedural,” and not one of the four errors statutorily defined by § 251.⁸³⁷ At issue on appeal was whether the language of § 251 limits corrections to the specifications, drawings, or claims; or whether the statute permits the correction of any defect that results in invalidity.⁸³⁸ The Federal Circuit stressed that § 251 “is remedial in nature, based on fundamental principles of equity and fairness, and should be construed liberally.”⁸³⁹ The court then ruled that § 251 provides for the correction of all errors made without deceptive intent.

Although such an error may result from the language used in a claim, the express terms of the statute do not refer only to errors in the claim language itself. . . . Rather, the highlighted language in section 251 can be read to encompass any error that causes a patentee to claim more or less than he had a right to claim.⁸⁴⁰

The Federal Circuit held that the language in § 251—“by reason of the patentee claiming more or less than he had a right to claim in the patent”—does not require that the error occur in the actual language of the claims.⁸⁴¹

836. *Id.*, 80 U.S.P.Q.2d (BNA) at 1527.

837. *See id.* at 1049-50, 80 U.S.P.Q.2d (BNA) at 1527. On motion for summary judgment, the patent challenger argued that the reissue was defective pursuant to § 251 because it did not correct one of four statutorily defined errors: (1) a defect in the specification; (2) a defect in the drawings; (3) an overclaiming error; or (4) an underclaiming error. *Id.* at 1049, 80 U.S.P.Q.2d (BNA) at 1525. The district court construed section 251 as requiring “that some error in the specification, drawings, or a claim of the patent be corrected as a result of the reissue process.” *Id.*, 80 U.S.P.Q.2d (BNA) at 1525 (citing *Medrad Inc. v. Tyco Healthcare Group LP*, 391 F. Supp. 2d 374, 378 (W.D. Pa. 2005)).

838. *See id.* at 1050-51, 80 U.S.P.Q.2d (BNA) at 1528. Specifically, at issue was the phrase “by reason of the patentee claiming more or less than he had a right to claim in the patent.” *Id.* at 1051, 80 U.S.P.Q.2d (BNA) at 1528.

839. *Id.*, 80 U.S.P.Q.2d (BNA) at 1528 (citing *In re Weiler*, 790 F.2d 1576, 1579, 229 U.S.P.Q. (BNA) 673, 675 (Fed. Cir. 1986)).

840. *Id.* at 1052, 80 U.S.P.Q.2d (BNA) at 1529.

841. *See id.*, 80 U.S.P.Q.2d (BNA) at 1529. The Federal Circuit refused to consider additional arguments raised by the challenger concerning compliance with reissue regulations 37 C.F.R. § 1.171-179, which require an applicant to file an oath or declaration with an application for reissue. *Id.*, 80 U.S.P.Q.2d (BNA) at 1529. Because the district court did not reach this issue, the Federal Circuit declined to consider it in the first instance and noted that it would be more appropriately addressed by the district court on remand. *See id.* at 1052-53, 80 U.S.P.Q.2d (BNA) at 1530.

IV. INFRINGEMENT

“[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States . . . during the term of the patent therefor, infringes the patent.”⁸⁴² “[P]atent infringement analysis involves two steps.”⁸⁴³ First, the claim must be properly interpreted or “construed” to determine its meaning and scope.⁸⁴⁴ Second, a court should compare the properly construed claim to the accused product to determine whether the accused product contains every element of the properly construed claim.⁸⁴⁵

There were several iterative but still notable developments this past year with respect to infringement analysis. In July 2005, the Federal Circuit issued its en banc decision in *Phillips v. AWH Corp.*,⁸⁴⁶ which comprehensively summarized and clarified its law on claim construction, focusing on the proper role, in claim construction, of a patent’s specification and prosecution history in relation to general or field specific dictionaries.⁸⁴⁷ This year, the Federal Circuit further refined and applied the teachings of *Phillips*.⁸⁴⁸

Another important development in infringement law over the past several years has been the prevalence of summary judgment rulings.⁸⁴⁹ This year, the Federal Circuit again addressed numerous cases where district courts had granted summary judgment as to infringement or non-infringement.⁸⁵⁰ The past year also occasioned further consideration and refinement of the limitations on the doctrine of equivalents as set forth in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*⁸⁵¹ And among the more notable developments in the area of infringement was the Federal Circuit’s en banc decision in *DSU Medical Corp. v. JMS Co.*,⁸⁵² which clarified that a party can be held

842. 35 U.S.C. § 271(a) (2000) (defining infringement).

843. See, e.g., *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326, 78 U.S.P.Q.2d (BNA) 1382, 1385 (Fed. Cir. 2006) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976, 34 U.S.P.Q.2d (BNA) 1321, 1326 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996)).

844. See *id.*, 78 U.S.P.Q.2d (BNA) at 1385.

845. See *id.*, 78 U.S.P.Q.2d (BNA) at 1385; see also *Flex-Rest, LLC v. Steelcase, Inc.*, 455 F.3d 1351, 1361-62, 80 U.S.P.Q.2d (BNA) 1620, 1627 (Fed. Cir. 2006) (explaining that every element of a claim is material for this analysis).

846. 415 F.3d 1303, 75 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2005).

847. *Id.* at 1319-24, 75 U.S.P.Q.2d (BNA) at 1331-35.

848. See *infra* notes 864-873 and accompanying text.

849. See, e.g., *Adamo et al.*, *supra* note 14, at 1609-12.

850. See *infra* notes 291-325 and accompanying text.

851. 535 U.S. 722, 740 (2002) (noting that “[a] patentee’s decision to narrow his claims through amendment may be presumed to be a general disclaimer of the territory between the original claim and the amended claim,” and holding “that the patentee should bear the burden of showing that the amendment does not surrender the particular equivalent in question”).

852. 471 F.3d 1293, 81 U.S.P.Q.2d (BNA) 1238 (Fed. Cir. 2006).

liable for inducing infringement only upon a determination that it specifically intended that another party infringe a patent.⁸⁵³

A. *Claim Construction*

Prior to 2005, there had been some confusion as to the hierarchy of tools that may be used to construe or interpret a patent claim. It had long been settled that “[i]t is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’”⁸⁵⁴ And the Federal Circuit has “frequently stated that the words of a claim ‘are generally given their ordinary and customary meaning,’” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.”⁸⁵⁵ Difficulties arise, however, because it is not always easy to ascertain the “ordinary and customary meaning” of a particular claim term.⁸⁵⁶ Thus, it has also been well accepted that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.”⁸⁵⁷ Accordingly, “the best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history.”⁸⁵⁸ The Federal Circuit has also noted that “[c]onsistent with that general principle, our cases recognize that the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.”⁸⁵⁹

853. *See id.* at 1306, 81 U.S.P.Q.2d (BNA) at 1247 (stating that “inducement requires evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities”).

854. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312, 75 U.S.P.Q.2d (BNA) 1321, 1325 (Fed. Cir. 2005) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1115, 72 U.S.P.Q.2d (BNA) 1001, 1004 (Fed. Cir. 2004)).

855. *Id.* at 1312-13, 75 U.S.P.Q.2d (BNA) at 1326 (citing numerous cases).

856. *Id.* at 1313, 75 U.S.P.Q.2d (BNA) at 1326.

857. *Id.*, 75 U.S.P.Q.2d (BNA) at 1326.

858. *Id.* at 1315, 75 U.S.P.Q.2d (BNA) at 1328 (quoting *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1478, 45 U.S.P.Q.2d (BNA) 1429, 1433 (Fed. Cir. 1998)) (citing several additional cases).

859. *Id.* at 1316, 75 U.S.P.Q.2d (BNA) at 1329 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366, 62 U.S.P.Q.2d (BNA) 1658, 1662-63 (Fed. Cir. 2002)).

Notwithstanding these basic principles, there had been confusion regarding the role in claim construction of general-purpose or field-specific dictionaries.⁸⁶⁰ The court explained:

In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. In such circumstances, general purpose dictionaries may be helpful. In many cases that give rise to litigation, however, determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art.⁸⁶¹

The court also noted:

Within the class of extrinsic evidence, the court has observed that dictionaries and treatises can be useful in claim construction. We have especially noted the help that technical dictionaries may provide to a court “to better understand the underlying technology” and the way in which one of skill in the art might use the claim terms. Because dictionaries, and especially technical dictionaries, endeavor to collect the accepted meanings of terms used in various fields of science and technology, those resources have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention. Such evidence, we have held, may be considered if the court deems it helpful in determining “the true meaning of language used in the patent claims.”⁸⁶²

The main source of difficulty had been in reconciling the role of dictionaries with the role of the specification and prosecution history:

The main problem with elevating the dictionary to [excessive] prominence is that it focuses the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent. Properly viewed, the “ordinary meaning” of a claim term is its meaning to the ordinary artisan after reading the entire patent. Yet heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.⁸⁶³

860. *See id.* at 1312, 75 U.S.P.Q.2d (BNA) at 1325 (noting that court’s previous discussions of “the use of dictionaries in claim construction.. require[] clarification”).

861. *Id.* at 1314, 75 U.S.P.Q.2d (BNA) at 1327 (internal citation omitted).

862. *Id.* at 1318, 75 U.S.P.Q.2d (BNA) at 1330 (internal citations omitted).

863. *Id.* at 1321, 75 U.S.P.Q.2d (BNA) at 1332.

Therefore, the court held in *Phillips* that a court may consult dictionaries as part of construing patent claims, but must “attach the appropriate weight” to the specification and the prosecution history in its analysis.⁸⁶⁴ The court explained:

A claim should not rise or fall based upon the preferences of a particular dictionary editor, or the court’s independent decision, uninformed by the specification, to rely on one dictionary rather than another. Finally, the authors of dictionaries or treatises may simplify ideas to communicate them most effectively to the public and may thus choose a meaning that is not pertinent to the understanding of particular claim language.⁸⁶⁵

While this guidance is certainly helpful, it is also exceedingly general. The court made clear that it was “not attempt[ing] to provide a rigid algorithm for claim construction.”⁸⁶⁶ As a result of this limited guidance, as well as the belief of some of the court’s judges that claim construction is not the purely *legal* endeavor that the court’s majority has described,⁸⁶⁷ Judges Mayer and Newman dissented, urging that:

[w]hat we have wrought . . . is the substitution of a black box, as it so pejoratively has been said of the jury, with the black hole of this court. Out of this void we emit “legal” pronouncements by way of “interpretive necromancy”; these rulings resemble reality, if at all, only by chance. Regardless, and with a blind eye to the consequences, we continue to struggle under this irrational and reckless regime, trying every alternative—dictionaries first, dictionaries second, never dictionaries, etc., etc., etc.⁸⁶⁸

The dissent construed the majority opinion as stating nothing more than a rule “that [the court] will decide cases according to whatever mode or method results in the outcome we desire, or at least allows us a seemingly plausible way out of the case.”⁸⁶⁹ The dissent concluded by warning that “[e]loquent words can mask much mischief. The court’s opinion today is akin to rearranging the deck chairs on the Titanic—the orchestra is playing as if nothing is amiss, but the ship is still heading for Davey Jones’ locker.”⁸⁷⁰ It is too soon to tell if the dissenters’ concerns will continue to manifest themselves

864. *See id.* at 1324, 75 U.S.P.Q.2d (BNA) at 1335.

865. *Id.* at 1322, 75 U.S.P.Q.2d (BNA) at 1333 (citation omitted).

866. *Id.* at 1324, 75 U.S.P.Q.2d (BNA) at 1335.

867. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979, 34 U.S.P.Q.2d (BNA) 1321, 1329 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (clarifying that claim construction is a legal issue reserved exclusively for the court).

868. 415 F.3d at 1330, 75 U.S.P.Q.2d (BNA) at 1339 (Mayer & Newman, JJ., dissenting).

869. *Id.*, 75 U.S.P.Q.2d (BNA) at 1339.

870. *Id.* at 1334-35, 75 U.S.P.Q.2d (BNA) at 1342.

in the court's decisions, but this year's decisions do provide significant guidance as to the principles set forth in *Phillips*.

1. *Claim language*

As noted above, claim construction starts with examining the words of the patent claim, and ascertaining the "ordinary and customary meaning" of those words to "a person of ordinary skill in the art in question at the time of the invention."⁸⁷¹ The court in *Phillips* noted that in some circumstances the claim language is easily interpreted, particularly with the aid of dictionaries:

In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. In such circumstances, general purpose dictionaries may be helpful.⁸⁷²

The court also recognized, however, that "in many cases that give rise to litigation, . . . determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art."⁸⁷³ This year's cases demonstrate several principles relevant to construing claim terms that lack obvious, facially plain meanings.

All words in a claim must be given effect. "[C]laims are interpreted with an eye toward giving effect to all terms in the claim."⁸⁷⁴ In *Bicon, Inc. v. Straumann Co.*, the court explained the rationale for this principle:

The purpose of a patent claim is to define the precise scope of a claimed invention, thereby 'giving notice both to the examiner at the U.S. Patent and Trademark Office during prosecution, and to the public at large, including potential competitors after the patent has issued. Allowing a patentee to argue that physical structures and characteristics specifically described in a claim are merely superfluous would render the scope of the patent ambiguous, leaving examiners and the public to guess about which claim language the drafter deems necessary to his claimed invention and which language is merely superfluous, nonlimiting elaboration.⁸⁷⁵

871. *Id.* at 1313, 75 U.S.P.Q.2d (BNA) at 1326 (majority opinion) (citations omitted).

872. *Id.* at 1314, 75 U.S.P.Q.2d (BNA) at 1327.

873. *Id.*, 75 U.S.P.Q.2d (BNA) at 1327.

874. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950, 78 U.S.P.Q.2d (BNA) 1267, 1272 (Fed. Cir. 2006).

875. *Id.*, 78 U.S.P.Q.2d (BNA) at 1272.

Thus, in *Bicon*, the court held that a claim for a dental implant that included language describing an abutment that lays above the gumline to which a crown can be attached was limited to implants that contain such an abutment.⁸⁷⁶ Similarly, in *Flex-Rest, LLC v. Steelcase, Inc.*,⁸⁷⁷ the court determined that it had to give effect to the term “sidewall” in a claim for a computer keyboard positioning system.⁸⁷⁸ The court rejected the patentee’s argument that the term was “‘minor,’ ‘inconsequential,’ and ‘unimportant,’” because that argument “disregards the basic patent law doctrine that every limitation of a claim is material.”⁸⁷⁹ Likewise, in *Aero Products International, Inc. v. Intex Recreation Corp.*,⁸⁸⁰ the court refused to read the term “substantially hermetic seal” in a claim for an inflatable support system, such as an air mattress, to require a “complete hermetic seal,” because doing so would “render the term ‘substantially’ illusory.”⁸⁸¹

Separate claims should not be read to be redundant. A corollary to the principle that all words in a claim should be given effect is that separate claims in a patent should each be given separate effect. In *nCube Corp. v. SeaChange International, Inc.*,⁸⁸² the Federal Circuit construed the term “upstream manager” in a claim for storage of multimedia sources over a network.⁸⁸³ The court rejected the construction put forth by SeaChange that the upstream manager term requires routing of information by using “only logical,” virtual addresses assigned by the storage apparatus, rather than “physical” addresses that reflect the information’s actual location in the connection manager.⁸⁸⁴ The court reasoned that “[t]he creation of a virtual circuit, or ‘virtual connection,’ appears only in dependent claim 2 as a ‘further’ function of the connection service.”⁸⁸⁵ The claim at issue (claim 1), however, “does not describe an upstream manager that requires routing only with logical addresses.”⁸⁸⁶ Accordingly, the court concluded that “[t]o read a requirement for use of logical addresses into claim 1 would impermissibly read the

876. *See id.* at 946-52, 78 U.S.P.Q.2d (BNA) at 1269-74.

877. 455 F.3d 1351, 80 U.S.P.Q.2d (BNA) 1620 (Fed. Cir. 2006).

878. *Id.* at 1361-62, 80 U.S.P.Q.2d (BNA) at 1627.

879. *Id.* at 1361, 80 U.S.P.Q.2d (BNA) at 1626-27.

880. 466 F.3d 1000, 80 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

881. *Id.* at 1012-13, 80 U.S.P.Q.2d (BNA) at 1488-89.

882. 436 F.3d 1317, 77 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

883. *Id.* at 1321-22, 77 U.S.P.Q.2d (BNA) at 1484-85.

884. *See id.*, 77 U.S.P.Q.2d (BNA) at 1484-85.

885. *Id.* at 1321, 77 U.S.P.Q.2d (BNA) at 1484-85.

886. *Id.* at 1321-22, 77 U.S.P.Q.2d (BNA) at 1484.

'virtual connection' limitation of claim 2 into claim 1, making these claims redundant."⁸⁸⁷

The same words generally have the same meaning throughout the patent claims. A complementary principle is that the same words in a patent generally should be construed to have the same meaning even where the words are contained in different claims. In *Schoenhaus v. Genesco, Inc.*,⁸⁸⁸ the court examined two possible constructions of the term "orthotic device" in a patent for a portion of, or insert into, certain shoes.⁸⁸⁹ The court noted that both claims 1 and 2 of the patent included the "orthotic device" term, and referred to the "presumption that the same terms appearing in different portions of the claims should be given the same meaning unless it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims."⁸⁹⁰ Even though only claim 1 was at issue, the court examined whether a possible construction of "orthotic device"—"a shoe built to have the shape of the interior of the insert"—would make sense if applied to claim 2, which claims "a footwear product having as an element thereof an orthotic device as claimed in claim 1."⁸⁹¹ The court concluded that the possible construction of "orthotic device" renders claim 2 nonsensical, because it would lead claim 2 to be construed to mean "a footwear product having an element thereof a shoe built to have the shape of the interior of the insert as claimed in claim 1," and thus "cannot be correct."⁸⁹²

A similar analysis was undertaken in *Semitool, Inc. v. Dynamic Micro Systems Semiconductor Equipment GmbH*,⁸⁹³ where the court addressed the significance of a claim term in a prior, related patent application.⁸⁹⁴ In that case, the claim term "processing chamber" had been defined in a parent application, which had ultimately led to a different patent, as "a processing vessel defining a process chamber therewithin."⁸⁹⁵ Even though such a clear definition was lacking in the patent at issue, the court reasoned that "the same definition of the processing chamber" should likely apply to both the patent

887. *Id.* at 1322, 77 U.S.P.Q.2d (BNA) at 1484.

888. 440 F.3d 1354, 78 U.S.P.Q.2d (BNA) 1252 (Fed. Cir. 2006).

889. *Id.* at 1356-57, 78 U.S.P.Q.2d (BNA) at 1253-54.

890. *Id.* at 1357, 78 U.S.P.Q.2d (BNA) at 1254 (quoting *Fin Control Sys. Pty., Ltd. v. OAM, Inc.*, 265 F.3d 1311, 1318, 60 U.S.P.Q.2d (BNA) 1203, 1208 (Fed. Cir. 2001)).

891. *Id.*, 78 U.S.P.Q.2d (BNA) at 1254.

892. *Id.*, 78 U.S.P.Q.2d (BNA) at 1254.

893. 444 F.3d 1337, 78 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 2006).

894. *Id.* at 1345-48, 78 U.S.P.Q.2d (BNA) at 1444-46.

895. *Id.* at 1346, 78 U.S.P.Q.2d (BNA) at 1444-45.

resulting from the “parent application” and that resulting from the “continuation application,” which led to the patent at issue.⁸⁹⁶

The context in which a claim term is placed may be critical. The appropriate construction of a claim term may be informed by the “context of the surrounding words of the claim.”⁸⁹⁷ Thus, in *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*,⁸⁹⁸ the Federal Circuit addressed the claim term “gap” in a patent for a softball bat.⁸⁹⁹ The court noted the principle that claim terms should generally “have the same meaning” in different claims of the same patent, but emphasized that the term “gap” had been modified differently in claim 1 and claim 15 of the patent.⁹⁰⁰ In claim 1, the term “gap” was modified by the phrase, “forming at least part of an annular shape,” whereas in claim 15 the term was modified by the preceding phrase, “annular.”⁹⁰¹ Since the term “annular” was construed to mean “of or relating to an area formed by two concentric circular or curved regions,” the court determined that claim 1 does not require concentricity of the gap between the frame of the bat and an insert into that frame, and permits “some contact between the insert and frame.”⁹⁰² In contrast, because it features an “annular gap,” claim 15 requires concentricity of both the frame and the insert.⁹⁰³

The language of a preamble to a claim can be limiting. In *Bicon, Inc. v. Straumann, Co.*,⁹⁰⁴ the Federal Circuit addressed the effect of language in the preamble to a claim.⁹⁰⁵ The court explained that, as a general matter, “whether to treat a preamble as a claim limitation is determined on the facts of each case in light of the claim as a whole and the invention described in the patent.”⁹⁰⁶ “Preamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim.”⁹⁰⁷ “However, the preamble is regarded as limiting if it recites essential structure

896. *Id.* at 1346-47, 78 U.S.P.Q.2d (BNA) at 1445.

897. *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088, 68 U.S.P.Q.2d (BNA) 1516, 1521 (Fed. Cir. 2003).

898. 442 F.3d 1322, 78 U.S.P.Q.2d (BNA) 1382 (Fed. Cir. 2006).

899. *Id.* at 1328-29, 78 U.S.P.Q.2d (BNA) at 1387.

900. *Id.*, 78 U.S.P.Q.2d (BNA) at 1387.

901. *Id.* at 1324-25, 78 U.S.P.Q.2d (BNA) at 1384.

902. *Id.* at 1328, 78 U.S.P.Q.2d (BNA) at 1387.

903. *Id.*, 78 U.S.P.Q.2d (BNA) at 1387 (explaining that “a claim without the ‘annular’ requirement or with only a partial annular requirement . . . do[es] not require concentricity”).

904. 441 F.3d 945, 78 U.S.P.Q.2d (BNA) 1267 (Fed. Cir. 2006).

905. *Id.* at 948-53, 78 U.S.P.Q.2d (BNA) at 1267-74.

906. *Id.* at 952, 78 U.S.P.Q.2d (BNA) at 1273 (quoting *Storage Tech. Corp. v. Cisco Sys., Inc.*, 329 F.3d 823, 831, 66 U.S.P.Q.2d (BNA) 1545, 1550 (Fed. Cir. 2003)).

907. *Id.*, 78 U.S.P.Q.2d (BNA) at 1273 (citations omitted).

that is important to the invention or necessary to give meaning to the claim.”⁹⁰⁸ The court evaluated a preamble to a claim for a dental implant prosthesis providing that:

An emergence cuff member for use in preserving the interdental papilla during the procedure of placing an abutment on a root member implanted in the alveolar bone of a patient in which *the abutment has a frusto-spherical basal surface portion and a conical surface portion having a selected height extending therefrom comprising . . .*⁹⁰⁹

The court concluded that the emphasized language “recites essential elements of the invention pertaining to the structure of the abutment that is used with the claimed emergence cuff,” and thus limits the patent claim.⁹¹⁰

Similarly, in *On Demand Machine Corp. v. Ingram Industries, Inc.*,⁹¹¹ the Federal Circuit addressed the effect of a claim preamble stating: “A method of high speed manufacture of a single copy of a book comprising the steps of . . .”⁹¹² The district court had determined that the preamble did not limit the claim; on appeal, the Federal Circuit reversed, and ruled that “the preamble in this case necessarily limits the claims, in that it states the framework of the invention, whose purpose is rapid single-copy printing of a customer’s selected book . . .”⁹¹³ Thus, the Federal Circuit held that a jury instruction stating that the preamble did not limit the claim to the “high speed manufacture of a single copy” of a book, was erroneous.⁹¹⁴

2. *Specification (written description)*

A fundamental part of the intrinsic evidence critical to claim construction is the patent specification or written description that accompanies patent claims.⁹¹⁵ In *Phillips v. AWH Corp.*, the court explained that “the specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’”⁹¹⁶ Thus, a “person of

908. *Id.*, 78 U.S.P.Q.2d (BNA) at 1273 (citations omitted).

909. *Id.* at 948, 78 U.S.P.Q.2d (BNA) at 1270 (emphasis added).

910. *Id.* at 952, 78 U.S.P.Q.2d (BNA) at 1274.

911. 442 F.3d 1331, 1343-44, 78 U.S.P.Q.2d (BNA) 1428, 1436-37 (Fed. Cir. 2006).

912. *Id.* at 1336, 78 U.S.P.Q.2d (BNA) at 1431.

913. *Id.* at 1343, 78 U.S.P.Q.2d (BNA) at 1437.

914. *See id.* at 1343-44, 78 U.S.P.Q.2d (BNA) at 1437 (explaining that “[t]he preamble embraces the totality of these limitations”).

915. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317, 75 U.S.P.Q.2d 1321, 1329 (Fed. Cir. 2006) (remarking that it is “entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of claims”).

916. *Id.* at 1315, 75 U.S.P.Q.2d (BNA) at 1327 (quoting *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582, 39 U.S.P.Q.2d (BNA) 1573, 1577 (Fed. Cir. 1996)).

ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.”⁹¹⁷ “The importance of the specification in claim construction derives from its statutory role. The close kinship between the written description and the claims is enforced by the statutory requirement that the specification describe the claimed invention in ‘full, clear, concise, and exact terms.’”⁹¹⁸ Ultimately, “[t]he claims are directed to the invention that is described in the specification; they do not have meaning removed from the context from which they arose.”⁹¹⁹ Indeed, as noted above, an inventor may craft in the specification a “special definition” given to a claim term, which will govern.⁹²⁰ Moreover, “the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor. In that instance as well, the inventor has dictated the correct claim scope, and the inventor’s intention, as expressed in the specification, is regarded as dispositive.”⁹²¹

One of the greatest difficulties in properly using the specification to construe a claim is adhering to the important principle that limitations not present in the claims should not be read into the claim terms.⁹²²

[W]e recognize that the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim can be a difficult one to apply in practice. However, the line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court’s focus remains on understanding how a person of ordinary skill in the art would understand the claim terms. For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments. In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the

917. *Id.* at 1313, 75 U.S.P.Q.2d (BNA) at 1326.

918. *Id.* at 1316, 75 U.S.P.Q.2d (BNA) at 1328 (quoting 35 U.S.C. § 112 (2000)).

919. *Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352, 58 U.S.P.Q.2d (BNA) 1076, 1079 (Fed. Cir. 2001).

920. *Philips*, 415 F.3d at 1316, 75 U.S.P.Q.2d (BNA) at 1329.

921. *Id.*, 75 U.S.P.Q.2d (BNA) at 1329 (citing *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44, 58 U.S.P.Q.2d (BNA) 1059, 1064-65 (Fed. Cir. 2001)).

922. *See id.* at 1323-24, 75 U.S.P.Q.2d (BNA) at 1334-35.

claims of the patent must be construed as being limited to that embodiment.⁹²³

In all events, the Federal Circuit has acknowledged that “interpretation of descriptive statements in a patent’s written description is a difficult task, as an inherent tension exists as to whether a statement is a clear lexicographic definition or a description of a preferred embodiment.”⁹²⁴

This year, the Federal Circuit has decided several cases in which the district courts have grappled with the appropriate use of the specification in interpreting patent claims.

Using the specification to clarify ambiguous claim language. In *Schoenhaus v. Genesco, Inc.*,⁹²⁵ the court ruled that the specification cannot trump the clear meaning of claim language.⁹²⁶ There, the court addressed the construction of the term “rigid” in a claim for a shoe insert.⁹²⁷ The patentee argued that “rigid” is properly construed to encompass material that is “semi-rigid,” and pointed to language in the specification stating that the “insert . . . is formed by molding semi-rigid material.”⁹²⁸ The district court had rejected this argument, and the Federal Circuit affirmed, reasoning that while “[t]he patentee is free to act as his own lexicographer,” the reference in the written description to “semi-rigid material” that is “to be used in the manufacture of the orthotic device generally” is insufficient to overcome the claim language that requires the portion of the insert to itself be “rigid.”⁹²⁹

In *Semitoool, Inc. v. Dynamic Micro Systems*,⁹³⁰ the court looked to the patent’s specification to verify its conclusion that the claim term “processing chamber” is coextensive with the term “processing vessel,” also present in the claim.⁹³¹ The court emphasized several statements in the specification that supported its conclusion, noting that “the specification treats the three terms processing bowl, processing chamber, and processing vessel synonymously.”⁹³² Ultimately, the court concluded that “[t]he specification makes no

923. *Id.* at 1323, 75 U.S.P.Q.2d (BNA) at 1334 (internal citations and quotations omitted).

924. *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1374, 79 U.S.P.Q.2d (BNA) 1443, 1451 (Fed. Cir. 2006) (quoting *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 U.S.P.Q.2d (BNA) 1947, 1950 (Fed. Cir. 2003)).

925. 440 F.3d 1354, 1357-58, 78 U.S.P.Q.2d (BNA) 1252, 1254-55 (Fed. Cir. 2006).

926. *Id.*, 78 U.S.P.Q.2d (BNA) at 1254-55.

927. *Id.* at 1358, 78 U.S.P.Q.2d (BNA) at 1255.

928. *Id.*, 78 U.S.P.Q.2d (BNA) at 1255 (ellipses in original).

929. *Id.*, 78 U.S.P.Q.2d (BNA) at 1255.

930. 444 F.3d 1337, 1347, 78 U.S.P.Q.2d (BNA) 1438, 1445 (Fed. Cir. 2006).

931. *Id.*, 78 U.S.P.Q.2d (BNA) at 1445.

932. *Id.* 78 U.S.P.Q.2d (BNA) at 1445.

meaningful distinction between the vessel, bowl, or the chamber and therefore reinforces that the entire interior of the processing vessel and the processing chamber should be interpreted to be coextensive.⁹³³ Similarly, in *Panduit Corp. v. Hellermannntyton Corp.*,⁹³⁴ the court relied on the specification to verify its construction of the term “opening” in a claim for a power box. The court tentatively concluded from the claim language that the opening must descend from the “abutment portion” described in the claim.⁹³⁵ The specification more completely described “an opening formed in the abutment portion of the projection which is in communication with an aperture formed in a side wall’ and an abutment portion ‘which depends from the furthest extent of the top portion.’”⁹³⁶ Since the “abutment portion” is “described consistently” in “the written description as depending—i.e., extending downward—from a top portion of the projection” the court concluded that the “opening” must descend as well.⁹³⁷

In *Old Town Canoe Co. v. Confluence Holdings Corp.*,⁹³⁸ the Federal Circuit looked to the specification to clarify whether the term “completion of coalescence” in a claim for a method for making plastic laminate boat hulls required that the plastic particulate reach its “optimum state.”⁹³⁹ Although it found the claim language itself to be ambiguous, the court emphasized that the written description described the method as involving “coalescence” that “continues” beyond the point at which the molding process is completed and describes the invention as an improvement over a prior art patent that resulted in coalescence without reaching the particulate’s optimum state.⁹⁴⁰ The court therefore concluded that the term does require the plastic particulate to reach its optimum state.⁹⁴¹ Similarly, in *Planet Bingo, LLC v. GameTech International, Inc.*,⁹⁴² the court found that the specification clarified the meaning of the term “progressive . . . predetermined winning combination” in a claim for a bingo machine.⁹⁴³ The court emphasized that the specification repeatedly explains that “the game determines a ‘winning

933. *Id.* at 1347-48, 78 U.S.P.Q.2d (BNA) at 1446.

934. 451 F.3d 819, 829, 79 U.S.P.Q.2d (BNA) 1053, 1059-60 (Fed. Cir. 2006).

935. *Id.*, 79 U.S.P.Q.2d (BNA) at 1060.

936. *Id.*, 79 U.S.P.Q.2d (BNA) at 1060.

937. *Id.*, 79 U.S.P.Q.2d (BNA) at 1060.

938. 448 F.3d 1309, 81 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

939. *See id.* at 1316-17, 1321, 78 U.S.P.Q.2d (BNA) at 1710-11, 1714.

940. *See id.* at 1316-17, 78 U.S.P.Q.2d (BNA) at 1710-11.

941. *See id.*, 78 U.S.P.Q.2d (BNA) at 1710-11.

942. 472 F.3d 1338, 81 U.S.P.Q.2d (BNA) 1145 (Fed. Cir. 2006).

943. *See id.* at 1342-43, 81 U.S.P.Q.2d (BNA) at 1148.

combination' before the first bingo ball is drawn, thus making it 'predetermined.'"⁹⁴⁴ As such, the claim would not encompass a machine that determines the winning combination after the first bingo ball is drawn.⁹⁴⁵

As noted above, a special definition set forth in the specification will govern the patent claims. Thus, in *Cook Biotech Inc. v. Acell, Inc.*,⁹⁴⁶ the Federal Circuit held that the term "urinary bladder submucosa" in a claim for a tissue composition used for tissue reconstruction was limited by a definition in the specification.⁹⁴⁷ The specification defined the term as "urinary bladder submucosa delaminated from abluminal muscle cell layers and at least the luminal portion of the tunica mucosa of the urinary bladder tissue," and the court therefore held that it could not include what the definition specifically excluded—the delaminated "abluminal muscle cell layers and at least the luminal portion of the tunica mucosa" of the urinary bladder tissue.⁹⁴⁸

*Cook Biotech*⁹⁴⁹ also involved the related principle that the specification may specifically incorporate by reference limiting language from a different patent.⁹⁵⁰ "To incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents."⁹⁵¹ With respect to the claim term "the luminal portion of the tunica mucosa," the specification specifically incorporated the method for preparing intestinal submucosa detailed in a prior art patent.⁹⁵² Therefore, the court held that the mucosa defined in the prior art patent was an equivalent structure to the tissue claimed by the patent at issue.⁹⁵³

It is notable that the members of a particular panel often strongly disagree as to the appropriate consideration to be afforded statements in a patent's specification. In *Amgen Inc. v. Hoechst Marion Roussel, Inc.*,⁹⁵⁴ the court addressed the meaning of the term "therapeutically effective amount" in a claim for an erythropoietin

944. *See id.* at 1343, 81 U.S.P.Q.2d (BNA) at 1148.

945. *See id.*, 81 U.S.P.Q.2d (BNA) at 1148.

946. 460 F.3d 1365, 79 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2006).

947. *See id.* at 1373-75, 79 U.S.P.Q.2d (BNA) at 1870-71.

948. *Id.* at 1374, 79 U.S.P.Q.2d (BNA) at 1871.

949. 460 F.3d 1365, 79 U.S.P.Q.2d (BNA) 1865.

950. *See id.* at 1376, 79 U.S.P.Q.2d (BNA) at 1872.

951. *Id.* at 1376, 79 U.S.P.Q.2d (BNA) at 1872 (quoting *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282, 54 U.S.P.Q.2d (BNA) 1673, 1679 (Fed. Cir. 2000)).

952. *See id.*, 79 U.S.P.Q.2d (BNA) at 1872.

953. *See id.* at 1377, 79 U.S.P.Q.2d (BNA) at 1873.

954. 457 F.3d 1293, 79 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

(“EPO”) synthetic hormone.⁹⁵⁵ The district court had held that the term requires one of four biological effects *and also* an increase in hematocrit levels.⁹⁵⁶ Determining that the claim language itself was unclear, the majority looked to the specification for guidance and noted that a passage in the specification indicated that the synthetic hormone when effective would produce “any or all” of certain biological effects: “e.g., stimulation of reticulocyte response, development of ferrokinetic effects (such as plasma from iron turnover effects and marrow transmit time effects), erythrocyte mass changes, stimulation of hemoglobin C synthesis . . . and, as indicated in Example 10, increasing hematocrit levels in mammals.”⁹⁵⁷ The majority determined that the phrase regarding hematocrit levels was merely one of the effects listed that would be therapeutically effective, but that increased hematocrit levels were not an absolute requirement for effectiveness.⁹⁵⁸

Chief Judge Michel dissented, contending that the term “therapeutically effective” requires more than merely the trigger of certain biological effects, but instead requires an effect that will actually “heal” or “cure” patients who need the synthetic hormone.⁹⁵⁹ Looking to other passages in the specification, Chief Judge Michel reasoned that the purpose of the synthetic hormone was to increase red blood cells and thus requires that the hematocrit level increase.⁹⁶⁰ Accordingly, this case illustrates a pronounced difficulty with relying on a patent’s specification—it is often unclear which *part* of the specification is the most probative of the meaning of an ambiguous claim term.

Similarly, in *Kim v. Conagra Foods, Inc.*,⁹⁶¹ the court addressed the meaning of the term “potassium bromate replacer” in a claim for an oxidizing agent used to strengthen bread dough.⁹⁶² The district court had held that the term required that the replacer must be effective and “perform essentially the same function in the production of that bread as would potassium bromate.”⁹⁶³ The Federal Circuit panel majority affirmed, emphasizing that a passage in the specification explained that the claimed potassium bromate replacer is an “oxidizing agent” that is “*effective and functional* throughout the entire

955. *See id.* at 1296-97, 79 U.S.P.Q.2d (BNA) at 1707.

956. *See id.* at 1301, 79 U.S.P.Q.2d (BNA) at 1710.

957. *Id.* at 1302, 79 U.S.P.Q.2d (BNA) at 1711.

958. *See id.*, 79 U.S.P.Q.2d (BNA) at 1711.

959. *See id.* at 1318, 1319, 79 U.S.P.Q.2d (BNA) at 1724 (Michel, C.J. dissenting).

960. *See id.* at 1318-19, 79 U.S.P.Q.2d (BNA) at 1724.

961. 465 F.3d 1312, 80 U.S.P.Q.2d (BNA) 1495 (Fed. Cir. 2006).

962. *See id.* at 1316, 80 U.S.P.Q.2d (BNA) at 1496.

963. *Id.* at 1317, 80 U.S.P.Q.2d (BNA) at 1498 (emphasis omitted).

manufacturing process.”⁹⁶⁴ Thus, the majority held that the claim does not encompass an ineffective or inert compound.⁹⁶⁵

Judge Schall dissented, urging that the majority had read the specification too narrowly.⁹⁶⁶ Judge Schall looked to other portions of the specification that indicate that the “potassium bromate replacer” is “a slow acting oxidant that is functional throughout the entire manufacturing process.”⁹⁶⁷ Because the majority had relied on other language in the specification that did not mention the “slow acting” quality of the compound, Judge Schall contended that it had overlooked a critical part of the appropriate claim construction.⁹⁶⁸ Accordingly, Judge Schall would have vacated the district court’s claim construction and remanded for further analysis.⁹⁶⁹ Again, this case demonstrates the difficulty of selecting the appropriate portion of the specification upon which to rely for assistance in claim construction.

Likewise, in *Ventana Medical Systems, Inc. v. Biogenex Laboratories, Inc.*,⁹⁷⁰ the court did not agree on what portion of the specification was most probative in construing the term “dispensing” in a claim for a biological assay method.⁹⁷¹ The district court had ruled that the term was limited only to “direct dispensing.”⁹⁷² Reviewing the specification, the majority concluded that the district court’s construction was erroneous because the specification included descriptions of multiple dispensing methods, some direct and some indirect.⁹⁷³ The majority also noted that while the preferred embodiments did contain a “direct dispensing feature,” other portions of the specification indicated that the claims were not limited only to direct dispensing.⁹⁷⁴

Judge Lourie dissented, urging that when properly read, the specification made clear that the term is limited to “direct dispensing.”⁹⁷⁵ He emphasized that language other than the language relied upon by the majority describes a process that could only be completed through direct dispensing.⁹⁷⁶

964. *See id.* at 1318, 80 U.S.P.Q.2d (BNA) at 1498 (emphasis added).

965. *See id.* at 1318-19, 80 U.S.P.Q.2d (BNA) at 1498-99.

966. *See id.* at 1326-28, 80 U.S.P.Q.2d (BNA) at 1504-06.

967. *See id.* at 1326-27, 80 U.S.P.Q.2d (BNA) at 1505.

968. *See id.* at 1327-28, 80 U.S.P.Q.2d (BNA) at 1505-06.

969. *See id.* at 1329, 80 U.S.P.Q.2d (BNA) at 1506.

970. 473 F.3d 1173, 81 U.S.P.Q.2d (BNA) 1314 (Fed. Cir. 2006).

971. *See id.* at 1176, 1177, 81 U.S.P.Q.2d (BNA) at 1315, 1316.

972. *See id.* at 1178, 81 U.S.P.Q.2d (BNA) at 1317.

973. *See id.* at 1180, 1183, 81 U.S.P.Q.2d (BNA) at 1318, 1320.

974. *See id.* at 1182, 81 U.S.P.Q.2d (BNA) at 1320.

975. *See id.* at 1185, 81 U.S.P.Q.2d (BNA) at 1322.

976. *See id.* at 1185-86, 81 U.S.P.Q.2d (BNA) at 1322-23 (Lourie, J., dissenting).

These cases suggest that the meaning one derives from the specification may be different depending upon how one approaches evaluating the specification. In *Cook Biotech*,⁹⁷⁷ *Kim*,⁹⁷⁸ and *Ventana*,⁹⁷⁹ the majorities looked to specific language of the specifications that in their view provided an express “definition” of the ambiguous claim language. In each of the dissents in those cases, however, the dissenting judge looked more broadly at the specification to determine whether the majority’s construction would allow the invention to realize the advantages and benefits described in the specification. It is noteworthy that the “specific definition” approach carried the day in all three cases.

The binding effect of specific definitions in the specification. While it is a basic principle of claim construction that a specific definition contained in the specification will control the claim language, it is not always easy to determine whether language in the specification constitutes such a definition. In *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*,⁹⁸⁰ the district court had construed the term “adjustable” as having its ordinary meaning of “capable of making a change to something or capable of being changed.”⁹⁸¹ The Federal Circuit vacated and remanded, emphasizing that the specification made clear that the “adjustment” called for by the invention occurs only “during operation and without removal of the head unit.”⁹⁸² The court noted that the district court’s construction effectively rendered the “adjustable” claim term “meaningless” because every mechanical device would be “adjustable” under the district court’s definition; the court therefore held that the more limited definition set forth in the specification had to control.⁹⁸³

In *On Demand Machine Corp. v. Ingram Industries, Inc.*,⁹⁸⁴ the district court had construed the term “sales information” in a claim for a method of manufacturing a book copy to generally mean “data stored in a computer which is involved in the promoting and selling of a book,” including purely descriptive information like a book’s title or ISBN number.⁹⁸⁵ The Federal Circuit reversed this claim

977. *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 79 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2006).

978. *Kim v. ConAgra Foods Inc.*, 465 F.3d 1312, 80 U.S.P.Q.2d (BNA) 1495 (Fed. Cir. 2006).

979. 473 F.3d 1173, 81 U.S.P.Q.2d (BNA) 1314.

980. 438 F.3d 1374, 77 U.S.P.Q.2d (BNA) 1988 (Fed. Cir. 2006).

981. *See id.* at 1378, 77 U.S.P.Q.2d (BNA) at 1992.

982. *See id.* at 1379, 77 U.S.P.Q.2d (BNA) at 1992.

983. *See id.* at 1379-80, 77 U.S.P.Q.2d (BNA) at 1993.

984. 442 F.3d 1331, 78 U.S.P.Q.2d (BNA) 1428 (Fed. Cir. 2006).

985. *See id.* at 1338, 78 U.S.P.Q.2d (BNA) at 1432.

construction, emphasizing that the specification identified promotional information as “descriptive material such as a synopsis, plot outline, author’s biographical summary, etc.,” which “sales information” necessarily required be “stored in the computer that is made available to the customer.”⁹⁸⁶ The court held that identifying data such as a book’s title and ISBN number were not promotional information.⁹⁸⁷

In *Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc.*,⁹⁸⁸ the district court had construed the term “edetate” in a claim for an anesthetic compound as “EDTA as well as compounds structurally related to EDTA regardless of how they are synthesized.”⁹⁸⁹ The Federal Circuit reversed, emphasizing that the specification described an “edetate” as EDTA and “derivatives” of EDTA, rather than structural analogs.⁹⁹⁰ The court also noted several statements in the specification that indicated that the advantages of the invention are unique to EDTA and its derivatives or salts, rather than structural analogs.⁹⁹¹ The court thus held that the term “edetate” could not encompass structural analogs to EDTA.⁹⁹²

In *SRAM Corp. v. AD-II Engineering, Inc.*,⁹⁹³ the district court had construed the term “shift actuator” as requiring “precision indexed downshifting.”⁹⁹⁴ The Federal Circuit reversed, concluding that the district court had improperly applied a limitation from the specification that was relevant to patent claims other than the one at issue.⁹⁹⁵ This case demonstrates the importance of linking statements in the specification to the specific claim (indeed, the specific claim limitation) one is attempting to construe.

Non-limitation to preferred embodiments. A fundamental principle of claim construction maintains that it is improper to limit “the claimed invention to preferred embodiments or specific examples in the specification.”⁹⁹⁶ In practice, however, it is often difficult to

986. *See id.* at 1338, 1339, 78 U.S.P.Q.2d (BNA) at 1433.

987. *See id.* at 1339, 78 U.S.P.Q.2d (BNA) at 1433.

988. 467 F.3d 1370, 80 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

989. *See id.* at 1375, 80 U.S.P.Q.2d (BNA) at 1708 (quoting *Astrazeneca Pharms., LP v. Mayne Pharma (USA), Inc.*, 352 F. Supp. 2d 403, 417 (S.D.N.Y. 2004)).

990. *See id.* at 1378, 80 U.S.P.Q.2d (BNA) at 1710.

991. *See id.* at 1377-78, 80 U.S.P.Q.2d (BNA) at 1709-10.

992. *See id.* at 1378, 80 U.S.P.Q.2d (BNA) at 1710.

993. 465 F.3d 1351, 80 U.S.P.Q.2d (BNA) 1363 (Fed. Cir. 2006).

994. *See id.* at 1357, 80 U.S.P.Q.2d (BNA) at 1367.

995. *See id.* at 1358-59, 80 U.S.P.Q.2d (BNA) at 1368-69.

996. *Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1375, 77 U.S.P.Q.2d (BNA) 1948, 1954 (Fed. Cir. 2006) (quoting *Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 805 F.2d 1558, 1563 (Fed. Cir. 1980)).

determine whether particular language in a specification describes a claim term in general or merely a preferred embodiment.

In *nCube*,⁹⁹⁷ the Federal Circuit affirmed the district court's construction of the "upstream manager" claim term as not limited by an embodiment that routed messages only using logical, rather than physical addresses.⁹⁹⁸ In *Pfizer, Inc. v. Ranbaxy Laboratories Ltd.*,⁹⁹⁹ the Federal Circuit affirmed the district court's construction of the term "structural formula I" as not limited by specific examples of compounds of that formula, particularly because the specification stated that "[t]hese examples are illustrative and are not to be read as limiting the scope of the invention as it is defined by the appended claims."¹⁰⁰⁰ And in *Massachusetts Institute of Technology v. Abacus Software*,¹⁰⁰¹ the Federal Circuit considered the term "scanner" as not being limited by the preferred embodiment that includes a "close proximity" requirement.¹⁰⁰²

In contrast, in *Varco*,¹⁰⁰³ the Federal Circuit reversed the district court's construction of the term "relay" because the district court had improperly limited that term to its description in a preferred embodiment as requiring the use of pneumatically operated valves.¹⁰⁰⁴ In *Wilson Sporting Goods*,¹⁰⁰⁵ the court reversed the district court's construction of the term "insert" as "hollow" because the district court had improperly limited that term to the preferred embodiment and because the term "insert" could encompass both hollow and solid inserts and have a consistent meaning in all the claims of the patent.¹⁰⁰⁶ And in *LG Electronics*,¹⁰⁰⁷ the Federal Circuit reversed the district court's construction of the term "requesting agent" as limited to the definition in an industry standard incorporated into the specification because the district court had failed to appreciate that the industry standard was incorporated only "as a preferred embodiment" and not to limit the claims.¹⁰⁰⁸

997. *nCube Corp. v. SeaChange Int'l, Inc.*, 436 F.3d 1317, 77 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

998. *See id.* at 1321-22, 77 U.S.P.Q.2d (BNA) at 1484-85.

999. 457 F.3d 1284, 79 U.S.P.Q.2d (BNA) 1583 (Fed. Cir. 2006).

1000. *See id.* at 1290, 79 U.S.P.Q.2d (BNA) at 1588.

1001. 462 F.3d 1344, 80 U.S.P.Q.2d (BNA) 1225 (Fed. Cir. 2006).

1002. *See id.* at 1352-53, 80 U.S.P.Q.2d (BNA) at 1230-31.

1003. *Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 77 U.S.P.Q.2d (BNA) 1948 (Fed. Cir. 2006).

1004. *See id.* at 1375-76, 77 U.S.P.Q.2d (BNA) at 1954.

1005. *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 78 U.S.P.Q.2d (BNA) 1382 (Fed. Cir. 2006).

1006. *See id.* at 1329, 78 U.S.P.Q.2d (BNA) at 1388.

1007. *LG Elecs., Inc. v. Bizcom Elecs, Inc.*, 453 F.3d 1364, 79 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 2006).

1008. *See id.* at 1374-75, 79 U.S.P.Q.2d (BNA) at 1451-52.

A related principle is that claim language should virtually never be read to exclude the preferred embodiment.¹⁰⁰⁹ Thus, in *Primos, Inc. v. Hunter's Specialties, Inc.*,¹⁰¹⁰ the Federal Circuit affirmed the district court's construction of the term "engaging" to mean "to come into contact with."¹⁰¹¹ The court rejected the construction urged by one of the parties that the term had to mean "interlocking" because such a construction was not supported by the specification and in fact would have excluded a preferred embodiment.¹⁰¹² Conversely, in *Lava Trading, Inc. v. Sonic Trading Management, LLC*,¹⁰¹³ the Federal Circuit disagreed with the district court's construction of the term "distributing and displaying" in a claim for software for securities trading as meaning "distribution of the whole combined order book to the trader."¹⁰¹⁴ The court emphasized that "the specification discloses embodiments that distribute and display information for only a subset of the combined order book" and concluded that the claims should be read to cover those embodiments.¹⁰¹⁵

Specific disavowals or disclaimers of claim coverage. A final principle that frequently arises when using the specification to aid in claim construction is that specific statements disclaiming coverage will be binding. Thus, in *Honeywell International, Inc. v. ITT Industries, Inc.*,¹⁰¹⁶ the Federal Circuit affirmed the district court's conclusion that the claim term "'fuel injection system component' is limited to a fuel filter."¹⁰¹⁷ The court emphasized that the specification several times described "the present invention" as comprising "a fuel filter."¹⁰¹⁸ In light of these repeated statements, the court concluded that "[t]he public is entitled to take the patentee at his word and the word was that the invention is a fuel filter," notwithstanding that the court's construction limited the claim term to the preferred embodiment.¹⁰¹⁹

1009. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583, 39 USPQ2d (BNA) 1573, 1578 (Fed. Cir. 1996) ("Such an interpretation is rarely, if ever, correct and would require highly persuasive evidentiary support."). *But see* *Elekta Instrument S.A. v. O.U.R. Sci. Int'l Inc.*, 214 F.3d 1302, 54 U.S.P.Q.2d (BNA) 1910 (Fed. Cir. 2000) (holding that overwhelming evidence demonstrated that claim term could not encompass preferred embodiment).

1010. 451 F.3d 841, 79 U.S.P.Q.2d (BNA) 1129 (Fed. Cir. 2006).

1011. *See id.* at 847, 79 U.S.P.Q.2d (BNA) 1134.

1012. *See id.* at 848, 79 U.S.P.Q.2d (BNA) at 1135.

1013. 445 F.3d 1348, 78 U.S.P.Q.2d (BNA) 1624 (Fed. Cir. 2006).

1014. *See id.* at 1353-54, 78 U.S.P.Q.2d (BNA) at 1627-28.

1015. *See id.* at 1354, 1355, 78 U.S.P.Q.2d (BNA) at 1628-29.

1016. 452 F.3d 1312, 79 U.S.P.Q.2d (BNA) 1294 (Fed. Cir. 2006).

1017. *See id.* at 1318, 79 U.S.P.Q.2d (BNA) at 1299.

1018. *See id.*, 79 U.S.P.Q.2d (BNA) at 1299.

1019. *See id.* at 1318-19, 79 U.S.P.Q.2d (BNA) at 1299-1300.

In *LG Electronics*,¹⁰²⁰ the Federal Circuit reversed the district court's construction of the term "cache memory" as requiring "at least two caches."¹⁰²¹ The court noted that "the specification may reveal an intentional disclaimer, or disavowal, of claim scope by an inventor. In that instance, . . . the inventor has dictated the correct claim scope, and the inventor's intention, as expressed in the specification, is regarded as dispositive."¹⁰²² Nevertheless, the court held that there had been no specific disavowal of a cache memory with a single cache, noting that the portion of the specification that the district court had relied upon related to multi-cache systems that were severed from the patent at issue during its prosecution history.¹⁰²³ This case again demonstrates that it is critical to match statements relied upon in the specification with the specific claim at issue.

3. *Prosecution history*

"In addition to consulting the specification, we [the Federal Circuit] have held that a court 'should also consider the patent's prosecution history, if it is in evidence.'"¹⁰²⁴ "[A]n invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office."¹⁰²⁵ "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be."¹⁰²⁶ In 2006, the Federal Circuit decided several cases in which the prosecution history played a significant role in claim construction.

Use of prosecution history in construing ambiguous terms. Prosecution history can often be helpful in construing unclear claim terms. For instance, in *Amgen*,¹⁰²⁷ the court turned to the prosecution history to confirm its construction that the term "therapeutically effective" did

1020. *LG Elecs., Inc. v. Bizcom Elecs, Inc.*, 453 F.3d 1364, 79 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 2006).

1021. *See id.* at 1377, 79 U.S.P.Q.2d (BNA) at 1453.

1022. *Id.* at 1378, 79 U.S.P.Q.2d (BNA) at 1454 (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2005)).

1023. *See id.*, 79 U.S.P.Q.2d (BNA) at 1454.

1024. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317, 75 U.S.P.Q.2d (BNA) 1321, 1329 (Fed. Cir. 2005) (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995)).

1025. *Id.* at 1317, 75 U.S.P.Q.2d (BNA) at 1329 (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 33 (1966)).

1026. *Id.*, 75 U.S.P.Q.2d (BNA) at 1329.

1027. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 79 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

not require an increase in hematocrit.¹⁰²⁸ The court noted that during prosecution of the patent, the patentee stated that the claimed invention had several uses relating to low red-blood-cell counts, but there was no indication that the scope of the invention should be limited only to such uses.¹⁰²⁹ Likewise, in *Aero Products International, Inc. v. Intex Recreation Corp.*,¹⁰³⁰ the Federal Circuit examined the prosecution history to aid in its construction of the claim term “substantially hermetic seal.”¹⁰³¹ The court affirmed the district court’s construction that the term did not require a “complete hermetic seal,” based in part upon the prosecution history which showed that language in the claim suggesting that the invention provides “a complete hermetic seal” when a valve is in closed position was added without regard to the “quality of the seal.”¹⁰³² Therefore, the court concluded that the “complete hermetic seal” language did not limit the “substantially hermetic seal” claim term.¹⁰³³

In *Old Town Canoe*,¹⁰³⁴ the court relied on the prosecution history to support its conclusion that the term “completion of coalescence means progress of coalescence to the optimum state.”¹⁰³⁵ The court noted that the claim had been amended to make clear that coalescence is completed such that it produces a “coherent fused layer” of material.¹⁰³⁶ Indeed, the claim had originally been rejected because it had not made clear whether the “cooling” part of the claim method was concurrent with the “completion” of coalescence—“whether coalescence would reach a point of completion.”¹⁰³⁷ Accordingly, the court found that this prosecution history compelled such a construction.

Role of the prosecution history of other patent applications. In certain circumstances, like in *Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*,¹⁰³⁸ the prosecution history of related patent applications may be useful in construing patent claims. In that case, the court examined the prosecution history of the first application in a series of

1028. See *id.* at 1303, 79 U.S.P.Q.2d (BNA) at 1712.

1029. See *id.*, 79 U.S.P.Q.2d (BNA) at 1712.

1030. 466 F.3d 1000, 80 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

1031. See *id.* at 1012-15, 80 U.S.P.Q.2d (BNA) 1488-90.

1032. See *id.*, 80 U.S.P.Q.2d (BNA) at 1488-90.

1033. See *id.*, 80 U.S.P.Q.2d (BNA) at 1488-90.

1034. *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 78 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

1035. See *id.* at 1317, 78 U.S.P.Q.2d (BNA) at 1711.

1036. See *id.* at 1317-18, 78 U.S.P.Q.2d (BNA) at 1711.

1037. See *id.* at 1317, 78 U.S.P.Q.2d (BNA) at 1711.

1038. 450 F.3d 1350, 78 U.S.P.Q.2d (BNA) 1786 (Fed. Cir. 2006).

applications, one of which led to the patent at issue.¹⁰³⁹ In a claim for PDA devices, the court affirmed the district court's construction of the term "host interface" to mean "a direct parallel bus interface."¹⁰⁴⁰ The prosecution history of the first application made clear that one of the key innovations of the invention was to create a "direct" bus connection.¹⁰⁴¹ Therefore, the court concluded:

Although arguments in the prosecution of related applications should not receive undue weight, for claims and issues and inventions vary from case to case, here the applicant was describing the broad technologic basis of these related applications; the usage in each application is consistent with the district court's view of "host interface" as requiring "a direct parallel bus interface." That interface excludes the serial connection of the prior art, and requires direct parallel connection. The district court's interpretation of this term is correct, and is affirmed.¹⁰⁴²

In contrast, the court in *Pfizer*¹⁰⁴³ affirmed the district court's conclusion that the prosecution histories of several foreign counterpart patents and a later, unrelated U.S. patent, were irrelevant to claim construction in that case.¹⁰⁴⁴ The court noted that the statements at issue were irrelevant because they "were made in response to patentability requirements unique to Danish and European law."¹⁰⁴⁵ Further, statements made in the prosecution of an unrelated U.S. patent were "irrelevant to claim construction 'absent a formal relationship or incorporation during prosecution' of the patent at issue."¹⁰⁴⁶ Thus, just as it is important to match language in the specification with the relevant patent claim or claim term, it is also critical to match statements in prosecution histories with the correct patent or patents to which they are relevant.

Amendments overcoming a rejection or distinguishing prior art. Where a patentee has amended a claim to overcome a rejection or distinguish the prior art, any limitation imposed by that amendment is binding and will control construction of the claim. Thus, in *Schoenhaus*,¹⁰⁴⁷ the court relied on the prosecution history to confirm its conclusion that

1039. *See id.* at 1356, 78 U.S.P.Q.2d (BNA) 1789-90.

1040. *See id.* at 1353, 78 U.S.P.Q.2d (BNA) at 1788.

1041. *See id.* at 1356-57, 78 U.S.P.Q.2d (BNA) at 1789-90.

1042. *Id.* at 1357, 78 U.S.P.Q.2d (BNA) at 1790.

1043. *Pfizer, Inc. v. Ranbaxy Labs Ltd.*, 457 F.3d 1284, 79 U.S.P.Q.2d (BNA) 1583 (Fed. Cir. 2006).

1044. *See id.* at 1290, 79 U.S.P.Q.2d (BNA) at 1588.

1045. *See id.*, 79 U.S.P.Q.2d at 1588.

1046. *See id.*, 79 U.S.P.Q.2d (BNA) at 1588 (quoting *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1167-68 (Fed. Cir. 2004)).

1047. *Schoenhaus v. Genesco, Inc.*, 440 F.3d 1354, 78 U.S.P.Q.2d (BNA) 1252 (Fed. Cir. 2006).

the term “rigid” in a claim for a portion of an orthotic shoe insert could not be construed to include a “semi-rigid” insert.¹⁰⁴⁸ The court noted that the claim had been rejected as obvious in light of the prior art; to overcome this rejection, the applicants were required to use the term “rigid” as part of the claim language.¹⁰⁴⁹ Even though the patent examiner did not specifically explain why he insisted on the inclusion of the term “rigid,” the court reasoned that there was a presumption that “the PTO had a substantial reason related to patentability for including the limiting element added by amendment,” and that this presumption had not been overcome by the patentee.¹⁰⁵⁰ The court concluded that the term “rigid” was necessary to secure patentability and could not encompass an insert that was only “semi-rigid.”¹⁰⁵¹

In *DSU Medical Corp. v. JMS Co., Ltd.*,¹⁰⁵² the court examined whether an amendment to avoid a prior patent limited the scope of the term “slot” in a claim for a medical needle guard.¹⁰⁵³ The court emphasized that the amendments did not “limit the size of the slot” but “concerned only the orientation of the needle wings that moved back and forth through the slot.”¹⁰⁵⁴ Therefore, the court concluded that “[t]o distinguish the Hughes patent, the patentee did not have to, and did not actually, limit the width of the slot. Thus, the trial court correctly construed ‘slot’ as not requiring a defined width”¹⁰⁵⁵

As with the other intrinsic evidence of claim meaning, these cases demonstrate that there must be a specific match between a claim amendment and the supposedly limiting language that the amendment required. If in fact the amendment did limit the relevant language, that limitation should be given effect in claim construction. However, if the amendment did not limit the specific language at issue, the claim term should not be limited by the amendment.

Express disavowals or disclaimers in the prosecution history. Just as an express disclaimer in the language of the specification will limit the claim term, such an express disclaimer in the prosecution history will generally have a similar effect. In *Purdue Pharma, L.P. v. Endo*

1048. See *id.* at 1358, 78 U.S.P.Q.2d (BNA) at 1255.

1049. See *id.*, 78 U.S.P.Q.2d (BNA) at 1255.

1050. See *id.* at 1359, 78 U.S.P.Q.2d (BNA) at 1255-56 (quoting *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 32-33 (1997)).

1051. See *id.*, 78 U.S.P.Q.2d (BNA) at 1256.

1052. 471 F.3d 1293, 81 U.S.P.Q.2d (BNA) 1238 (Fed. Cir. 2006).

1053. See *id.* at 1301, 81 U.S.P.Q.2d (BNA) at 1243.

1054. See *id.*, 81 U.S.P.Q.2d (BNA) at 1243.

1055. *Id.*, 81 U.S.P.Q.2d (BNA) at 1243.

Pharmaceuticals Inc.,¹⁰⁵⁶ the court examined whether statements in the prosecution history had expressly limited the scope of the term “controlled release oxycodone formulation” such that it was limited to “a four-fold dosage range that controls pain for 90% of patients.”¹⁰⁵⁷ The district court had required such a limitation based on statements in the prosecution history that the “four-fold dosage range” was an improvement over the prior art.¹⁰⁵⁸ The Federal Circuit held that the term should not be so limited because the statements in the prosecution history did not present the four-fold dosage range as “a necessary feature of the claimed oxycodone formulations.”¹⁰⁵⁹ Therefore, the court concluded that the district court had “impermissibly imported a limitation into the claims” from the prosecution history.¹⁰⁶⁰

Whether the prosecution history expressly disclaims certain subject matter was an issue that divided the court in *Ventana*.¹⁰⁶¹ In that case, the majority held that the district court had erroneously ruled that various statements in the prosecution history related to the claim term “dispensing” had disclaimed coverage of all types of dispensing except “direct dispensing.”¹⁰⁶² The court reasoned that the allegedly disclaiming language was not directly relevant because it related to claims of an ancestor application that used different claim language than the claims at issue; indeed, “the allegedly disclaiming statements were made with respect to claim language that expressly required reagent in the reagent container to be ‘dispensable directly to a sample.’”¹⁰⁶³ The court also held that statements made in the prosecution of two subsequent patent applications were made with respect to claim language critically different from that in the claims at issue.¹⁰⁶⁴

Judge Lourie took a different view in his dissent, as he urged that the relevant language in the prosecution history of the ancestor application did disclaim all dispensing that is not “direct.”¹⁰⁶⁵ Judge Lourie did not, however, explain why that prosecution history should

1056. 438 F.3d 1123, 77 U.S.P.Q.2d (BNA) 1767 (Fed. Cir. 2006).

1057. *See id.* at 1135, 1136-37, 77 U.S.P.Q.2d (BNA) at 1776, 1777.

1058. *See id.* at 1135, 77 U.S.P.Q.2d (BNA) at 1776.

1059. *See id.* at 1136, 77 U.S.P.Q.2d (BNA) at 1777.

1060. *See id.* at 1136-37, 77 U.S.P.Q.2d (BNA) at 1777.

1061. *Ventana Med. Sys., Inc. v. Biogenex Labs., Inc.*, 473 F.3d 1173, 81 U.S.P.Q.2d (BNA) 1314 (Fed. Cir. 2006).

1062. *See id.* at 1182-83, 81 U.S.P.Q.2d (BNA) at 1320.

1063. *See id.* at 1182, 81 U.S.P.Q.2d (BNA) at 1320.

1064. *See id.* at 1183, 81 U.S.P.Q.2d (BNA) at 1321.

1065. *See id.* at 1186, 81 U.S.P.Q.2d (BNA) at 1323 (Lourie, J., dissenting).

govern when applied to claims with different language from that in the claims at issue.¹⁰⁶⁶

4. *Extrinsic evidence*

All materials other than the claim terms, specification, written description, and prosecution history are “extrinsic evidence” for the purposes of claim construction, and generally carry less weight than evidence in the intrinsic record.

Dictionaries. As noted above,¹⁰⁶⁷ in *Phillips*¹⁰⁶⁸ the Federal Circuit addressed the role of general purpose and field specific dictionaries as part of claim construction.¹⁰⁶⁹ In 2006, several decisions attempted to apply the guidance set forth in that case.

In *Atofina v. Great Lakes Chemical Corp.*,¹⁰⁷⁰ the court ruled that the district court had properly consulted “scientific and technical dictionaries” to construe the term “catalyst” as “a substance that alters the velocity of a chemical reaction without being consumed.”¹⁰⁷¹ In doing so, the Federal Circuit emphasized that there was “no suggestion that the intrinsic evidence defines the term ‘catalyst.’”¹⁰⁷² In *On Demand*,¹⁰⁷³ the court indicated that it is appropriate to use general-purpose dictionaries for definitions of terms such as “information” and “sales” so long as the definitions are consistent with the intrinsic record.¹⁰⁷⁴ Ultimately, however, the court held that the intrinsic record precluded the district court’s construction that it had based on general dictionaries.¹⁰⁷⁵ Thus, these cases suggest that use of general dictionaries may be appropriate and useful but only if there is no conflict with evidence from the intrinsic record.

In *Old Town Canoe*,¹⁰⁷⁶ the court relied heavily on the specification and prosecution history to reject one party’s argument that the term “completion of coalescence” could refer to bringing the chemical process at issue “to a halt.”¹⁰⁷⁷ The party had relied on a dictionary definition that included the term “brought to an end” as a definition

1066. *See id.* at 1186-87, 81 U.S.P.Q.2d (BNA) at 1323 (Lourie, J., dissenting).

1067. *See supra* Part IV.A.

1068. *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2005).

1069. *See supra* Part IV.A.

1070. 441 F. 3d 991, 78 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2006).

1071. *See id.* at 996, 78 U.S.P.Q.2d (BNA) at 1421.

1072. *See id.*, 78 U.S.P.Q.2d (BNA) at 1421.

1073. *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 78 U.S.P.Q.2d (BNA) 1428 (Fed. Cir. 2006).

1074. *See id.* at 1338, 78 U.S.P.Q.2d (BNA) at 1432-33.

1075. *See id.* at 1344, 78 U.S.P.Q.2d (BNA) at 1437.

1076. *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 78 U.S.P.Q.2d (BNA) 1705 (Fed. Cir. 2006).

1077. *See id.* at 1315, 78 U.S.P.Q.2d (BNA) at 1709.

for “complete”; the court reasoned, however, that the dictionary definition could not trump the strong contrary evidence in the written description and prosecution history.¹⁰⁷⁸

In *Cook Biotech*,¹⁰⁷⁹ the Federal Circuit evaluated the district court’s use of a medical dictionary to help define the term “tunica mucosa.”¹⁰⁸⁰ The court determined that the district court had misunderstood the medical dictionary’s definition, which listed several layers that comprised the tunica mucosa, in a manner that would not permit the definition to encompass all of the constituent layers.¹⁰⁸¹ Accordingly, the Federal Circuit rejected the district court’s construction in favor of that put forth by the appellant.¹⁰⁸²

In *Abacus Software*,¹⁰⁸³ the court approved of the district court’s use of dictionary definitions for the terms “scan” and “scanner” as of the time the relevant patent application was filed in 1982.¹⁰⁸⁴ The court reasoned that contemporary dictionary definitions were useful to determine how “a person of ordinary skill in 1982” would understand what the patent claims as a scanner.¹⁰⁸⁵ Notably, the intrinsic evidence confirmed the dictionary definitions, further indicating that this was the appropriate construction of the terms at issue.¹⁰⁸⁶

Other extrinsic evidence. There was very little consideration in 2006 of other sources of extrinsic evidence. In *Inpro*,¹⁰⁸⁷ the court affirmed the district court’s decision to exclude expert testimony relevant to claim construction.¹⁰⁸⁸ The court noted that a trial court has broad discretion in determining whether to admit expert testimony regarding claim construction, and it found there was no abuse of discretion in the district court’s decision.¹⁰⁸⁹

1078. *See id.* at 1315, 1317-18, 79 U.S.P.Q.2d (BNA) at 1709, 1711-12.

1079. *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 79 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2006).

1080. *See id.* at 1377-78, 79 U.S.P.Q.2d (BNA) at 1873-74.

1081. *See id.*, 79 U.S.P.Q.2d (BNA) at 1873-74.

1082. *See id.* at 1378, 79 U.S.P.Q.2d (BNA) at 1874.

1083. *Mass. Inst. of Tech. & Elecs. For Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 80 U.S.P.Q.2d (BNA) 1225 (Fed. Cir. 2006).

1084. *See id.* at 1351-52, 80 U.S.P.Q.2d (BNA) at 1229.

1085. *See id.*, 80 U.S.P.Q.2d (BNA) at 1229.

1086. *See id.*, 80 U.S.P.Q.2d (BNA) at 1229-30.

1087. *Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 78 U.S.P.Q.2d (BNA) 1786 (Fed. Cir. 2006).

1088. *See id.* at 1357, 78 U.S.P.Q.2d (BNA) at 1791.

1089. *See id.*, 78 U.S.P.Q.2d (BNA) at 1791.

5. *Canons of construction*

There are several canons or rules of construction that courts sometimes employ as an aid to claim construction. In 2006, the Federal Circuit addressed only a few of these.

Claim Differentiation.

In the most specific sense, “claim differentiation” refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim. . . . Beyond the independent/dependent claim scenario, this court has characterized claim differentiation more generally, *i.e.*, as the “presumption that each claim in a patent has a different scope.” Different claims with different words can, of course, define different subject matter within the ambit of the invention. On the other hand, claim drafters can also use different terms to define the exact same subject matter. Indeed this court has acknowledged that two claims with different terminology can define the exact same subject matter.¹⁰⁹⁰

Like any other general rule or principle, this canon of construction should be applied only where it makes sense in the context of a particular case. In *Curtiss-Wright*,¹⁰⁹¹ the court rejected claim differentiation as controlling with respect to the appropriate construction of the term “adjustable” in a claim for a device used in oil refining.¹⁰⁹² The district court had held that the term “adjustable” had to mean “capable of making a change to something or capable of being changed” because a narrower construction of “adjustable” would be inconsistent with other claims in the patent.¹⁰⁹³ The Federal Circuit relied on the specification to conclude that “adjustable” should in fact have a narrower meaning than that construed by the district court.¹⁰⁹⁴ The court also found that the district court had misapplied the doctrine of claim differentiation because the narrower construction would not have rendered superfluous any of the other claims of the patent.¹⁰⁹⁵ Furthermore, the court emphasized that claim differentiation does not control when it would contradict the construction of a term compelled by the specification.¹⁰⁹⁶

1090. *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380, 77 U.S.P.Q.2d (BNA) 1988, 1993-94 (Fed. Cir. 2006) (quoting *Versa Corp. v. Ag-Bag Int'l Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004)).

1091. *Id.* at 1380, 77 U.S.P.Q.2d (BNA) at 1988.

1092. *See id.* at 1379-81, 77 U.S.P.Q.2d (BNA) at 1992-94.

1093. *See id.* at 1378, 77 U.S.P.Q.2d (BNA) at 1992.

1094. *See id.* at 1379-81, 77 U.S.P.Q.2d (BNA) at 1992-94.

1095. *See id.* at 1381, 77 U.S.P.Q.2d (BNA) at 1994.

1096. *See id.*, 77 U.S.P.Q.2d (BNA) at 1994.

Similarly, in *SRAM*,¹⁰⁹⁷ the court rejected the appellant's claim differentiation argument with respect to the term "precision index downshifting."¹⁰⁹⁸ The appellant had argued that the district court's construction would render superfluous a different claim in the patent.¹⁰⁹⁹ However, the Federal Circuit disagreed, explaining that the two claims had different scopes, with one reciting a "series of shifts" and the other reciting a single "down-shifting event."¹¹⁰⁰ The court thus concluded that the district court's construction would not render the other claim superfluous.¹¹⁰¹

In *Inpro*,¹¹⁰² the Federal Circuit likewise concluded that claim differentiation did not prescribe a definition of the term "host interface" in a claim for a PDA module.¹¹⁰³ The court maintained that even though different claims of the patent had used the terms "host interface," "parallel bus interface," and "direct access" parallel bus, the use of those terms did not prevent the term "host interface" from requiring a "direct" interface; instead, the specification and prosecution history compelled a construction requiring a "direct" interface.¹¹⁰⁴

In *LG Electronics*,¹¹⁰⁵ the Federal Circuit agreed with the appellant that the district court's construction of a claim for a microprocessor component was incorrect because it violated the canon of claim differentiation.¹¹⁰⁶ The court explained that requiring the limitation of "at least two high speed memories" for claims 1 and 14 of the patent could not be reconciled with claim 5 which expressly required "at least two cache memory means."¹¹⁰⁷ Thus, the court held that claim differentiation precluded the district court's construction.¹¹⁰⁸

Role of the accused device in claim construction. One long-standing canon of claim construction is that "construction of the claim is independent of the device charged with infringement."¹¹⁰⁹

1097. *SRAM Corp. v. AD-II Eng'g, Inc.*, 465 F.3d 1351, 80 U.S.P.Q.2d (BNA) 1363 (Fed. Cir. 2006).

1098. *See id.* at 1357-58, 80 U.S.P.Q.2d (BNA) at 1367-68.

1099. *See id.* at 1358, 80 U.S.P.Q.2d (BNA) at 1368.

1100. *See id.*, 80 U.S.P.Q.2d (BNA) at 1368.

1101. *See id.*, 80 U.S.P.Q.2d (BNA) at 1368.

1102. *Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 78 U.S.P.Q.2d (BNA) 1786 (Fed. Cir. 2006).

1103. *See id.* at 1353-54, 78 U.S.P.Q.2d (BNA) at 1788.

1104. *See id.* at 1353-57, 78 U.S.P.Q.2d (BNA) at 1788-90.

1105. *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 79 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 2006).

1106. *See id.* at 1377, 79 U.S.P.Q.2d (BNA) at 1453.

1107. *See id.*, 79 U.S.P.Q.2d (BNA) at 1453.

1108. *See id.*, 79 U.S.P.Q.2d (BNA) at 1453.

1109. *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1327, 78 U.S.P.Q.2d (BNA) 1382, 1386 (Fed. Cir. 2006) (quoting *Pall Corp. v. HemaSure Inc.*, 181 F.3d 1305, 1308 (Fed. Cir. 1999)).

Nevertheless, in several recent decisions, most of them authored by Judge Rader, the Federal Circuit has stated that knowledge of the accused device may be helpful as part of the claim construction analysis.¹¹¹⁰ “While a trial court should certainly not prejudge the ultimate infringement analysis by construing claims with an aim to include or exclude an accused product or process, knowledge of that product or process provides meaningful context for the first step of the infringement analysis, claim construction.”¹¹¹¹

Thus, in *Wilson Sporting Goods*,¹¹¹² the court criticized the state of the record, in which, based upon a disputed claim construction, there was entered a stipulated final judgment of non-infringement:

In this case, despite entry of a final judgment, neither the trial court nor the parties supplied this court with any information about the accused products. Thus, this record affords this court no opportunity to compare the accused products to the asserted claims. Accordingly, this court cannot assess the accuracy of any infringement or validity determination. Furthermore, this sparse record lacks the complete context for accurate claim construction.¹¹¹³

In *Lava Trading*,¹¹¹⁴ the court echoed such sentiments:

Without knowledge of the accused products, this court cannot assess the accuracy of the infringement judgment under review and lacks a proper context for an accurate claim construction. . . . Without the vital contextual knowledge of the accused products or processes, this appeal takes on the attributes of something akin to an advisory opinion on the scope of the ‘982 patent.¹¹¹⁵

It is therefore unsurprising that in *Aero Products*,¹¹¹⁶ the court rejected the defendants’ argument that the district court had “erred by construing the term ‘inflation input’ in light of the accused device.”¹¹¹⁷ The court insisted that the district court’s awareness was permissible and explained that “[o]f course the particular accused product (or process) is kept in mind, for it is efficient to focus on the

1110. See *supra* notes 355-63 and accompanying text.

1111. 442 F.3d at 1326-27, 78 U.S.P.Q.2d (BNA) at 1386.

1112. 442 F.3d 1322, 78 U.S.P.Q.2d (BNA) 1382.

1113. See *id.* at 1327, 78 U.S.P.Q.2d (BNA) at 1386.

1114. *Lava Trading, Inc. v. Sonic Trading Mgmt., LLC*, 445 F.3d 1348, 78 U.S.P.Q.2d (BNA) 1624 (Fed. Cir. 2006).

1115. *Id.* at 1350, 78 U.S.P.Q.2d (BNA) at 1625.

1116. *Aero Products Int’l, Inc. v. Intex Recreation Corp.*, 466 F.3d 1000, 80 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

1117. See *id.* at 1012 n.6, 80 U.S.P.Q.2d (BNA) at 1488 n.6.

construction of only the disputed elements or limitations of the claims.”¹¹¹⁸

6. *Means-plus-function claim limitations*

An area of claim construction that is often thorny is that involving so-called “means-plus-function” or “step-plus-function” claim elements.¹¹¹⁹ “Claim construction of a means-plus-function limitation includes two steps. First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description that performs that function.”¹¹²⁰ It can be difficult, however, both to determine whether a term written without the traditional “means” or “step” language can be construed as such a claim element and to identify the “corresponding structure” that performs the claimed function.

In *Applied Medical Resources Corp. v. U.S. Surgical Corp.*,¹¹²¹ the Federal Circuit adopted the district court’s constructions of means-plus-function claim elements that were mostly undisputed by the parties below.¹¹²² In doing so, the court noted several relevant principles for construing such claim elements. First, the court criticized the parties’ apparent view that a district court’s construction of a means-plus-function claim could be binding under collateral estoppel when the parties disputed the meaning of the function in that clause: “Construction of a means-plus-function term requires first identifying the function and then determining the structure disclosed for performing that function. Thus, an attempt to reargue the scope of the function would inherently require a new analysis to determine the structures disclosed to permit the function.”¹¹²³ Second, the court noted that the use of different words in a claim creates a presumption that those claims have different “meanings,” but in a means-plus-function claim, it does not create a presumption that those words implicate different structures; in other words, where a means-plus-function claim has more than one “means” clause, those means

1118. See *id.*, 80 U.S.P.Q.2d (BNA) at 1488 n.6 (quoting *Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1580 (Fed. Cir. 1991)).

1119. See 35 U.S.C. § 112 (2006) (“An element in a claim for a combination may be expressed as a means or a step for performing a specified function without the recital of structure, material, or acts in support thereof . . .”).

1120. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332, 78 U.S.P.Q.2d (BNA) 1807, 1812 (Fed. Cir. 2006) (internal citations omitted).

1121. 448 F.3d 1324, 78 U.S.P.Q. 2d (BNA) 1807 (Fed. Cir. 2006).

1122. See *id.* at 1332-33, 78 U.S.P.Q.2d (BNA) at 1812-13.

1123. *Id.* at 1332 n.2, 78 U.S.P.Q.2d (BNA) at 1812 n.2.

clauses could all refer to the *same* corresponding structure in the specification.¹¹²⁴

In *LG Electronics, Inc. v. Bizcom Electronics, Inc.*,¹¹²⁵ the court addressed whether a claim term that does not use the “means” language could nevertheless be construed as a means-plus-function claim: “[A] claim term that does not use ‘means’ will trigger the rebuttable presumption that § 112 ¶ 6 does not apply.”¹¹²⁶ The court held that the trial court had erroneously construed the term “control unit” as a means-plus-function limitation, noting that the presumption against construing such a term as a means-plus-function claim “is a strong one” that can only be rebutted “by showing that the claim element recites a function without reciting sufficient structure for performing that function.”¹¹²⁷ The court concluded that the “control unit” element referred to a “sufficient structure” that was contained within the claim itself, namely “a CPU and a partition memory system” for performing the stated function of “controlling the communication unit.”¹¹²⁸

Conversely, in *Abacus Software*, the Federal Circuit agreed with the district court’s conclusion that the term “colorant selection mechanism” was properly construed as a means-plus-function limitation, even though it did not contain the term “means.”¹¹²⁹ After noting the presumption against such a construction, the court noted that the term “mechanism” contained in the claim limitation did not connote a “sufficiently definite structure” to avoid treatment as a means-plus-function element.¹¹³⁰ The court explained that where a term like “mechanism” is further defined such that it refers to a definite structure, treatment as a means-plus-function element may be inappropriate, but the court reasoned that the term “mechanism” in the patent at issue was not so modified; therefore, the court affirmed the district court’s findings with respect to the functions of the “colorant selection mechanism” element and the corresponding structures in the specification as components of an “ink correction module (ICM).”¹¹³¹

1124. *See id.* at 1333 n.3, 78 U.S.P.Q.2d (BNA) at 1813 n.3.

1125. 453 F.3d 1364, 79 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 2006).

1126. *Id.* at 1372, 79 U.S.P.Q.2d (BNA) at 1449 (quoting *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358, 72 U.S.P.Q.2d (BNA) 1344, 1348 (Fed. Cir. 2004)).

1127. *Id.* at 1372, 79 U.S.P.Q.2d (BNA) at 1449 (quoting *Watts v. XL Sys.*, 232 F.3d 877, 880, 56 U.S.P.Q.2d (BNA) 1836, 1838 (Fed. Cir. 1999)).

1128. *See id.* at 1372, 79 U.S.P.Q.2d (BNA) at 1449.

1129. *See Mass. Inst. of Tech. & Elecs. for Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1353-55, 80 U.S.P.Q.2d (BNA) 1225, 1230-32 (Fed. Cir. 2006).

1130. *See id.*, 80 U.S.P.Q.2d (BNA) at 1230-32.

1131. *Id.* at 1355, 80 U.S.P.Q.2d (BNA) at 1232.

Finally, in *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*,¹¹³² the Federal Circuit ruled that the district court had properly refused to construe the term “compression member” as a means-plus-function limitation.¹¹³³ After noting the presumption against construing such a term as a means-plus-function element, the court determined that the claim language and specification make clear “that the term ‘compression member’ refers to a particular cylindrical insert and is not simply a general reference to any structure that will perform a particular function.”¹¹³⁴ Accordingly, the court concluded that one of ordinary skill in the art would have understood that “compression member” referred to a definite structure.¹¹³⁵

Nonetheless, there is room for further clarity with respect to the application of the “‘means’ presumption.” The Federal Circuit’s case law speaks in terms of “presumptions”—which are primarily thought of as legal constructs that organize the presentation of factual evidence¹¹³⁶—yet the court’s precedents treat construction of means-plus-function claim elements as a question of law.¹¹³⁷ Thus, there is no case law that sets forth any explication of the quantum of “evidence” necessary to overcome this “presumption,” which leaves it to the judges in a given case to decide, as a matter of law, whether the “presumption” has been overcome.

7. Other issues

In 2006, the Federal Circuit addressed a handful of other issues related to claim construction. First, the court noted that a party can waive appellate review of a claim construction by proposing a construction on appeal different from the construction that the party had proposed in the trial court. In *Exigent Technology, Inc. v. Atrana Solutions, Inc.*,¹¹³⁸ the Federal Circuit noted that the claim construction one of the parties had asserted on appeal was not made “to the district court”; “as a result,” the court stated that it would “not disturb” the district court’s construction at issue.¹¹³⁹ In *Lava Trading,*

1132. 469 F.3d 1005, 80 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2006).

1133. See *id.* at 1023-24, 80 U.S.P.Q.2d (BNA) at 1877-78. One of the authors was counsel to the DePuy Spine parties in this case.

1134. *Id.* at 1023, 80 U.S.P.Q.2d (BNA) at 1878.

1135. See *id.* at 1024, 80 U.S.P.Q.2d (BNA) at 1878.

1136. See, e.g., IX WIGMORE ON EVIDENCE § 2491, at 304 (James H. Chadborn rev. 1981) (“A presumption . . . is in its characteristic feature a rule of law laid down by the judge and attaching to one evidentiary fact certain *procedural consequences* as to the duty of production of other evidence by the opponent.”).

1137. See, e.g., *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332, 78 U.S.P.Q. 2d (BNA) 1807, 1812 (Fed. Cir. 2006).

1138. 442 F.3d 1301, 78 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2006).

1139. See *id.* at 1306-07, 78 U.S.P.Q.2d (BNA) at 1324-25.

however, the court refused to find that a party had waived the claim construction it asserted on appeal where that party's original counsel had proposed one claim construction before the district court but where the party had obtained new counsel in the district court who had asserted in a motion for reconsideration in the district court the same construction argued on appeal.¹¹⁴⁰

Second, the Federal Circuit noted in *Kim v. Conagra Foods, Inc.*,¹¹⁴¹ that it is "hesitant" to adopt a claim construction that was not asserted by either party in the district court or on appeal.¹¹⁴² The panel majority acknowledged its authority to "adopt claim constructions which have not been proposed by either party," but determined that it would be inappropriate to do so with respect to the term "potassium bromate replacer" in light of the claim language and specification.¹¹⁴³ Judge Schall dissented, urging that the court should have adopted a construction not asserted by either of the parties that he believed was compelled by explanations of the advantages of the invention that were disclosed in the specification.¹¹⁴⁴

Finally, the Federal Circuit has been involved in an internal debate whether the court should evaluate the district court's claim constructions that are not necessary to resolve a pending appeal. Judge Newman has urged that the court should review "all of the claim terms whose construction was decided by the district court and challenged on appeal," even where it is not necessary to address some of those constructions to decide the appeal.¹¹⁴⁵ Judge Newman has stated:

I believe we have the obligation to review the construction of the three appealed terms, for the interests of the parties and the public, as well as judicial economy, require final disposition of the issues of claim construction that were decided by the district court, and raised on appeal. This panel's resolution of this infringement action based solely on the construction of "host interface" does not resolve, or render moot, the interpretation of the other disputed terms. . . . My colleagues' decision not to review the other disputed issues of claim construction leaves unresolved the scope and

1140. *Lava Trading, Inc. v. Sonic Trading Mgmt., LLC*, 445 F.3d 1348, 1352-53, 78 U.S.P.Q.2d (BNA) 1624, 1626-27 (Fed. Cir. 2006).

1141. 465 F.3d 1312, 80 U.S.P.Q.2d (BNA) 1495 (Fed. Cir. 2006).

1142. *See id.* at 1319, 80 U.S.P.Q.2d (BNA) at 1499.

1143. *See id.*, 80 U.S.P.Q.2d (BNA) at 1499.

1144. *See id.* at 1326-29, 80 U.S.P.Q.2d (BNA) at 1504-06 (Schall, J., dissenting).

1145. *See Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 1358, 78 U.S.P.Q.2d (BNA) 1786, 1791 (Fed. Cir. 2006) (Newman, J., dissenting).

viability of the claims, for these aspects are relevant to the validity and further applicability of the patent in suit.¹¹⁴⁶

On the other hand, Judge Dyk has expressed the view that review of claim constructions not necessary to decide an appeal is not appropriate, at least where the claim construction did not directly affect the final judgment in a district court:

This case once again involves an effort by parties to a patent infringement case to have this court opine on a range of claim construction issues even though the judgment of the district court is not based on the resolution of those issues. We decline that invitation and limit our consideration to issues presented by the judgment under review. An appeal is not an opportunity to bring before the appellate court every ruling with which one of the parties disagrees without regard to whether the ruling has in any way impacted the final judgment. The fact that this is a patent case does not invoke a different legal regime.¹¹⁴⁷

It is difficult to tell precisely how divergent the views of Judge Newman and Judge Dyk really are. It does seem that Judge Newman would be much more likely than her colleagues to entertain claim construction issues not necessary to resolving an appeal. It is less clear under what circumstances, if any, Judge Dyk or the other Federal Circuit judges would address such claim-construction issues. At a minimum, however, reaching out to decide issues not germane to the judgment under review would appear to raise case-or-controversy issues under Article III of the Constitution.

B. Infringement

1. Literal infringement

As noted above, a determination of literal infringement requires two steps—legal claim construction, followed by factual comparison of the accused device or method to the terms of the properly construed claim.¹¹⁴⁸ Resolution of questions of literal infringement often follows from claim construction. Therefore, because literal infringement is often determined on summary judgment, the Federal Circuit's disposition of claim construction issues will often lead to a corresponding resolution of literal-infringement questions.¹¹⁴⁹ Nevertheless, in 2006 there were several decisions in which fact issues

1146. *Id.* at 1358-59, 78 U.S.P.Q.2d (BNA) at 1791.

1147. *Mass. Inst. of Tech. and Elecs. v. Abacus Software*, 462 F.3d 1344, 1350, 80 U.S.P.Q.2d (BNA) 1225, 1228 (Fed. Cir. 2006).

1148. *See supra* note 932.

1149. *See, e.g., Adamo, supra* note 14, at 1608-09.

precluded summary judgment as to literal infringement for resolution of literal infringement solely as a matter of law.

Affirmance of summary judgment with respect to literal infringement. Not surprisingly, in 2006 the Federal Circuit affirmed summary judgment with respect to literal infringement in several cases in which it also affirmed the district court's claim constructions. Thus, in *Bicon*, the court affirmed summary judgment of non-infringement after determining that the district court had properly construed a claim for a dental implant prosthesis.¹¹⁵⁰ In *Panduit*, the court similarly affirmed the district court's summary judgment of non-infringement after affirming its construction of a claim for a power box.¹¹⁵¹ Likewise, in *Flex-Rest*, the court affirmed summary judgment of non-infringement after affirming the district court's construction of a claim for a computer keyboard positioning system where there was "no dispute" that the accused devices did not infringe under the district court's construction.¹¹⁵² And, in *02 Micro International, Ltd. v. Monolithic Power Systems, Inc.*,¹¹⁵³ the court affirmed a grant of summary judgment after determining that there was no evidence presented that could support the only theory of literal infringement properly presented to the district court.¹¹⁵⁴

In *Semitool*, the Federal Circuit affirmed summary judgment of non-infringement, but did so based on a claim construction different from that adopted by the district court.¹¹⁵⁵ The district court had determined that it was not necessary to decide "whether the condenser is part of the process chamber or a separate unit" in construing the phrase "supplying drying gas to the process chamber" in a claim for a semiconductor wafer carrier cleaning system.¹¹⁵⁶ The Federal Circuit, however, determined that it did need to decide that issue to evaluate whether summary judgment was properly granted because the specification compelled the conclusion that the condenser must be outside the process chamber, and because the accused products had a condenser inside the process chamber.¹¹⁵⁷

1150. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 953-56, 78 U.S.P.Q.2d (BNA) 1267, 1274-77 (Fed. Cir. 2006).

1151. *Panduit Corp. v. HellermannTyton Corp.*, 451 F.3d 819, 829-30, 79 U.S.P.Q.2d (BNA) 1053, 1060-61 (Fed. Cir. 2006).

1152. *Flex-Rest, LLC v. Steelcase, Inc.*, 455 F.3d 1351, 1362, 80 U.S.P.Q.2d (BNA) 1620, 1627 (Fed. Cir. 2006).

1153. 467 F.3d 1335, 80 U.S.P.Q.2d (BNA) 1769 (Fed. Cir. 2006).

1154. *See id.* at 1369, 80 U.S.P.Q.2d (BNA) at 1779.

1155. *See Semitool, Inc. v. Dynamic Micro Sys. Semiconductor Equip. GmbH*, 444 F.3d 1337, 1345-48, 78 U.S.P.Q.2d (BNA) 1438, 1444-46 (Fed. Cir. 2006).

1156. *See id.* at 1345, 78 U.S.P.Q.2d (BNA) at 1444.

1157. *See id.* at 1347-48, 78 U.S.P.Q.2d (BNA) at 1446.

Reversal of judgment based upon reversed claim constructions. Just as the Federal Circuit has affirmed summary judgments as to literal infringement where it has affirmed the district court's underlying claim constructions, it has also reversed outright and granted judgment to the losing party below where it has reversed the district court's claim constructions. Thus, in *On Demand*, the Federal Circuit reversed the district court's construction of the term "sales information" and determined that under the correct claim construction "no reasonable jury could find infringement"; accordingly, the court reversed a jury verdict of infringement and ordered judgment of non-infringement.¹¹⁵⁸

Similarly, in *Cook Biotech*, the court reversed the district court's construction of the term "urinary bladder submucosa" in a patent for a biological tissue composition and held that under the correct construction there could be no literal infringement.¹¹⁵⁹ Therefore, the court reversed the judgment of literal infringement.¹¹⁶⁰ In *Abraxis Bioscience*, the court reversed the district court's judgment of literal infringement after determining that its construction of the claim term "edetate" was incorrect and that under the correct construction there could be no literal infringement.¹¹⁶¹

Affirmance of judgments as to literal infringement after trial. In a number of cases, the Federal Circuit affirmed judgments as to literal infringement after a jury or bench trial. In *nCube*, the court affirmed the district court's construction of the term "upstream manager" in a computer system and then affirmed the jury verdict of infringement based upon substantial record evidence that the accused product infringed.¹¹⁶² In *Liquid Dynamics Corp. v. Vaughan Co.*,¹¹⁶³ the Federal Circuit affirmed a jury verdict of infringement based upon substantial evidence including significant expert testimony as to infringement.¹¹⁶⁴ And in *Kemin Foods, L.C. v. Pigmentos Vegetales Del Centro S.A.*,¹¹⁶⁵ the Federal Circuit affirmed a jury verdict of literal infringement based upon substantial evidence of literal infringement.¹¹⁶⁶

1158. See *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1344-45, 78 U.S.P.Q.2d (BNA) 1428, 1437-38 (Fed. Cir. 2006).

1159. See *Cook Biotech, Inc. v. Acell, Inc.*, 460 F.3d 1365, 1378-79, 79 U.S.P.Q.2d (BNA) 1865, 1874-75 (Fed. Cir. 2006).

1160. See *id.* at 1382, 79 U.S.P.Q.2d (BNA) at 1877.

1161. See *Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc.*, 467 F.3d 1370, 1378, 80 U.S.P.Q.2d (BNA) 1705, 1710 (Fed. Cir. 2006).

1162. See *nCube Corp. v. Seachange Int'l, Inc.*, 436 F.3d 1317, 1323, 77 U.S.P.Q.2d (BNA) 1481, 1486 (Fed. Cir. 2006).

1163. 449 F.3d 1209, 79 U.S.P.Q.2d (BNA) 1094 (Fed. Cir. 2006).

1164. See *id.* at 1219-23, 79 U.S.P.Q.2d (BNA) at 1100-04.

1165. 464 F.3d 1339, 80 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2006).

1166. See *id.* at 1348-50, 80 U.S.P.Q.2d (BNA) at 1391-93.

In *Alza Corp. v. Mylan Laboratories, Inc.*,¹¹⁶⁷ the Federal Circuit affirmed a judgment of infringement after a bench trial.¹¹⁶⁸ The court determined that the district court had properly evaluated the evidence presented of non-infringement and thus there was no basis to overturn the court's judgment.¹¹⁶⁹

Reversal of summary judgment because of disputed issues of fact. In a few cases in 2006, the Federal Circuit reversed or vacated grants of summary judgment because of disputed issues of fact. Thus, in *LG Electronics*, after having determined that the district court's claim constructions as to certain claim terms was incorrect, the Federal Circuit determined that the record was incomplete as to evidence that would establish or disprove literal infringement under the correct claim constructions.¹¹⁷⁰ The court therefore remanded for further evaluation of those claims of infringement.¹¹⁷¹ Similarly, in *L & W, Inc. v. Schertech, Inc.*,¹¹⁷² the court determined that issues of fact precluded summary judgment as to literal infringement and that the record needed to be more fully developed to determine whether L & W's products in fact met all of the limitations of the claim at issue.¹¹⁷³

Literal infringement of a means-plus-function claim. In *Applied Medical*, the Federal Circuit discussed and applied the requirements for literal infringement of a means-plus-function claim:

Literal infringement of a means-plus-function claim limitation requires that the relevant structure in the accused device perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification. Once the relevant structure in the accused device has been identified, a party may prove it is equivalent to the disclosed structure by showing that the two perform the identical function in substantially the same way, with substantially the same result.¹¹⁷⁴

The court proceeded to analyze both the supporting function and relevant structure of the accused device, finding that the district court had erroneously determined "the way in which the disclosed structure" performed the defined function because the district court had determined that the relevant "ring-levers-teeth structure" was

1167. 464 F.3d 1286, 80 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 2006).

1168. *See id.* at 1297, 80 U.S.P.Q.2d (BNA) at 1009.

1169. *See id.* at 1295-97, 80 U.S.P.Q.2d (BNA) at 1007-09.

1170. *See LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1376, 79 U.S.P.Q.2d (BNA) 1443, 1455 (Fed. Cir. 2006).

1171. *See id.* at 1381, 79 U.S.P.Q.2d (BNA) at 1456.

1172. 471 F.3d 1311, 81 U.S.P.Q.2d (BNA) 1198 (Fed. Cir. 2006).

1173. *See id.* at 1318, 81 U.S.P.Q.2d (BNA) at 1203.

1174. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1333, 78 U.S.P.Q.2d (BNA) 1807, 1813 (Fed. Cir. 2006).

required to perform functions in addition to “holding the valve portions” function of the claim term.¹¹⁷⁵ The court also found that the district court had erroneously imported extraneous functions when it determined how the disclosed embodiment performed the claimed “permit to float” function.¹¹⁷⁶ Judge Dyk dissented, urging that the accused device did in fact perform the required function in substantially the same way as the patented device.¹¹⁷⁷ He disagreed with the majority’s interpretation of the functions that the district court had required for the relevant ring-levers-teeth structure, urging that the supposedly extraneous functions defined by the majority were really just explanations as to *how* the relevant structure performed the different, required functions.¹¹⁷⁸

Given the differences between the majority and the dissent as to how one defines the “function” associated with a means-plus-function claim element, *Applied Medical* demonstrates the difficulties in resolving issues of infringement of such claims. It is difficult to determine both what the precise functions are and exactly how the structures in the patented and accused devices perform those functions.

Design patent infringement. In 2006, the court also addressed the less-commonly confronted doctrine of design patent infringement. A design-patent-infringement claim requires a different procedure for comparing the patent claim to the accused design than that used in utility-patent infringement:

In comparing a design patent claim to the accused design to determine infringement, a court must apply “two distinct tests, both of which must be satisfied in order to find infringement: (a) the ‘ordinary observer’ test, and (b) the ‘point of novelty’ test.” The “ordinary observer” test requires comparison of the two designs from the viewpoint of the ordinary observer to “determine whether the patented design as a whole is substantially the same as the accused design.” Under the “point of novelty” test, a court must determine whether “the accused device . . . appropriates the novelty in the patented device which distinguishes it from the prior art.”¹¹⁷⁹

In *Lawman Armor*, the court affirmed the district court’s summary judgment ruling of non-infringement under the “point of novelty”

1175. *See id.* at 1334-35, 78 U.S.P.Q.2d (BNA) at 1814.

1176. *See id.* at 1336-37, 78 U.S.P.Q.2d (BNA) at 1815-16.

1177. *See id.* at 1337-40, 78 U.S.P.Q.2d (BNA) at 1816-19 (Dyk, J., dissenting).

1178. *See id.*, 78 U.S.P.Q.2d (BNA) at 1816-19 (Dyk, J., dissenting).

1179. *Lawman Armor Corp. v. Winner Int’l, LLC*, 437 F.3d 1383, 1384-85, 77 U.S.P.Q.2d (BNA) 2017, 2018 (Fed. Cir. 2006) (citations and quotations omitted).

test, rejecting the patentee's argument that, even though all of the "points of novelty" proffered by the patentee were encompassed by the prior art, the combination of those elements created an additional point of novelty.¹¹⁸⁰ The court explained:

"The purpose of the 'points of novelty' approach . . . is to focus on those aspects of a design which render the design different from prior art designs." "New" designs frequently involve only relatively small changes in the shape, size, placement, or color of elements of old designs. It is those changes in and departures from the old designs that constitute the "points of novelty" in the patented new design.

If the combination of old elements shown in the prior art is itself sufficient to constitute a "point of novelty" of a new design, it would be the rare design that would not have a point of novelty. The practical effect of Lawman's theory would be virtually to eliminate the significance of the "points of novelty" test in determining infringement of design patents, and to provide patent protection for designs that in fact involve no significant changes from the prior art.¹¹⁸¹

In *Amini Innovation Corp. v. Anthony California, Inc.*,¹¹⁸² the court reversed a grant of summary judgment of non-infringement of a design patent because there were genuine issues of material fact.¹¹⁸³ The court reasoned that the district court had misapplied the "ordinary observer" test because it had "perhaps focused too narrowly" on "isolated ornamental features" of a claimed design for a carved, ornamental woodwork for furniture; the court stated that the patent claims are directed to the use of the furniture "as a whole" and that the appropriate infringement inquiry would examine how an ordinary observer would view the "design as a whole."¹¹⁸⁴ Therefore, the court remanded for a reexamination of the design patent infringement claims.¹¹⁸⁵

Infringement by offering to sell. In 1994, 35 U.S.C. § 271(a) was amended to include "offer to sell" as a ground of infringement in order to harmonize that aspect of United States law with that of other nations.¹¹⁸⁶ In *FieldTurf Int'l, Inc. v. Sprinturf, Inc.*,¹¹⁸⁷ the Federal Circuit affirmed the district court's ruling that the accused infringer's

1180. See *id.* at 1384-86, 77 U.S.P.Q.2d (BNA) at 2018-20.

1181. *Id.* at 1385-86, 77 U.S.P.Q.2d (BNA) at 2019.

1182. 439 F.3d 1365, 78 U.S.P.Q.2d (BNA) 1147 (Fed. Cir. 2006).

1183. *Id.* at 1371-72, 78 U.S.P.Q.2d (BNA) at 1150-52.

1184. *Id.*, 78 U.S.P.Q.2d (BNA) at 1151-52.

1185. *Id.* at 1372, 78 U.S.P.Q.2d (BNA) at 1152.

1186. See, e.g., *FieldTurf Int'l, Inc. v. Sprinturf, Inc.*, 433 F.3d 1366, 1369, 77 U.S.P.Q.2d (BNA) 1468, 1470 (Fed. Cir. 2006).

1187. 433 F.3d 1366, 77 U.S.P.Q.2d (BNA) 1468 (Fed. Cir. 2006).

response to a request for proposal (“RFP”) that had specified features that characterized a patented product by offering its own noninfringing product was not an infringing “offer to sell.”¹¹⁸⁸ The court rejected the patentee’s argument that by responding to an RFP that specifically requested its patented product “or approved equal” and described its patented features, the defendant had necessarily infringed; the court emphasized that the requester was “aware” of the differences between the patented product and the defendant’s product and chose to purchase the noninfringing product.¹¹⁸⁹

“*Joint Infringement.*” The Federal Circuit addressed, without extended discussion, the issue of “joint” or “divided infringement,” which implicates possible joint liability for infringement of a method claim, where multiple entities perform different steps of a claimed method.¹¹⁹⁰ In *On Demand*, the court addressed the argument that Amazon, which interfaced directly with consumers, and Lightning Source, which took orders for books from Amazon, could be liable for “joint infringement,” even though neither, by itself, completed all of the steps required to infringe a claim for a high-speed process to create a single copy of a book.¹¹⁹¹ The court examined the following jury instruction:

It is not necessary for the acts that constitute infringement to be performed by one person or entity. When infringement results from the participation and combined action(s) of more than one person or entity, they are all joint infringers and jointly liable for patent infringement. Infringement of a patented process or method cannot be avoided by having another perform one step of the process or method. Where the infringement is the result of the participation and combined action(s) of one or more persons or entities, they are joint infringers and are jointly liable for the infringement.¹¹⁹²

The court stated that it discerned “no flaw in this instruction as a statement of law,” and went on to rule that neither Amazon nor Lightning Source could be held liable for infringement under that standard: “Each of these components of the claimed invention is in the prior art; their combination is the patentable invention, and it is the practice of the combination that is essential to infringement.”¹¹⁹³

1188. *See id.* at 1369-70, 77 U.S.P.Q.2d (BNA) at 1470-71.

1189. *See id.*, 77 U.S.P.Q.2d (BNA) at 1470-71.

1190. *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1344-45, 78 U.S.P.Q.2d (BNA) 1428, 1437-38.

1191. *Id.*, 78 U.S.P.Q.2d (BNA) at 1437-38.

1192. *See id.* at 1344-45, 78 U.S.P.Q.2d (BNA) at 1437-38.

1193. *See id.* at 1345, 78 U.S.P.Q.2d (BNA) at 1438.

Decisional law from district courts provides some support for aggregation in the performance of steps of a method claim among different parties, and those cases have generally agreed that aggregation is permissible when there is a sufficient connection between or among the entities whose conduct is aggregated.¹¹⁹⁴ District court cases have explicated this “connection” requirement in different ways.¹¹⁹⁵ Nonetheless, it was not until *On Demand* that the Federal Circuit took up this theory of infringement, albeit without discussing the governing standards.

Taken at face value, *On Demand* suggests a general acceptance of the joint-infringement theory. But litigation will continue on the issue, as the jury instruction endorsed by the Federal Circuit can be argued as support for a nearly indiscriminate aggregation of steps performed by different parties, so long as “the infringement is the result of the participation and combined action(s) of one or more persons or entities.”¹¹⁹⁶ The paucity of analysis and brief treatment of the issue might also lessen the likelihood that panels in future cases will uncritically adopt the most expansive reading of the case.

The court’s treatment of this issue in *On Demand* (and the controversy the issue generated with respect to that case, and with respect to another notable case raising joint-infringement issues that was settled in 2006)¹¹⁹⁷ leaves several questions unanswered. Is the “connection” standard the appropriate standard? If it is, what sort of “connection” should be required? When can the steps practiced by others, whether or not defendants, be imputed to a single defendant? It is possible that a pending case presenting issues of “joint infringement” will provide some of the answers to these questions.¹¹⁹⁸

1194. See, e.g., *Faroudja Labs., Inc. v. Dwin Elecs., Inc.*, No. 97-20010 SW, 1999 WL 111788, at *5 (N.D. Cal. Feb. 24, 1999) (summarizing case law as requiring that there be “some connection between the different entities” in order to support aggregation).

1195. Compare, e.g., *Cordis Corp. v. Medtronic Ave., Inc.*, 194 F. Supp. 2d 323, 349-50 (D. Del.) (finding connection standard satisfied based upon facts such as a “relationship between [the defendant] and the medical community”), *modified on rehearing in other respects*, 2002 WL 1022509 (D. Del. May 15, 2002), *rev’d on other grounds*, 339 F.3d 1352 (Fed. Cir. 2003), with *Marley Mouldings Ltd. v. Mikron Indus., Inc.*, No. 02 C 2855, 2003 WL 1989640, at *3 (N.D. Ill. Apr. 30, 2003).

1196. *On Demand*, 432 F.3d at 1344-45, 78 U.S.P.Q.2d (BNA) at 1437-38.

1197. See *Freedom Wireless, Inc. v. Boston Commc’ns Group, Inc.*, No. 2006-1237, 2006 WL 3358367, at *1 (Fed. Cir. Oct. 24, 2006) (noting dismissal of appeal because of “[t]he parties having so agreed”).

1198. See *BMC Res., Inc. v. Paymentech, L.P.*, No. 06-1503 (Fed. Cir., scheduled for argument Apr. 5, 2007).

2. *Infringement by equivalents*

The doctrine of equivalents (sometimes abbreviated as the “DOE”) prevents an accused infringer from avoiding liability for patent infringement by making only minor or insubstantial changes to an invention covered by the claims of the patent, thereby avoiding literal infringement while retaining the invention’s “essential identity.”¹¹⁹⁹

The doctrine recognizes that “[t]he language in the patent claims may not capture every nuance of the invention or describe with complete precision the range of its novelty. If patents were always interpreted by their literal terms, their value would be greatly diminished. Unimportant and insubstantial substitutes for certain elements could defeat the patent, and its value to inventors could be destroyed by simple acts of copying.”¹²⁰⁰

“Infringement may be found under the doctrine of equivalents if every limitation of the asserted claim, or its ‘equivalent,’ is found in the accused subject matter, where an ‘equivalent’ differs from the claimed limitation only insubstantially.” An accused device that “performs substantially the same function in substantially the same way to obtain the same result” as the patented invention may infringe under this doctrine.¹²⁰¹

The test quoted above is often referred to as the “function-way-result” test. In *Abraxis Bioscience*, the district court had applied that test to hold that the accused product’s use of diethylenetriaminepentaacetic acid (“DTPA”) rather than the claimed compound ethylenediaminetetraacetic acid (“EDTA”) infringed a claim for a pharmaceutical composition under the doctrine of equivalents.¹²⁰² Although the Federal Circuit had reversed the district court’s finding of literal infringement based on its disagreement with the district court’s claim construction, it affirmed the finding of infringement by equivalents; the Federal Circuit reasoned that DTPA and EDTA are structurally analogous polyaminocarboxylic acids that both work in the same way to retard microbial growth.¹²⁰³ The court held that the record supported the

1199. See, e.g., *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 564, 56 U.S.P.Q.2d (BNA) 1865, 1868 (Fed. Cir. 2000).

1200. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1016, 80 U.S.P.Q.2d (BNA) 1865, 1873 (Fed. Cir. 2006) (quoting *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 731 (2002)).

1201. *Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc.*, 467 F.3d at 1370, 1379, 80 U.S.P.Q.2d (BNA) 1705, 1710-11 (Fed Cir. 2006) (quoting *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F. 3d 1309, 1315, 47 U.S.P.Q.2d (BNA) 1272, 1276 (Fed. Cir. 1998), and *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950)).

1202. See *id.* at 1379-83, 80 U.S.P.Q.2d (BNA) at 1710-13.

1203. See *id.* at 1380-82, 80 U.S.P.Q.2d (BNA) at 1711-13.

finding of infringement and emphasized that the patentee had not surrendered coverage of DTPA in the specification, “particularly in light of the unforeseeability of calcium trisodium DTPA as an equivalent” at the time the patent was issued.¹²⁰⁴

Although the court in *Abraxis Biochemical* had reversed the district court’s claim construction and literal-infringement rulings, but affirmed its finding of infringement by equivalents, it did so in light of specific and independent arguments in favor of infringement under the doctrine of equivalents.¹²⁰⁵ That is important because the Federal Circuit has warned that “[t]he party asserting infringement must present ‘evidence and argument concerning the doctrine [of equivalents] and each of its elements.’” The evidence and argument on the doctrine of equivalents cannot merely be subsumed in plaintiff’s case of literal infringement.¹²⁰⁶ Thus, in *nCube*, the court affirmed the district court’s grant of judgment as a matter of law of non-infringement under the doctrine of equivalents notwithstanding the jury’s contrary verdict, because the patentee had not presented any evidence of infringement under the doctrine of equivalents at trial.¹²⁰⁷

It should also be noted that, just as one can disavow in the specification literal coverage of a patent claim, it is also possible to disavow equivalents in the specification. “The scope of equivalents may [] be limited by statements in the specification that disclaim certain subject matter.”¹²⁰⁸ Thus, in *Honeywell*, the court affirmed the district court’s conclusion that the use of “carbon fibers” had been specifically disavowed from the scope of the “electrically conductive fibers” claim limitation at issue.¹²⁰⁹

There are several legal limitations upon application of the doctrine of equivalents that the Federal Circuit addressed in 2006.

a. Prosecution-history estoppel

The doctrine of prosecution-history estoppel (archaically known as “file-wrapper estoppel”) precludes a patentee from using the doctrine of equivalents to obtain coverage of subject matter that the patentee has relinquished during the prosecution of the patent application.¹²¹⁰

1204. See *id.* at 1380-81, 80 U.S.P.Q.2d (BNA) at 1711-13.

1205. See *id.* at 1381-82, 80 U.S.P.Q.2d (BNA) at 1712.

1206. *nCube Corp. v. Seachange Int’l, Inc.*, 436 F.3d 1317, 1325, 77 U.S.P.Q.2d (BNA) 1481, 1488 (Fed. Cir. 2006).

1207. See *id.*, 77 U.S.P.Q.2d (BNA) at 1488.

1208. *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1321, 79 U.S.P.Q.2d (BNA) 1294, 1301-02 (Fed. Cir. 2006) (citation omitted).

1209. See *id.* at 1320-21, 79 U.S.P.Q.2d (BNA) at 1301-02.

1210. See, e.g., *Pharmacia & Upjohn Co. v. Mylan Pharms., Inc.*, 170 F.3d 1373, 1376, 50 U.S.P.Q.2d (BNA) 1033, 1036 (Fed. Cir. 1999).

Prosecution-history estoppel is a purely legal issue and is based on the logic that “the patentee, during prosecution, has created a record that fairly notifies the public that the patentee has surrendered the right to claim particular matter as within the reach of the patent.”¹²¹¹ There are two varieties of prosecution-history estoppel: estoppel by argument and estoppel by amendment. “Arguments made voluntarily during prosecution may give rise to prosecution history estoppel if they evidence a surrender of subject matter.”¹²¹² The Supreme Court addressed estoppel by amendment in its decision in *Festo*: “A patentee’s decision to narrow his claims through amendment may be presumed to be a general disclaimer of a territory of the original claim and the amended claim.”¹²¹³

In 2006, the Federal Circuit addressed a handful of cases involving estoppel by amendment. In *Old Town Canoe*, the Federal Circuit affirmed the district court’s ruling of no infringement under the doctrine of equivalents; the court found that the relevant patent claims were “narrowed, triggering a presumption that subject matter was surrendered” in light of an amendment in response to a rejection by the examiner.¹²¹⁴ The court reasoned that the amendment disclaimed the methods for “coalescence” as part of a chemical process for which coverage was sought under the doctrine of equivalents.¹²¹⁵

In *Primos*, the court affirmed a jury verdict of infringement by equivalents, rejecting the argument that amendments to the term “plate” in a claim for a device that simulates animal sounds narrowed the scope of the claim and were made for reasons relating to patentability.¹²¹⁶ The Federal Circuit noted that the Supreme Court in *Festo* held that “when a patent claim is amended during prosecution for reasons relating to patentability, there is a presumption that the patentee surrendered all the territory between the original claim limitation and the amended claim limitation,” but acknowledged that the presumption may be overcome when the “rationale underlying the amendment may bear no more than a

1211. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 564-65, 56 U.S.P.Q.2d (BNA) 1865, 1869 (Fed. Cir. 2000).

1212. *Id.* at 568, 56 U.S.P.Q.2d (BNA) at 1872.

1213. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 740 (2002).

1214. *Old Town Canoe Co. v. Conflunee Holdings Corp.*, 448 F.3d 1309, 1314-15, 78 U.S.P.Q.2d (BNA) 1705, 1709 (Fed. Cir. 2006).

1215. *See id.* at 1315, 78 U.S.P.Q.2d (BNA) at 1709.

1216. *See Primos, Inc. v. Hunter’s Specialities, Inc.*, 451 F.3d 841, 848-50, 79 U.S.P.Q.2d (BNA) 1129, 1134-36 (Fed. Cir. 2006).

tangential relation to the equivalent in question.”¹²¹⁷ The court reasoned that the amendments to the term “plate” did not surrender the equivalent of a “dome” that functions identically to the “plate” literally claimed; the relevant amendments addressed the “length” of the “plate” and its relationship to a different portion of the device, but did not relate to its shape, i.e., whether it is a flat plate or dome shaped.¹²¹⁸

The *Festo* presumption and the situations where it may be rebutted were the focus of analysis in *Amgen*, where the Federal Circuit evaluated the district court’s ruling that the *Festo* presumption did not apply to a claim amendment because the presumption had been rebutted.¹²¹⁹ The district court had determined that an amendment limiting the claims of a patent for an erythropoietin (“EPO”) product that limited the EPO to one with a particular amino acid sequence was “tangential” and did not prevent an equivalent having a 165-amino acid sequence.¹²²⁰ The Federal Circuit had previously determined that the amendment at issue was related to patentability, and thus that the *Festo* presumption was triggered.¹²²¹ The court then noted that “[t]he burden of rebutting the *Festo* presumption lies with the patentee” and that “[t]he presumption that equivalents are surrendered may be rebutted if a patentee shows that ‘one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.’”¹²²² The court further explained:

[I]n *Festo II*, the Supreme Court listed three ways in which a patentee may make this showing. First, the patentee may demonstrate that “the equivalent would have been unforeseeable at the time of the amendment.” Second, the patentee may show that “the rationale underlying the amendment bears no more than a tangential relation to the equivalent in question.” Third, a patentee may demonstrate that “there [is] some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question.”¹²²³

1217. *Id.* at 849, 79 U.S.P.Q.2d (BNA) at 1135 (quoting *Festo*, 535 U.S. at 740-41).

1218. *See id.* at 849-50, 79 U.S.P.Q.2d (BNA) at 1135-36.

1219. *See Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1308-16, 79 U.S.P.Q.2d (BNA) 1705, 1716-22 (Fed. Cir. 2006).

1220. *See id.* at 1311, 79 U.S.P.Q.2d (BNA) at 1719.

1221. *See id.* at 1310-12, 79 U.S.P.Q.2d (BNA) at 1717-19.

1222. *Id.* at 1312, 79 U.S.P.Q.2d (BNA) at 1719 (quoting *Festo*, 535 U.S. at 741) (other citations omitted).

1223. *Id.* at 1312-13, 79 U.S.P.Q.2d (BNA) at 1719 (quoting *Festo*, 535 U.S. at 740-41).

The court then summarized the guidance it had previously had given in its decision on remand in *Festo* as to the showings necessary to rebut the *Festo* presumption:

We suggested that after-arising technology is more likely to be unforeseeable than old technology, but did not set forth any hard or fast rule on foreseeability. We stated that “if the alleged equivalent were known in the prior art in the field of the invention, it certainly should have been foreseeable at the time of the amendment.” With regard to the tangentiality of an amendment to an equivalent, we did not set forth any concrete definition, but we did note that an amendment “made to avoid prior art that contains the equivalent in question is not tangential; it is central to allowance of the claim.” Thus, an amendment is tangential when the “reason for it was peripheral, or not directly relevant, to the alleged equivalent.” The determination of whether or not an amendment is merely tangential to the equivalent is based on the “patentee’s objectively apparent reason for the narrowing amendment.” Thus, the inquiry must be based on the intrinsic record alone and, if necessary, expert testimony to aid in interpretation of that record. Finally, we noted that the third way to rebut the *Festo* presumption, the “some other reason” route, is a narrow one. We stated that “the third criterion may be satisfied when there was some reason, such as the shortcomings of language, why the patentee was prevented from describing the alleged equivalent when it narrowed the claim.”¹²²⁴

Applying this guidance, the court in *Amgen* reasoned that an EPO with 165 amino acids was a foreseeable equivalent and that the addition of the reference to the different amino acids sequence “was not merely tangential” to the alleged equivalent.¹²²⁵ The court emphasized that the sequence amendment appeared to have been “central to overcoming a double patenting rejection” in light of a prior patent with a different amino acid sequence.¹²²⁶ Finally, the court examined whether there was “some other reason” or “shortcoming of language” that prevented the patentee from describing the 165-amino acid sequence when it narrowed the claim, the court found that no such reason or short coming existed.¹²²⁷ Accordingly, the court concluded that the district court had erred in

1224. *Id.* at 1313, 79 U.S.P.Q.2d (BNA) at 1719-20 (quoting *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359, 1372, 68 U.S.P.Q.2d (BNA) 1321, 1330 (Fed. Cir. 2003) (en banc)).

1225. *Id.* at 1313-15, 79 U.S.P.Q.2d (BNA) at 1720-21.

1226. *See id.* at 1314-15, 79 U.S.P.Q.2d (BNA) at 1720-21.

1227. *See id.* at 1316, 79 U.S.P.Q.2d (BNA) at 1722.

finding that the *Festo* presumption had been overcome and reversed the judgment of infringement by equivalents.¹²²⁸

b. The all-elements/anti-vitiation rule

“Application of the doctrine of equivalents is limited by the ‘all-elements rule,’ which provides that ‘the doctrine of equivalents does not apply if applying the doctrine would vitiate an entire claim limitation.’”¹²²⁹

Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.¹²³⁰

Application of this rule, however, can be difficult.

In *Panduit*, the Federal Circuit affirmed the district court’s determination that application of the doctrine of equivalents was forbidden because the claim required wires to pass through “an opening in an abutment portion” in a wire box, but the accused device had wires that did not go through such an opening.¹²³¹ The court concluded that “[t]o extend the scope of the claim to encompass an accused device in which wires bypass the abutment portion all together would necessarily read the ‘opening’ limitation out of the claim.”¹²³²

In *Primos*, the court rejected the argument that application of the doctrine of equivalents would have vitiated the limitation “plate” in the relevant claim.¹²³³ The court reasoned that it would not vitiate the “plate” limitation to permit a dome-shaped equivalent because the term “plate” does not necessarily convey a definitive, geometric shape or structure; thus, the court concluded that permitting the claimed equivalent would not “effectively eliminate” the plate limitation in its entirety.¹²³⁴

1228. *See id.* at 1316, 79 U.S.P.Q.2d (BNA) at 1722.

1229. *Panduit Corp. v. HellermannTyton Corp.*, 451 F.3d 819, 830, 79 U.S.P.Q.2d (BNA) 1053, 1060 (Fed. Cir. 2006) (quoting *Asyst Techs., Inc. v. Emtrak, Inc.*, 402 F.3d 1188, 1195, 74 U.S.P.Q.2d (BNA) 1272, 1278 (Fed. Cir. 2005)).

1230. *DePuy Spine v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1016-17, 80 U.S.P.Q.2d (BNA) 1865, 1873 (Fed. Cir. 2006) (quoting *Warner-Jenkinson Co. Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997)).

1231. *Panduit*, 451 F.3d at 830, 79 U.S.P.Q.2d (BNA) at 1060-61.

1232. *Id.*, 79 U.S.P.Q.2d (BNA) at 1060-61.

1233. *See Primos, Inc. v. Hunter’s Specialties, Inc.*, 451 F.3d 841, 849-50, 79 U.S.P.Q.2d (BNA) 1129, 1135-36 (Fed. Cir. 2006).

1234. *See id.* at 850, 79 U.S.P.Q.2d (BNA) at 1136.

Conversely, in *Planet Bingo*, the Federal Circuit affirmed the district court's conclusion that the doctrine of equivalents could not apply to a device that performs the critical calculation "after" the first bingo ball is drawn, where the claim requires that calculation "before" the first bingo ball is drawn.¹²³⁵ The court reasoned that the "before" limitation was critical to the invention, and thus that the doctrine of equivalents could not apply without entirely vitiating that claim limitation: "Here, the patents contain a distinct limitation, which was part of the bargain when the patent issued. This court cannot overlook that limitation or expand the doctrine of equivalents beyond its purpose to allow recapture of subject matter excluded by a deliberate and foreseeable claim drafting decision."¹²³⁶

In *DePuy Spine*, the Federal Circuit reversed the district court's determination that applying the doctrine of equivalents would vitiate the limitation "spherically-shaped" in a patent for a surgical screw if a "cylindrical-conical" equivalent were permitted.¹²³⁷ The court emphasized that "DePuy's expert presented particularized" evidence that the claimed equivalent was "insubstantially different from the corresponding 'spherically-shaped' limitation."¹²³⁸ Accordingly, the Federal Circuit held that the district court had erred by granting summary judgment of non-infringement, and remanded for a trial.¹²³⁹

While these cases can be rationalized as situation-specific determinations of whether a particular claim term would be read out of the claim by application of the doctrine of equivalents, it could also be argued that these cases show how arbitrary the anti-vitiation rule can appear. It does not necessarily follow that, if "before" can not equal "after," that "plate" can equal "dome" and that "spherical" can equal "conical." Of course, the devil is always in the details, and the Federal Circuit claims to make such distinctions based on the precise language of the claims, specification and prosecution history. But at a more basic level, these decisions are best understood as case-by-case applications of an extremely general rule.

1235. *Planet Bingo, LLC v. GameTech Int'l, Inc.*, 472 F.3d 1338, 1345, 81 U.S.P.Q.2d (BNA) 1145, 1150 (Fed. Cir. 2007).

1236. *Id.* at 1344, 81 U.S.P.Q.2d (BNA) at 1150.

1237. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1019-20, 80 U.S.P.Q.2d (BNA) 1865, 1874-75 (Fed. Cir. 2006).

1238. *Id.*, 80 U.S.P.Q.2d (BNA) at 1874-75.

1239. *See id.*, 80 U.S.P.Q.2d (BNA) at 1874-75.

c. Specific exclusion of equivalents

The doctrine of equivalents may not apply where a claim recites detailed structure and thus implicitly disclaims arguably equivalent structures.

A claim that contains a detailed recitation of structure is properly accorded correspondingly limited recourse to the doctrine of equivalents. . . . “[B]y defining the claim in a way that clearly excluded certain subject matter, the patent implicitly disclaimed the subject matter that was excluded and thereby barred the patentee from asserting infringement under the doctrine of equivalents.”¹²⁴⁰

Thus, in *Bicon*, the court held that a claim reciting a very detailed “convex” structure excluded an equivalent with a correspondingly “concave” structure.¹²⁴¹ The court emphasized that permitting the claimed equivalent would be “clearly contrary to, and thus excluded by” the relevant patent claim.¹²⁴²

Similarly, in *Cook Biotech*, the court concluded that the claimed equivalent could not be permitted because it contained a structure “specifically excluded” from the composition covered by the patent claim.¹²⁴³ The court noted that it is a ““corollary to the ‘all limitations rule’” that ““the concept of equivalency cannot embrace a structure that is specifically excluded from the scope of the claims.””¹²⁴⁴

d. Other issues

In 2006, the Federal Circuit addressed a handful of other significant issues with respect to the doctrine of equivalents. First, the court emphasized that after-arising technology may be particularly appropriate for analysis under the doctrine of equivalents. “An appropriate range of equivalents may extend to post-invention advances . . . in an appropriate case.”¹²⁴⁵

Second, the Federal Circuit made clear that summary judgment under the doctrine of equivalents is inappropriate where there are material questions of fact with respect to whether an accused product

1240. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 955, 78 U.S.P.Q.2d (BNA) 1267, 1276 (Fed. Cir. 2006) (quoting *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1346, 58 U.S.P.Q.2d (BNA) 1059, 1066 (Fed. Cir. 2001)).

1241. *See id.* at 955-56, 78 U.S.P.Q.2d (BNA) at 1276-77.

1242. *See id.*, 78 U.S.P.Q.2d (BNA) at 1276.

1243. *See Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1379, 79 U.S.P.Q.2d (BNA) 1865, 1874-75 (Fed. Cir. 2006).

1244. *Id.*, 79 U.S.P.Q.2d (BNA) at 1875 (quoting *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1582, 37 U.S.P.Q.2d (BNA) 1365, 1373 (Fed. Cir. 1996)).

1245. *Varco, L.P. v. Pason Sys. USA Corp.*, 436 F.3d 1368, 1376, 77 U.S.P.Q.2d (BNA) 1948, 1955 (Fed. Cir. 2006) (quoting *Am. Hosp. Supply Corp. v. Travenol Labs., Inc.*, 745 F.2d 1, 9, 223 U.S.P.Q. (BNA) 577, 583 (Fed. Cir. 1984)).

is an appropriate equivalent. Thus, in *LG Electronics*, the court ruled that the district court had inappropriately granted summary judgment of no infringement under the doctrine of equivalents where there was a genuine issue of material fact “as to whether the accused device can function within the narrow range of equivalents” that the court ruled would be permissible.¹²⁴⁶

3. Other infringement doctrines

a. Inducing infringement

In one of the more significant infringement rulings of 2006, the Federal Circuit issued its en banc decision in *DSU Medical Corp. v. JMS Co.*,¹²⁴⁷ clarifying the level of intent necessary for inducing infringement.¹²⁴⁸ Inducing infringement requires “both an underlying instance of direct infringement and a requisite showing of intent.”¹²⁴⁹ Thus, the court must determine whether the party accused of inducing infringement acted with the requisite intent. Prior to the decision in *DSU Medical*, there was some question whether the accused inducer merely had to intend to commit certain acts that in fact would infringe a patent or whether the accused inducer had to actually know of a patent and intend that it be infringed. In *DSU Medical*, the court explained that it was clarifying the

intent requirement by holding en banc that, as was stated in *Mansville Sales Corp. v. Paramount Systems, Inc.*, 917 F.2d 544, 554 (Fed. Cir. 1990), “[t]he plaintiff has the burden of showing that the alleged infringer’s actions induced infringing acts and that he knew or should have known his actions would induce actual infringements.” The requirement that the alleged infringer knew or should have known his actions would induce actual infringement necessarily includes the requirement that he or she knew of the patent.¹²⁵⁰

Therefore, the court emphasized that

the intent requirement for inducement requires more than just intent to cause the acts that produce direct infringement. Beyond that threshold knowledge, the inducement must have an

1246. See *LG Elecs., Inc., v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1380-81, 79 U.S.P.Q.2d (BNA) 1443, 1456 (Fed. Cir. 2006).

1247. 471 F.3d 1293, 81 U.S.P.Q.2d (BNA) 1238 (Fed. Cir. 2006).

1248. *Id.*, 81 U.S.P.Q.2d (BNA) 1238 (Fed. Cir. 2006).

1249. *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1222, 79 U.S.P.Q.2d (BNA) 1094, 1103 (Fed. Cir. 2006) (citation and quotation omitted).

1250. *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1304, 81 U.S.P.Q.2d (BNA) 1238, 1246 (Fed. Cir. 2006) (other citations omitted).

affirmative intent to cause direct infringement. In the words of a recent decision, inducement requires “that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another’s infringement.” Accordingly, inducement requires evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.¹²⁵¹

Applying this standard, the court affirmed the jury’s determination that the accused inducer had not “purposefully and culpably” induced infringement.¹²⁵² The court noted that the record contained substantial evidence that the accused inducer did not believe that the device at issue infringed the patent.¹²⁵³

The court’s holding in *DSU Medical* is quite significant. Earlier in 2006, the court in *nCube* had affirmed a jury verdict of induced infringement based upon a jury instruction that merely stated that the accused inducer would be liable if it “actively and knowingly aided or abetted someone to make, use, sell, or offer to sell the entire product covered by the claims of the patent in suit.”¹²⁵⁴ That instruction did not include the requirement that the accused inducer specifically know of and intend to infringe the patent. Accordingly, under the law clarified in *DSU Medical*, it appears that it would have been harder to affirm the verdict in *nCube* under the *Manville Sales/DSU Medical* standard.

On the other hand, the court in *Golden Blount, Inc. v. Robert H. Peterson Co.*,¹²⁵⁵ noted that the intent requirement had not been clarified by the court, and emphasized that even if specific intent to cause infringement were necessary to holding a party liable for inducing infringement, such specific intent was evident in the case before it.¹²⁵⁶ The court emphasized that the accused inducer “had notice of the patent” and that he had provided instructions to customers “directing them to perform specific acts leading to the assembly of infringing devices, from which the district court could draw an inference of [specific] intent”¹²⁵⁷

In *Liquid Dynamics*, the court addressed inducement of infringement by foreign purchasers. Under 35 U.S.C. § 271(f)(1), a party may be an infringer if it:

1251. *Id.* at 1306, 81 U.S.P.Q.2d (BNA) at 1247 (citations omitted).

1252. *See id.* at 1307, 81 U.S.P.Q.2d (BNA) at 1248.

1253. *See id.*, 81 U.S.P.Q.2d (BNA) at 1248.

1254. *nCube Corp. v. Seachange Int’l, Inc.*, 436 F.3d 1317, 1324-25, 77 U.S.P.Q.2d (BNA) 1481, 1487 (Fed. Cir. 2006).

1255. 438 F.3d 1354, 78 U.S.P.Q.2d (BNA) 1004 (Fed. Cir. 2006).

1256. *See id.* at 1364-65, 78 U.S.P.Q.2d (BNA) at 1012.

1257. *Id.* at 1364 n.4, 78 U.S.P.Q.2d (BNA) at 1012 n.4.

“supplies . . . in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States”¹²⁵⁸

The court upheld a jury verdict of inducement because there was substantial evidence in the record that the accused inducer knew about the ‘414 patent at issue and “intended for its . . . design to infringe the claims of the ‘414 patent.”¹²⁵⁹

An issue related to that addressed in *Liquid Dynamics* is whether § 271(f) applies to process inventions. That issue is apparently unresolved. In *Union Carbide Chemicals and Plastics Technology Corp. v. Shell Oil Co.*,¹²⁶⁰ Judge Lourie, joined by Chief Judge Michel and Judge Linn, dissented from the court’s denial of rehearing en banc because, in his view, § 271(f) cannot apply to process inventions.¹²⁶¹ Judge Lourie’s dissent emphasized that the statute “speaks of supplying ‘components of a patented invention, where such components are uncombined . . . in such manner as to actively induce the combination of such components outside of the United States.’ 35 U.S.C. § 271(f). The whole tenor of that provision relates to physical inventions, i.e., apparatus or compositions, not methods.”¹²⁶² The majority, of course, had held that § 271(f) did in fact apply to method claims and thus, until and unless the Federal Circuit addresses that issue en banc, or the Supreme Court takes up the issue, § 271(f) does apply to method claims.

In *Kim*, the court affirmed the district court’s grant of judgment of no inducing infringement on the ground that the plaintiff had failed to prove underlying infringement.¹²⁶³ The court emphasized that the plaintiff had presented “no testimony based on the accused products themselves that supported a finding of infringement,” and thus found no reason to disturb the district court’s ruling.¹²⁶⁴

1258. See *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1222, 79 U.S.P.Q.2d (BNA) 1094, 1103 (Fed. Cir. 2006).

1259. See *id.* at 1222-23, 79 U.S.P.Q.2d (BNA) at 1103.

1260. 434 F.3d 1357, 77 U.S.P.Q.2d (BNA) 1634 (Fed. Cir. 2006).

1261. See *id.* at 1358-59, 77 U.S.P.Q.2d (BNA) at 1635-36 (Lourie, J., dissenting).

1262. See *id.* at 1358, 77 U.S.P.Q.2d (BNA) at 1635 (Lourie, J., dissenting).

1263. See *Yoon Ja Kim v. Conagra Foods, Inc.*, 465 F.3d 1312, 1319-20, 80 U.S.P.Q.2d (BNA) 1495, 1499-1500 (Fed. Cir. 2006).

1264. See *id.* at 1320, 80 U.S.P.Q.2d (BNA) at 1500.

b. Contributory infringement

The court in *DSU Medical* also addressed the related doctrine of contributory infringement under 35 U.S.C. § 271(c). Under that section:

Whoever offers to sell or sells *within the United States* . . . a component of a patented machine, manufacture, combination or composition . . . constituting a material part of the invention, *knowing* the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce *suitable for substantial noninfringing use*, shall be liable as a contributory infringer.¹²⁶⁵

Thus, to prevail on contributory infringement, the plaintiff must show that the accused infringer knew that the component it sold would be used in an infringing product, was not suitable for substantial non-infringing uses and that the component was sold within the United States. The court in *DSU Medical* determined that the district court had correctly refused to grant a new trial as to contributory infringement because the jury verdict of no contributory infringement could be sustained on the basis that there was no underlying infringement that occurred within the United States.¹²⁶⁶ The court found that substantial evidence showed that components that were shipped into the United States were already in an infringing configuration; thus, the court concluded that it was reasonable for the jury to determine that any infringing acts took place outside of the United States.¹²⁶⁷

c. Willful infringement

“The extent to which the infringer disregarded the property rights of the patentee, the deliberateness of tortious acts, or other manifestations of unethical or injurious commercial conduct, may provide grounds for a finding of willful infringement.”¹²⁶⁸ “A patentee bears the burden of persuasion and must prove willful infringement by clear and convincing evidence.”¹²⁶⁹ A finding of willful infringement will permit the assessment of enhanced damages for infringement.¹²⁷⁰

1265. 35 U.S.C. § 271(c) (2000) (quoted with emphasis in *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1303, 81 U.S.P.Q.2d (BNA) 1238, 1244-45 (Fed. Cir. 2006)).

1266. *See DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1303, 81 U.S.P.Q.2d (BNA) 1238, 1244-45 (Fed. Cir. 2006).

1267. *See id.*, 81 U.S.P.Q.2d (BNA) at 1245.

1268. *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1367-68, 78 U.S.P.Q.2d (BNA) 1004, 1015 (Fed. Cir. 2006) (quotation omitted).

1269. *Id.* at 1368, 78 U.S.P.Q.2d (BNA) at 1015 (citation omitted).

1270. *See infra* notes 1366-1377.

In *nCube*, the Federal Circuit affirmed a jury verdict of willful infringement where the accused infringer claimed that it relied on an opinion of counsel of non-infringement.¹²⁷¹ The court concluded that the opinion-of-counsel defense was defective because the record showed “that at least one important technical document was not supplied to [the defendant’s] opinion counsel. Thus, ‘the best information was intentionally not made available to counsel during the preparation of the opinion, so that the opinion can no longer serve its prophylactic purpose of negating a finding of willful infringement.’”¹²⁷²

Similarly, in *Liquid Dynamics*, the Federal Circuit affirmed the jury’s verdict of willful infringement where the accused infringer argued that it had relied on an opinion of counsel of non-infringement.¹²⁷³ The court held that the jury verdict was sustainable because patent counsel “was not given” complete versions of necessary documents, and thus his opinion was flawed and was not a proper basis to avoid a finding of willful infringement.¹²⁷⁴

Likewise, the court in *Applied Medical* upheld a jury verdict of willfulness notwithstanding the accused infringer’s argument that it had relied on several opinions of counsel.¹²⁷⁵ The court emphasized that there was substantial evidence that each of those opinions was defective and that the accused infringer “did not rely on the legal opinions as legitimate advice as to whether Versaport II infringed, but rather sought legal opinions for their potential evidentiary value on the issue of willful infringement in future litigation.”¹²⁷⁶

On a related issue, the court in *Golden Blount* addressed the effect on willfulness analysis of a failure to seek an opinion of counsel. In *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*,¹²⁷⁷ the Federal Circuit had ruled that it is inappropriate to draw an inference that any opinion of counsel would have been unfavorable from the fact that a party did not seek an opinion of counsel as to infringement.¹²⁷⁸ In *Golden Blount*, the accused infringer urged that

1271. See *nCube Corp v. Seachange Int’l, Inc.*, 436 F.3d 1317, 1324, 77 U.S.P.Q.2d (BNA) 1481, 1486-87 (Fed. Cir. 2006).

1272. *Id.*, 77 U.S.P.Q.2d (BNA) at 1487 (quoting *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1191, 48 U.S.P.Q.2d (BNA) 1001, 1009 (Fed. Cir. 1998)).

1273. See *Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 449 F.3d 1209, 1225, 79 U.S.P.Q.2d (BNA) 1094, 1105-06 (Fed. Cir. 2006).

1274. See *id.* at 1225-26, 79 U.S.P.Q.2d (BNA) at 1105.

1275. See *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1365, 77 U.S.P.Q.2d (BNA) 1666, 1672-73 (Fed. Cir. 2006).

1276. *Id.* at 1365, 77 U.S.P.Q.2d (BNA) at 1673.

1277. 383 F.3d 1337, 72 U.S.P.Q.2d (BNA) 1560 (Fed. Cir. 2004) (en banc).

1278. See *id.* at 1344, 72 U.S.P.Q.2d (BNA) at 1565.

the district court had in fact drawn such an adverse inference.¹²⁷⁹ The Federal Circuit rejected this argument, concluding that the district court had “considered all of the facts presented in assessing whether Peterson acted in reckless disregard of Golden Blount’s patent rights”; those facts included substantial evidence that Peterson had obtained several incomplete and plainly insufficient oral opinions as to infringement.¹²⁸⁰ The court accordingly concluded that the district court had not drawn any improper inferences.¹²⁸¹

V. REMEDIES AND LIMITATIONS ON RECOVERY

A. Damages

In 2006, the Federal Circuit handed down a number of significant damages decisions. It decided several cases clarifying plaintiffs’ ability to recover two separate damages awards based on putatively separate infringements or legal theories. It also issued decisions reviewing district courts’ applications of the *Panduit Corp. v. Stahlin Brothers Fibre Works, Inc.*¹²⁸² lost-profits test, as well as reviewing an award of enhanced damages premised upon willful patent infringement.

1. General Damages

The Federal Circuit decided three cases in 2006 relating to the effect of an initial reasonable-royalty, patent-infringement damages award upon the plaintiff’s ability to obtain a second damages award under a different theory. In this regard, the panel considered the collateral estoppel effect of rulings relating to a previous damages award upon a subsequent damages award relating to additional accused products, the interaction between an award of damages for direct infringement and a subsequent attempt to receive an award for indirect infringement for the same conduct, and the effect of a patent-damages award upon a plaintiff’s ability to obtain trademark-infringement damages based upon conduct forming the basis of the patent-damages award.

In *Applied Medical Resources Corp. v. U.S. Surgical Corp.*,¹²⁸³ Applied sued U.S. Surgical for infringement of a patent relating to surgical

1279. See *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354, 1367-69, 78 U.S.P.Q.2d (BNA) 1004, 1014-16 (Fed. Cir. 2006).

1280. See *id.* at 1369, 78 U.S.P.Q.2d (BNA) at 1016.

1281. See *id.* at 1369-70, 78 U.S.P.Q.2d (BNA) at 1016.

1282. 575 F.2d 1152, 197 U.S.P.Q. (BNA) 726 (6th Cir. 1978).

1283. 435 F.3d 1356, 77 U.S.P.Q.2d (BNA) 1666 (Fed. Cir. 2006).

devices used in abdominal surgery.¹²⁸⁴ A jury had found in a previous action that U.S. Surgical had willfully infringed the patent, and had awarded Applied a reasonable royalty of 7%.¹²⁸⁵ After that verdict, U.S. Surgical began selling a redesigned device, and Applied brought this second lawsuit accusing the redesigned product of patent infringement.¹²⁸⁶ The district court granted summary judgment of infringement in favor of Applied, and the Federal Circuit affirmed that liability ruling on appeal.¹²⁸⁷

The parties then tried damages in the second case involving the redesigned accused products.¹²⁸⁸ U.S. Surgical argued that principles of collateral estoppel required that the seven percent royalty from the first lawsuit also be used in the second case.¹²⁸⁹ The district court rejected this argument, and imposed a different and higher royalty amount. U.S. Surgical appealed to the Federal Circuit.¹²⁹⁰

Applying the regional law of the Ninth Circuit to the collateral estoppel issue, the panel affirmed the district court's rejection of U.S. Surgical's claim that the original royalty percentage was binding in the second case.¹²⁹¹ The panel observed that collateral estoppel applies only where an issue is "identical" between two cases, and held that the doctrine was "not appropriate because the necessary reasonable royalty determination in [the second case wa]s not identical to that decided in [the first case]."¹²⁹² The panel noted that a reasonable royalty is based upon a hypothetical negotiation between the parties regarding terms of a license, and that this counterfactual analysis "must relate to the time infringement occurred."¹²⁹³ The panel rejected U.S. Surgical's contention that the infringement in the two cases could be treated as a single, undifferentiated and ongoing infringement, holding instead that "the infringements requiring compensation began at separate and distinct times" in the two cases.¹²⁹⁴ "Because [the first case] and [the second] caused two separate infringements, and each infringement commenced on a different date, it follows that the reasonable

1284. *See id.* at 1357-58, 77 U.S.P.Q.2d (BNA) at 1667.

1285. *See id.* at 1358, 77 U.S.P.Q.2d (BNA) at 1668.

1286. *See id.* at 1358-59, 77 U.S.P.Q.2d (BNA) at 1668.

1287. *See id.* at 1359, 77 U.S.P.Q.2d (BNA) at 1668.

1288. *See id.*, 77 U.S.P.Q.2d (BNA) at 1668.

1289. *See id.*, 77 U.S.P.Q.2d (BNA) at 1668.

1290. *See id.*, 77 U.S.P.Q.2d (BNA) at 1668-69.

1291. *See id.* at 1360, 77 U.S.P.Q.2d (BNA) at 1669.

1292. *Id.* at 1361, 77 U.S.P.Q.2d (BNA) at 1670.

1293. *Id.*, 77 U.S.P.Q.2d (BNA) at 1670.

1294. *Id.*, 77 U.S.P.Q.2d (BNA) at 1670.

royalties may well be different from each other,” thus precluding application of collateral estoppel.¹²⁹⁵

Moreover, the panel observed that, in defending against infringement in the second action, “U.S. Surgical ha[d] asserted that [the redesigned product at issue in that case wa]s a different product from the” accused product in the first case.¹²⁹⁶ “Having conceded that [the two products] were different infringements, U.S. Surgical’s attempt to conflate the two products for purposes of damages fails.”¹²⁹⁷ The panel further held that, “simply because the *same* company sold two *different* products which infringed a patent does not prevent the patentee from litigating and collecting *separate* damages for *each* infringement.”¹²⁹⁸

The panel cautioned, however, that despite its ruling in the case at hand, “there may be instances, which we do not address here, in which two products, even if not identical, may present the same damages analysis.”¹²⁹⁹ Because “[t]he two infringements caused by [the products at issue in the two cases] began at *different* times, and require two different hypothetical negotiation dates,” the panel held that such a case of identical damages analyses was “not the case here.”¹³⁰⁰

In *Glenayre Electronics, Inc. v. Jackson*,¹³⁰¹ Jackson, a patent holder, claimed that Glenayre had infringed a patent relating to an apparatus for making certain control signals over telephone lines.¹³⁰² Glenayre brought the lawsuit seeking a declaratory judgment of non-infringement.¹³⁰³ Jackson counterclaimed against Glenayre for indirect infringement based upon Glenayre’s sales of the accused products to Glenayre’s customers.¹³⁰⁴ The district court stayed the counterclaims, and held a jury trial on direct infringement.¹³⁰⁵ The jury returned a verdict of infringement and awarded reasonable royalty damages to Jackson in the amount of \$12,000,000.¹³⁰⁶ The district court granted Glenayre’s motion for remittitur, finding that the evidence did not support a royalty in that amount, and reducing

1295. *Id.* at 1361-62, 77 U.S.P.Q.2d (BNA) at 1670.

1296. *Id.* at 1362, 77 U.S.P.Q.2d (BNA) at 1670.

1297. *Id.*, 77 U.S.P.Q.2d (BNA) at 1670.

1298. *Id.*, 77 U.S.P.Q.2d (BNA) at 1671.

1299. *Id.* at 1363, 77 U.S.P.Q.2d (BNA) at 1671.

1300. *Id.*, 77 U.S.P.Q.2d (BNA) at 1671.

1301. 443 F.3d 851, 78 U.S.P.Q.2d (BNA) 1641 (Fed. Cir. 2006).

1302. *See id.* at 853, 78 U.S.P.Q.2d (BNA) at 1642.

1303. *See id.*, 78 U.S.P.Q.2d (BNA) at 1642.

1304. *See id.*, 78 U.S.P.Q.2d (BNA) at 1642-43.

1305. *See id.*, 78 U.S.P.Q.2d (BNA) at 1643.

1306. *See id.*, 78 U.S.P.Q.2d (BNA) at 1643.

the damages award to \$2,650,000 plus prejudgment interest.¹³⁰⁷ “Jackson accepted the district court’s decision to award him the remitted damages award plus prejudgment interest,”¹³⁰⁸ but later “filed a motion to set trial on the stayed counterclaims of indirect infringement by Glenayre.”¹³⁰⁹ The district court denied the motion, holding “that the judgment completely compensated Jackson for direct infringement and therefore there was nothing else owed to Jackson,”¹³¹⁰ and Jackson appealed.

In the Federal Circuit, the panel majority affirmed, rejecting Jackson’s arguments that he was entitled to a new trial on reasonable royalty damages for indirect infringement by Glenayre. Jackson first argued “that various statements and conduct of the district court and Glenayre require[d] that a second trial be held to address his claims of indirect infringement by Glenayre.”¹³¹¹ The panel majority rejected this argument, concluding that “none of these statements or conduct constitute[d] a guarantee or promise by the district court that entitle[d] Jackson to a second trial as a matter of right.”¹³¹²

Jackson next challenged the district court’s conclusion that he had been fully compensated for any indirect infringement by the original damages award. The panel majority rejected this argument, too, noting that “Jackson’s allegations of indirect infringement [we]re based solely on Glenayre’s sales of infringing products to its customers followed by those customers’ use of the same products.”¹³¹³ The panel majority held that,

at least in cases like this one, where a patentee alleges that a manufacturer contributes to and induces infringement by its customers simply because it sells infringing products to its customers, damages assessed for indirect infringement normally will be the same as damages that would be assessed had the patentee sued and obtained a judgment against the customers.¹³¹⁴

Moreover, the panel majority concluded that “in most cases damages assessed for indirect infringement will be equal to damages assessed for the underlying direct infringement.”¹³¹⁵ The panel majority found that general rule applicable and emphasized that Jackson had “presented evidence and arguments regarding customer

1307. *See id.* at 854, 78 U.S.P.Q.2d (BNA) at 1643.

1308. *Id.*, 78 U.S.P.Q.2d (BNA) at 1643.

1309. *Id.*, 78 U.S.P.Q.2d (BNA) at 1644.

1310. *Id.*, 78 U.S.P.Q.2d (BNA) at 1644.

1311. *Id.* at 856, 78 U.S.P.Q.2d (BNA) at 1645.

1312. *Id.* at 856-57, 78 U.S.P.Q.2d (BNA) at 1645.

1313. *Id.* at 858, 78 U.S.P.Q.2d (BNA) at 1646.

1314. *Id.* at 858-59, 78 U.S.P.Q.2d (BNA) at 1647.

1315. *Id.* at 859, 78 U.S.P.Q.2d (BNA) at 1647.

use to the jury and judge during and after the first trial.”¹³¹⁶ It thus concluded that Jackson’s attempt to get damages for indirect infringement amounted to an attempt to re-litigate the district court’s remittitur from the first phase, which “ha[d] already been litigated to a final judgment.”¹³¹⁷

The panel majority next turned to considering three Supreme Court precedents in this area, *Birdsell v. Shaliol*,¹³¹⁸ *Union Tool Co. v. Wilson*,¹³¹⁹ and *Aro Manufacturing Co. v. Convertible Top Replacement Co.*¹³²⁰ The panel majority found that *Birdsell* precluded Jackson “from suing to collect damages for direct infringement by Glenayre’s customers because actual damages ha[d] already been collected from Glenayre and Glenayre’s customers simply use[d] infringing devices made and sold by Glenayre.”¹³²¹ Similarly, it found that *Union Tool* applied the principle

that when a patentee receives full compensation for the wrongful use of an invention in devices made and sold by a manufacturer, the patentee effectively adopts the sales by the manufacturer such that purchasers and users of the devices receive implied licenses that free them from liability for infringement of the patent.¹³²²

Finally, the panel majority reasoned that *Aro Manufacturing* was inapplicable because it related only to “the question of whether Glenayre’s customers are *liable* for actions they took before Jackson accepted the remittitur,” an issue that was “not before us in this appeal.”¹³²³

Judge Newman dissented. She opined that “a damages award against a manufacturer does not automatically include a paid-up license for infringing operations by the manufacturer’s customers.”¹³²⁴ Further, she reasoned that “[w]hether users and resellers who acquire the patented invention from an infringing manufacturer can incur liability for infringement and additional damages, is independent of whether the infringing manufacturer has already paid the judgment based on its own infringing manufacture.”¹³²⁵ Because she believed that the original damages award did not fully

1316. *Id.* at 860, 78 U.S.P.Q.2d (BNA) at 1648.

1317. *Id.* at 862, 78 U.S.P.Q.2d (BNA) at 1649.

1318. 112 U.S. 485 (1884).

1319. 259 U.S. 107 (1922).

1320. 377 U.S. 476 (1964).

1321. *Glenayre*, 443 F.3d at 864, 78 U.S.P.Q.2d (BNA) at 1651.

1322. *Id.* at 865, 78 U.S.P.Q.2d (BNA) at 1652.

1323. *Id.* at 871, 78 U.S.P.Q.2d (BNA) at 1656.

1324. *Id.* at 875, 78 U.S.P.Q.2d (BNA) at 1659 (Newman, J., dissenting).

1325. *Id.* at 877, 78 U.S.P.Q.2d (BNA) at 1661 (Newman, J., dissenting).

compensate Jackson for indirect infringement on the part of Glenayre, she dissented from the judgment.¹³²⁶

In *Aero Products International, Inc. v. Intex Recreation Corp.*,¹³²⁷ the panel considered the circumstances under which an award of trademark damages must be remitted as duplicative with a concurrent award of damages for patent infringement. Aero sued Intex for its sales of certain mattresses and asserted that, in doing so, Intex had infringed a patent relating to inflatable support systems, and also a registered trademark on the phrase "ONE TOUCH."¹³²⁸ The district court entered a judgment of infringement under both theories, and awarded patent-infringement damages in the amount of \$2.95 million (which it doubled based upon a jury finding of willfulness) and, additionally, \$1 million in trademark-infringement damages.¹³²⁹

Intex appealed, arguing that "Aero's recovery of both patent and trademark infringement damages represent[ed] an impermissible double recovery."¹³³⁰ The panel noted that, "[g]enerally, the double recovery of damages is impermissible," and, in particular, "double recovery for the same injury is inappropriate."¹³³¹ The panel reviewed several precedents in this area, concluding that they "teach that, in determining whether there has been an impermissible double recovery of damages, the inquiry focuses on whether the damages issue arose from the same set of operative facts."¹³³² Intex argued that the damages awards did stem from the same set of operative facts, namely the sales of the same infringing mattresses.¹³³³ Aero, on the other hand, argued that the operative facts were different, because the patent and trademark infringements constituted "two separate wrongs."¹³³⁴

The panel held that the two awards had stemmed from the same set of operative facts and, therefore, were impermissibly duplicative. The panel noted that the patent damages represented a reasonable royalty on sales of the accused mattresses,¹³³⁵ and that the only evidence supporting the trademark damages was the fact of the same

1326. *See id.* at 878-79, 78 U.S.P.Q.2d (BNA) at 1662.

1327. 466 F.3d 1000, 80 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

1328. *See id.* at 1003, 80 U.S.P.Q.2d (BNA) at 1482.

1329. *See id.*, 80 U.S.P.Q.2d (BNA) at 1482.

1330. *Id.* at 1016, 80 U.S.P.Q.2d (BNA) at 1491.

1331. *Id.* at 1017, 80 U.S.P.Q.2d (BNA) at 1492.

1332. *Id.* at 1018, 80 U.S.P.Q.2d (BNA) at 1492.

1333. *See id.*, 80 U.S.P.Q.2d (BNA) at 1492-93.

1334. *Id.*, 80 U.S.P.Q.2d (BNA) at 1493.

1335. *See id.*, 80 U.S.P.Q.2d (BNA) at 1493.

sales.¹³³⁶ Thus, it found that “Aero based both its patent and trademark damages solely on sales of the accused Intex mattresses. Aero did not rely on any other evidence in support of its trademark damages.”¹³³⁷ Because “all of the damages awarded to Aero flowed from the same operative facts: sales of the infringing Intex mattresses,”¹³³⁸ it held that “Aero was fully compensated” by the reasonable royalty award,¹³³⁹ and “could not also be awarded defendants’ profits for trademark infringement based on the same sales of the same accused devices.”¹³³⁹

2. *Lost-profits damages*

In 2006, the Federal Circuit added little in the way of new analytical development in the area of lost-profits damages. It issued decisions applying the *Panduit* factors and evaluating the proper temporal scope of lost-profits awards based upon the scope of a plaintiff’s exclusive license to the patent in suit.

In *Golden Blount, Inc. v. Robert H. Peterson Co.*,¹³⁴⁰ the panel reviewed an award of \$429,256 (trebled to \$1,287,766 for willfulness) in lost-profits damages, plus attorneys’ fees, based on Peterson’s infringement of Golden Blount’s patent.¹³⁴¹ The district court had based the damages award on the *Panduit Corp. v. Stahlin Brothers Fibre Works, Inc.*¹³⁴² analysis, which looks to the demand for the patented product, the absence of acceptable, non-infringing alternatives, the capacity to exploit the demand, and the amount of profit lost by the plaintiff.¹³⁴³

The district court found that there was effectively a two-supplier market (with the parties before the court collectively controlling ninety-five percent of the market).¹³⁴⁴ The court found, moreover, that the accused ember burner was “the basis for the customer’s demand” under the entire-market-value rule, and caused a loss to Golden Blount of “the entire burner assembly, the grate, and a full set of artificial logs.”¹³⁴⁵ The district court thus “found that 97.5% of the time that Peterson sold [an infringing secondary burner], Golden Blount lost the sale of its entire burner assembly and a full set of logs,

1336. *Id.* at 1019, 80 U.S.P.Q.2d (BNA) at 1493.

1337. *Id.*, 80 U.S.P.Q.2d (BNA) at 1493.

1338. *Id.*, 80 U.S.P.Q.2d (BNA) at 1493.

1339. *Id.*, 80 U.S.P.Q.2d (BNA) at 1493.

1340. 438 F.3d 1354, 78 U.S.P.Q.2d (BNA) 1004 (Fed. Cir. 2006)

1341. *See id.* at 1357, 78 U.S.P.Q.2d (BNA) at 1007.

1342. 575 F.2d 1152, 197 U.S.P.Q. (BNA) 726 (6th Cir. 1978).

1343. *See Golden Blount*, 438 F.3d at 1370, 78 U.S.P.Q.2d (BNA) at 1016.

1344. *See id.*, 78 U.S.P.Q.2d (BNA) at 1016.

1345. *Id.*, 78 U.S.P.Q.2d (BNA) at 1017.

and that 2.5% of the time, Golden Blount lost the sale of its ember burner alone.”¹³⁴⁶ Peterson challenged the district court’s inclusion of the entire burner assemblies in the lost-profits calculation.¹³⁴⁷

The panel affirmed the basic approach of the district court, finding that “Golden Blount proffered sufficient evidence from which the district court could find that ‘but for’ Peterson’s sale of the [accused burner], . . . the end-user would have turned to Golden Blount to satisfy its demand for the patented product.”¹³⁴⁸ Because Peterson “c[ame] forward with no quantitative evidence to rebut th[e] testimony” of the retailer that full assemblies are ordinarily sold together, it “left itself open to the inferences reasonably drawn by the district court.”¹³⁴⁹ Nonetheless, the panel reduced the damages award in light of “802 [burners] allegedly returned to Peterson before being assembled into an infringing configuration,” which the district court had included in its damages calculation.¹³⁵⁰ The panel noted that, “[i]f the 802 [burners] were returned before having been sold to retailers and thereafter assembled into an infringing configuration, they should not have been included in the damages calculus.”¹³⁵¹ The court explained that “there can be no cognizable lost sale on which to base a damages award under the patent laws without an act of infringement to warrant it,” and the returned burners might never have been “assembl[ed] into an infringing configuration.”¹³⁵²

In *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*,¹³⁵³ DePuy sued Medtronic for infringement of a patent relating to pedicle screws used in spinal surgery. The district court entered judgment that certain Medtronic screws had infringed the patent under the doctrine of equivalents, and awarded lost-profits damages.¹³⁵⁴

Medtronic appealed the damages award. Medtronic “d[id] not contest that if DePuy Spine was an exclusive licensee during the relevant time period, it [wa]s entitled to the lost profits at issue.”¹³⁵⁵ Instead, it argued that DePuy had not been an exclusive licensee until August 31, 1999, and that the damages award had included profits allegedly lost from before that date.¹³⁵⁶ The panel rejected this

1346. *Id.*, 78 U.S.P.Q.2d (BNA) at 1017.

1347. *See id.* at 1371, 78 U.S.P.Q.2d (BNA) at 1017.

1348. *Id.* at 1372, 78 U.S.P.Q.2d (BNA) at 1018.

1349. *Id.*, 78 U.S.P.Q.2d (BNA) at 1018.

1350. *Id.*, 78 U.S.P.Q.2d (BNA) at 1018.

1351. *Id.*, 78 U.S.P.Q.2d (BNA) at 1018.

1352. *Id.* at 1373, 78 U.S.P.Q.2d (BNA) at 1018-19.

1353. 469 F.3d 1005, 80 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2006).

1354. *See id.* at 1009-10, 80 U.S.P.Q.2d (BNA) at 1867.

1355. *Id.* at 1025, 80 U.S.P.Q.2d (BNA) at 1879.

1356. *See id.* at 1024, 80 U.S.P.Q.2d (BNA) at 1878.

argument, and thus affirmed the full lost-profits award, finding that the exclusive license with respect to the patent had “bec[o]me operative . . . in January 1998” as the result of a 1993 Technology Agreement.¹³⁵⁷ The panel held that the 1993 agreement expressly “provide[d] an exclusive license for all of [the licensor’s] current and future . . . designs,”¹³⁵⁸ and that, “when [the licensor] acquired the [patent in question], it acquired the design of the products covered by that patent as well.”¹³⁵⁹ The panel thus held that the 1993 agreement triggered an exclusive license as soon as the licensor acquired the patent in suit, and that this “provide[d] a basis for the jury’s lost profit award.”¹³⁶⁰ The panel rejected Medtronic’s argument that a subsequent Exclusive License Agreement between DePuy and the licensor affected this conclusion, holding that because it had been entered into later, it was “not relevant to the rights that were created by the parties by the 1993 Technology Agreement entered into on February 4, 1993.”¹³⁶¹

B. Enhanced Damages

In *nCube Corp. v. SeaChange International, Inc.*,¹³⁶² the panel addressed an award of enhanced damages. A jury found SeaChange liable for infringement of nCube’s patent.¹³⁶³ Over a dissent by Judge Dyk, the panel majority upheld the findings of literal infringement, willful infringement, and indirect infringement by inducement.¹³⁶⁴ Affirming the district court’s grant of judgment as a matter of law rejecting the jury’s finding of infringement under the doctrine of equivalents,¹³⁶⁵ the panel addressed the award of enhanced damages and attorneys’ fees.

Under *Read Corp. v. Portec, Inc.*,¹³⁶⁶ a district court may award enhanced damages pursuant to 35 U.S.C. § 284 if “the infringement is willful,” considering “the egregiousness of the defendant’s conduct based on all the facts and circumstances.”¹³⁶⁷ SeaChange challenged the district court’s finding of willfulness and its discretionary enhancement of the damages award.¹³⁶⁸ The panel majority rejected

1357. *Id.*, 80 U.S.P.Q.2d (BNA) at 1879.

1358. *Id.* at 1026, 80 U.S.P.Q.2d (BNA) at 1880.

1359. *Id.*, 80 U.S.P.Q.2d (BNA) at 1880.

1360. *Id.*, 80 U.S.P.Q.2d (BNA) at 1880.

1361. *Id.*, 80 U.S.P.Q.2d (BNA) at 1880.

1362. 436 F.3d 1317, 77 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2006).

1363. *See id.* at 1319, 77 U.S.P.Q.2d (BNA) at 1482.

1364. *See id.* at 1319-25, 77 U.S.P.Q.2d (BNA) at 1483-88.

1365. *Id.* at 1325-26, 77 U.S.P.Q.2d (BNA) at 1488.

1366. 970 F.2d 816, 23 U.S.P.Q.2d (BNA) 1426 (Fed. Cir. 1992).

1367. *Id.* at 826, 23 U.S.P.Q.2d (BNA) at 1435.

1368. *See nCube*, 436 F.3d at 1325, 77 U.S.P.Q.2d (BNA) at 1487.

this challenge with little analysis. The panel majority noted that the district court had “awarded enhanced damages on the basis of the jury’s willfulness finding and the *Read* factors for enhancing damages.”¹³⁶⁹ The panel majority held that, “[m]ost importantly, the court found that the case for literal infringement was not close.”¹³⁷⁰ The panel majority’s acceptance of this finding that the infringement case “was not close” was striking in light of the fact that Judge Dyk dissented on that very infringement question.¹³⁷¹ Ruling that the district court had permissibly determined that SeaChange had “deliberately copied” the patented invention, the panel majority “detect[ed] no clear error in any of the court’s subsidiary factual findings leading to its conclusion that this was an exceptional case.”¹³⁷² On the same basis, the panel majority also held that there was “no abuse of discretion in the trial court’s award of attorney fees.”¹³⁷³

C. Attorneys’ Fees

The Federal Circuit reviewed a number of attorneys’ fee determinations in 2006. In several of these cases, the court explicated the standards for a case to be deemed exceptional for purposes of 35 U.S.C. § 285. It reversed one fee award on the ground that an objectively reasonable, but unsuccessful, litigation position could not support a determination that the litigation had been brought for improper purposes in the absence of evidence of bad faith. In another case, the court applied the principle that the mootness of the underlying dispute does not foreclose the district court’s jurisdiction over a motion for attorneys’ fees. And in several other cases, the court largely deferred to district courts’ determinations regarding whether cases were exceptional for fee-award purposes.

FieldTurf International, Inc. v. Sprinturf, Inc.,¹³⁷⁴ involved competitive bidding on a project to construct a synthetic turf sports field for a school.¹³⁷⁵ The school district’s initial Request for Proposal was based on a similar installation previously constructed by one of the bidders, FieldTurf. A FieldTurf competitor, SportFields, bid on the project,

1369. *Id.*, 77 U.S.P.Q.2d (BNA) at 1487 (citing *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 23 U.S.P.Q.2d (BNA) 1426 (Fed. Cir. 1992)).

1370. *Id.*, 77 U.S.P.Q.2d (BNA) at 1487.

1371. *See id.* at 1326-30, 77 U.S.P.Q.2d (BNA) at 1488-91 (Dyk, J., dissenting).

1372. *Id.* at 1325, 77 U.S.P.Q.2d (BNA) at 1487.

1373. *Id.*, 77 U.S.P.Q.2d (BNA) at 1487.

1374. 433 F.3d 1366, 77 U.S.P.Q.2d (BNA) 1468 (Fed. Cir. 2006).

1375. *Id.* at 1368, 77 U.S.P.Q.2d (BNA) at 1469.

and the school district ultimately awarded the project to SportFields.¹³⁷⁶ Following the bidding process, FieldTurf sued SportFields, alleging that SportFields's bid had constituted an unlawful offer to sell a product infringing a patent in violation of § 271(a), and SportFields counterclaimed on several state-law grounds.¹³⁷⁷

The district court granted SportFields's motion for summary judgment of non-infringement, and also on its state-law counterclaims.¹³⁷⁸ The district court awarded attorneys' fees against FieldTurf, finding, as a predicate, that the case was "exceptional" for purposes of 35 U.S.C. § 285, and thus proper for the fee award.¹³⁷⁹ The district court based its finding that the case was "exceptional" on its conclusion that FieldTurf had "manufactured" the lawsuit "by seeking to include patented features in the bid specifications and then filing suit based on SportFields' bid."¹³⁸⁰

The panel affirmed the district court's grant of summary judgment of non-infringement.¹³⁸¹ Nonetheless, it reversed the award of attorneys' fees. Reviewing the "exceptional" case determination for clear error, the panel held that "FieldTurf's patent position was not without support."¹³⁸² Because an "exceptional" case determination must involve "some finding by the trial judge of unfairness, bad faith, inequitable conduct, vexatious litigation, or some similar exceptional circumstance,"¹³⁸³ the panel did "not discern the egregious action required by precedent to support fee shifting."¹³⁸⁴ In the absence of such evidence of baseless litigation or bad faith, the panel held that the district court had clearly erred in relying upon the fact that FieldTurf had brought the instant lawsuit as a "manufactured" case.¹³⁸⁵

In *Highway Equipment Co. v. FECO, Ltd.*,¹³⁸⁶ the Federal Circuit considered jurisdictional and merits issues relating to an attorneys' fee decision. Highway Equipment sued FECO for patent infringement stemming from the sale of certain agricultural

1376. See *id.* at 1368-69, 77 U.S.P.Q.2d (BNA) at 1469-70.

1377. See *id.* at 1369, 77 U.S.P.Q.2d (BNA) at 1470.

1378. See *id.*, 77 U.S.P.Q.2d (BNA) at 1470.

1379. See *id.* at 1373, 77 U.S.P.Q.2d (BNA) at 1472.

1380. *Id.* at 1373, 77 U.S.P.Q.2d (BNA) at 1472.

1381. See *id.* at 1369-70, 77 U.S.P.Q.2d (BNA) at 1470-71.

1382. *Id.* at 1373, 77 U.S.P.Q.2d (BNA) at 1473.

1383. *Id.*, 77 U.S.P.Q.2d (BNA) at 1473 (internal quotation marks omitted).

1384. *Id.*, 77 U.S.P.Q.2d (BNA) at 1473.

1385. See *id.*, 77 U.S.P.Q.2d (BNA) at 1472-73.

1386. 469 F.3d 1027, 81 U.S.P.Q.2d (BNA) 1120 (Fed. Cir. 2006). One of the authors was counsel to the DePuy Spine parties in this case.

equipment.¹³⁸⁷ Shortly before trial was scheduled to begin, Highway Equipment issued FECO a covenant not to sue on the patent, and the district court dismissed the entire action, but retained jurisdiction over a motion by FECO for attorneys' fees.¹³⁸⁸ The district court found that the case was not exceptional, and denied FECO's fee request on the merits.¹³⁸⁹

FECO appealed the denial of attorneys' fees, and Highway Equipment cross-appealed the district court's predicate determination that it had jurisdiction to award fees in light of the mootness of the underlying dispute.¹³⁹⁰ Addressing the jurisdictional issue first, the panel held that "the district court correctly retained jurisdiction over FECO's claim for attorney fees."¹³⁹¹ The court noted that its precedents permitted district courts to retain jurisdiction over attorneys' fee motions even after the underlying dispute had become moot.¹³⁹²

On the merits, the panel rejected Highway Equipment's argument that attorneys' fees were unavailable "because FECO did not receive judicial relief on the merits"¹³⁹³ The panel agreed with Highway Equipment that the fee statute, 35 U.S.C. § 285, "prohibit[s] an award of fees to the plaintiff unless the court awards relief on the merits, either through a judgment on the merits or through a settlement agreement enforced through a consent decree."¹³⁹⁴ The "dispositive issue" was "whether the dismissal with prejudice had sufficient judicial imprimatur to constitute a 'judicially sanctioned change in the legal relationship of the parties.'"¹³⁹⁵ It found that standard satisfied, holding "that as a matter of patent law, the dismissal with prejudice, based on the covenant and granted pursuant to the district court's discretion under Rule 41(a)(2), ha[d] the necessary judicial imprimatur to constitute a judicially sanctioned change in the legal relationship of the parties."¹³⁹⁶ According to the court, a contrary ruling "would imply that the only way for a defendant to obtain a disposition on the merits would be to oppose a dismissal and proceed

1387. *See id.* at 1029, 81 U.S.P.Q.2d (BNA) at 1122.

1388. *See id.* at 1030-31, 81 U.S.P.Q.2d (BNA) at 1123.

1389. *See id.* at 1031, 81 U.S.P.Q.2d (BNA) at 1123.

1390. *See id.*, 81 U.S.P.Q.2d (BNA) at 1123-24.

1391. *Id.* at 1032, 81 U.S.P.Q.2d (BNA) at 1124.

1392. *See id.* at 1032-33, 81 U.S.P.Q.2d (BNA) at 1124-25.

1393. *Id.* at 1033, 81 U.S.P.Q.2d (BNA) at 1125.

1394. *Id.*, 81 U.S.P.Q.2d (BNA) at 1125.

1395. *Id.* at 1034, 81 U.S.P.Q.2d (BNA) at 1125.

1396. *Id.* at 1035, 81 U.S.P.Q.2d (BNA) at 1126.

to litigation on the merits, and would encourage the litigation of unreasonable and groundless claims.”¹³⁹⁷

The panel also affirmed the district court’s determination that, on the merits, the case was not exceptional, and its consequent denial of attorneys’ fees. The panel affirmed the district court’s rejection of FECO’s inequitable-conduct argument stemming from the prosecution of the patent, which was based upon evidence that Highway Equipment’s nondisclosure of certain alleged prior art had followed investigation and discussion with patent counsel, and a determination that the alleged prior art might not have “had a spreader” of the type “disclosed in [the patent].”¹³⁹⁸ It also affirmed the district court’s rejection of inequitable conduct premised on the failure to list a joint inventor, noting that the party that FECO claimed should have been listed had “indicated that he should *not* be named as an inventor.”¹³⁹⁹ And it affirmed the district court’s rejection of litigation misconduct as a basis for finding the case exceptional with little analysis, in deference to the district court’s findings on these points.¹⁴⁰⁰

In *Golden Blount*,¹⁴⁰¹ as discussed above,¹⁴⁰² the panel reviewed an award of damages and attorneys’ fees resulting from Peterson’s infringement of Golden Blount’s patent.¹⁴⁰³ The court briefly addressed the fee award on appeal. The panel upheld the district court’s designation of the case as “exceptional,” thus warranting a fee award, based on the fact that the district court had permissibly found that Peterson’s infringement of the patent to have been willful.¹⁴⁰⁴

In *Kao Corp. v. Unilever United States, Inc.*,¹⁴⁰⁵ the panel reviewed a district court’s refusal to award attorneys’ fees in a patent-infringement action relating to cosmetic skin-care products.¹⁴⁰⁶ The district court had held the patent valid and enforceable, but that it was not infringed by the accused Unilever product.¹⁴⁰⁷ The panel affirmed the district court’s validity holdings, finding that the patent complied with the written description requirement,¹⁴⁰⁸ and, over a

1397. *Id.*, 81 U.S.P.Q.2d (BNA) at 1126.

1398. *Id.* at 1037, 81 U.S.P.Q.2d (BNA) at 1127.

1399. *Id.*, 81 U.S.P.Q.2d (BNA) at 1128.

1400. *See id.*, 81 U.S.P.Q.2d (BNA) at 1128.

1401. 438 F.3d 1354, 78 U.S.P.Q.2d (BNA) 1004 (Fed. Cir. 2006).

1402. *See supra* notes 1128-40 and accompanying text.

1403. *See Golden Blount*, 438 F.3d at 1373, 78 U.S.P.Q.2d at 1019.

1404. *See id.* at 1373-74, 78 U.S.P.Q.2d (BNA) at 1019.

1405. 441 F.3d 963, 78 U.S.P.Q.2d (BNA) 1257 (Fed. Cir. 2006).

1406. *See id.* at 965, 78 U.S.P.Q.2d (BNA) at 1258.

1407. *See id.*, 78 U.S.P.Q.2d (BNA) at 1258.

1408. *See id.* at 968, 78 U.S.P.Q.2d (BNA) at 1260.

dissent by Judge Mayer,¹⁴⁰⁹ that it was not obvious,¹⁴¹⁰ nor the product of inequitable conduct during its prosecution.¹⁴¹¹ The panel majority also affirmed the district court's determination that Unilever had not literally infringed the patent, and that the plaintiff had failed to raise a doctrine-of-equivalents argument in the case.¹⁴¹² Judge Newman dissented on the infringement analysis.¹⁴¹³

Unilever appealed the district court's denial of attorneys' fees. Unilever challenged the district court's finding that the case was not exceptional, arguing that the plaintiff had "engaged in bad faith litigation by pursuing its patent claim' in the face of knowledge that . . . it could not possibly be infringed by Unilever's product."¹⁴¹⁴ The panel rejected this argument with little discussion, holding that, "[a]lthough [the plaintiff's] litigation position with respect to the infringement issue did not prevail, it was not so lacking in merit as to warrant 'exceptional' status."¹⁴¹⁵ The panel also rejected Unilever's argument that the plaintiff's inequitable conduct during prosecution made the case exception, because it had determined on the merits that no such inequitable conduct had occurred.¹⁴¹⁶

In *Serio-US Industries, Inc. v. Plastic Recovery Technologies Corp.*,¹⁴¹⁷ Serio-US sued PRT for patent infringement, and the jury ruled that PRT had not infringed the patent. The district court nonetheless denied PRT's motion for attorneys' fees.¹⁴¹⁸

PRT appealed the fee denial, and the panel affirmed the district court's denial of attorneys' fees. It held that, "[a]bsent misconduct in the litigation or in securing the patent, a trial court may only sanction the patentee if both the litigation is brought in subjective bad faith and the litigation is objectively baseless."¹⁴¹⁹ The panel held that neither of those elements was satisfied, because Serio-US's infringement allegation had been "objectively reasonable,"¹⁴²⁰ and had been asserted in "reli[ance] on the opinion of patent counsel."¹⁴²¹ The panel thus affirmed the district court's determination the case

1409. *See id.* at 976-77, 78 U.S.P.Q.2d (BNA) at 1267 (Mayer, J., concurring in part and dissenting in part).

1410. *See id.* at 968-71, 78 U.S.P.Q.2d (BNA) at 1260-62.

1411. *See id.* at 971-72, 78 U.S.P.Q.2d (BNA) at 1262-63.

1412. *See id.* at 974, 78 U.S.P.Q.2d (BNA) at 1265.

1413. *See id.* at 975-76, 78 U.S.P.Q.2d (BNA) at 1265-67 (Newman, J., concurring in part and dissenting in part).

1414. *Id.* at 974, 78 U.S.P.Q.2d (BNA) at 1265.

1415. *Id.* at 975, 78 U.S.P.Q.2d (BNA) at 1265.

1416. *See id.* at 974-75, 78 U.S.P.Q.2d (BNA) at 1265.

1417. 459 F.3d 1311, 80 U.S.P.Q.2d (BNA) 1065 (Fed. Cir. 2006).

1418. *See id.* at 1314, 80 U.S.P.Q.2d (BNA) at 1066.

1419. *Id.* at 1322, 80 U.S.P.Q.2d (BNA) at 1072.

1420. *Id.* at 1321, 80 U.S.P.Q.2d (BNA) at 1071.

1421. *Id.* at 1320, 1322, 80 U.S.P.Q.2d (BNA) at 1070, 1072.

was not “exceptional” for purposes of the statute, and its denial of attorneys’ fees on that ground.¹⁴²²

D. *Permanent Injunctions*

As noted above,¹⁴²³ the issue of when permanent injunctions should be granted in patent cases has percolated in the district courts since the Supreme Court’s decision in *eBay Inc. v. MercExchange, LLC*.¹⁴²⁴ Unsurprisingly in light of the apparent tension between the blocks of concurring justices regarding how Justice Thomas’s unanimous decision for the Court should be construed and applied,¹⁴²⁵ district courts considering motions for permanent injunctions after *eBay* have taken widely varying approaches.¹⁴²⁶ The Federal Circuit has so far simply remanded pre-*eBay* permanent injunction decisions for reconsideration in light of *eBay*,¹⁴²⁷ or otherwise disposed of permanent injunction issues without reaching their merits.¹⁴²⁸

VI. ALTERNATE SOURCES OF LIABILITY

A. *Antitrust*

Arguably, the most significant antitrust/patent development in 2006 was the Supreme Court’s decision in *Illinois Tool Works, Inc. v. Independent Ink, Inc.*,¹⁴²⁹ holding that the fact that a product is patented does not, in itself, support a presumption of market power in that product. The Federal Circuit also issued several significant decisions in 2006 relating to the antitrust laws as a source of liability in the patent area. One case in particular revealed some internal

1422. *See id.* at 1322, 80 U.S.P.Q.2d (BNA) at 1072.

1423. *See supra* notes 129-34 and accompanying text.

1424. 126 S. Ct. 1837 (2006).

1425. *Compare id.* at 1841-42 (Roberts, C.J., concurring) (suggesting that the historical trend of granting injunctions “in the vast majority of patent cases” might likely continue despite absence of categorical rule), *with id.* at 1842-43 (Kennedy, J., concurring) (suggesting that historical trend discussed by the Chief Justice “simply illustrates the result of the four-factor test in the contexts then prevalent,” and suggesting that recent changes could alter that trend in some kinds of cases).

1426. *Compare, e.g.,* *Rosco, Inc. v. Mirror Lite Co.*, No. CV-96-5658, 2006 WL 2844400, at *4 (E.D.N.Y. Sept. 29, 2006) (relying on language in pre-*eBay* Federal Circuit decisions to suggest that permanent injunctions are generally preferred), *with* *Paice LLC v. Toyota Motor Corp.*, No. 2:04-CV-211-DF, 2006 WL 2385139, at *4-6 (E.D. Tex. Aug. 16, 2006) (denying permanent injunction and rejecting any presumption in favor of such injunctions).

1427. *See, e.g.,* *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1341-42, 79 U.S.P.Q.2d (BNA) 1813, 1822 (Fed. Cir. 2006).

1428. *See, e.g.,* *Cook Biotech Inc. v. Acell, Inc.*, 460 F.3d 1365, 1379-80, 79 U.S.P.Q.2d (BNA) 1865, 1875 (Fed. Cir. 2006) (finding that appeal of permanent injunction denial was moot in light of reversal on merits).

1429. 126 S. Ct. 1281 (2006).

divisions among the judges regarding the permissible scope of license terms asserted to constitute an illegal tying arrangement.

In *Monsanto Co. v. Scruggs*,¹⁴³⁰ Monsanto sued Scruggs for infringement of patents relating to synthetic genes in agricultural products.¹⁴³¹ Scruggs counterclaimed, raising antitrust claims against Monsanto.¹⁴³² The district court granted summary judgment in favor of Monsanto on the antitrust counterclaims, and Scruggs appealed.¹⁴³³

On appeal, Scruggs first argued that Monsanto had unlawfully attempted to monopolize, in violation of section 2 of the Sherman Act,¹⁴³⁴ by engaging in anticompetitive conduct including Monsanto's inclusion of "no replant" provisions in its license agreements relating to the patented biotechnology, and its imposition of technology fees in those agreements.¹⁴³⁵ The panel majority rejected this argument.¹⁴³⁶ It held that Monsanto's "no replant policy simply prevent[ed] purchasers of the seeds from using the patented biotechnology when that biotechnology makes a copy of itself," and that such a limitation was "a valid exercise of its rights under the patent laws."¹⁴³⁷ Similarly, the panel held that the "uniform technology fee [wa]s essentially a royalty fee, the charging of which [wa]s also within the scope of the patent grant."¹⁴³⁸

Scruggs also argued that Monsanto had tied the purchase of its seed to the purchase of Monsanto's Roundup herbicide, in violation of the Sherman Act.¹⁴³⁹ To support this theory, Scruggs relied upon a grower incentive program that gave growers additional benefits if they chose to use Roundup exclusively, as well as upon Monsanto "seed partner agreements," which required those customers who chose to use glyphosate herbicides to use Roundup.¹⁴⁴⁰ The panel majority rejected Scruggs's arguments.¹⁴⁴¹ It held that because "[t]he grower incentive program was optional, not coerced," it did not support a tying claim,¹⁴⁴² and that, similarly, "Monsanto's seed partners were not forced to buy Roundup under the seed partner

1430. 459 F.3d 1328, 79 U.S.P.Q.2d (BNA) 1813 (Fed. Cir. 2006).

1431. *See id.* at 1333, 79 U.S.P.Q.2d (BNA) at 1815.

1432. *See id.*, 79 U.S.P.Q.2d (BNA) at 1815-16.

1433. *See id.* at 1333-34, 79 U.S.P.Q.2d (BNA) at 1816.

1434. 15 U.S.C. § 2 (2006).

1435. *See Monsanto*, 459 F.3d at 1340, 79 U.S.P.Q.2d (BNA) at 1821.

1436. *See id.*, 79 U.S.P.Q.2d (BNA) at 1821.

1437. *Id.*, 79 U.S.P.Q.2d (BNA) at 1821.

1438. *Id.*, 79 U.S.P.Q.2d (BNA) at 1821.

1439. *See id.* at 1340, 79 U.S.P.Q.2d (BNA) at 1821.

1440. *See id.* at 1339-40, 79 U.S.P.Q.2d (BNA) at 1820-21.

1441. *See id.* at 1340-41, 79 U.S.P.Q.2d (BNA) at 1821.

1442. *Id.* at 1340, 79 U.S.P.Q.2d (BNA) at 1821.

agreements.”¹⁴⁴³ The panel also rejected Monsanto’s argument that Monsanto had tied the sale of cotton containing the patented gene to the sale of cotton containing another trait.¹⁴⁴⁴ It held that “Monsanto sells cotton without the [allegedly tied] trait and there [wa]s no evidence that Monsanto engineered a shortage of [the tying] cotton.”¹⁴⁴⁵

Judge Dyk dissented from the panel majority’s antitrust holding.¹⁴⁴⁶ Judge Dyk believed that Scruggs’s tying claim should have survived summary judgment in light of the license restriction requiring the use of Roundup by customers selecting glyphosate herbicides.¹⁴⁴⁷ Judge Dyk focused much of his argument on the district court’s conclusion that the tying claim was precluded because the EPA had approved only Roundup among this class of herbicides at that time.¹⁴⁴⁸ He opined that, on the facts, despite the sole EPA approval of Roundup at the time, Monsanto’s requirement constituted a tie and that Scruggs’s claim should have been allowed to proceed.¹⁴⁴⁹

In *Kemin Foods, L.C. v. Pigmentos Vegetales Del Centro S.A.*,¹⁴⁵⁰ Kemin sued Pigmentos for infringement of certain patents relating to extracting lutein from plants, and Pigmentos counterclaimed for violations of the Lanham Act and the antitrust laws.¹⁴⁵¹ The district court severed Pigmentos’ counterclaims and stayed them pending resolution of the plaintiff’s case.¹⁴⁵² Kemin ultimately prevailed in the trial on certain patent claims, and subsequently moved to dismiss the counterclaims.¹⁴⁵³ Pigmentos responded by moving to amend and supplement its counterclaims.¹⁴⁵⁴ The district court denied

1443. *Id.*, 79 U.S.P.Q.2d (BNA) at 1821. The panel noted that the district court had relied upon the fact that at the time that the seed partner agreements were in effect, “Roundup was the only glyphosate herbicide approved by the [EPA] for use with” the seeds, but the panel did not expressly adopt this rationale. *Id.* at 1339, 79 U.S.P.Q.2d (BNA) at 1820.

1444. *See id.* at 1340-41, 79 U.S.P.Q.2d (BNA) at 1821.

1445. *Id.* at 1341, 79 U.S.P.Q.2d (BNA) at 1821.

1446. *See id.* at 1342, 79 U.S.P.Q.2d (BNA) at 1822 (Dyk, J., concurring in part and dissenting in part).

1447. *See id.*, 79 U.S.P.Q.2d (BNA) at 1822 (Dyk, J., concurring in part and dissenting in part).

1448. *See id.* at 1342-44, 79 U.S.P.Q.2d (BNA) at 1822-24 (Dyk, J., concurring in part and dissenting in part).

1449. *Id.*, 79 U.S.P.Q.2d (BNA) at 1822-24 (Dyk, J., concurring in part and dissenting in part).

1450. 464 F.3d 1339, 80 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2006).

1451. *See id.* at 1343, 80 U.S.P.Q.2d (BNA) at 1387.

1452. *See id.*, 80 U.S.P.Q.2d (BNA) at 1387.

1453. *See id.* at 1353, 80 U.S.P.Q.2d (BNA) at 1394.

1454. *See id.*, 80 U.S.P.Q.2d (BNA) at 1394.

Pigmentos' leave to amend, and granted Kemin's motion to dismiss the counterclaims.¹⁴⁵⁵

On appeal, Pigmentos challenged the district court's refusal to allow it to amend its counterclaims.¹⁴⁵⁶ The panel affirmed the district court's determination that most of the proposed counterclaims "hinge[d] to a large extent on [Pigmentos's] assertion that Kemin's patents are invalid or unenforceable," and were therefore "foreclosed by the judgment as to invalidity and unenforceability" from the previous trial.¹⁴⁵⁷

The panel, however, ruled that two aspects of Pigmentos's antitrust and Lanham Act claims were not precluded by the disposition of the trial. First, Pigmentos claimed that Kemin had committed antitrust and Lanham Act violations by "represent[ing] to the public and competitors that its products [we]re covered by" the patent when, in fact, "in light of the district court's claim construction, Kemin's own products [we]re not covered by" that patent.¹⁴⁵⁸ Nevertheless, the panel rejected this argument, holding that "Kemin ha[d] maintained throughout the litigation" that the patent was "broad enough to encompass . . . its own commercial lutein products."¹⁴⁵⁹ There had been no judicial determination "that Kemin's products [we]re outside the scope of" the patent, and the panel found Kemin's position to be "sufficiently plausible" to avoid the conclusion that Kemin had "acted with the deceptive purpose necessary to trigger liability under the false marketing statute (or, derivatively, to form the basis for an antitrust or Lanham Act claim)."¹⁴⁶⁰

Pigmentos also argued that Kemin had "engaged in unfair competition and antitrust violations by continuing to represent to the public and competitors that [Pigmentos wa]s infringing" after Kemin knew that Pigmentos had stopped using the infringing component in its products.¹⁴⁶¹ The panel rejected this argument as well, because the district court properly found that Pigmentos had not demonstrated that it had "modified its process in any significant way, much less that said modified process did not use" the infringing component.¹⁴⁶² The panel held that "[a] patentee in Kemin's position [wa]s entitled to

1455. *See id.*, 80 U.S.P.Q.2d (BNA) at 1394.

1456. *See id.* at 1344, 80 U.S.P.Q.2d (BNA) at 1388.

1457. *Id.* at 1353, 80 U.S.P.Q.2d (BNA) at 1395.

1458. *Id.* at 1354, 80 U.S.P.Q.2d (BNA) at 1395.

1459. *Id.* at 1355, 80 U.S.P.Q.2d (BNA) at 1396.

1460. *Id.*, 80 U.S.P.Q.2d (BNA) at 1396.

1461. *Id.* at 1354, 80 U.S.P.Q.2d (BNA) at 1395.

1462. *Id.* at 1355, 80 U.S.P.Q.2d (BNA) at 1396.

assert that an accused product infringe[d] its patent unless an opponent c[ould] show that the patent holder acted in bad faith.”¹⁴⁶³

B. Lanham Act

In 2006, the Federal Circuit decided a handful of important Lanham Act issues in connection with decisions on patent issues.

M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co.,¹⁴⁶⁴ involved a determination that the defendant had violated the Lanham Act based upon “false representations concerning its eraser wheels by marking them with [a] patent number and with the label ‘patent pending,’ when the wheel itself was not protected by a patent.”¹⁴⁶⁵ The district court also relied upon the defendant’s “letters to [the plaintiff’s] customers,” which it found had “deceived customers and diverted sales from [the plaintiff] to [the defendant].”¹⁴⁶⁶ Following the Federal Circuit’s decision in *Zenith Electronics Corp. v. Exzec Inc.*,¹⁴⁶⁷ which “require[s] a showing of bad faith for a Lanham Act violation,”¹⁴⁶⁸ the district court found this requirement satisfied in light of “clear and convincing evidence” that the defendant had engaged in inequitable conduct during the patent prosecution.¹⁴⁶⁹ The district court thus adhered to its determination that the defendant had acted in bad faith and violated the Lanham Act.¹⁴⁷⁰

The Federal Circuit reversed. Specifically, the panel determined that this element no longer supported a determination of bad faith because the panel had reversed the district court’s inequitable conduct finding on which that court’s bad faith determination was “essentially based.”¹⁴⁷¹ Because “a Lanham Act violation requires a finding of bad faith” and the district court had “decide[d] that its finding of inequitable conduct constituted evidence of bad faith,” the panel “vacate[d] on the Lanham Act claim.”¹⁴⁷²

1463. *Id.*, 80 U.S.P.Q.2d (BNA) at 1396 (internal quotation marks and brackets omitted).

1464. 439 F.3d 1335, 78 U.S.P.Q.2d (BNA) 1229 (Fed. Cir. 2006).

1465. *Id.* at 1338, 78 U.S.P.Q.2d (BNA) at 1232.

1466. *Id.*, 78 U.S.P.Q.2d (BNA) at 1232.

1467. 182 F.3d 1340, 51 U.S.P.Q.2d (BNA) 1337 (Fed. Cir. 1999).

1468. *M. Eagles Tool*, 439 F.3d at 1335, 78 U.S.P.Q.2d (BNA) at 1233.

1469. *Id.* at 1339, 78 U.S.P.Q.2d (BNA) at 1233.

1470. *Id.*, 78 U.S.P.Q.2d (BNA) at 1233.

1471. *Id.* at 1343, 78 U.S.P.Q.2d (BNA) at 1236.

1472. *Id.*, 78 U.S.P.Q.2d (BNA) at 1236. The district court also vacated an award of attorneys’ fees, because the predicate “exceptional case” determination, too, had been “based on the determination of inequitable conduct.” *Id.*, 78 U.S.P.Q.2d (BNA) at 1236.

In *Serio-US Indus., Inc. v. Plastic Recovery Techs. Corp.*,¹⁴⁷³ discussed above,¹⁴⁷⁴ Plastic Recovery (“PRT”) asserted Lanham Act violations against Serio-US in counterclaims to Serio-US’s patent-infringement action. The panel affirmed the denial of Lanham Act liability on the ground that such liability can be imposed “on a patentee for marketplace statements only if the statements are proven to have been made in bad faith.”¹⁴⁷⁵ PRT’s Lanham Act claim was predicated solely on “Serio-US’s statements to the [relevant] industry and trade generally and to its customers . . . that PRT’s product infringes” Serio-US’s patents.¹⁴⁷⁶ Moreover, the panel agreed with the district court that there was no evidence that those statements had been made in bad faith, because the infringement allegation was “objectively reasonable,”¹⁴⁷⁷ and “Serio-US brought its action in reliance on the opinion of patent counsel.”¹⁴⁷⁸

In *Optivus Technology, Inc. v. Ion Beam Applications S.A.*,¹⁴⁷⁹ Optivus, a seller of proton-beam therapy systems, sued IBA, a competitor in that market for, *inter alia*, violations of the Lanham Act in connection with statements IBA had allegedly made in obtaining a contract with the University of Florida.¹⁴⁸⁰ Optivus argued that several statements made by IBA—most significantly, a statement that IBA “would finance \$50 million of the technology component of the proposed system”—were false and misleading, and had “caused Optivus not to be awarded the contract with Florida.”¹⁴⁸¹ The district court granted summary judgment to IBA on the Lanham Act claim, holding that the statements did not satisfy the materiality requirement for Lanham Act liability even if they were actually made.¹⁴⁸²

On appeal, the Federal Circuit reversed this part of the judgment.¹⁴⁸³ It held that “an issue of fact exist[ed] as to the materiality of the financing statement.”¹⁴⁸⁴ IBA relied upon a workgroup rating that placed Optivus last, behind a third competitor.¹⁴⁸⁵ But the panel observed that there was “no indication that Florida adopted this ranking without consideration of other

1473. 459 F.3d 1311, 80 U.S.P.Q.2d (BNA) 1065 (Fed. Cir. 2006).

1474. See *supra* notes 1405-1410 and accompanying text.

1475. *Serio-US*, 459 F.3d at 1321, 80 U.S.P.Q.2d (BNA) at 1071.

1476. *Id.* at 1320, 80 U.S.P.Q.2d (BNA) at 1071 (internal quotation marks omitted).

1477. *Id.* at 1321, 80 U.S.P.Q.2d (BNA) at 1071.

1478. *Id.* at 1320, 80 U.S.P.Q.2d (BNA) at 1070.

1479. 469 F.3d 978, 80 U.S.P.Q.2d (BNA) 1839 (Fed. Cir. 2006).

1480. See *id.* at 980-81, 80 U.S.P.Q.2d (BNA) at 1841-42.

1481. *Id.* at 987, 80 U.S.P.Q.2d (BNA) at 1846.

1482. See *id.*, 80 U.S.P.Q.2d (BNA) at 1846.

1483. See *id.* at 988, 78 U.S.P.Q.2d (BNA) at 1847.

1484. *Id.* at 987, 78 U.S.P.Q.2d (BNA) at 1846.

1485. See *id.*, 80 U.S.P.Q.2d (BNA) at 1846.

factors.”¹⁴⁸⁶ Because it concluded that a factfinder could have found that IBA made the financing statement and that there was a genuine question of fact as to its materiality, the panel reversed the grant of summary judgment on the Lanham Act claim and remanded.¹⁴⁸⁷

C. Copyright

In *Amini Innovation Corp. v. Anthony California, Inc.*,¹⁴⁸⁸ the panel reviewed a grant of summary judgment of non-infringement of copyrights covering carved ornamental woodwork; the copyright claim had been asserted by a seller of bedroom furniture against a competing designer and manufacturer of bedroom furniture, and was coupled with a design-patent claim.¹⁴⁸⁹ Applying Ninth Circuit law, the panel held that under the “access”-plus-“substantial similarity” test for copyright infringement, the “inverse-ratio rule” permits a stronger showing of access to reduce the required degree of similarity.¹⁴⁹⁰

Applying this sliding-scale approach, the panel held that “a strong showing of substantial similarity [wa]s required to prove infringement in this case, i.e., one approaching ‘striking’ similarity.”¹⁴⁹¹ The panel noted that the only evidence of access was deposition testimony of the defendant’s president “that neither he nor [the company had] made any effort to determine if their designs violated intellectual property rights,” along with “evidence that [the plaintiff had] displayed its designs at furniture trade shows” that the defendant’s president had attended.¹⁴⁹² The panel concluded that this evidence “d[id] not conclusively resolve the question of the access of [the defendant’s] designer[] to the protected work before the creation of the” furniture at issue.¹⁴⁹³

Turning to the similarity analysis, the panel held that “the trial court [had] correctly accorded protection to the expressive ornamental carvings on the furniture, but not the furniture pieces as a whole.”¹⁴⁹⁴ Having thus correctly identified the relevant “protectable features,”¹⁴⁹⁵ the panel addressed the trial court’s application of the Ninth Circuit’s “two-part analysis” for evaluating

1486. *Id.*, 80 U.S.P.Q.2d (BNA) at 1846.

1487. *See id.* at 988, 80 U.S.P.Q.2d (BNA) at 1847.

1488. 439 F.3d 1365, 78 U.S.P.Q.2d (BNA) 1147 (Fed. Cir. 2006).

1489. *See id.* at 1367, 78 U.S.P.Q.2d (BNA) at 1148.

1490. *Id.* at 1368, 78 U.S.P.Q.2d (BNA) at 1149.

1491. *Id.* at 1369, 78 U.S.P.Q.2d (BNA) at 1149.

1492. *Id.*, 78 U.S.P.Q.2d (BNA) at 1149.

1493. *Id.*, 78 U.S.P.Q.2d (BNA) at 1149.

1494. *Id.*, 78 U.S.P.Q.2d (BNA) at 1149.

1495. *Id.*, 78 U.S.P.Q.2d (BNA) at 1149.

the similarity of the accused products to those features, which includes “an ‘extrinsic test,’” i.e., “an objective comparison of specific expressive elements,” and “an ‘intrinsic test,’” which “is a subjective comparison that focuses on whether the ordinary reasonable audience would find the works substantially similar in ‘the total concept and feel of the works.’”¹⁴⁹⁶

The panel held that the district court had erred in its application of this two-part test.¹⁴⁹⁷ The district court had relied upon the extrinsic test, which the Ninth Circuit had held is better suited to summary judgment than the more subjective intrinsic test, in granting summary judgment of non-infringement.¹⁴⁹⁸ Specifically, “the trial court erred in expanding its application of the ‘extrinsic’ part of the infringement test to encompass an examination of ‘the total concept and feel of the works,’” which properly belongs to the intrinsic test.¹⁴⁹⁹ In particular, the district court had held that the ornamental features did not exhibit an original arrangement or selection, a determination properly “within the district court’s role of assessing the extrinsic prong of infringement on summary judgment.”¹⁵⁰⁰ But, “the trial court then proceeded to examine, on summary judgment, the fact intensive question of the total concept and feel of the carvings in the furniture. The court’s conclusion appear[ed] to be based primarily on its own visual inspection.”¹⁵⁰¹ The panel held that this subjective determination impermissibly strayed into the territory of the intrinsic part of the test.¹⁵⁰² The panel held that “a reasonable jury could [have] conclude[d] that at least some of the accused designs satisf[ied] the heightened showing of substantial similarity thus far required in this case.”¹⁵⁰³ For example, the panel noted one “whimsical” feature with respect to which “the accused design incorporate[d] a near-copy.”¹⁵⁰⁴ Therefore, the panel reversed and remanded for further proceedings.¹⁵⁰⁵

1496. *Id.*, 78 U.S.P.Q.2d (BNA) at 1149-50 (internal quotation marks omitted).

1497. *See id.* at 1370, 78 U.S.P.Q.2d (BNA) at 1150.

1498. *See id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1499. *Id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1500. *Id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1501. *Id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1502. *See id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1503. *Id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1504. *Id.*, 78 U.S.P.Q.2d (BNA) at 1150.

1505. *See id.* at 1372, 78 U.S.P.Q.2d (BNA) at 1152.

D. Takings

In *Zoltek Corp. v. U.S.*,¹⁵⁰⁶ the panel addressed the jurisdiction of the Court of Federal Claims over Fifth Amendment takings claims premised on allegations of patent infringement by the United States. Zoltek brought a lawsuit, asserting that the government had infringed its patent claiming methods of making carbon fiber sheets by contracting with Lockheed Martin to purchase aircraft incorporating components made using infringing methods.¹⁵⁰⁷ The relevant aircraft components had been produced in Japan and then imported into the United States.¹⁵⁰⁸

The Court of Federal Claims held that it lacked jurisdiction over the claim under 28 U.S.C. § 1498(a), which confers jurisdiction over claims for infringing patent use by the United States, because the relevant claim arose in a foreign country, and was thus precluded from the scope of § 1498(a) under 28 U.S.C. § 1498(c).¹⁵⁰⁹ Nonetheless, the trial court held that it had jurisdiction over the patent-infringement claims under a different theory.¹⁵¹⁰ It “directed Zoltek to amend its complaint to allege a taking under the Fifth Amendment,”¹⁵¹¹ and held that it could entertain the case under its Takings Clause jurisdiction.¹⁵¹²

On interlocutory appeal, the panel majority affirmed the denial of section 1498(a) jurisdiction.¹⁵¹³ Rather than relying upon the arising in a foreign country limitation of subsection (c), the panel found subsection (a) unavailable by its terms, because “direct infringement under section 271(a) is a necessary predicate for government liability under section 1498.”¹⁵¹⁴ Because every step of a process must be performed in the United States to infringe a method claim,¹⁵¹⁵ the panel held that, “where, as here, not all steps of a patented process have been performed in the United States, government liability does not exist pursuant to section 1498(a).”¹⁵¹⁶

1506. 442 F.3d 1345, 78 U.S.P.Q.2d (BNA) 1481 (per curiam), *reh'g denied*, 464 F.3d 1335, 80 U.S.P.Q.2d (BNA) 1157 (Fed. Cir. 2006).

1507. *See id.* at 1349, 78 U.S.P.Q.2d (BNA) at 1483.

1508. *See id.*, 78 U.S.P.Q.2d (BNA) at 1483.

1509. *See id.* at 1349, 78 U.S.P.Q.2d (BNA) at 1483.

1510. *See id.*, 78 U.S.P.Q.2d (BNA) at 1483.

1511. *Id.*, 78 U.S.P.Q.2d (BNA) at 1483.

1512. 28 U.S.C. § 1491(a)(1) (2006).

1513. *See Zoltek*, 442 F.3d at 1350, 78 U.S.P.Q.2d (BNA) at 1484.

1514. *Id.* at 1350, 78 U.S.P.Q.2d (BNA) at 1483-84 (internal quotation marks omitted).

1515. *See id.*, 78 U.S.P.Q.2d (BNA) at 1484 (citing *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1318, 75 U.S.P.Q.2d (BNA) 1763, 1789 (Fed. Cir. 2005)).

1516. *Id.*, 78 U.S.P.Q.2d (BNA) at 1484.

The panel majority reversed the trial court's exercise of Taking Clause jurisdiction under section 1491(a)(1), relying on *Schillinger v. United States*,¹⁵¹⁷ which held that patent infringement cannot give rise to a takings claim under the Fifth Amendment.¹⁵¹⁸ The panel majority also rejected the argument that *Schillinger* had been overruled by *Crozier v. Fried Krupp Aktiengesellschaft*.¹⁵¹⁹ The majority concluded that *Crozier* merely addressed "whether the trial court had jurisdiction to enjoin the government from alleged patent infringement," and that "[n]one of the relevant *Schillinger* issues were joined: *Crozier* was not filed in the Court of Claims, had nothing to do with the Tucker Act, did not allege a taking, and was solely in equity."¹⁵²⁰ While *Crozier* and other cases did "analyze the statute in terms of takings," and "analogized [patent infringement] to 'taking' a 'compulsory license,'"¹⁵²¹ the panel majority held that this "cannot disturb the Supreme Court's analysis of the Fifth Amendment in *Schillinger*."¹⁵²² The panel majority held that "Congress provided a specific sovereign immunity waiver for a patentee to recover for infringement by the government" in section 1498(a), and that this balance should not be upset by reading patent-infringement jurisdiction into the general taking jurisdiction of the Court of Federal Claims.¹⁵²³

Each judge on the panel wrote a separate opinion. Judge Gajarsa wrote a concurring opinion criticizing *NTP, Inc. v. Research in Motion, Ltd.*,¹⁵²⁴ the decision that grounded the panel majority's holding under section 1498(a), and opining that "our decision today does not depend for its validity on *NTP*, as it is also supported by an independent line of reasoning."¹⁵²⁵ Judge Gajarsa opined that the trial court's denial of jurisdiction under section 1498(a) was properly grounded on the "arises in a foreign country" limitation of section 1498(c).¹⁵²⁶ Judge Dyk also concurred, responding to Judge Gajarsa's arguments against the *NTP* decision, and thus defending the panel majority's ruling regarding the jurisdiction of the trial court under section 1498(a).¹⁵²⁷

1517. 155 U.S. 163 (1894).

1518. See *Zoltek*, 442 F.3d at 1350, 78 U.S.P.Q.2d (BNA) at 1484 (citing *Schillinger*, 155 U.S. at 163).

1519. 224 U.S. 290 (1912).

1520. *Zoltek*, 442 F.3d at 1351, 78 U.S.P.Q.2d (BNA) at 1484.

1521. *Id.*, 78 U.S.P.Q.2d (BNA) at 1485.

1522. *Id.* at 1352, 78 U.S.P.Q.2d (BNA) at 1485.

1523. *Id.*, 78 U.S.P.Q.2d (BNA) at 1485.

1524. 418 F.3d 1282, 75 U.S.P.Q.2d (BNA) 1763 (Fed. Cir. 2005).

1525. *Zoltek*, 442 F.3d at 1353, 78 U.S.P.Q.2d (BNA) at 1486 (Gajarsa, J., concurring).

1526. *Id.* at 1358, 78 U.S.P.Q.2d (BNA) at 1489 (Gajarsa, J., concurring).

1527. See *id.* at 1367-70, 78 U.S.P.Q.2d (BNA) at 1496-99.

Judge Plager dissented as to both grounds of jurisdiction. He first opined that the allegation that the government had taken the plaintiff's property presented a facially "straightforward" takings claim.¹⁵²⁸ He emphasized that the *Schillinger* case on which the panel majority relied "was decided in 1894," and that at that time, "the judicial treatment of the then-new Tucker Act provision . . . was still in its early stages of development."¹⁵²⁹ He argued "that the identity of a separate, non-statutory, constitutional basis for takings remedies under the Fifth Amendment emerged" only over the course of the following decades, thus rendering the *Schillinger* decision of limited value in this area.¹⁵³⁰ Turning to the section 1498(a) issue, Judge Plager agreed with Judge Gajarsa that the infringement was cognizable under section 1498(a), reasoning that "[n]othing in § 1498(a) speaks about performance in the United States; that notion is come to only by incorporating into § 1498(a) the requirement for infringement by a private party under 35 U.S.C. § 271(a)."¹⁵³¹ Nevertheless, Judge Plager opined that the case did not arise in a foreign country for purposes of section 1498(c), at least as to some of the products at issue, because "some of the steps of the method patent [we]re practiced abroad, and some in the United States."¹⁵³² He concluded that "the Government is liable under § 1498(a) for an unauthorized use of a method patent unless *all* steps of the method are practiced abroad."¹⁵³³

The Federal Circuit denied a petition for rehearing en banc.¹⁵³⁴ Judge Newman dissented from the denial, arguing that the panel majority's Taking Clause rationale was erroneous and warranted review by the full court.¹⁵³⁵ Judge Dyk, joined by Judge Gajarsa, wrote to concur in the denial, and stated that Judge Newman had misread the majority opinion as "leav[ing] private parties without an effective remedy for patent misuse against the government."¹⁵³⁶ Judge Dyk opined that the government would be put in the same position as "a private party under the circumstances of this case."¹⁵³⁷

1528. *Id.* at 1374, 78 U.S.P.Q.2d (BNA) at 1501 (Plager, J., dissenting).

1529. *Id.* at 1376, 78 U.S.P.Q.2d (BNA) at 1502 (Plager, J., dissenting).

1530. *Id.*, 78 U.S.P.Q.2d (BNA) at 1502 (Plager, J., dissenting).

1531. *Id.* at 1379, 78 U.S.P.Q.2d (BNA) at 1504 (Plager, J., dissenting).

1532. *Id.* at 1382, 78 U.S.P.Q.2d (BNA) at 1507 (Plager, J., dissenting).

1533. *Id.*, 78 U.S.P.Q.2d (BNA) at 1507 (Plager, J., dissenting).

1534. *See* *Zoltek Corp. v. United States*, 464 F.3d 1335, 80 U.S.P.Q.2d (BNA) 1157 (Fed. Cir. 2006).

1535. *See id.* at 1336-39, 80 U.S.P.Q.2d (BNA) at 1157-60.

1536. *Id.* at 1339, 80 U.S.P.Q.2d (BNA) at 1160 (Dyk, J., concurring).

1537. *Id.*, 80 U.S.P.Q.2d (BNA) at 1160 (Dyk, J., concurring).

E. Implied License

In *LG Electronics, Inc. v. Bizcom Electronics, Inc.*,¹⁵³⁸ LG brought suit for patent infringement against several defendants. The patents in suit related to personal computers. The defendants purchased components from Intel, who had been authorized by LG to sell them.¹⁵³⁹ Pursuant to their agreements, however, Intel informed the purchasers that “they were not authorized under that agreement to combine the products with non-Intel products.”¹⁵⁴⁰ Several plaintiffs counterclaimed, asserting an implied-license defense.¹⁵⁴¹ The district court granted summary judgment of non-infringement, but denied summary judgment to the defendants based on the implied-license defense.¹⁵⁴²

On appeal, the panel affirmed the district court’s rejection of the implied-license defense.¹⁵⁴³ The panel noted that, “[t]o prevail, defendants were required to establish that the products have no non-infringing uses and that the circumstances of the sale plainly indicate that the grant of a license should be inferred.”¹⁵⁴⁴ The panel agreed with the district court that the defendants had failed to satisfy this test, stating that “[r]egardless of any non-infringing uses, Intel expressly informed them that Intel’s license agreement with LG[] did not extend to any of defendants’ products made by combining an Intel product with non-Intel products.”¹⁵⁴⁵ The panel held that “[i]n light of this express disclaimer, no license c[ould] be implied.”¹⁵⁴⁶

F. Patent Exhaustion

The Federal Circuit decided two cases addressing the doctrine of patent exhaustion in 2006. In *LG Electronics*,¹⁵⁴⁷ the panel noted that an “*unconditional* sale of a patented device exhausts the patentee’s right to control the purchaser’s use of the device thereafter.”¹⁵⁴⁸ The panel noted the rationale for the patent-exhaustion doctrine—once “the patentee has bargained for, and received, an amount equal to the full value of the goods,” the receipt of that money fully

1538. 453 F.3d 1364, 79 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 2006).

1539. *See id.* at 1368, 79 U.S.P.Q.2d (BNA) at 1446.

1540. *Id.*, 79 U.S.P.Q.2d (BNA) at 1446.

1541. *See id.*, 79 U.S.P.Q.2d (BNA) at 1446.

1542. *See id.*, 79 U.S.P.Q.2d (BNA) at 1446.

1543. *See id.* at 1369, 79 U.S.P.Q.2d (BNA) at 1447.

1544. *Id.*, 79 U.S.P.Q.2d (BNA) at 1447 (internal quotation marks and ellipsis omitted).

1545. *Id.*, 79 U.S.P.Q.2d (BNA) at 1447.

1546. *Id.*, 79 U.S.P.Q.2d (BNA) at 1447.

1547. *Id.*, 79 U.S.P.Q.2d (BNA) at 1447.

1548. *Id.*, 79 U.S.P.Q.2d (BNA) at 1447.

compensates the patentee for the subsequent uses of the product.¹⁵⁴⁹ Yet, the panel noted that a conditional sale precludes application of the doctrine, because the bargained-for price of the product would not then incorporate the value of uses violating the conditions.¹⁵⁵⁰

The district court had applied the doctrine based upon Intel's purportedly unconditional sales of components of the patented systems to its customers, the defendants in *LG Electronics*.¹⁵⁵¹ The panel held that this ruling was erroneous, because the plaintiff's license to Intel had "expressly disclaim[ed] granting a license allowing computer system manufacturers to combine Intel's licensed parts with other non-Intel components," and had "required Intel to notify its customers" of this condition.¹⁵⁵² In light of this requirement, the panel held that Intel's sales of the components to the defendants "were conditional, and Intel's customers were expressly prohibited from infringing LGE's combination patents," thus precluding application of the patent-exhaustion doctrine.¹⁵⁵³

The Federal Circuit rejected another patent-exhaustion defense for similar reasons in *Monsanto Co. v. Scruggs*.¹⁵⁵⁴ In that case, the defendant argued that it had "purchased the Monsanto seeds in an unrestricted sale, and that it was therefore entitled to use those seeds in an unencumbered fashion under the doctrine of patent exhaustion."¹⁵⁵⁵ Again, however, the panel found that the factual predicate for the defense was absent: "There was no unrestricted sale because the use of the seeds by seed growers was conditioned on obtaining a license from Monsanto."¹⁵⁵⁶ In the alternative, the panel found the patent-exhaustion doctrine inapplicable, because Monsanto had sold only the original generation of seeds to the defendant; "[w]ithout the actual sale of the second generation seed to Scruggs, there can be no patent exhaustion."¹⁵⁵⁷ More generally, the panel held that "[t]he fact that a patented technology can replicate itself does not give a purchaser the right to use replicated copies of the technology."¹⁵⁵⁸

1549. *Id.*, 79 U.S.P.Q.2d (BNA) at 1447.

1550. *Id.* at 1369-70, 79 U.S.P.Q.2d (BNA) at 1447.

1551. *See id.*, 79 U.S.P.Q.2d (BNA) at 1447.

1552. *Id.* at 1370, 79 U.S.P.Q.2d (BNA) at 1447-48.

1553. *Id.*, 79 U.S.P.Q.2d (BNA) at 1448.

1554. 459 F.3d 1328, 79 U.S.P.Q.2d (BNA) 1813 (Fed. Cir. 2006); *see also supra* notes 1430-1449 and accompanying text.

1555. *Id.* at 1335, 79 U.S.P.Q.2d (BNA) at 1817.

1556. *Id.* at 1336, 79 U.S.P.Q.2d (BNA) at 1817.

1557. *Id.*, 79 U.S.P.Q.2d (BNA) at 1817.

1558. *Id.*, 79 U.S.P.Q.2d (BNA) at 1817-18.

CONCLUSION

On many of the “big issues” in patent law, the Federal Circuit’s voice was more muted than usual in 2006, owing to the U.S. Supreme Court’s unprecedented incursion into the Federal Circuit’s work. Viewed as a “dialogue” between these courts, these decisions in 2006 begin to chart the course for the next wave of Federal Circuit and Supreme Court decisions in the patent-law area. The next several years should be interesting, to say the least.

ADDENDUM

In our Article surveying the Federal Circuit’s year 2000 jurisprudence,¹⁵⁵⁹ we provided an Addendum discussing, in statistical terms, the year’s patent-law decisions from the Federal Circuit. We were motivated by trying to provide an empirical (rather than anecdotal or impressionistic) answer to the question we are frequently asked, as Federal Circuit practitioners, by our clients: “When can we expect a decision?” So we provided a statistical “snapshot” of the Federal Circuit’s work in the year 2000, based on our study of the court’s ninety-two published patent opinions from that year.

We have reprised that effort for the year 2006, with a few additional analyses. For 2006, there were ninety-eight published patent opinions—slightly higher than in 2000. In addition to repeating the analyses we provided in 2000, we have added two others: a table of the most frequent lower-court or agency venues from which appeals originated, and a tally of how many of these opinions resulted in affirmances, reversals, partial affirmances, etc.

There are caveats aplenty here. First, the universe of opinions being surveyed consists of the court’s *published, patent* opinions. Our survey does not account for the presumably shorter disposition time of *unpublished* patent opinions, or “Rule 36” affirmances, or the other areas of the court’s work (government employment cases, government contract cases, etc.). Second, the statistics we provide may be of limited predictive value, especially where they are based on a statistically insignificant number of data points. Finally, treating each decision as an equal data point for statistical averages may not be fair or accurate: Every case is unique. Nevertheless, as in our 2000 survey, we have found many of the results set forth below to be enlightening, and for that reason we are again sharing them with the

1559. Adamo, *supra* note 14, at 1699-1706.

bench, bar, and other persons interested in the work of the Federal Circuit.

TABLE 1: PUBLISHED PATENT OPINIONS BY JUDGE, JANUARY 1, 2006 – DECEMBER 31, 2006

JUDGE	# Authored	# on panel	# separate opinions	# authored generating separate opinions	% author (3-judge panel)
Michel	6	23	3	1	26.1
Newman	9	26	8	1	34.6
Mayer	4	15	3	1	26.7
Lourie	12	20	1	2	60.0
Rader	15	32	1	4	46.9
Schall	4	23	3	4	17.4
Bryson	4	23	0	0	17.4
Gajarsa	9	22	0	1	40.9
Linn	11	25	1	1	44.0
Dyk	10	33	6	4	30.3
Prost	8	23	0	5	34.8
Friedman	1	6	0	0	16.7
Archer	0	10	0	0	0.0
Plager	1	4	0	0	25.0
Clevenger	3	9	0	0	33.3
Per Curiam	1	—	—	1	—
Court	98	—	26	25	—

Table 1 sets forth some raw numbers about the published patent opinions issued by the Federal Circuit during 2006, listed by judge.

The first column (“# authored”) reflects the number of majority patent opinions each judge published in 2006. Thus, Chief Judge

Michel authored six majority patent opinions that were published in 2006, Judge Newman wrote nine, and so on. Judges Rader, Lourie, Linn and Dyk led the way in double-digits with fifteen, twelve, eleven, and ten opinions respectively. Judges Mayer, Schall, and Bryson trailed with four authored opinions each. Only one case was decided per curiam.

The second column (“# on panel”) sets forth the number of times each judge was on a panel for one of those cases decided in 2006. One interesting discovery this year are the outliers—while most of the active judges participated in anywhere from twenty to twenty-eight of the published patent opinions, two judges—Judges Dyk and Rader—participated in thirty-three and thirty-two of the published decisions respectively, a difference that is perhaps statistically significant. Even more striking is the discovery that Judge Mayer participated in an uncommonly low number—fifteen—of the court’s published opinions in 2006. One possible explanation for this difference—assuming that all active judges are likely to participate in roughly the same number of cases during the course of a year—is that Judges Rader and Dyk are somewhat more likely than their colleagues to request that the panel publish its disposition, which requires the concurrence of a panel majority (two of three judges) under Federal Circuit Rule 47.6(b).

The third column (“# separate opinions”) lists the number of separate opinions (concurrences and dissents) that each Federal Circuit judge filed in 2006. Two observations about this column are in order. First, these numbers reflect a high degree of unanimity in reasoning and result—only twenty-three separate opinions were filed in 2006. Second, two judges—Judges Newman and Dyk—were most likely to write separately in patent cases, far more than their colleagues, statistically speaking.

Because of the relatively small number of separate opinions issued by Federal Circuit judges in 2006, the fourth column (“# authored generating separate opinions”) may not prove much at all. It is meant to indicate the authoring judge for the majority in the cases where separate opinions were filed. One unusual data point here is the fact that every one of Judge Schall’s four published majority opinions in 2006 occasioned a separate opinion from another of the judges on the panel.

The final column (“% author (3-judge panel)”) on Table 1 indicates, based on the published patent opinions from 2006, how likely it was that a particular Federal Circuit judge would be the author of the resulting opinion in a particular case argued before a

three-judge panel. In a hypothetical world where opinions are randomly and evenly assigned, one would expect that each judge on a three-judge panel would wind up writing 33.3% of the opinions. What stands out as significant from this data is that three judges—Judges Lourie (sixty percent), Rader (almost forty-seven percent), and Linn (forty-four percent)—who in 2006 wrote a majority (or close to a majority) of the opinions in cases where they voted on published patent decisions in 2006.

TABLE 2: SEPARATE OPINIONS IN PATENT CASES 2006

JUDGE	Concur in Opinion	Concur in Judgment	Concur in part, Dissent in part	Dissent	Total
Michel	0	1	1	1	3
Newman	1	0	0	7	8
Mayer	0	1	0	2	3
Lourie	0	0	0	1	1
Rader	0	0	1	0	1
Schall	0	2	1	0	3
Bryson	0	0	0	0	0
Gajarsa	0	0	0	0	0
Linn	0	0	0	1	1
Dyk	0	1	3	2	6
Prost	0	0	0	0	0
Friedman	0	0	0	0	0
Archer	0	0	0	0	0
Plager	0	0	0	0	0
Clevenger					
Court	1	5	6	14	26

Table 2 sets forth a breakdown of the twenty-one separate opinions by type and by authoring judge. Again, because of the relative

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paucity of separate opinions, these statistics may not carry much meaning. As in 2000, these numbers for 2006 illustrate the Federal Circuit's largely unanimous nature—only fourteen dissents, and six partial dissents, were filed all year. If there is a striking statistic here, it is that Judge Newman wrote seven dissenting opinions (and her eighth, a separate opinion styled as “Additional Views,” was a separate opinion in a case where she herself wrote the unanimous opinion for the panel).

TABLE 3: DISPOSITION TIME BY JUDGE (IN DAYS) JANUARY 1, 2006 – DECEMBER 31, 2006

JUDGE	Avg. time per opinion authored	Avg. time per unanimous Opinion authored	Avg. time when writing separately	Avg. time when on panel
Michel	69	66	267	101
Newman	155	155	164	128
Mayer	76	66	211	113
Lourie	64	65	112	90
Rader	162	150	311	138
Schall	244	—	101	180
Bryson	71	71	—	74
Gajarsa	121	112	—	117
Linn	131	122	72	122
Dyk	148	100	133	135
Prost	103	109	—	112
Friedman	77	77	—	123
Archer	—	—	—	108
Plager	—	—	—	31
Clevenger	36	36	—	96
Per Curiam	—	—	—	—
Court	121	105	166	121

Table 3 sets forth the average length of time it takes the Federal Circuit and its judges to dispose of published Federal Circuit patent appeals. This table is at the same time the most interesting, and also perhaps the one most subject to the criticism that every case is unique and demands unique treatment, and thus cannot be “averaged” together with other cases to yield meaningful results.

Because the Federal Circuit does not publish the date of argument on the face of its opinions, we obtained from the PACER docket on the court’s website, or from the database of oral argument recordings now available there, the date of argument for each of the court’s patent opinions published in 2006.¹⁵⁶⁰ We then calculated the difference, in days, between oral argument (or submission) and decision, and used those calculated figures in our statistics.

The first column on Table 3 (“Avg. time per opinion authored”) lists, in days, the average time from argument to decision for each judge of the Federal Circuit. Thus, for the six published patent opinions Chief Judge Michel authored in 2006, the average time from argument to decision was sixty-nine days (slightly more than two months), while for the four published patent opinions authored by Judge Schall, the average time from argument to decision was 244 days (about eight months). The average time of disposition for all of the Federal Circuit’s published patent opinions (in cases that were orally argued or submitted on the merits briefs) was 121 days, or about four months. This is a significant change from the results of our year 2000 study, which showed an average disposition time of almost six months from argument to opinion.¹⁵⁶¹

The second column on Table 3 (“Avg. time per unanimous opinion authored”) is meant to account for one type of delay in publication not attributable to the author of the majority opinion—the authoring and issuance of a separate concurring, or dissenting, opinion. In most—but not all—cases, limiting the relevant data set to unanimous opinions decreases the average disposition time per

1560. Excluded from the calculations here were three published opinions in cases counted elsewhere in the statistical Addendum—*Purdue Pharma v. Endo Pharmaceuticals*, 438 F.3d 1123, 77 U.S.P.Q.2d (BNA) 1767 (Fed. Cir. 2006), *Nautilus Group v. Icon Health and Fitness*, 437 F.3d 1376, 77 U.S.P.Q.2d (BNA) 2012 (Fed. Cir. 2006), and *In re EchoStar Commc’ns Corp.*, 448 F.3d 1294, 78 U.S.P.Q.2d (BNA) 1676 (Fed. Cir. 2006). The first of those decisions was excluded because it was an amended decision on rehearing; the other two were decisions issued on a motion (*Nautilus*) and a petition for mandamus (*EchoStar*) and were not orally argued or “submitted” for decision on an ascertainable date, making a calculation of days between argument or submission and decision impossible.

1561. Adamo, *supra* note 14, at 1704-05.

judge. The average time for the entire court for issuance of unanimous published patent opinions was 105 days after argument, or a bit more than three months—down significantly from the 154-day (five months) figure we calculated in 2000.¹⁵⁶²

The third column (“Avg. time when writing separately”) supplies the average time from argument to disposition when the judge in question has written a separate opinion. This data may suffer from some inadequacies. First, it is based solely on the limited number of separate opinions in published patent cases in 2006. Second, it cannot account for the unknown factor of how long the author of the majority opinion took to prepare the draft opinion which occasioned the separate concurrence or dissent. Here, the overall court average is 166 days, or a bit more than five months—down from the 205 days (almost seven months) we found for 2000.¹⁵⁶³

The fourth and final column on Table 3 (“Avg. time when on panel”) supplies the average time from argument to disposition whenever a certain judge is on the panel hearing the case. We have supplied this statistic on the assumption that the time a non-authoring judge spends reviewing one of his or her colleagues’ draft opinion, even if it does not ultimately occasion a separate opinion, may have some influence on the disposition time. For active judges, the results range from thirty-one days for Judge Plager (on limited data, since he is a Senior Judge and participated in only four patent cases resulting in published opinions in 2006) to 180 days for Judge Schall. The court average, as earlier noted, was 121 days from argument to decision for published patent cases.

TABLE 4A: LOWER COURT OR AGENCY ORIGINATING CASE

Northern District of Illinois	10
Southern District of New York	8
Central District of California	6
District of Delaware	6
Northern District of California	6
District of Massachusetts	5
U.S. Patent and Trademark Office	5
Eastern District of Michigan	4
Western District of Washington	4
Eastern District of Pennsylvania	3

¹⁵⁶². *Id.* at 1704, 1706.

¹⁵⁶³. *Id.* at 1704, 1706.

Eastern District of Texas	3
District of Arizona	2
District of the District of Columbia	2
District of Minnesota	2
District of New Jersey	2
Northern District of Iowa	2
District of Colorado	1
District of Maryland	1
District of Nevada	1
District of Oregon	1
District of South Carolina	1
Eastern District of Arkansas	1
Eastern District of California	1
Eastern District of Missouri	1
Middle District of Tennessee	1
Northern District of Georgia	1
Northern District of Indiana	1
Northern District of Mississippi	1
Northern District of New York	1
Northern District of Texas	1
Northern District of West Virginia	1
Southern District of California	1
Southern District of Florida	1
Southern District of Indiana	1
Southern District of Iowa	1
Southern District of Texas	1
United States Court of Federal Claims	1
United States International Trade Commission	1
Western District of Kentucky	1
Western District of Michigan	1
Western District of Missouri	1
Western District of New York	1
Western District of Pennsylvania	1
Western District of Texas	1
Total	98

TABLE 4B: CIRCUITS ORIGINATING CASE

Ninth Circuit	22
Third Circuit	12
Seventh Circuit	12
Second Circuit	10
Eighth Circuit	8
Fifth Circuit	7
Sixth Circuit	7
First Circuit	5
Fourth Circuit	3
Eleventh Circuit	2
D.C. Circuit	2
Tenth Circuit	1
No circuit (agency or U.S. Court of Federal Claims)	7
Total	98

Tables 4A and 4B are new. They demonstrate where the cases decided by the Federal Circuit (at least those resulting in published opinions) are originating. Table 4A contains the unsurprising information that the Northern District of Illinois (Chicago), the Southern District of New York (New York City), the Central District of California (Los Angeles), the Northern District of California (San Francisco, Oakland, and Silicon Valley), and the District of Delaware (the preferred state of incorporation for so many American companies) are leading the way. But Table 4A also has some surprises: the relatively low number of cases originating in the Eastern District of Texas (a so-called “rocket docket” with special patent rules that has attracted more patent lawsuits than any district court save the Central District of California),¹⁵⁶⁴ and the complete absence of cases originating in the original “rocket docket,” the Eastern District of Virginia.

1564. See Julie Creswell, *So Small a Town, So Many Patent Suits*, N.Y. TIMES, Sept. 24, 2006, § 3, at 1 (“More patent lawsuits will be filed [in Marshall, Texas] this year than in federal district courts in San Francisco, Chicago, New York and Washington. Only the Central District of California, in Los Angeles, will handle more patent infringement cases.”).

Table 4B simply breaks down the data in Table 4A by Circuit rather than by district court; it suggests that, if Congress had not centralized all patent appeals in the Federal Circuit, the Second, Third, Seventh and Ninth Circuits would be the major patent-law circuits today.

TABLE 5: RESULTS OF PUBLISHED OPINIONS

Affirmed	42
Affirmed in part, dismissed in part	1
Affirmed in part, reversed in part	3
Affirmed in part, reversed in part, and remanded	5
Affirmed in part, reversed in part, vacated in part	1
Affirmed in part, reversed in part, vacated in part, and remanded	4
Affirmed in part, vacated in part, and remanded	10
Cross-appeal dismissed	1
Mandamus granted	1
Reversed	6
Reversed and remanded	4
Reversed; cross-appeal dismissed	1
Reversed in part, vacated in part, and remanded	3
Appeal transferred	1
Vacated	2
Vacated and remanded	12
Vacated in part, dismissed in part, and remanded	1
Total	98

The final table, Table 5, is also new. It sorts the “decretal language” from the Federal Circuit’s published patent opinions in 2007 to demonstrate how many of those opinions resulted in alterations of the rights of the parties.¹⁵⁶⁵ Table 5 thus shows that, in 2007, the Federal Circuit’s ninety-eight published patent opinions yielded across-the-board affirmances in forty-two cases; total reversals in eleven cases (six “Reversed,” one “Reversed and remanded,” and

1565. See, e.g., Hon. Jon O. Newman, *Decretal Language: Last Words of an Appellate Opinion*, 70 BROOK. L. REV. 727, 727 (2006) (“‘Decretal language’ is the portion of a court’s judgment or order that officially states (‘decrees’) what the court is ordering.”).

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one “Reversed; cross-appeal dismissed”); and a variety of dispositions in the rest. Of course, using the universe of *published* opinions to compile these statistics will not reflect the court’s true rate of affirmances or reversals; it is probable that the decisions the court chooses to publish under its Rule 47.6(b) are those that address issues of first impression or otherwise “ad[d] significantly to the body of law”¹⁵⁶⁶—and those cases are more likely to result in different outcomes than in the lower court as compared to the body of unpublished opinions.

1566. FED. CIR. R. 47.6(b).