# 2010 Patent Law Decisions of the Federal Circuit: "The Advent of the Rader Court" 

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## 2010 Patent Law Decisions of the Federal Circuit: "The Advent of the Rader Court"

# AREA SUMMARIES 

# 2010 PATENT LAW DECISIONS OF THE FEDERAL CIRCUIT: THE ADVENT OF "THE RADER COURT" ${ }^{+}$ 

Gregory A. CAStanias ${ }^{*}$

DOUGLAS R. COLE**


#### Abstract

$\dagger$ 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: Bd. of Trs. of the Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc., 583 F.3d 832, 92 U.S.P.Q.2d (BNA) 1442 (Fed. Cir. 2009), cert. granted, 131 S. Ct. 502 (2010); Goeddel v. Sugano, 617 F.3d 1350, 96 U.S.P.Q.2d (BNA) 1398 (Fed. Cir. 2010); Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc., 617 F.3d 1296, 96 U.S.P.Q.2d (BNA) 1104 (Fed. Cir. 2010); Intervet Inc. v. Merial Ltd., 617 F.3d 1282, 95 U.S.P.Q.2d (BNA) 1956 (Fed. Cir. 2010); King Pharm., Inc. v. Eon Labs, Inc., 616 F.3d 1267, 95 U.S.P.Q.2d (BNA) 1833 (Fed. Cir. 2010); Haemonetics Corp. v. Baxter Healthcare Corp., 607 F.3d 776, 95 U.S.P.Q.2d (BNA) 1556 (Fed. Cir. 2010); Vizio, Inc. v. U.S.I.T.C., 605 F.3d 1330, 95 U.S.P.Q.2d (BNA) 1353 (Fed. Cir. 2010); Optium Corp. v. Emcore Corp., 603 F.3d 1313, 94 U.S.P.Q.2d (BNA) 1925 (Fed. Cir. 2010); SiRF Tech., Inc. v. U.S.I.T.C., 601 F.3d 1319, 94 U.S.P.Q.2d (BNA) 1607 (Fed. Cir. 2010); and Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 599 F.3d 1277, 94 U.S.P.Q.2d (BNA) 1224 (Fed. Cir. 2010). The authors express their most sincere thanks to Matthew J. Chisman, Gene Crawford, Daniella A. Einik, Ryan T. Holte, Kevin B. Comeau and Christopher Haake for their valuable assistance in this ambitious project. * Partner, Jones Day, Washington, D.C. and Adjunct Professor of Law, Indiana University Maurer School of Law, Bloomington, Indiana. J.D., Indiana University Maurer School of Law, 1990; A.B., Wabash College, 1987. Member of Jones Day's Intellectual Property and Issues and Appeals practices, and chair of Jones Day's Federal Circuit and IP Appeals practice. ** Partner, Jones Day, Columbus, Ohio and Adjunct Professor of Law, Ohio State University Moritz College of Law, Columbus, Ohio. J.D., University of Chicago, 1993; B.S.E.E., University of Wisconsin-Madison, 1988; A.B., Ripon College, 1986. Member of Jones Day's Intellectual Property and Issues and Appeals practices, also practicing in Jones Day's Federal Circuit and IP Appeals practice.


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## Introduction

Over the almost thirty-year history of the United States Court of Appeals for the Federal Circuit, commentators have routinely noted the court's unique place in the federal appellate structure as the only federal court of appeals without a geographic supervisory jurisdiction over district courts, and as the only federal court of appeals whose jurisdiction is defined exclusively by the subject matter of the cases appealed to it. ${ }^{1}$ The Federal Circuit, the youngest child among the thirteen federal courts of appeals, was treated as a special child for much of its young life, with the Supreme Court first taking a handsoff, and then only a very deferential approach to its review of the Federal Circuit's decisions, particularly in the area of patent law. ${ }^{2}$

Over time, however, this focus on the Federal Circuit's special characteristics has served to mask a larger truth about this court: Despite its unique appellate jurisdiction and caseload, the Federal Circuit is still a federal appellate court whose basic roles and functions are little different than those carried out by its twelve older siblings across the nation. Many of the developments affecting the Federal Circuit in recent years, including 2010, have reflected the theme that, while it is a federal appeals court like no other, the Federal Circuit is still a federal appeals court like any other.

Certainly, the Supreme Court has begun to take this view of the Federal Circuit. No longer can it be said that the Court is taking a "well nigh invisible,," "hands-off,," or even a particularly deferential

[^0]attitude towards the patent work of the Federal Circuit. ${ }^{5}$ In the 2006 edition of American University Law Review's Federal Circuit review, we chronicled this change in attitude, dividing the phases of Supreme Court review of Federal Circuit patent-law decisions into three waves, with the most current 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." ${ }^{6}$ No longer is the Federal Circuit "the de facto supreme court of patents." ${ }^{\prime 7}$ Since then, we have seen even more of that third wave of aggressive, less deferential Supreme Court review, including the Supreme Court's recent decision in Bilski v. Kappos, ${ }^{8}$ and three patent cases presently pending on its docket, Global-Tech Appliances, Inc. v. SEB S.A., ${ }^{9}$ Microsoft Corp. v. i4i Ltd. Partnership, ${ }^{10}$ and Board of Trustees of Leland Stanford Junior University v. Roche Molecular Systems, Inc. ${ }^{11}$

One sees this phenomenon as well in the identities of the advocates increasingly appearing before the Federal Circuit in patent cases. No longer is the Federal Circuit bar the exclusive province of patent lawyers holding degrees in electrical, chemical, or mechanical engineering. To the contrary, these days one is at least as likely to find a member of a large law firm's general appellate practice, a former lawyer of the U.S. Solicitor General's office, or a generalist trial lawyer standing at the lectern at 717 Madison Place. ${ }^{12}$

The Federal Circuit itself, through its own policies and procedures, has contributed to this change in attitude as well. In 2006, the court returned to a practice (one followed in most of the other circuits) of having visiting judges sit with the Federal Circuit for one or two days at a time. From September 2006 through December 2010, forty-seven visiting judges sat to hear and decide cases with the judges of the Federal Circuit. ${ }^{13}$ In most (forty-three) of those instances, the visiting

[^1]judges were district judges, although three sitting circuit judges and one judge of the U.S. Court of International Trade have also been among the visitors. ${ }^{14}$ The Federal Circuit's judges, too, take assignments among the regional circuits, and have been doing so regularly since 2006 . $^{15}$ This sort of cross-pollenization among the federal courts can only further an understanding that the Federal Circuit is, for the most part, a federal appellate court like every other.

Yet, the Federal Circuit remains, in significant ways, a court like no other. By statute, ${ }^{16}$ it remains, with rare exception, ${ }^{17}$ the court of appeals for patent cases. This means that unless and until Congress takes up the task of patent law reform, it will continue to be up to the Federal Circuit (and, in a handful of cases, the Supreme Court) to make the sort of interstitial changes to patent law that come from common-law rulemaking. As we will discuss at some length below, the year 2010 certainly saw more of that in the Federal Circuit's (and in the Supreme Court's) jurisprudence.

Significant change came to the Federal Circuit's membership in the year 2010. In his 2009 "State of the Court" address before the Federal Circuit Bar Association's Bench and Bar Conference, Chief Judge Paul R. Michel noted "the potential of a generational reconstitution of the membership of the court" because eight of the twelve active judges are eligible to retire or take senior status as of September 2010. ${ }^{18}$ Chief Judge Michel then surprised the Federal Circuit bar only five months later when he announced his intent to retire from the bench on May 31, 2010. ${ }^{19}$ His decision to retire from the bench meant that Judge Randall R. Rader, the next most senior active judge eligible for the position, became Chief Judge on June 1, $2010 .{ }^{20}$

[^2]There were other significant personnel changes in 2010. In January, Former Chief Judge H. Robert Mayer announced his decision to take senior status effective June 30, 2010. ${ }^{21}$ On March 10, 2010, President Obama nominated Judge Kathleen O'Malley of the U.S. District Court for the Northern District of Ohio to take the seat previously occupied by Judge Alvin A. Schall, who had assumed senior status on October 5, 2009. ${ }^{22}$ Judge O'Malley, who had been one of the forty-seven visiting judges to sit with the Federal Circuit since 2006, became the first former district judge to sit on the Federal Circuit in its history when she was confirmed on December 22, and sworn in on December 27, 2010. ${ }^{23}$

President Obama made two other nominations to the Federal Circuit in 2010, but the Senate did not confirm either one before the end of the $111^{\text {th }}$ Congress. Edward DuMont, a partner in the appellate practice of a Washington law firm, was nominated to take Chief Judge Michel's seat on April 14, 2010. ${ }^{24}$ Jimmie Reyna, a partner in the international trade and customs practice of another Washington, D.C. firm, was nominated to take Judge Mayer's seat on September 29, 2010. ${ }^{25}$ Both men were renominated by the President on January 5, 2011. ${ }^{26}$ As of the publication of this Article, Reyna had been confirmed by the U.S. Senate, but DuMont's nomination was still pending, awaiting a hearing.

[^3]Thus, as of January 1, 2011, the Federal Circuit comprised ten active judges (with two seats still open), and six senior judges. Moreover, of the court's ten current active judges, five are presently eligible to take senior status under the judicial code's "Rule of $80 .{ }^{27}$ Former Chief Judge Michel's promise of a "generational reconstitution" of the Federal Circuit is already taking shape, and likely to accelerate its pace in the very near future. ${ }^{28}$

Another interesting development in the Federal Circuit in 2010 was an apparent upturn in the court's use of its en banc power. In 2006, when we last surveyed the Federal Circuit's jurisprudence, the court decided no full cases en banc. ${ }^{29}$ By contrast, in 2010, the Federal Circuit decided three patent cases en banc, ${ }^{30}$ and heard argument in two others in November 2010. ${ }^{31}$ Various judges of the court also issued dissents from the denial of rehearing en banc in four other cases. ${ }^{32}$ This increased en banc activity in 2010 may presage a more muscular use of the court's en banc capabilities in the near term.

Some 2010 developments in Federal Circuit administration bear note as well. The Federal Circuit continued its practice of hearing arguments outside of Washington, D.C., with a calendar of oral
27. See 28 U.S.C. $\S 371$ (c) (2006) (permitting judges to remain in office but retire from full active service when the sum of their age and years of service is eighty). Those judges presently eligible to take senior status are Judges Pauline Newman, Alan Lourie, William Bryson, Arthur Gajarsa, and Timothy Dyk.
28. See Michel, supra note 18.
29. Castanias, et al., supra note 2, at 797; 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 part III-B only).
30. See Hyatt v. Kappos, 625 F.3d 1320, 96 U.S.P.Q.2d (BNA) 1841 (Fed. Cir. 2010) (en banc); Princo Corp. v. Int'l Trade Comm'n, 616 F.3d 1318, 96 U.S.P.Q.2d (BNA) 1233 (Fed. Cir. 2010) (en banc); Ariad Pharm., Inc. v. Eli Lilly \& Co., 598 F.3d 1336, 94 U.S.P.Q.2d (BNA) 1161 (Fed. Cir. 2010) (en banc).
31. Therasense, Inc. v. Becton, Dickinson \& Co., 593 F.3d 1289, 93 U.S.P.Q.2d (BNA) 1489 (Fed. Cir. 2010), reh'g granted per curiam, 374 Fed. Appx 35 (Fed. Cir. 2010) (per curiam), setting reh'g, 379 Fed. Appx 979 (Fed. Cir. 2010) (setting oral argument before en banc court for November 9, 2010); TiVo Inc. v. Echostar Corp., 597 F.3d 1247, 94 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2010), reh'g granted, 376 Fed. Appx.F. App'x 21 (Fed. Cir. 2010) (per curiam).
32. See Sun Pharm. Indus. v. Eli Lilly \& Co., 625 F.3d 719, 721, 96 U.S.P.Q.2d (BNA) 1830, 1831 (Fed. Cir. 2010) (Newman, J., dissenting from denial of rehearing en banc); Novo Nordisk v. Caraco Pharm. Labs., Ltd., 615 F.3d 1374, 1375, 95 U.S.P.Q.2d (BNA) 1880, 1881 (Fed. Cir. 2010) (Gajarsa, J., dissenting from denial of rehearing en banc) (per curiam); Avid Identification Sys., Inc. v. Crystal Import Corp., 614 F.3d 1330, 1331, 95 U.S.P.Q.2d (BNA) 1830, 1831 (Fed. Cir. 2010) (Newman, J., dissenting from denial of stay pending resolution of Therasense, Inc. v. Becton, Dickinson \& Co., 593 F.3d 1289 (Fed. Cir. 2010) (per curiam)); Boehringer Ingelheim Int'l GmbH v. Barr Labs., Inc., 603 F.3d 1359, 1360, 95 U.S.P.Q.2d (BNA) 1188, 1189 (Fed. Cir. 2010) (Gajarsa, J., dissenting from denial of rehearing en banc) (per curiam).
arguments in Atlanta, Georgia in November 2010. ${ }^{33}$ The court also continued its program of courtroom renovations with a still-underway reconstruction of its Courtroom 203, which is the third and final Federal Circuit courtroom to undergo significant renovations, representing not only aesthetic improvements to the courtrooms but technological ones as well (including the capability, not yet used to the best of our knowledge, of hearing and seeing arguments from attorneys in remote locations). ${ }^{34}$

The Federal Circuit also premiered a revamped website in 2010, but the court has yet to introduce e-filing, which leaves it as the only federal appeals court that has not enabled e-filing through the federal courts' CM/ECF (Case Management/Electronic Case Files) system. ${ }^{35}$ There have been occasional public promises that e-filing is coming to the Federal Circuit, but for now, it remains an unfulfilled promise for the lawyers practicing before its bar-and for the public, whose access to the briefs filed in the court's cases is limited to seeking out copies from the clerk's office, or through expensive electronic research in databases such as Thomson Reuters' WESTLAW.

The ancient Greek philosopher Heraclitus first set forth the notion that nothing is constant but change. In the Federal Circuit, 2010 certainly reflected that doctrine, with changes in court membership, changes in practice, and changes in the law. In the pages that follow, we will address many of these continued developments as they were reflected in the Federal Circuit's patent jurisprudence of 2010. And, as we did in our articles surveying the Federal Circuit's 2000 and 2006 jurisprudence, ${ }^{36}$ we again conclude with an addendum that discusses the statistical output of the Federal Circuit and its judges.

## I. The Supreme Court and the Federal Circuit

One word-one name, really-dominated discussions of patent law in 2010 like no other: Bilski.

In 2010, thanks to the Federal Circuit and the Supreme Court, Bernard Bilski joined Herbert Markman, ${ }^{37}$ Eugene Markush, ${ }^{38}$ and

[^4]Mr. Jepson (whose first name is lost to the ages) ${ }^{39}$ as one of those few inventors whose names have become synonymous with patent-law doctrine. In Bilski v. Kappos, ${ }^{40}$ the Supreme Court again considered the proper scope and interpretation of the statute defining the subject matter eligible for patenting. ${ }^{41}$ In ruling that Bilski and his coinventor's claimed invention was not patent-eligible, the Supreme Court technically affirmed the judgment of the en banc Federal Circuit, but did so on different reasoning than that adopted in the Federal Circuit's 2009 decision. ${ }^{42}$

Bilski and his co-inventor, Rand Warsaw, claimed a new method of hedging in commodity trading. ${ }^{43}$ This "method" was technically within the scope of the statute governing patent eligibility, which makes eligible for patenting, "subject to" the other requirements of Title 35, "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." ${ }^{44}$ Yet the examiner rejected the inventors' claim because it "is not implemented on a specific apparatus and merely manipulates an abstract idea and solves a purely mathematical problem without any limitation to a practical application." ${ }^{45}$ The Board of Patent Appeals and Interferences affirmed the examiner's judgment on similar grounds. ${ }^{46}$

The Federal Circuit heard the case en banc and affirmed the Board's judgment in a decision that produced five separate opinions. ${ }^{47}$ The majority's core holding was that "the sole test" for patent eligibility is whether "(1) [a process] is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing." ${ }^{48}$ The correctness of this machine-ortransformation test became the subject of the dispute as it made its way to the Supreme Court.

The reason that a "method" could be ineligible for a patent, notwithstanding the language of the patent statutes, lay in ancient Supreme Court decisions: "The [Supreme] Court's precedents provide three specific exceptions to $\S 101$ 's broad patent-eligibility

[^5]principles: 'laws of nature, physical phenomena, and abstract ideas." ${ }^{49}$ While the statute does not expressly state these exceptions, they fit within the requirement that the process be "new and useful. ${ }^{50}$ The Court further noted that "these exceptions have defined the reach of the statute as a matter of statutory stare decisis going back 150 years." ${ }^{51}$

The Supreme Court ultimately agreed with the Federal Circuit that Bilski and Warsaw's application sought to patent the "concept of hedging" in commodity transactions, a mere abstract idea. ${ }^{52}$ But it refused to endorse the machine-or-transformation test as "the sole test" for the patentability of methods or processes, although it retained some of that test's vitality as "an important and useful clue" in determining patent eligibility. ${ }^{53}$ Instead, the Court portrayed its decision as a narrow, straightforward application of prior case law holding that abstract ideas are unpatentable ${ }^{54}$ Significantly, the Court concluded its opinion by noting that the Federal Circuit remained free to place other limits on patentability so long as the criteria are consistent with the text and purposes of the Patent Act. ${ }^{55}$

What lessons can be drawn from Bilski? First, the language of the Patent Act is still predominant. ${ }^{56}$ Second, even in the area of patent law, " $[t]$ he Supreme Court is still 'supreme,," ${ }^{57}$ and even Supreme Court decisions going back more than a century must be respected under the principles of stare decisis. ${ }^{58}$ Third, although the Federal Circuit has the ability to develop limitations on patent-eligibility in its case law, such criteria will have to be tied closely to the language and purposes of the statute ${ }^{59}$ Fourth, even though the Federal Circuit may desire to create hard-and-fast rules for patent litigation, such as the machine-or-transformation test, the Supreme Court seems to prefer guidelines and open-ended judicial inquiries. ${ }^{60}$

This last point may be the most enduring lesson about the differences in approach between the Federal Circuit and the Supreme Court when it comes to patent law. Over the past ten years, the Supreme Court has rejected a rigid prosecution-history bar to

[^6]application of the doctrine of equivalents, ${ }^{61}$ a virtually irrebuttable presumption of irreparable harm for injunctions against future patent infringement, ${ }^{62}$ a bar on federal jurisdiction for patent licensees seeking to challenge the license or the patents underlying it, ${ }^{63}$ a rigid teaching-suggestion-or-motivation test for obviousness, ${ }^{64}$ and, in 2010, a rigid machine-or-transformation test for patent eligibility. ${ }^{65}$ Professor Kathleen Sullivan defined this dichotomy as a battle over "the choice of rules or standards-over whether to cast legal directives in more or less discretionary form. ${ }^{66}$ The Federal Circuit keeps endorsing rules, and the Supreme Court, despite its general preference for rules over standards, responds by correcting the Federal Circuit's rule-based decisions and replacing those rules with more malleable, more open-ended standards. ${ }^{67}$

As lawyers who advise clients and practice with regularity before both the Federal Circuit and the Supreme Court, we have a great deal of sympathy for what the Federal Circuit has been trying to do with these rules-based decisions. Lawyers and clients, especially clients with significant investments in technology and intellectual property, desire predictability and certainty. ${ }^{68}$ The fact that significant property rights and reliance interests are always at the core of patent cases makes certainty all the more important; more than one client has said to us, in essence, "I don't care what the Federal Circuit does, as long as I know what the rules are." District judges, too, who as a group are likely to suffer reversals at the hand of the Federal Circuit far more frequently than by their respective regional circuits, have expressed similar concerns in their public comments, ${ }^{69}$ and even, occasionally, in their opinions. ${ }^{70}$
61. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 737, 62 U.S.P.Q.2d (BNA) 1705, 1711-12 (2002).
62. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 394, 78 U.S.P.Q.2d (BNA) 1577, 1580 (2006).
63. See MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 137, 81 U.S.P.Q.2d (BNA) 1225, 1234 (2007).
64. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 422, 82 U.S.P.Q.2d (BNA) 1385, 1398 (2007).
65. Bilski, 130 S. Ct. at 3231, 95 U.S.P.Q.2d (BNA) at 1010.
66. Kathleen M. Sullivan, Foreword: The Justices of Rules and Standards, 106 Harv. L. Rev. 22, 26 (1992).
67. See Adamo, et al., supra note 36, at 1643 \& n. 1680 (noting that even though the Supreme Court generally favors rules over discretionary standards, it often rejects rules developed by the Federal Circuit in favor of standards).
68. See, e.g., Bilski, 130 S. Ct. at 3231, 95 U.S.P.Q.2d (BNA) at 1010 (Stevens, J., concurring in judgment) ("In the area of patents, it is especially important that the law remain stable and clear.").
69. See, e.g., David L. Schwartz, Practice Makes Perfect? An Empirical Study of Claim Construction Reversal Rates in Patent Cases, 107 Mich. L. Rev. 223, 226-27 n. 7 (2008) (discussing comments by judges on frustrations in the reversal rates on claim construction, including the lament by District Court Judge Marsha J. Pechman that

This is the price of this era of more active Supreme Court review of Federal Circuit decisions. In the days when the Federal Circuit functioned, in the words of Professor Mark Janis, as the "de facto supreme court of patents," ${ }^{" 11}$ the Federal Circuit could more freely frame rules governing patent litigation and prosecution. Because of the court's expertise-well-earned from hearing and deciding hundreds of patent cases every year-the Federal Circuit could appropriately detect patterns that made the announcement of these kinds of rules both comfortable and appropriate.

A good example of this phenomenon was the almost black-letter rule that an injunction would follow after a finding of patent infringement. ${ }^{72}$ This rule was not made by the Federal Circuit willynilly; rather, it grew up from a vast body of experience demonstrating that, in patent-infringement suits between competitors, there was almost always irreparable harm that would flow from not enjoining the infringing competitor. This is a classic mode of common-law adjudication: When courts have accumulated enough experience with respect to a particular issue, whether legal or equitable, through case-by-case decisionmaking, they can pronounce rules for future application so that courts do not have to engage in balancing multifarious factors in every individual case. ${ }^{73}$
Ironically, though, the virtually irrebutable presumption of irreparable harm from infringement-which led to an almost inviolable rule that jury verdicts of patent infringement would be followed by injunctions against future infringement, no matter what

[^7]devastating costs might be worked on the losing party or upon third parties-helped to create a new industry of non-practicing entities, called NPEs, or, more derisively, "patent trolls." ${ }^{74}$ These NPEs could accumulate patents as their principal or only asset, never manufacture a thing, but obtain a patent-infringement judgment against a manufacturer. The potential money judgment, a reasonable royalty for past infringement, might be modest, but the real value would be the threat of an injunction of devastating consequence which might shut down the defendant's business. ${ }^{75}$ By the time the Federal Circuit had developed its pro-injunction rule from its experience in cases largely involving head-to-head litigation between competitors, its decisions had paradoxically deprived the court of the equitable flexibility to deal with the rise of the NPE in patent litigation. Thus, the Supreme Court had to step in to restore the equitable norms and return the Federal Circuit (and the district courts) to case-by-case adjudication of injunction requests. ${ }^{76}$

Institutionally, however, the Supreme Court is unlikely to endorse rules over standards in patent cases because it is the inverse of the Federal Circuit with respect to its base of experience. Even in this era of more aggressive Supreme Court review of Federal Circuit patent decisions, the Justices' experience with patent law is going to represent only a few cases each year, whereas the judges of the Federal Circuit will have repeat exposure to all of the issues that regularly arise in patent disputes. The Supreme Court will more naturally be disposed to presumptions, standards, and "useful clues,""7 whereas the Federal Circuit will more naturally seek to transform its repeat experiences into more concrete rules to guide litigants and individuals. The pull-and-tug between rules and standards is likely to be on display again as the Supreme Court takes up three other patent cases from the Federal Circuit this year. ${ }^{78}$

[^8]This institutional tension is apparent on the face of the Bilski decision. Justice Kennedy's opinion for the Court contained two subsections (denoted "II-B-2" and "II-C-2") that represented his views as well as those of Chief Justice Roberts, Justice Alito, and Justice Thomas. ${ }^{79}$ Justice Scalia, who otherwise joined Justice Kennedy's opinion for the Court, did not join these two subsections. ${ }^{80}$ In section II-B-2, Justice Kennedy expressed his concern that, in the course of applying a hard-and-fast "machine-or-transformation" rule, "courts may pose questions of such intricacy and refinement that they risk obscuring the larger object of securing patents for valuable inventions without transgressing the public domain."81 Justice Kennedy opined that the Information Age has created greater possibilities for innovation and presents particular challenges for patent law in finding ways to protect inventors while not foreclosing new, creative applications of established principles. ${ }^{82}$ And in section II-C-2, which concluded the portion of the Court's opinion rejecting a categorical exception to patent-eligibility for "business methods," Justice Kennedy expressed similar concerns that adopting a brightline rule forbidding all business-method patents might foreclose some legitimately patentable processes under § 101. ${ }^{83}$

In Microsoft Corp. v. i4i Ltd. Partnership, ${ }^{84}$ the Court will confront the question of whether challenges to the validity of a patent-at least in cases where the relevant prior art was not before the patent examiner-must be proved by clear and convincing evidence. ${ }^{85}$ The relevant statute provides that "[a] patent shall be presumed valid," and that " $[t]$ he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such validity," but makes no mention of the standard of proof required to sustain such a

[^9]challenge. ${ }^{86}$ Nonetheless, the clear-and-convincing standard of proof for validity challenges predates the Federal Circuit, having originated with one of that court's predecessors, the Court of Customs and Patent Appeals (CCPA). ${ }^{87}$

In Global-Tech Appliances Inc. v. SEB S.A., ${ }^{88}$ the Court will take up the question of the proper standard for finding induced patent infringement under 35 U.S.C. § 271 (b), in particular the question of whether knowledge of the specific patent is required for inducement liability. In the case below, the Federal Circuit held that the defendant's deliberate indifference to a known risk of infringement was sufficient to support liability. ${ }^{89}$

And in Board of Trustees of Leland Stanford Junior University v. Roche Molecular Systems, Inc., ${ }^{90}$ the Court will confront a question arising under the Bayh-Dole Act, namely, whether a university that is a federal contractor may have its statutory right to inventions arising from federally funded research terminated when one of the individual inventors makes a separate agreement purporting to assign that inventor's rights in the invention to a third party. ${ }^{91}$ The Federal Circuit held that Stanford University's rights could be (and were) so terminated. ${ }^{92}$

In sum, we may look back on 2010 as a milestone in a period of enormous change in the Federal Circuit-among them, changes in leadership, changes in membership, changes in en banc practices, and changes in doctrine. The following sections explore some of those changes-as well as the areas of relative stability-in some detail.

[^10]
## II. Federal Court and Agency Practice

## A. District Court Practice

## 1. Initiating the case

## a. Standing

The year 2010 offered the Federal Circuit several opportunities to address the constitutional requirement of standing. Article III of the Constitution limits the federal judicial power to "Cases" and "Controversies" between two or more parties. ${ }^{93}$ Under the Patent Act, standing often involves the question of who can serve as the proper plaintiff in a patent infringement suit. The Act says that a "patentee shall have a remedy by civil action for infringement of his patent. ${ }^{94}$ This right to bring a civil action extends beyond the party to whom the patent was issued. It may include successors in title, ${ }^{95}$ co-owners, ${ }^{96}$ and, in some cases, licensees. ${ }^{97}$

Perhaps the Circuit's most significant standing case of 2010 came at the end of the year, when the court examined the fundamentals of its Article III standing jurisprudence in the context of exclusive patent licensees. In WiAV Solutions LLC v. Motorola, Inc., ${ }^{98}$ WiAV, as the licensee of the patents-in-suit, filed an infringement action against Motorola and others. ${ }^{99}$ The defendants moved to dismiss, claiming that WiAV lacked standing because the patent licensor had retained a limited right to license patent rights notwithstanding WiAV's otherwise exclusive license. ${ }^{100}$ The district court granted the motion. ${ }^{101}$ While recognizing that Federal Circuit precedent allows a party to be considered an exclusive licensee even though the license is subject to pre-existing licenses by others, the district court nonetheless rejected what it characterized as "'a new legal principle that, if a grantor retains a limited right to sublicense, it does not defeat exclusivity." ${ }^{102}$ Interpreting Textile Productions, Inc. v. Mead Corp. ${ }^{103}$ the district court held that the right to grant sublicenses

[^11]under a patent defeated patent exclusivity, even if sublicensing is only available to subsidiaries and affiliates. ${ }^{104}$

On appeal, the Federal Circuit began by recounting its exclusive license jurisprudence, emphasizing that an exclusive license sufficient to confer Article III standing is one that creates the right to exclude others from exercising certain patent rights. Because the Patent Act protects exclusionary rights in a patent, a party that holds an exclusionary right suffers an injury under the Patent Act by unauthorized encroachment on the right. ${ }^{105}$ The court thus found that constitutional standing in a patent infringement suit depends on "whether a party can establish that it has an exclusionary right in a patent that, if violated by another, would cause the party holding that exclusionary right to suffer legal injury." ${ }^{106}$ With that point clear, the court rejected the argument that a licensee must be the sole party who can license the patent in order to be considered an exclusive licensee, instead holding that an exclusive licensee is a party that holds any of a patent's exclusionary rights. ${ }^{107}$ Going further with respect to the case at hand, the court held that "[b]ecause an exclusive licensee derives its standing from the exclusionary rights it holds, it follows that its standing will ordinarily be coterminous with those rights." ${ }^{108}$ In that sense, the standing question was "whether WiAV has shown that it has the right under the patents to exclude the Defendants from engaging in the alleged infringing activity and therefore is injured by the Defendants' conduct." ${ }^{109}$ After reviewing the various license agreements, the panel held that WiAV did indeed have the right to exclude Motorola and the other defendants from its patent rights under the license, and thus had Article III standing to file suit. ${ }^{110}$

In Abraxis Bioscience, Inc. v. Navinta LLC, ${ }^{111}$ the court considered the extent to which a patentee and licensee can agree to a nunc pro tunc assignment of the patent in order to establish standing in the licensee after the infringement suit has already been filed. ${ }^{112}$ Abraxis purchased the assets of AstraZeneca on April 2006. ${ }^{113}$ The purchase agreement required AstraZeneca to assign the patents-in-suit to Abraxis, and AstraZeneca purportedly did so through a later-

[^12]executed intellectual property assignment agreement, which further required AstraZeneca to execute any additional assignments necessary to vest full title to the patents-in-suit in Abraxis. ${ }^{114}$ The problem, however, was that the patents-in-suit were still owned by third parties, and the rights had not been assigned to AstraZeneca at the time AstraZeneca signed the agreements with Abraxis. ${ }^{115}$

On the day Abraxis filed its infringement suit, March 15, 2007, the third party owners of the patents-in-suit assigned their rights to AstraZeneca. ${ }^{116}$ Eight months later, AstraZeneca assigned all of its rights to the patents-in-suit to Abraxis. ${ }^{117}$ That assignment agreement further stated that AstraZeneca and Abraxis had considered Abraxis, as of June 28, 2006 at the latest, to be the holder of all rights to the patents. ${ }^{118}$ The district court held that Abraxis nonetheless had standing because the intent of the parties could be taken to imply a nunc pro tunc assignment of the patents-in-suit because of the relationship between the parties. ${ }^{119}$

The Federal Circuit first held that its law determined the assignment question here because "[w]e have stated that [a]lthough state law governs the interpretation of contracts generally... the question of whether a patent assignment clause creates an automatic assignment or merely an obligation to assign is intimately bound up with the question of standing in patent cases." ${ }^{120}$ The court then examined the assignment agreements involved and determined that the transfer of the patents was to occur by separate agreement in the future and that such agreements "do not vest legal title to the patents in the assignee.. ${ }^{1121}$ While Abraxis and AstraZeneca did execute an intellectual property assignment agreement in June 2006 (months before suit was filed), AstraZeneca was not able to assign the patents at that time because it did not possess them. ${ }^{122}$ AstraZeneca's acquisition of title to the patents-in-suit on the day Abraxis filed its infringement suit likewise did not matter because AstraZeneca's title to the patents, per the agreement, did not pass by operation of law to Abraxis. ${ }^{123}$ Rather, as per the parties' agreement, the actual transfer

[^13]from AstraZeneca to Abraxis did not occur until they executed a separate assignment agreement in the future. ${ }^{124}$ Moreover, it did not matter that the parties intended a nunc pro tunc assignment. ${ }^{125}$ The court held that "[e]ven if the November 12, 2007 agreement is considered to be a nunc pro tunc assignment, for purposes of standing, Abraxis was required to have legal title to the patents on the day it filed the complaint and that requirement can not [sic] be met retroactively. ${ }^{126}$

Judge Newman dissented, arguing that state law controlled the effect of an assignment agreement, including its effective date. ${ }^{127}$ Applying New York law, Judge Newman found it "beyond cavil that parties to a contract can set the effective date of their agreement," and that Abraxis and AstraZeneca intended to assign the patents prior to Abraxis filing suit. ${ }^{128}$ Judge Newman also criticized the majority's reliance on "promise to assign" cases, characterizing such cases as irrelevant because the patents were already in existence here. ${ }^{129}$

In Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc., ${ }^{130}$ the court set a high bar for parties claiming rights under an unwritten license agreement. There, a patent owner sought to join its sister corporation as a co-plaintiff. ${ }^{131}$ The sister corporation actually practiced the patent and could claim lost profits from the alleged infringement. ${ }^{132}$ In the absence of a formal license agreement, the patent owner sought to rely on the corporate organizational structure and the working relationship between the patentee entity and its sister company to establish the exclusive license agreement required for standing. ${ }^{133}$ Based on deposition testimony, the patent holder argued that the corporate family has an "understanding" that the sister company has the sole right to practice the patent-in-suit. ${ }^{134}$ The court rejected this argument, noting that "the fact that the [sister corporation] is currently the only entity practicing the [patent-insuit] does not mean that [the patent holder] has promised to exclude all others from doing so." ${ }^{135}$ The alleged "understanding" between

[^14]the patent holder and its sister corporation, moreover, was "nothing more than the way in which the various [corporate family] entities presently operate., ${ }^{136}$

In Alfred E. Mann Foundation for Scientific Research v. Cochlear Corp., ${ }^{137}$ a patent holder granted to a licensee an exclusive license covering two hearing-aid patents. ${ }^{138}$ The license agreement specified that either party could sue for patent infringement, with the licensee holding the right to do so first. ${ }^{139}$ When the licensee declined to sue the defendant for infringement, the patent holder, per the licensing agreement, sued instead. ${ }^{140}$ The district court dismissed the suit on the argument that the patent holder did not retain a sufficiently substantial right to sue and thus lacked standing. ${ }^{141}$
The Federal Circuit reversed. ${ }^{142}$ Recognizing that "the nature and scope of the licensor's retained right to sue accused infringers is the most important factor in determining whether an exclusive license transfers sufficient rights to render the licensee the owner of the patent, ${ }^{1143}$ the court held that the patent holder had the "absolute right to decide whether or not to initiate litigation" and would maintain "complete control" over any litigation it initiated. ${ }^{144}$ That "unfettered" level of control, despite the licensee's first refusal right, meant the Foundation's retention of litigation rights was not illusory and thus sufficiently substantial to create standing. ${ }^{145}$

Another case, A123 Systems, Inc. v. Hydro-Quebec, ${ }^{146}$ involved the prudential standing requirement that an exclusive licensee must join all patent owners to a suit, considering that requirement in the context of a declaratory judgment action by an alleged infringer. ${ }^{147}$ A123 Systems sought a declaration of noninfringement and invalidity of patents belonging to the University of Texas and licensed to Hydro-Quebec. ${ }^{148}$ A123 did not join the University of Texas. ${ }^{149}$ The district court held that A123 was required to join both the patentees as each patentee was a necessary party just as an exclusive licensee that lacks some substantial rights in a patent must join the patentee

[^15]in order to sue. ${ }^{150}$ The district court dismissed the suit, reasoning that the University of Texas was a necessary party because it had not transferred all substantial rights in the patents at issue to HydroQuebec. ${ }^{151}$

The Federal Circuit agreed. ${ }^{152}$ It held that Hydro-Quebec "holds an exclusive license to some, but not all, fields of use under the patents in suit, mandating the legal conclusion that [Hydro-Quebec] holds less than all substantial patent rights."153 The court rejected A123 Systems' argument that the University of Texas was not a necessary party because Hydro-Quebec and the University of Texas held HydroQuebec out as the exclusive licensee with all substantial rights to the patents-in-suit in prior infringement litigation. ${ }^{154}$ The court instead held that the University of Texas and Hydro-Quebec had made clear that Hydro-Quebec was the exclusive licensee to some, but not all, fields of use. ${ }^{155}$ More importantly, the court held that "even if [Hydro-Quebec] had held itself out as having all substantial rights in the patents, such a unilateral representation could not alter the [University of Texas's] own rights in the patents. In determining ownership for purposes of standing, labels given by the parties do not control." ${ }^{156}$

With the University of Texas now a necessary party, the court asked if the university could be joined in light of its Eleventh Amendment immunity, ultimately concluding that it could not. ${ }^{157}$ Neither party disputed the university's status as a state entity entitled to immunity ${ }^{158}$ The panel also held that the University of Texas had not waived its immunity by acting as a plaintiff in an earlier infringement action. ${ }^{159}$ The court relied on its earlier decision in Biomedical Patent Management Corp. v. Department of Health Services, ${ }^{160}$ which held that waivers of immunity in one suit do not operate to waive immunity in other suits, including suits about the same issues and between the same parties. ${ }^{161}$ Thus the University could not be joined as a party unless it waived its immunity in this specific lawsuit. ${ }^{162}$

[^16]The only remaining question was whether the University of Texas, as a necessary party incapable of being joined, was also an "indispensible party" such that the suit must be dismissed under Federal Rule of Civil Procedure 19(a). ${ }^{163}$ Applying Fifth Circuit law, the court held that the University was an indispensible party, citing the prejudice that would result to the University if suit were permitted to proceed without the University because of the risk that the University's interests would not be fully represented, as well as the risk of multiple future lawsuits. ${ }^{164}$ On balance, then, Rule 19(a) made the University an indispensible party, and the district court correctly dismissed A123 Systems' declaratory judgment action. ${ }^{165}$

During this past year, the Federal Circuit also considered its prudential standing requirement that all those with ownership rights to the patents-in-suit be joined in an infringement or invalidity action, a question that turns on who has those ownership rights. ${ }^{166}$ Ownership rights in the context of employment contracts and the assignment of inventorship rights to employers arose in SiRF Technology, Inc. v. International Trade Commission. ${ }^{167}$ In that case, an employee assigned to his employer "all inventions... which are related to or useful in the business of the Employer... and which were... conceived... during the period of the Employee's employment . . . ."168 ${ }^{168}$ The employee invented certain GPS technologies while working for the employer and subsequently left for a competitor. ${ }^{169}$ The employee then obtained a patent for the technologies and assigned it to the competitor. ${ }^{170}$ The question became whether the employer, through the automatic assignment agreement with the employee, had an ownership interest in the subsequently-assigned patent. ${ }^{171}$ If so, the former employer was required to be joined as a plaintiff with the new employer (i.e., the competitor) because a co-owner of patent bringing suit without the voluntary joinder of all other co-owners does not have standing. ${ }^{172}$

The competitor as assignee had already recorded the assignment with the Patent and Trademark Office, thus "creat[ing] a

[^17]presumption of validity as to the assignment and plac[ing] the burden to rebut such a showing on one challenging the assignment," meaning the defendant in the infringement action. ${ }^{173}$ The defendant failed to meet that burden because it was unable to show that the employee's invention was "related to" or "useful in" the former employer's business as required by the employment contract so that the invention did not trigger the automatic assignment clause from the employment contract. ${ }^{174}$ As support for that conclusion, the court looked to a prior settlement agreement between the employer and competitor in which they agreed that the competitor could freely use the now-patented technology. ${ }^{175}$ "If [the former employer and the employee] recognized that [the competitor] was the owner of the trade secret rights to the invention," the court concluded, "it logically follows that [the employer] did not think that [it] was the owner of similar rights that eventually became the subject of the [patent-insuit]." ${ }^{176}$ Thus, the competitor was not required to join the employer to the suit, and the competitor had standing to assert its infringement claims. ${ }^{177}$

Enovsys LLC v. Nextel Communications, Inc., ${ }^{178}$ required the court to consider the impact of a divorce decree on a patent owner's standing to bring suit ${ }^{179}$ Enovsys had acquired ownership of several patents from a manager and part owner of Enovsys, who obtained the patents before divorcing his wife. ${ }^{180}$ The defendant, Nextel, moved to dismiss the suit on the ground that Enovsys had failed to join the original patentee's ex-wife who, Nextel claimed, retained an ownership interest in the patents under California's community property laws. ${ }^{181}$ Because an infringement plaintiff must join all patent owners in order to establish standing, if the ex-wife retained an ownership interest in the patents, then Enovsys had no standing to sue. ${ }^{182}$ The district court refused to dismiss, and a jury ultimately decided the case in the plaintiff's favor. ${ }^{183}$

Patent ownership is a matter of state law, and thus the Federal Circuit looked to California law, the state where the original patent owner and his ex-wife were married, to determine whether the ex-

[^18]wife had any ownership interest in the patent. ${ }^{184}$ California law presumes that all property obtained during marriage is community property, but Enovsys overcame that presumption by arguing that the ex-wife signed a California divorce petition indicating that the couple had "no community assets or liabilities," and the state court entered judgment on that petition, thus extinguishing any ownership interest the ex-wife may have had in the patents. ${ }^{185}$ Without an ownership interest, the ex-wife was not required to be joined in the suit in order to establish standing. ${ }^{186}$

Beyond the question of who possessed the right to sue for infringement under the Patent Act, the Federal Circuit also considered standing in two unique contexts-the Patent Act's qui tam false-marking provision, and the Hatch-Waxman Act's generic drug approval framework.

The Patent Act's false-marking qui tam provision ${ }^{187}$ was at issue in Stauffer v. Brooks Brothers, Inc. ${ }^{188}$ Stauffer, a patent attorney, bought Brooks Brothers bow ties that contained a sizing mechanism marked with two patents, each of which expired in the 1950 's. ${ }^{189}$ Believing that this patent-marking was intended to deceive, Stauffer sued Brooks Brothers. ${ }^{190}$ Brooks Brothers argued that Stauffer lacked standing because his claim that Brooks Brothers' markings quelled competition was "too conjectural and hypothetical to constitute an injury in fact." ${ }^{191}$ The district court agreed and dismissed the suit. ${ }^{192}$

The Federal Circuit reversed because "even though a relator may suffer no injury himself, a qui tam provision operates as a statutory assignment of the United States' rights, and the assignee... has standing to assert the injury in fact suffered by the assignor. ${ }^{" 193}$ To have standing, the panel concluded, the plaintiff must assert that the United States has sustained an injury-in-fact, which it did by virtue of having one of its statutes violated. ${ }^{194}$ Relying on Vermont Agency of Natural Resources v. United States ex rel. Stevens, ${ }^{195}$ and its conclusion that

[^19]Congress historically often assigned its sovereign injuries to private parties, ${ }^{196}$ the panel held that Stauffer could establish standing merely through the alleged violation of 35 U.S.C. $\S 292$ and declined to address whether Stauffer's alleged personal injuries were sufficient to confer standing. ${ }^{197}$

The Federal Circuit also addressed whether claimed injuries from a generic drug manufacturer's efforts to gain approval for its drugs under the Hatch-Waxman Act framework ${ }^{198}$ were sufficiently concrete to support Article III standing. ${ }^{199}$ In Teva Pharmaceuticals USA, Inc. v. Eisai Co., ${ }^{200}$ Teva sought a declaratory judgment that its generic Alzheimer's disease drug did not infringe on Eisai's patents listed in the FDA's Orange Book, thus clearing the way for approval of Teva's Abbreviated New Drug Application ("ANDA"). ${ }^{201}$ But because Teva was not the first generic manufacturer to file an ANDA for the Alzheimer's drug, Teva's ANDA was indefinitely delayed until the first ANDA filer's 180-day exclusive marketing period was triggered. ${ }^{202}$ The period could be triggered either by the marketing of the generic drug or a court judgment that Eisai's patents were invalid or not infringed. ${ }^{203}$ Because the first ANDA filer's plans were on hold due to a preliminary injunction entered in another case, Teva sought on its own to obtain an order of invalidity or non-infringement which would trigger the exclusivity period and bring Teva closer to having its own ANDA approved. ${ }^{204}$ The district court agreed with Eisai that the delay in running the exclusivity period was an insufficiently concrete injury to establish Article III standing and dismissed Teva's suit. ${ }^{205}$

On appeal, the Federal Circuit reversed and held that the delay in the running of the exclusivity period was a sufficient Article III injury to Teva. ${ }^{206}$ Teva's "injury (i.e., exclusion from the market) is fairly traceable to the defendant's actions because 'but-for' the defendant's decision to list a patent in the Orange Book, FDA approval of the generic drug company's ANDA would not have been independently delayed by that patent." A favorable judgment declaring Eisai's

[^20]patents invalid or not infringed would remove the possibility that Eisai's patents would bar Teva from the market and that was sufficient to create Article III standing. ${ }^{208}$ In a holding discussed more fully in Section $\mathrm{A}(1)(\mathrm{d})(\mathrm{i})$ below, the panel also held that the district court abused its discretion in declining to exercise jurisdiction under the Declaratory Judgment Act and thus remanded the case for resolution. ${ }^{209}$

## b. Subject-matter jurisdiction

Subject-matter jurisdiction issues arose in the context of the scope of the federal courts' exclusive patent jurisdiction under 28 U.S.C. §1338(a) and the ongoing existence of an Article III "case or controversy" between the parties in litigation.

The Federal Circuit considered the scope of jurisdiction under 28 U.S.C. § 1338(a) ${ }^{210}$ in Davis v. Brouse McDowell, L.P.A., ${ }^{211}$ a legal malpractice suit by an inventor who claimed her patent counsel failed to file timely patent applications. ${ }^{212}$ Although the plaintiff initially filed suit in Ohio state court, the defendants removed to federal court arguing that the patentability of the inventions was key to the malpractice claim and thus fell under the district court's exclusive jurisdiction. ${ }^{213}$ A federal court has jurisdiction over a patent claim under 28 U.S.C. $\S 1338(\mathrm{a})$ if federal patent law creates the cause of action or if the plaintiff's relief depends on determining a substantial question of patent law as a necessary element of one of the claims in the well-pleaded complaint. ${ }^{214}$ The question in Davis was whether patent law was a necessary element of one of the plaintiff's claims. ${ }^{215}$

Ohio follows the "case-within-a-case" malpractice doctrine for some claims, meaning the plaintiff must prove she would have been successful in the underlying matter before she can recover for malpractice. ${ }^{216}$ As such, Davis could "prevail only by proving that U.S. patents would have issued on her application but for Defendants' malpractice-i.e., that her inventions were patentable under U.S.

[^21]law." ${ }^{1217}$ The court reasoned that since federal patent law determines the patentability of Davis' inventions, federal patent law was a necessary element of Davis' malpractice claim. ${ }^{218}$ Therefore, jurisdiction was proper under 28 U.S.C. § 1338(a). ${ }^{219}$

The second subject-matter jurisdiction question, the existence of an ongoing Article III "case or controversy" between litigating parties, arose in several cases. In Dow Jones $\mathcal{E}$ Co. v. Ablaise Ltd., ${ }^{220}$ the Federal Circuit considered the effect of a patent holder's offer of a covenant not to sue for infringement on the existence of an Article III "case or controversy" in a suit for patent invalidity. ${ }^{221}$ Since 1995, the Federal Circuit has held "that a covenant not to sue for patent infringement divests the trial court of subject matter jurisdiction over claims that the patent is invalid" because it eliminates the controversy over whether the defendant has infringed the patent. ${ }^{222}$ On appeal, the Federal Circuit applied this rule, holding that Ablaise's offer of a covenant not to sue extinguished the "case or controversy" between the parties and left the district court without subject-matter jurisdiction to decide the case. ${ }^{223}$

In so holding, the panel took time to reject the district court's belief that the Federal Circuit's covenant-not-to-sue rulings could be avoided for "sound prudential reasons," like judicial efficiency. ${ }^{224}$ To the contrary, "no amount of 'prudential reasons' or perceived increases in efficiency, however sound, can empower a federal court to hear a case where there is no extant case or controversy." ${ }^{225}$

The Federal Circuit's appellate jurisdiction in the context of a declaratory judgment action arose in Laboratory Corp. of America Holdings v. Metabolite Laboratories. ${ }^{226}$ Under 28 U.S.C. § 1295(a)(1), the Federal Circuit has exclusive appellate jurisdiction if the district court's jurisdiction "was based, in whole or in part, on § 1338."227 To answer the § 1338 question in the context of a declaratory judgment action, the court looks to the hypothetical action that the declaratory

[^22]action defendant would have brought rather than to the declaratory judgment action itself. ${ }^{228}$

Noting that § 1338 incorporates § 1331's "arising under" standard, ${ }^{229}$ the § 1331 (and thus § 1338) "arising under" question is whether "a state-law claim necessarily raises a states federal issue, actually disputed and substantial, which a federal forum many entertain without disturbing any congressionally approved balance of federal and state judicial responsibilities" when a case involves state law claims such as in LabCorp. ${ }^{230}$ The appellant bears the burden of showing that the standard is met under § 1295(a)(1) because the ultimate question is one of appellate jurisdiction. ${ }^{231}$

A majority of the three-judge panel concluded that Metabolite, the appellant, could not meet its burden. ${ }^{232}$ The "hypothetical action" underlying the declaratory judgment would have been a breach of contract action involving a patent license. ${ }^{233}$ Although Metabolite claimed that this hypothetical breach of contract action would have required an infringement inquiry (to know if LabCorp had breached its license), that infringement inquiry already had been resolved in prior litigation between the parties. ${ }^{234}$ Thus, the infringement question was no longer "substantial and disputed." ${ }^{235}$ Accordingly, the court transferred the case to the Tenth Circuit. ${ }^{236}$

The dissent, on the other hand, would have exercised appellate jurisdiction. ${ }^{237}$ Judge Dyk argued that the suit was essentially a suit to enforce or determine the res judicata effect of a prior federal judgment, and that the res judicata effect of a federal judgment is itself a federal question. ${ }^{238}$ He acknowledged that the res judicata question did not rest on patent law and thus did not arise under

[^23]$\S 1338 .{ }^{239}$ Citing the Supreme Court's decision in Semtek International v. Lockheed Martin Corp., ${ }^{240}$ Judge Dyk argued that in the context of determining the res judicata effect of a prior judgment, the court should "look through" to that prior judgment, and determine the jurisdictional basis on which that prior judgment rested. ${ }^{241} \mathrm{He}$ concluded that the initial case had arisen in part under § 1338, and thus a later suit to determine the res judicata effect of that prior judgment afforded the Federal Circuit appellate jurisdiction. ${ }^{242}$

ClearPlay, Inc. v. Abecassis, ${ }^{243}$ involved a similar scenario. ClearPlay brought six state law claims against Abecassis, all of which could potentially raise patent law issues in the course of litigation. ${ }^{244}$ However, because there was a theory of liability for each of the six claims that did not require resolving an issue of patent law, the court held that it lacked appellate jurisdiction (and that the district court lacked original jurisdiction) over the claims. ${ }^{245}$
In King Pharmaceuticals, Inc. v. Eon Labs, Inc., ${ }^{246}$ the court held that a case or controversy ceases to exist when a plaintiff files an infringement suit but subsequently assigns all of its rights to the patents-in-suit to a third party. ${ }^{247}$ In this generic drug case, the patent holder, Elan, sued Eon for infringement. ${ }^{248}$ After filing suit, Elan assigned all of its rights to the patents-in-suit to King Pharmaceuticals and recorded that assignment with the Patent and Trademark Office. ${ }^{249}$ Elan then attempted to extricate itself from the litigation, including repeatedly offering to waive its rights to the patents-insuit. ${ }^{250}$ Those efforts were ignored and the district court ultimately entered judgment against both Elan and King invalidating the patents-in-suit. ${ }^{251}$

The Federal Circuit vacated the judgment against Elan, holding that there was no current case or controversy between the parties in

[^24]light of the assignment of the patents-in-suit to King. ${ }^{252}$ Noting that the acquisition documents showed that Elan sold all of its interest in the patents-in-suit and separately promised not to sue Eon for infringement, the court held that Elan's "broad and unrestricted covenants not to sue" eliminated a case or controversy between Eon and Elan, and thus the district court was without jurisdiction to enter judgment against Elan. ${ }^{253}$ "Had Elan retained the right to sue Eon in some instances, then an actual case or controversy" may have existed. ${ }^{254}$ That not being the case, the district court was without jurisdiction to decide the case. ${ }^{255}$

## c. Personal jurisdiction

With personal jurisdiction looming large on the Supreme Court's docket in the 2010 Term, ${ }^{256}$ the Federal Circuit's personal jurisdiction cases-and their currency-took on an added interest in 2010. Near year's end, the court weighed-in on the propriety of exercising specific jurisdiction over foreign corporations. In Nuance Communications, Inc. v. Abbyy Software House, ${ }^{257}$ Nuance sued Abbyy USA for infringement in the Northern District of California and later joined Abbyy Production (a sister corporation organized under Russian law) and Abbyy Software (a parent to Abbyy USA and Abbyy Production, organized under Cypriot law). ${ }^{258}$ With scant analysis, the district court dismissed the case for lack of personal jurisdiction, holding that neither foreign Abbyy entity purposefully directed activity towards California and that both foreign Abbyy entities were improperly served. ${ }^{259}$

On appeal, the court began with the familiar test: personal jurisdiction "over an out-of-state defendant is appropriate if the relevant state's long-arm statute permits the assertion of jurisdiction without violating federal due process. ${ }^{260}$ California's long-arm statute

[^25]permits personal jurisdiction to the extent allowed by due process, therefore the court asked whether exercise of jurisdiction over the foreign Abbyy defendants was consistent with due process. ${ }^{261}$ No facts suggested that the court could exercise general jurisdiction over the foreign Abbyy defendants, so the court inquired whether the defendants intentionally established minimum contacts in the forum state. ${ }^{262}$ This specific-jurisdiction inquiry required an analysis of three factors: "(1) whether the defendant purposefully directed activities at residents of the forum; (2) whether the claim arises out of or relates to those activities; and (3) whether assertion of personal jurisdiction is reasonable and fair.." ${ }^{263}$ Since the case lacked a record on jurisdiction and the parties had not exchanged discovery, the court was required to construe factual disputes in the plaintiff's favor ${ }^{264}$

The court began with the sister corporation, Abbyy Production, holding that exercise of personal jurisdiction was appropriate based on Abbyy Production's "CEO's stated goal of 'conquering' the U.S. market; the importation of allegedly infringing products into California; the extraction of royalty payments for the sale of those products; and Abbyy Production's agreement to provide assistance to Abbyy USA in selling, reproducing, and modifying the accused products in California." ${ }^{265}$ Further, according to an industry publication, Abbyy's product held about a thirty percent share of the U.S. market. ${ }^{266}$

The court also had little trouble concluding that the infringement claims related to Abbyy Production's California contacts, which were based on importing infringing products into the state. ${ }^{267}$ The court, however, went further, holding that Abbyy Production's actions "also run[] afoul of the Supreme Court's and this court's stream of commerce jurisprudence." ${ }^{268}$ Noting that the most restrictive "stream of commerce" tests require factors warranting the exercise of personal jurisdiction in addition to proof of placing goods into the stream of commerce (stream of commerce plus), the court held that a plus factor was present here. ${ }^{269}$ By intentionally shipping the products in question into California through an established distribution channel in order to sell the products in California and by providing

[^26]Abbyy USA with updated versions of the software, technical support, and general assistance, Abbyy Production engaged in the sort of purposeful contacts that would support personal jurisdiction in a "steam of commerce plus" analysis and this indicated that Abbyy Production should have reasonably anticipated being haled into court in California. ${ }^{270}$

Addressing the foreign parent, Abbyy Software, the court held that the record was insufficient to decide whether the exercise of personal jurisdiction was proper. ${ }^{271}$ That uncertainty raised the question of jurisdictional discovery and whether the district court correctly refused to allow it. ${ }^{272}$ Applying Ninth Circuit law, the panel held that the district court abused its discretion in refusing discovery because Nuance offered more than a "mere hunch" that discovery would uncover important jurisdictional facts. ${ }^{273}$ The court noted that Abbyy Software "functions as more than a holding company" for its subsidiaries, and that its CEO managed all of the entities through a global management team. ${ }^{274}$ These facts were sufficient to allow additional discovery to decide whether additional facts may support personal jurisdiction over Abbyy Software. ${ }^{275}$

Finally, the court held that Nuance should have been afforded the opportunity to conduct alternate service on the Russian entity, Abbyy Production, which Nuance had served in person with a local process server. ${ }^{276}$ The court held that plaintiffs are not required to attempt to serve foreign parties in accord with the Hague Convention by using a country's central authority for service before they may use an alternative method of service if a nation, like Russia, categorically refuses to participate in Hague Convention service procedures. ${ }^{277}$ Recognizing that "[s]ubstituted service under" Federal Rule of Civil Procedure 4(f) (3) has previously been used to serve parties from Russia in many federal courts, the court held that "substitute service on Abbyy USA would satisfy [due process], as it is reasonably calculated to apprise Abbyy Production of the pendency of the action and afford it an opportunity to respond. ${ }^{278}$

Patent Rights Protection Group, LLC v. Video Gaming Technologies, Inc., ${ }^{279}$ offered the court another opportunity to explore personal

[^27]jurisdiction issues. Patent Rights Protection Group sued several gaming companies in Nevada for infringement, including VGT, a Tennessee corporation, and SPEC, a Michigan corporation. ${ }^{280}$ The district court subsequently dismissed VGT and SPEC for lack of personal jurisdiction. ${ }^{281}$

On appeal, the Federal Circuit first concluded that because Nevada's long-arm statute allowed its courts to exercise personal jurisdiction to the extent permitted by the U.S. Constitution, determining whether personal jurisdiction is proper requires answering only whether the exercise of personal jurisdiction accords with due process ${ }^{282}$ That inquiry turned on whether SPEC and VGT had the requisite minimum contacts with Nevada. ${ }^{283}$ If the minimum contacts are present, however, a court must still determine whether asserting jurisdiction based on those contacts "would comport with fair play and substantial justice, i.e., whether exercising jurisdiction would be reasonable." ${ }^{284}$ In its analysis, the district court did not engage in a minimum contacts inquiry and refused to allow jurisdictional discovery on the subject, reasoning instead that even if minimum contacts were present, the exercise of personal jurisdiction would not be reasonable. ${ }^{285}$

The Federal Circuit agreed with Patent Rights Protection Group's argument that its and Nevada's interests were not outweighed by SPEC's and VGT's burden of defending the litigation and thus exercise of personal jurisdiction would be reasonable. ${ }^{286}$ SPEC and VGT argued that defending the suit would be unduly burdensome because the witnesses and documents they would need were located outside of Nevada. ${ }^{287}$ Moreover, the companies claimed that Tennessee and Michigan have equal interest in the suit and either would be a preferable forum. ${ }^{288}$ In rejecting these arguments, the Federal Circuit held that all of the interests asserted in Michigan and Tennessee's favor weighed equally in Nevada's favor. ${ }^{289}$ The court also found that defending the suit was clearly not overly burdensome since "their admitted presence at numerous trade shows in Nevada indicates that, despite their arguments to the contrary, neither company faces a particularly onerous burden in defending itself in

[^28]Nevada., ${ }^{290}$ Also finding that the district court abused its discretion in denying jurisdictional discovery, the court remanded the case with instructions to allow the parties to engage in jurisdictional discovery. ${ }^{291}$

In Bradford Co. v. ConTeyor North America, Inc., ${ }^{292}$ the court considered personal jurisdiction in the context of a foreign infringement defendant who claimed that it was not amenable to suit in any state. ${ }^{293}$ Applying Federal Rule of Civil Procedure 4(k) (2), the district court agreed that the defendant did not have sufficient contacts for the exercise of personal jurisdiction. ${ }^{294}$ Rule 4(k)(2) says that for a claim arising under federal law, personal jurisdiction exists if "(A) the defendant is not subject to jurisdiction in any state's courts of general jurisdiction; and (B) exercising jurisdiction is consistent with the United States Constitution and laws."295 The district court held that personal jurisdiction would not comport with due process because the foreign defendant's contacts with Ohio were not "continuous and systematic."."96
The Federal Circuit noted, however, that the district court's decision was handed down before the Federal Circuit's decision in Touchcom, Inc. v. Bereskin E $\mathcal{O}$ Parr. ${ }^{297}$ In Touchcom, the Federal Circuit rejected a standard requiring a plaintiff to prove that a defendant is not subject to jurisdiction in any state. The court instead adopted the Seventh Circuit approach, which permits the use of Rule 4(k)(2) whenever the defendant asserts that it cannot be sued in the forum state and will not provide any other state where suit can be brought. ${ }^{298}$ The district court's approach was inconsistent with this rule because it "failed to analyze ConTeyor NV's contacts with the United States as a whole and imposed an improper burden on the plaintiff" to prove minimum contacts with the forum state. ${ }^{299}$ The court accordingly remanded the case for a personal jurisdiction analysis under the appropriate Rule 4(k) (2) framework. ${ }^{3.0}$

[^29]d. Specific issues affecting the initiation of a case

## i. Declaratory judgments

Even when a district court has jurisdiction to hear a case, it nonetheless has discretion to decline to exercise jurisdiction in limited circumstances, such as cases filed under the Declaratory Judgment Act. ${ }^{301}$ In Teva Pharmaceuticals USA, Inc. v. Eisai Co. Ltd., ${ }^{302}$ the Federal Circuit held that the district court abused its discretion in refusing to exercise jurisdiction under the Declaratory Judgment Act. ${ }^{303}$ The district court based its decision on two factors: its lack of subject matter jurisdiction and its belief that Teva was engaged in improper gamesmanship. ${ }^{304}$ The Federal Circuit reversed the district court's ruling that it did not have subject matter jurisdiction, thus eliminating lack of jurisdiction as a basis for declining declaratory judgment jurisdiction. ${ }^{305}$ In exercising discretion under the Declaratory Judgment Act, a district court should "typically consider the usefulness of the declaratory judgment remedy, the fitness of the case for resolution, and the purposes of the Declaratory Judgment Act." On these factors, the court noted that it had "upheld discretionary decisions declining jurisdiction when the declaratory judgment action was duplicative of other proceedings, the party instituted an action solely to enhance its bargaining power in negotiations, or when reexamination proceedings were pending."307 The existence vel non of subject matter jurisdiction not being within these considerations, it was inappropriate for the district court to consider it. ${ }^{308}$

Although concerns regarding gamesmanship fit this framework, the district court's gamesmanship concerns were misplaced because the concern was insufficiently supported by the facts. ${ }^{309}$ The HatchWaxman Act did not prevent companies from "filing multiple ANDAs covering different formulations of the same drug," even when the filings are under different corporate names. ${ }^{310}$ The district court's concerns for gamesmanship were thus unfounded and, with no other appropriate reason for declining jurisdiction, the panel held that the

[^30]district court abused its discretion in declining declaratory judgment jurisdiction. ${ }^{311}$

While the Teva Pharmaceuticals district court abused its discretion in refusing to exercise declaratory judgment jurisdiction, the district court in Innovative Therapies, Inc. v. Kinetic Concepts, Inc. ${ }^{312}$ did not. ${ }^{313}$ There, a competitor sought a declaration that the patents-in-suit were invalid or not infringed by the competitor's product. ${ }^{314}$ The defendant patent holder had not seen the competitor's products, examined them for possible infringement, nor accused the competitor of infringement. ${ }^{315}$ The competitor claimed several facts that created an actual controversy within the scope of the Declaratory Judgment Act, including phone calls between the competitor and patent holder and the patent holder's history of aggressive enforcement. ${ }^{316}$ The district court rejected all of these grounds, holding that events subsequent to the complaint's filing could not create jurisdiction, and further refusing to exercise declaratory jurisdiction because the competitor's informal phone calls to the patent holder to provoke threats of litigation amounted to an improper attempt to manufacture jurisdiction. ${ }^{317}$ The Federal Circuit affirmed in all respects. ${ }^{318}$

The phone calls at issue involved the competitor's employees contacting the patent holder's employees, describing the competitor's product, and then seeking the patent-holder's employees' opinions as to whether the patent holder would sue for infringement. ${ }^{319}$ The district court labeled these calls a "sub rosa" attempt to create jurisdiction and noted that none of the patent holder's employees understood the nature of the phone calls and were not decision-makers in any event. ${ }^{320}$ The panel held that the "indirection reflected in these conversations did not produce a controversy of such immediacy and reality as to require the district court to accept declaratory jurisdiction. ${ }^{321}$

[^31]The panel also rejected the patent holder's enforcement history as a basis for declaratory jurisdiction. ${ }^{322}$ The court noted that previous litigation should be factored into the court's assessment of the totality of the circumstances, but held that prior infringement suits against other parties for other products were not sufficient without an act directed toward the competitor. ${ }^{323}$

Events occurring subsequent to the original complaint, namely litigation between the parties concerning the competitor's product, likewise could not establish jurisdiction: "[U]nless there was jurisdiction at the filing of the original complaint, jurisdiction could not be carried back to the date of the original pleading." ${ }^{324}$ This was true even though the competitor filed an "amended" complaint adding those subsequent facts to the case. ${ }^{325}$ That "amended" complaint was, in truth, a "supplemental" complaint under Federal Rule of Civil Procedure Rule $15(\mathrm{~d})$ because it added facts that occurred after the date of the original pleading. ${ }^{326}$ As such, Rule 15 (c) governing amended pleadings did not "treat events that postdate the original pleading as if they had occurred at an earlier time." ${ }^{327}$ Since jurisdiction is measured at the time of filing, the subsequent facts could not thereby create jurisdiction. ${ }^{328}$

Lastly, the panel agreed with the district court that the competitor's gamesmanship provided an alternative basis for dismissing the suit. ${ }^{329}$ The panel said that the district court did not abuse its discretion in holding that the case should be dismissed because the competitor had attempted to create jurisdiction through phone calls, a tactic that was not consistent with the purposes of the Declaratory Judgment Act."330

## ii. Supplemental jurisdiction

In addition to exercising original jurisdiction in, for example, federal question cases, ${ }^{331}$ federal district courts may also exercise supplemental jurisdiction over other related claims in the lawsuit, ${ }^{332}$ which typically means deciding state law claims asserted in the

[^32]complaint. Patent law cases concerning supplemental jurisdiction over state law claims occasionally involve the antecedent question of whether the state law claims are, in fact, patent claims subject to the district court's exclusive patent law jurisdiction in the first instance ${ }^{333}$

The Federal Circuit considered this issue in HIF Bio, Inc. v. Yung Shin Pharmaceuticals Industrial Co. ${ }^{334}$ The case involved a dispute over inventorship for two patent applications and related state law claims filed in California state court. ${ }^{335}$ The defendants removed the suit to federal court. ${ }^{336}$ The district court dismissed the plaintiffs' federal claims, declined to exercise supplemental jurisdiction, and remanded to state court after holding that all of the remaining claims were based on state law, including the inventorship claims. ${ }^{937}$

The Federal Circuit first held that the district court was wrong to characterize the inventorship claims as state law claims subject to a discretionary decision to exercise supplemental jurisdiction. ${ }^{338}$ To the contrary, those claims arose under patent law and were thus subject to the district court's exclusive original patent jurisdiction under 28 U.S.C. § 1338(a). ${ }^{339}$ That jurisdiction extends to any case involving a cause of action created by federal patent law or which requires the resolution of a substantial question of federal patent law in order to determine the plaintiff's right to relief. ${ }^{340}$ "[B]ecause inventorship is a unique question of patent law," the state law claim based on inventorship "arises under $\S 1338(a)$ " and is subject to the exclusive jurisdiction of the federal court. ${ }^{341}$ The district court, however, was given little to do on remand because the Federal Circuit also held that patent law provided no avenue for the plaintiffs to challenge inventorship on the facts of the case, and thus instructed the district court to dismiss those claims. ${ }^{342}$ The court carefully examined the remainder of the claims, concluding that only the slander of title claim implicated patent law and should be dismissed like the inventorship claims. ${ }^{343}$ None of the other state law claims required resolution of a patent law issue, and thus did not fall under the

[^33]federal court's exclusive patent law jurisdiction. ${ }^{344}$ With no viable federal claims remaining in the case, the court held that the district court should remand the case and its remaining claims to state court. ${ }^{345}$
iii. Venue

In re Zimmer Holdings, Inc. ${ }^{346}$ asked the question of when it is appropriate for the Federal Circuit to issue a writ of mandamus requiring a district court to transfer a case to a different venue. ${ }^{347}$ MedIdea filed suit against Zimmer Holdings in the Eastern District of Texas, claiming that the district was a proper venue because MedIdea's principal place of business was in the district. ${ }^{348}$ MedIdea, however, was not registered to do business in Texas and did not appear to transact any business from Texas; MedIdea's only apparent connection to Texas was that it shared office space with another of its patent counsel's clients. ${ }^{349}$ Zimmer Holdings claimed that the Northern District of Indiana was the more convenient forum for both parties: MedIdea was formed under Michigan law, where it had an office, the vast majority of evidence would come from either Indiana or Michigan, and many key witnesses resided in Michigan and Indiana. ${ }^{350}$ The district court held, however, that neither venue was more convenient than the other and noted that MedIdea had another pending suit in the Eastern District of Texas concerning the same patent. ${ }^{351}$ According to the district court, moving the case would "prevent the parties from taking advantage of the built-in efficiencies that result from having related cases before the same judge., "352

Applying Fifth Circuit law, the Federal Circuit held that courts apply the public and private factors in deciding whether the transferee venue is more convenient., ${ }^{, 553}$ The public factors include concern for crowded dockets, desire to resolve local issues in local courts, the court's familiarity with the controlling law, and desire to

[^34]eliminate unnecessary conflict of laws issues. ${ }^{354}$ The private factors include access to proof, the availability of subpoena power to ensure that necessary witnesses will attend, the cost of witness attendance, and all other logistic issues that make a trial efficient and inexpensive. ${ }^{355}$

The Federal Circuit clearly viewed the case as an attempt to manufacture venue for convenience of patent counsel. ${ }^{356}$ In light of MedIdea's decision to copy its patent prosecution files and send them to an office in Texas shared by another of its counsel's clients, the court held that its evaluation of the circumstances of the case indicates that the Eastern District of Texas was not convenient for anyone but MedIdea's counsel. ${ }^{357}$ Neither party disputed that MedIdea's patent work took place exclusively in Michigan, and there was no evidence that MedIdea had employees in Texas. ${ }^{358}$ The court concluded that this was "a classic case where the plaintiff is attempting to game the system by artificially seeking to establish venue by sharing office space with another of the trial counsel's clients." ${ }^{359}$ Accordingly, the court ordered a transfer. ${ }^{360}$

Following In re Zimmer, the Federal Circuit again granted mandamus relief for a venue transfer and again did so for a case in the Eastern District of Texas. ${ }^{361}$ Of all the parties in In re Acer America Corp. ${ }^{362}$ only one was located in Texas. ${ }^{363}$ Many of the others, including the plaintiff, were located in the Northern District of California. ${ }^{364}$ The district court denied a change of venue request, and the defendants petitioned for mandamus relief. ${ }^{365}$

The court granted the writ, recognizing that prior "venue transfer cases make clear that the combination of multiple parties being headquartered in or near the transferee venue and no party or witness in the plaintiffs [sic] chosen forum is an important consideration" in transfer cases. ${ }^{366}$ The fact that the transferee venue's subpoena powers could be used to secure the attendance of

[^35]those witnesses at trial and the absence of any significant evidence in the transferring venue also weighed in favor of the transfer. ${ }^{367}$ The court concluded that the convenience of the parties and witnesses, access to proof, the transferee venue's interest in the case, and the availability of compulsory process all indicate that transfer is appropriate while "no factor remotely favors keeping this case in the Eastern District of Texas."368

Venue continued as a hot topic in the Eastern District of Texas with In re Vistaprint Ltd. ${ }^{369}$ The plaintiff, a New Jersey limited liability company, sued two defendants for infringement, neither of which was incorporated or had its principal place of business in the Eastern District of Texas. ${ }^{370}$ The defendants sought a change of venue to Massachusetts, which the district court denied, reasoning that it was familiar with the patent-in-suit due to prior litigation with the plaintiff that involved a hearing and resulted in a long opinion, as well as a related suit before the court concerning the same patent. ${ }^{371}$ The defendants then sought a writ of mandamus seeking a venue transfer. ${ }^{372}$

This time, the Federal Circuit denied the writ, carefully distinguishing its earlier In re Zimmer decision granting a venue transfer. ${ }^{373}$ The Vistaprint court held that "where the convenience factors strongly weigh in favor of the transferee venue," as was the case in In re Zimmer, "a decision to deny transfer based solely on 'negligible' judicial efficiencies may be such a clear abuse of discretion as to warrant extraordinary relief." ${ }^{374}$ The court rejected, however, the petitioners' contention that denial of a venue transfer based on judicial economy is always improper "when all of the convenience factors clearly favor transfer." ${ }^{375}$ The court found the judicial economy factors cited by the district court to be substantial, ${ }^{376}$ and " $[\mathrm{a}] \mathrm{t}$ the end of the day, $\S 1404(\mathrm{a})$ balances a number of casespecific factors, not just convenience." ${ }^{377}$ Thus, considering the amount of discretion placed in district courts in weighing those

[^36]factors, the court held that the petitioners failed to establish entitlement to the writ. ${ }^{378}$

## iv. Hatch-Waxman counterclaims

The year 2010 presented the opportunity to examine and define the scope of the Hatch-Waxman Act's counterclaim provision. ${ }^{379}$ In Novo Nordisk A/S v. Caraco Pharmaceutical Laboratories, Ltd., ${ }^{380}$ Caraco sought to bring a generic form of Novo's diabetes drug Prandin® to market under the Hatch-Waxman Act's framework. ${ }^{381}$ In short, that framework provides a dispute resolution process to allow patent holders and generic manufacturers to resolve their patent disputes quickly and pave the way for generic manufacturers to market lowercost drugs. ${ }^{382}$ FDA approval of generic drugs first requires the generic manufacturer to identify all patents listed in the FDA's Orange Book that might be infringed by the generic drug. ${ }^{383}$ The generic manufacturer then must state its position concerning possible infringement, with one of those options, called a Paragraph IV statement, serving as a certification that an Orange Book patent is either invalid or will not be infringed by the generic drug. ${ }^{384}$ Should the generic manufacturer make a Paragraph IV statement, that statement constitutes a statutory act of infringement, ${ }^{385}$ and the patent holder must sue the generic manufacturer in order to avoid FDA approval of the generic drug. ${ }^{386}$ The Hatch-Waxman Act provides a statutory counterclaim to defendants in Paragraph IV infringement suits, allowing those defendants to "seek[] an order requiring the holder to correct or delete the patent information submitted by the holder [for the Orange Book] on the ground that the patent does not claim either-(aa) the drug for which the application was approved; or (bb) an approved method of using the drug.,"887 The scope of this counterclaim provision was at issue in Novo. ${ }^{388}$

[^37]Caraco filed an Abbreviated New Drug Approval Application for its generic version of Prandin®®. ${ }^{389}$ Caraco identified Novo's Orange Book patents at issue, and filed a Paragraph IV statement with respect to the ' 358 patent that was assigned use code U-546 in the Orange Book. ${ }^{390}$ Accordingly, Caraco claimed that the ' 358 patent was either invalid or that Caraco's drug would not infringe the patent. ${ }^{391}$ Novo then sued Caraco for infringement. ${ }^{392}$

Caraco subsequently stipulated that its drug would infringe the ' 358 patent if it included the combination of its generic drug with another drug as a potential use claimed by Novo. ${ }^{393}$ Caraco submitted a label to the FDA that carved out this stipulated infringing use, which the FDA approved. ${ }^{394}$ Novo responded by seeking to change the Orange Book narrative covering its ' 358 patent. ${ }^{395}$ Under the new narrative covering the ' 358 patent, now assigned use code U-968, the FDA could no longer approve Caraco's carve-out label because it overlapped with Novo's new Orange Book use code, and Caraco's drug now fell under its earlier stipulation of infringement of the ' 358 patent. ${ }^{396}$

Caraco then added a Hatch-Waxman Act counterclaim, seeking an order requiring Novo to change its Orange Book use code back from U-968 to U-546. ${ }^{397}$ That counterclaim provision allowed the court to order Novo to correct its patent information submitted to the FDA if Novo's ' 358 patent did not claim either "the drug for which the application was approved" or "an approved method of using the drug.","98 The parties agreed that the ' 358 patent claimed one, and only one, of the three approved methods for using Novo's Prandin®. ${ }^{399}$

Caraco argued that a Hatch-Waxman Act counterclaim allows correction of patent information for any patent that did not claim all of the approved methods for using a drug, and the ' 358 patent claimed only one use of Prandin(®. ${ }^{400}$ In other words, Caraco argued that in providing a counterclaim on a patent that did not claim "an approved method of using the drug," Congress allowed

[^38]counterclaims on patents that failed to claim "all approved $\operatorname{method}[s] "$ of using the drug. ${ }^{401}$

The Federal Circuit rejected this reading, reasoning that grammatically, " $[\mathrm{w}]$ hen an indefinite article is preceded and qualified by a negative, standard grammar generally provides that 'a' means 'any," and therefore "'an approved method' means 'any approved method." "402 The ' 358 patent claimed one of those approved methods, and therefore the Hatch-Waxman Act's counterclaim provision did not cover Caraco's claim. ${ }^{403}$

The court added one other point, namely that the Hatch-Waxman counterclaim covered only the correction of "patent information" submitted to the FDA, which the court narrowly construed to include only the patent number and expiration date for a given Orange Book listing based on its reading of "patent information" elsewhere in the statute as limited to "patent number and expiration." ${ }^{404}$ In that sense, the court's construction rejected the notion that the Hatch-Waxman counterclaim created a catch-all action for the correction of any Orange Book data. ${ }^{405}$

Judge Dyk dissented, taking a broader look at the problem sought to be addressed by the Hatch-Waxman Act and then reading the counterclaim provision accordingly. ${ }^{406}$ He began by noting that Hatch-Waxman was a reaction to the Federal Circuit's decision in Mylan Pharmaceuticals, Inc. v. Thompson, ${ }^{407}$ where the court held that plaintiffs could not use declaratory judgment actions to police errors in the Orange Book. ${ }^{408}$ With that as the starting point, Judge Dyk believed the counterclaim provision should be read to allow correction of Orange Book errors as a means of ending patent holders' manipulation of the Orange Book by associating irrelevant patents with certain uses and thus obstructing a generic manufacturer's efforts to bring a cheaper drug to market. ${ }^{409}$ Judge Dyk believed the term "patent information" capable of correction was far broader than merely the patent number and expiration date claimed by the majority. ${ }^{410}$ Novo's U-968 use code did not refer to a

[^39]patented use of Prandin ${ }^{\circledR}$, and thus could be corrected with a counterclaim. ${ }^{411}$
2. Pre-trial matters

## a. Res judicata and collateral estoppel

The Federal Circuit also addressed issues of res judicata (claim preclusion) and collateral estoppel (issue preclusion) in 2010. In Gillig v. Nike, Inc., ${ }^{412}$ an inventor and his company (collectively "Triple Tee") sued Nike on a correction of inventorship claim under 35 U.S.C. § $356^{413}$ and a state law misappropriation of trade secrets claim, asserting that Nike had misappropriated Triple Tee's trade secrets for golf club design. ${ }^{414}$ In an earlier suit, Triple Tee (without the inventor as a party) had sued Nike for misappropriation of trade secrets alone. ${ }^{415}$ The district court granted summary judgment to Nike in the earlier suit, holding that Triple Tee had no standing to assert the trade secret claims because Triple Tee, which had acquired ownership rights from the inventor after the alleged misappropriation, had no ownership rights to the trade secrets at the time they were allegedly misappropriated. ${ }^{416}$ Since Triple Tee could not establish its ownership of the trade secrets, the district court dismissed the suit both for lack of standing and on the merits. ${ }^{417}$ The Fifth Circuit affirmed. ${ }^{418}$

Triple Tee again sued Nike, this time with the inventor as a coplaintiff, alleging the same misappropriation of trade secrets claim and the new correction of inventorship claim arguing that the inventor was the sole inventor or a co-inventor of various Nike golf club patents. ${ }^{419}$ After noting that the district court in the first action properly dismissed the first action on the merits, the district court likewise dismissed the correction of inventorship claims on res judicata grounds as arising from the same nucleus of operative facts as the claims brought in the previous action., ${ }^{420}$

[^40]The Federal Circuit reversed the res judicata ruling on the correction of inventorship claims. ${ }^{421}$ Under Fifth Circuit law, res judicata bars actions in which the parties are identical or in privity, involving the same claims or causes of action, and when the earlier judgment was a final judgment on the merits issued by a court of competent jurisdiction. ${ }^{422}$

The court first noted that, to the extent the prior action was dismissed on lack of standing grounds rather than on the merits of the trade secret claims, res judicata does not bar a later action by a party with standing. ${ }^{423}$

The court also rejected Nike's argument that the inventor had been in privity with Triple Tee in the first action. ${ }^{424}$ The privity argument was based on the fact that the inventor was "an officer and the principal owner of Triple Tee." ${ }^{425}$ But, the court noted, "control of a party to the litigation through stock ownership or corporate officership is not enough to create privity, absent a showing that the corporate form has been ignored (which is not the case here)."426 Rather, control of the litigation must be shown, and the court found it "doubtful" that the necessary showing had been made here because Nike's assertion that the inventor was the ultimate decision maker for the company was inadequate to show control of the litigation. ${ }^{427}$ In any event, the court concluded, it need not decide whether the inventor controlled the litigation because that theory of privity only applied to collateral estoppel (issue preclusion), not to res judicata (claim preclusion). ${ }^{428}$ Res judicata did not apply because the only issue determined in the first lawsuit was the validity of the assignment of the trade secret rights of the patent, whereas the second suit involved the completely unrelated issue of the inventor's inventorship interest. ${ }^{429}$

And in a final point, the court held that Triple Tee, even though a party to the first suit, was not barred from bringing inventorship claims so long as those claims were based on events occurring during the pendency of the first suit. ${ }^{430}$ Quoting the Second Circuit, the court held that " $[\mathrm{t}]$ he res judicata doctrine does not apply to new

[^41]rights acquired during the action which might have been, but which were not, litigated." ${ }^{431}$

The Federal Circuit was faced with the issue of collateral estoppel in Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc. ${ }^{432}$ There, Transocean sued Maersk, claiming infringement of various patents relating to improvements to an offshore drill. ${ }^{433}$ Maersk asserted that Transocean was collaterally estopped from bringing the suit because Maersk's drill was identical to an apparatus that a court had previously held to be non-infringing. In that prior suit, in which Transocean brought the same infringement claims and succeeded in proving infringement, an injunction required that defendant "to install a casing sleeve" on its drill to "avoid[] infringement" and to make certain reports to Transocean regarding the modified apparatus. ${ }^{434}$ Maersk modified its drill to conform to the injunction in that other case, but refused to abide by any other part of the injunction. ${ }^{435}$

The Federal Circuit concluded that Transocean was collaterally estopped from bringing its infringement claims against Maersk. ${ }^{436}$ After noting that collateral estoppel was analyzed "under the law of the regional circuit," the court applied Fifth Circuit law, which requires that an issue " 1 ) be identical in the two actions, 2 ) have been actually litigated in the prior action, and 3) have been necessary to the judgment in the prior action" for collateral estoppel to apply. ${ }^{437}$

Focusing on the first requirement, the only requirement in dispute, the court held that Maersk satisfied the only condition relevant to the issue before the court, the noninfringing design of the drill. ${ }^{438}$ None of the other portions of the injunction in the other case, such as the reporting requirement, related to the infringement, and thus Maersk's refusal to abide by these terms of the injunction did not change the infringement analysis or result. ${ }^{439}$ Additionally, the fact that the other defendant's apparatus was analyzed under the rubric of an injunction had no effect on the infringement determination that Maresk's modified drill did not infringe

[^42]Transocean's patents. ${ }^{40}$ In both cases, the relevant consideration was whether the modified device infringed. ${ }^{441}$

## b. Equitable estoppel

Applying its own law, the Federal Circuit considered equitable estoppel in Aspex Eyewear, Inc. v. Clariti Eyewear, Inc. ${ }^{4{ }^{42}}$ There, Aspex wrote a letter informing Clariti of its belief that Clariti was selling "magnetic frame attachments" that infringed on Aspex's ' 747 patent and demanding that Clariti cease sales. ${ }^{443}$ Aspex sent this letter in 2003, and Clariti did not cease selling its products. ${ }^{444}$ Aspex took no further action on the ' 747 patent until 2006, when it sent another letter claiming infringement, this time specifically naming Clariti's AirMag® product as an infringing item. ${ }^{455}$ Aspex subsequently sued for infringement in 2007. ${ }^{446}$ The district court awarded Clariti summary judgment based on equitable estoppel from the three years of silence between the letters threatening enforcement. ${ }^{447}$

The Federal Circuit affirmed, holding Aspex's conduct was misleading, because Aspex threatened an infringement suit under several patents in 2003 and responded to Clariti's denial of infringement with "silence for three years," allowing Clariti to continue to market the products in the interim. ${ }^{448}$ Equitable estoppel requires a showing that:
(1) the patentee, through misleading conduct, led the alleged infringer to reasonably believe that the patentee did not intend to enforce its patent against the infringer; (2) the alleged infringer relied on that conduct; and (3) due to its reliance, the alleged infringer would be materially prejudiced if the patentee were permitted to proceed with its charge of infringement. ${ }^{419}$
Moreover, " $[\mathrm{m}]$ isleading conduct may include specific statements, action, inaction, or silence when there was an obligation to speak.."550

Although Aspex's letters did not specify which Clariti products were infringing, Aspex's claim that its patents "may" cover "some" of Clariti's products was sufficiently threatening to invoke the equitable

[^43]estoppel doctrine. ${ }^{451}$ Thus, the district court did not abuse its discretion when it assessed the parties' correspondence in its entirety and determined that Clariti had reasonably interpreted the correspondence between the parties as threat of an infringement suit. ${ }^{452}$ Clariti also reasonably relied on Aspex's inaction and changed its position accordingly. ${ }^{453}$ Clariti in 2003 had denied infringement and demanded a list of claims that Aspex believed were infringed. ${ }^{454}$ Aspex provided a list of infringed claims related to other patents, but not the ' 747 patent. ${ }^{455}$ Clariti's president, in reliance on that inaction, decided to expand the AirMag ${ }^{\circledR}$ product line on the perceived withdrawal of Aspex's infringement claims. ${ }^{456}$ The Federal Circuit agreed with the district court that these facts constituted detrimental reliance. ${ }^{457}$

Judge Rader dissented, arguing that the majority opinion expanded equitable estoppel beyond its previously recognized bounds. ${ }^{458}$ To Judge Rader, the case was about silence and whether there was a duty for Aspex to speak about its infringement claims. ${ }^{459}$ He concluded that there was no duty, ${ }^{460}$ and argued that the majority had misconstrued A.C. Aukerman Co. v. R.L. Chaides Construction Co., ${ }^{461}$ which said that silence "must be combined with other facts respecting the relationship or contacts between the parties to give rise to the necessary inference that the claim against the defendant is abandoned." ${ }^{462}$ Aspex's ' 747 patent letter in 2003 to Clariti was not specific enough, in Judge Rader's view, to create this duty to speak. ${ }^{463}$ He also believed that the record failed to reflect any prejudice to Clariti because " $[\mathrm{m}]$ arketing products, which is all Clariti did here, generally does not require the same kind of investment as developing and manufacturing products." ${ }^{464}$ Finding "lingering questions of fact," Judge Rader deemed this case inappropriate for summary judgment. ${ }^{465}$

[^44]
## c. Settlement agreements

Disputes under patent law can lead to unique issues in interpreting release language in a settlement agreement, as seen in 2010 in Baseload Energy, Inc. v. Roberts. ${ }^{466}$ The Federal Circuit applies its own law to the question of whether a settlement agreement bars a party from later challenging the validity of a patent. ${ }^{467}$ The court concluded that invalidity and unenforceability claims may be released in a settlement agreement, but only if the language of the agreement is "clear and unambiguous." ${ }^{468}$

Prior to the suit at issue, the parties had unsuccessfully attempted to enter into a joint venture, resulting in David Resnick, founder and CEO of Baseload, suing Bryan W. Roberts and his company under various state law contract claims unrelated to patent invalidity. ${ }^{469}$ The parties settled that dispute. ${ }^{470}$ The settlement agreement contained a release provision releasing Roberts "from any and all losses, liabilities, claims, expenses, demands and causes of action of every kind and nature . . . ."471 The settlement agreement further included an option agreement that, if exercised, would provide Baseload with a nonexclusive license to use Roberts's patent. ${ }^{472}$ When Baseload let the option lapse, it could no longer continue its technology development efforts without risk of Roberts bringing an infringement action. ${ }^{473}$ Accordingly, Baseload sought a declaratory judgment that the patent was invalid and unenforceable. ${ }^{474}$ Roberts moved for summary judgment, arguing that the settlement agreement's language barred Baseload's claim. ${ }^{475}$ The district court granted Roberts's motion, holding that the "unambiguous and expansive language" of the settlement agreement barred all claims. ${ }^{476}$

The Federal Circuit reversed the district court's decision. ${ }^{477}$ The court began by noting that even though Lear, Inc. v. Adkins ${ }^{478}$ had eliminated the doctrine of "licensee estoppel" (thus generally freeing

[^45]licensees to challenge patent validity), ${ }^{479}$ a settlement agreement could still "provide for a patent license while barring challenges to patent invalidity and unenforceability." ${ }^{480}$ Because of the important policy concerns expressed in Lear, however, such bars are enforceable "only if the language of the agreement or consent decree is clear and unambiguous." ${ }^{481}$

Baseload sought further limitations on enforceability, arguing that under Flex-Foot, Inc. v. CRP, Inc., ${ }^{482}$ such bars are enforceable only if the question of invalidity or unenforceability had been actually litigated in the prior action that led to the settlement. ${ }^{483}$ The court disagreed, holding that clear and unambiguous language alone is sufficient to release an invalidity claim. ${ }^{484}$

Nonetheless, applying that standard, the court found the settlement agreement did not contain a clear and unambiguous release of patent claims or defenses. ${ }^{485}$ In reaching that conclusion, the court noted that the agreement made no reference to patent claims and defenses in general or invalidity issues in particular. ${ }^{486}$ Moreover, the court observed that the agreement granted Baseload an option to acquire a nonexclusive license to the patent, an option that would not be necessary if the agreement precluded all future infringement claims. ${ }^{487}$ Baseload was thus essentially arguing that the agreement should be understood to treat invalidity claims and infringement claims differently, but since the agreement contained no language whatsoever pertaining to patent claims or defenses, there was certainly nothing to suggest different treatment of invalidity and infringement claims. ${ }^{488}$

## d. Motions for reconsideration

When reviewing a district court's ruling on a motion for reconsideration, the Federal Circuit applies regional circuit law. ${ }^{489}$ Typically, reconsideration is only justified in the event of "(1) an intervening change in the controlling law; (2) the availability of new

[^46]evidence; and (3) the need to correct clear error or prevent manifest injustice. ${ }^{490}$ Generally when a party seeks to introduce new evidence on a motion to reconsider, the party must show that the evidence it seeks to admit was not initially available. ${ }^{491}$

In Delaware Valley Floral, ${ }^{492}$ appellant Shaw argued that a postjudgment declaration by an employee was newly available evidence, and thus the district court abused its discretion in denying reconsideration. ${ }^{493}$ The Federal Circuit found no merit to this argument, because the evidence did not show that the employee was unavailable, but rather that Shaw did not attempt to find the employee earlier. ${ }^{494}$ Next, the court rejected Shaw's "half-hearted" assertion that manifest justice requires reconsideration because the new evidence creates a genuine issue of material fact that would preclude summary judgment: "[a] motion for reconsideration should not be used as a vehicle to present authorities available at the time of the first decision or to reiterate arguments previously made." ${ }^{495}$ The court thus affirmed the district court's denial of reconsideration. ${ }^{496}$

## e. Attorney-client privilege and work-product protection

Issues arising in Shanghai Meihao Electric, Inc. v. Leviton Manufacturing Co. ${ }^{497}$ allowed the court to clarify the relationship between the work-product doctrine and an inequitable conduct defense. The general rule is that a party cannot obtain documents and items prepared for trial or in anticipation of litigation by another party or counsel. ${ }^{498}$ Such materials may be discovered, however, if another party shows "substantial need for the materials to prepare its case and cannot, without undue hardship, obtain their substantial equivalent by other means." ${ }^{499}$

In Shanghai Meihao Electric, Meihao asserted an inequitable conduct defense against Leviton and issued subpoenas to some of the attorneys that had helped Leviton file and prosecute its patent

[^47]applications. ${ }^{500}$ The attorneys did not appear for their scheduled depositions, and the attorneys' firm withdrew from representation of Leviton, which then acquired new counsel. ${ }^{501}$ Following withdrawal, two of the subpoenaed attorneys appeared for depositions, where they asserted numerous work-product and privilege objections and refused to answer many questions on advice of counsel. ${ }^{502}$ Meihao filed motions to compel, but Leviton dismissed the case prior to the magistrate judge's ruling. ${ }^{503}$ The district court gave Meihao leave to move for fees and costs, and later adopted the magistrate judge's finding that Leviton's inequitable conduct and strategy of vexatious litigation justified an award of over one million dollars to Meihao. ${ }^{504}$

The Federal Circuit vacated and remanded the district court's fee award with respect to both inequitable conduct and vexatious litigation. ${ }^{505}$ In doing so, the court was troubled by the district court's treatment of the work-product doctrine. ${ }^{506}$ The Federal Circuit noted that the magistrate judge was correct that exceptions to the work product privilege are "very rare," existing only in "extraordinary circumstances., ${ }^{507}$ While the magistrate judge may have ultimately concluded that Meihao's requests for discovery satisfied those exceptions, Leviton's arguments to the contrary were not frivolous. ${ }^{508}$ Certainly, Leviton was not "required to concede that Meihao satisfied the 'substantial need' and 'undue hardship' exceptions simply because a defense of inequitable conduct was raised.,509 Accordingly, the district court clearly erred in finding that Leviton's actions amounted to vexatious litigation. ${ }^{510}$

## f. Discovery

In 2010, the court resolved two important discovery questions pertaining to patent prosecution bars (i.e., an order barring an attorney who has access to the opposing party's confidential information during litigation from later participating in patent

[^48]prosecution on behalf of his client) and exceptions therefrom. In re Deutsche Bank Trust Co. Americas ${ }^{511}$ raised issues of (1) whether regional circuit law or Federal Circuit law should apply in deciding whether to impose a patent prosecution bar; and (2) what sort of inquiry courts should conduct in making that decision. ${ }^{512}$ Deutsche Bank petitioned the court for a writ of mandamus directing the U.S. District Court for the Southern District of New York to vacate an order exempting the opposing party's lead litigation counsel from a patent prosecution bar that applied to other counsel representing that same opposing party. ${ }^{513}$
At the outset, the court determined that Federal Circuit law should apply. ${ }^{514}$ While the court typically uses regional circuit law for issues involving the Federal Rules of Civil Procedure, Federal Circuit law is applied to discovery matters "if the determination implicates an issue of substantive patent law." ${ }^{515}$ Factors to be considered in deciding which law to apply include uniformity in each circuit's law, consistency in outcome of patent litigation, and the nature of the issue involved. ${ }^{516}$ Because the issue-determining whether a protective order should deny a lawyer's access to information because of his additional role in patent prosecution or simply bar that attorney from representing clients in certain matters before the Patent and Trademark Office (PTO)-is specific to patent law, and because there is little uniformity among district courts when it comes to the application of patent prosecution bars, the court applied Federal Circuit law. ${ }^{517}$

Next, the court defined the relationship between patent prosecution activities and the imposition of a patent prosecution bar. As a general matter, imposition of patent prosecution bars (like other protective order terms) turns on concerns about inadvertent disclosure of information learned through litigation. Such determinations must be made on a counsel-by-counsel basis, and should turn on the extent to which counsel is involved in "competitive decisionmaking,","18 "Competitive decisionmaking" is "[s]horthand for a counsel's activities, association, and relationship with a client that are such as to involve counsel's advice and

[^49]participation in any or all of the client's decisions (pricing, product design, etc.) made in light of similar or corresponding information about a competitor., ${ }^{519}$

The court noted that district courts disagree about the extent to which patent prosecution activities entail competitive decisionmaking, with some courts holding that competitive decisionmaking is inherent to patent prosecution, while others have ruled instead that patent prosecution does not, by itself, raise an inference of an unacceptable risk of inadvertent disclosure. ${ }^{520}$ Citing the wide range of activities performed by patent prosecution attorneys, the court rejected a categorical assertion that every such attorney is necessarily involved in competitive decisionmaking. ${ }^{521}$ Instead, the court ruled, assessing whether an exemption from a patent prosecution bar is proper requires an examination of "all relevant facts surrounding counsel's actual preparation and prosecution activities, on a counsel-by-counsel basis." ${ }^{522}$

The court set out the legal standard for a party seeking imposition of a patent prosecution bar. That party must show "that the information designated to trigger the bar, the scope of activities prohibited by the bar, the duration of the bar, and the subject matter covered by the bar reasonably reflect the risk presented by the disclosure of proprietary competitive information."

In addition, the court put forth the test for a party seeking exemption from a patent prosecution bar. That party must show, on a counsel-by-counsel basis 1) that counsel's representation of the client does not and is not likely to involve competitive decisionmaking related to the litigation that might raise the possibility of accidental use of confidential information acquired through the litigation, and 2) that the potential injury from limiting a party's choice of counsel outweighs the potential injury from accidental use of confidential information. ${ }^{524}$

The court granted Deutsche Bank's petition for writ of mandamus in part and remanded to the district court for reconsideration of its exemption order under the new standards set forth in this case. ${ }^{525}$

[^50]
## g. Rule 11 sanctions

The Federal Circuit decided two cases in 2010 involving review of a district court's imposition of Rule 11 sanctions. Rule 11 sanctions are warranted when a party files a pleading (1) containing no reasonable factual basis; (2) based on a legal theory with no reasonable chance of success or without a reasonable argument to change existing law; or (3) in bad faith for an inappropriate purpose. ${ }^{526}$ Rule 11 motions "should be served promptly after the inappropriate paper is filed, and, if delayed too long, may be viewed as untimely." ${ }^{527}$ If a party has enough evidence to survive a motion for summary judgment, it has sufficient "evidentiary support" for purposes of Rule 11. ${ }^{528}$ The Federal Circuit applies regional circuit law to review of Rule 11 sanctions. ${ }^{529}$

The first case, ResQNet.com, Inc. v. Lansa, Inc., ${ }^{530}$ involved ruling on the timeliness and appropriateness of Rule 11 sanctions in an infringement action. ${ }^{531}$ Soon after ResQNet filed its initial complaint, Lansa stated in correspondence with ResQNet that its product did not infringe any of the patents mentioned therein. ${ }^{532}$ In response, ResQNet's attorney stated that two of the patents did not appear to be infringed, and thus, unless contrary evidence was discovered going forward, ResQNet would remove those two patents from litigation. ${ }^{533}$ ResQNet later filed an amended complaint that continued to assert infringement of the two patents discussed in the correspondence. ${ }^{534}$ Almost three years later, Lansa served a Rule 11 motion on ResQNet, and, when ResQNet did not respond within the 21-day period following service, filed the Rule 11 motion with the district court. ${ }^{535}$ The district court imposed sanctions upon ResQNet and its counsel on the ground that it should have withdrawn the two patents from its infringement litigation at an early stage of the suit because ResQNet had no good faith basis to allege infringement of the two patents based on the parties' correspondence.,536

[^51]The Federal Circuit reversed the district court's award of sanctions, finding the award to be an abuse of discretion. ${ }^{537}$ At the outset, the court noted that one of the two patents had been withdrawn two years before the Rule 11 motion was filed, and therefore the motion was untimely as to that patent. ${ }^{538}$ As for the remaining patent, the court found that ResQNet explicitly stated that the position of noninfringement asserted in the correspondence was based on Lansa's representations, and there had not been discovery on the subject. ${ }^{539}$ Moreover, the district court declined to grant summary judgment of noninfringement of the remaining patent, and the issue subsequently went to trial, both of which suggested that there was a good faith basis for ResQNet to continue pursuing its claims. ${ }^{540}$

The second Rule 11 case, Carter v. ALK Holdings, Inc., ${ }^{511}$ required the Federal Circuit to rule on sanctions imposed for advancing frivolous claims. In Carter, a dispute arose over the listing of coinventors on a patent application. ${ }^{542}$ Carter, who claimed he was the only inventor, brought fifteen claims-nine purportedly federal claims and six state-law claims-against the defendants (including one of the named co-inventors and the patent attorney who prosecuted the patent) in district court. ${ }^{543}$ The district court dismissed the federal claims for failure to state a claim and declined to exercise supplemental jurisdiction over the state-law claims. ${ }^{544}$ Next, the district court found sua sponte that three of the federal claims were frivolous: Count I, alleging a violation of the Patent Clause of the United States Constitution; Count VIII, alleging breach of fiduciary duty by the patent prosecuting attorney; and Count XI, alleging a violation of 35 U.S.C. § 122. ${ }^{545}$ The district court imposed sanctions of $\$ 30,356.89$ against Carter's counsel. ${ }^{546}$

The Federal Circuit affirmed in part and reversed in part, finding two of the three claims frivolous. ${ }^{577}$ Count I was frivolous, the court held, because no legal authority suggests that the Patent Clause

[^52]confers a private cause of action, and Carter's counsel put forth no nonfrivolous argument that the law should be changed accordingly. ${ }^{548}$ Next, the court held Count XI frivolous, because 35 U.S.C. § 122 only applies to actions by the PTO, and does not create a cause of action against the attorney who prosecutes a patent. ${ }^{549}$

In contrast, the court ruled that Count VIII, alleging a breach of fiduciary duty, was not frivolous. ${ }^{550}$ The district court had characterized Count VIII as an attempt "to manufacture a federal cause of action by couching a garden-variety malpractice claim in terms of patent law. ${ }^{551}$ The Federal Circuit applied the Christianson test for jurisdiction, asking whether the state law claim sufficiently incorporates a patent question so as to create federal jurisdiction. ${ }^{522}$ The court concluded that because the patent prosecuting attorney's compliance with the MPEP and CFR was a necessary element of the claim, the claim "involves a substantial question of federal patent law and is not frivolous." ${ }^{553}$ The court remanded to determine whether sanctions should be imposed for the two frivolous claims, noting that the district court's primary concern in imposing sanctions below appeared to have been Carter's perceived attempt in Count VIII to disguise a state-law malpractice claim as a federal claim. ${ }^{554}$

## h. Choice of law

The past term presented the court with thorny choice-of-law questions involving successor liability issues among domestic subsidiaries of a foreign corporation.

In Funai Electric Co. v. Daewoo Electronics Corp., ${ }^{555}$ the patentee sued four Daewoo entities, Daewoo Electronics Corporation ("DEC," a South Korea corporation), DEC's predecessor, Daewoo Electronics Company, Ltd. ("DECL," also a South Korean entity), and their U.S. subsidiaries, Daewoo Electronics America, Inc. ("DEAM," a Florida corporation), and its predecessor Daewoo Electronics Company of American ("DECA," a California corporation). ${ }^{556}$ DECL and DECA did not defend, and the court entered a default judgment against

[^53]those entities in the amount of $\$ 8,066,112$. $^{557}$ Funai then sought the right to collect that judgment against the respective successor corporations (DEC and DEAM), and to pursue independent infringement claims against those entities. ${ }^{558}$

The district court determined that under choice of law principles, the successor liability question would be determined by South Korean law, which did not allow successor liability on a claim unless the successor company expressly assumed liability by contract. ${ }^{559}$ The district court held that this was true even as to the U.S. subsidiaries because the transfer of operations from one U.S. subsidiary to the other had been an "outgrowth" of the transfer between the parent Korean corporations, which had occurred as a result of a contract entered into in Korea. ${ }^{560}$

On appeal, the Federal Circuit revisited the choice of law issue. Funai asserted on appeal that as between the two American subsidiaries, United States law, not foreign law, should govern. ${ }^{561}$ Funai argued that "the question is not of interpretation and enforcement of the Korean contract between the Korean companies [i.e., the parent companies], but enforcement of a United States judgment against United States companies . . . ."562

The Federal Circuit rejected the district court's determination that because the plaintiff, Funai, was a foreign company, no state had an interest in applying its own law. ${ }^{563}$ According to the court, "it is fundamental to the rule of law that courts are open to native and alien alike, when affected by a violation of United States law.".564 Moreover, when entities doing business in the United States violate United States law, the United States has an "overriding interest in the integrity of judgments of its courts ....."65 With respect to successor liability in particular, the court concluded that "[t]his is not a question of conflict with foreign law, or choice between domestic and foreign law, for no foreign law is involved in this question of

[^54]successor liability for a default judgment for violation of United States law." ${ }^{566}$

Having decided that foreign law did not control, the court then turned to the question of which State's law would govern the successor liability issue. ${ }^{567}$ The court began with the choice of law rules of the forum in which the case was pending, California. ${ }^{\text {568 }}$ California uses a three-step analysis for conflict-of-law determinations. ${ }^{569}$ First, the court must determine whether the laws of the states in question are materially different. ${ }^{570}$ If so, the second step is for the court to determine each state's interest in having its law applied. ${ }^{571}$ If both the laws of the states are materially different and each state has an interest in having its own law applied, then the court applies the third step of selecting the law of the state whose interests would be "more impaired" if its law were not applied. ${ }^{572}$

The court applied this test and determined that New Jersey law would govern. ${ }^{573}$ DEAM is incorporated in Florida with its principal place of business in New Jersey, while DECA is incorporated in California with its principal place of business in New Jersey. ${ }^{574}$ None of the parties argued that there was any material difference between the applicable laws of California, Florida, or New Jersey. ${ }^{575}$ The court also noted that the Supreme Court had recently held in Hertz Corp. v. Friend ${ }^{\text {776 }}$ that the laws of the principal place of business should normally apply to transactions flowing from the corporation's "nerve center, ${ }^{577}$ and New Jersey meets these criteria for both corporations. ${ }^{578}$

## i. Attorney disqualification

In one case this year, Ring Plus, Inc. v. Cingular Wireless Corp., ${ }^{579}$ the Federal Circuit encountered a party seeking to disqualify opposing

[^55]counsel. ${ }^{580}$ As with many procedural issues, the court applies regional circuit law when reviewing attorney disqualification decisions. ${ }^{581}$ In the Fifth Circuit, where Ring Plus arose, applicable rules of professional conduct are viewed
in light of the litigant's rights and the public interest, considering whether a conflict has (1) the appearance of impropriety in general, or (2) a possibility that a specific impropriety will occur, and (3) the likelihood of public suspicion from the impropriety outweighs any social interests which will be served by the lawyer's continued participation in the case. ${ }^{582}$
Here, a person named Garretson emailed Cingular's attorneys from his personal address, explaining his involvement with one of Ring Plus's patents and his desire to pass on information to Cingular about the patent. ${ }^{583}$ Counsel for Cingular called counsel for Ring Plus to discern whether Garretson was affiliated with Ring Plus. ${ }^{584}$ The parties dispute what was said in that conversation, but counsel for Cingular sent a letter to Ring Plus's counsel to memorialize his understanding from the phone conversation that Garretson was not a Ring Plus affiliate. ${ }^{585}$ Cingular's counsel then responded to Garretson's email, confirmed his representation of Cingular, and proposed scheduling Garretson's deposition. ${ }^{586}$ Counsel for Cingular asked opposing counsel if Ring Plus would accept service of Mr. Garretson's subpoena for deposition, but opposing counsel claimed not to represent Mr. Garretson. ${ }^{587}$ After Mr. Garretson's deposition, Ring Plus moved to disqualify Cingular's counsel, alleging violation of Texas Disciplinary Rule of Professional Conduct 4.02 and ABA Model Rule of Professional Conduct 4.2, which prohibit communication with any person "the lawyer knows to be represented by another lawyer regarding that subject."588 Applying the Horaist factors, the district court denied Ring Plus's motion to disqualify Cingular's counsel. ${ }^{589}$

[^56]The Federal Circuit affirmed the district court's denial of the motion to disqualify. ${ }^{590}$ Nothing in the initial emails showed that Mr. Garretson was affiliated with Ring Plus. ${ }^{591}$ Similarly, the court found nothing in opposing counsel's behavior to suggest to counsel for Cingular that Mr. Garretson was so affiliated. ${ }^{592}$ The court also rejected Ring Plus's argument that a 2007 privilege log showing a 2006 communication between Mr. Garretson and a Ring Plus attorney put Cingular's counsel on notice of his affiliation, reasoning that it only tended to show a prior affiliation. ${ }^{593}$ Finally, the court disagreed with Ring Plus's assertion that the district court incorrectly applied the Horaist factors, agreeing with the district court that there was no appearance of impropriety on behalf of Cingular's counsel, no danger of "specific impropriety" since "Garretson's deposition showed he had no relevant information, and a low risk of "public suspicion. ${ }^{559}$

## 3. Trial

## a. Right to jury trial

The court heard one fairly easy case this year involving an untimely demand for a jury trial. The discretion afforded a district court to grant an untimely demand for a jury trial under Rule 39(b) is "narrow," the court held, and may not be invoked to provide relief in cases of "oversight or inadvertence.," ${ }^{\text {"95 }}$ Under Rule 38(b), a proper demand for a jury trial must be served "no later than 10 days after the last pleading directed to the issue is served. ${ }^{596}$

In Richardson v. Stanley Works, Inc., ${ }^{597}$ Richardson argued that he was entitled to a jury trial on his infringement claim against Stanley. ${ }^{598}$ Applying Ninth Circuit law, the court rejected Richardson's argument that his jury demand was proper under Rule 38(b) of the Federal Rules of Civil Procedure. ${ }^{599}$ Because Richardson's answer was "the last pleading directed to any issue triable of right by a jury in this

[^57]case," ${ }^{600}$ and the answer was filed more than ten days before Richardson served his jury demand, the court found the demand untimely. ${ }^{601}$ Prior to filing an answer, Stanley moved to dismiss, and that motion was still pending when Richardson served his jury demand. ${ }^{602}$ The court disagreed with Richardson's use of United States v. Anderson ${ }^{603}$ to support his proposition that the "last pleading" for purposes of Rule $38(\mathrm{~b})$ is not deemed filed until any motion attacking the pleadings is decided. ${ }^{604}$ Anderson is inapposite, the court ruled, because it did not involve a defendant who filed a motion to dismiss prior to filing an answer. ${ }^{605}$ Finally, the court upheld the district court's refusal to grant Richardson's untimely demand under Rule 39(b), noting the narrow discretion granted to courts by the Rule. ${ }^{606}$

## b. Evidentiary rulings

The Federal Circuit rarely reverses a district court's evidentiary rulings, and 2010 was no different. In SEB S.A. v. Montgomery Ward $\mathcal{E}$ Co., ${ }^{607}$ the district court allowed the plaintiff's expert to testify despite defendant's objections. ${ }^{\text {608 }}$ Defendant argued that, since the expert "lacked expertise in the art of designing deep fryers," the district court abused its discretion in allowing him to testify. ${ }^{609}$ Showing clear deference, the Federal Circuit held that the district court had not abused its discretion. ${ }^{610}$ SEB's expert worked in the PTO for thirtyone years, and he explained that his work with a certain polymer material that was the same as that in the deep fryer permitted him to testify as an expert witness. ${ }^{611}$ In addition, the expert testified not about deep frying in itself, but about a more specialized process that was related to the district court's claim construction. ${ }^{612}$ The court also rejected defendant's reliance upon Sundance, Inc. v. DeMonte

[^58]Fabricating Ltd., ${ }^{613}$ where the Federal Circuit found an abuse of discretion when the district court admitted an expert "[d]espite the absence of any suggestion of relevant technical expertise." ${ }^{614}$ Here, in contrast, SEB's expert had sufficient relevant technical expertise to testify. ${ }^{615}$

Another 2010 case presenting a challenge to a district court's admission of expert testimony was $i 4 i$ Ltd. Partnership v. Microsoft Corp. ${ }^{616}$ Microsoft appealed the admission of i4i's expert on damages, challenging the expert's royalty calculation. ${ }^{617}$ Affirming the district court's admission, the Federal Circuit concluded that Microsoft's objections were to the expert's conclusions, not his methodology, and such objections go to the weight of his opinion, not its admissibility. ${ }^{618}$ In addition, the expert's opinion was "based on sufficient facts or data" under Rule 702. ${ }^{619}$ Finally, the court noted that Microsoft had every opportunity to cross-examine i4i's expert and present its own expert testimony, which is the proper way to attack "shaky but admissible evidence." ${ }^{620}$

The court also rejected a second evidentiary appeal from Microsoft, which argued that the survey used to estimate the amount of Microsoft's infringing use was inadmissible under Rule 403 of the Federal Rules of Evidence. ${ }^{621}$ The Federal Circuit held that the district court did not abuse its discretion in admitting the survey because i4i's experts testified that the survey dramatically underestimated the infringing use, the survey was relevant to i4i's damage calculation, and evidence about the survey's methodology and findings could help the jury evaluate the expert testimony. ${ }^{622}$

## c. Verdict forms

In 2010, the Federal Circuit addressed inconsistent jury verdicts, which, like many other issues of procedure, the court reviews under

[^59]regional circuit law. ${ }^{623}$ In Comaper Corp. v. Antec, Inc., ${ }^{624}$ the jury found two independent patent claims were not obvious; ${ }^{625}$ however, the jury also invalidated as obvious three claims that depended on the two nonobvious claims. ${ }^{626}$ Noting that "[a] broader independent claim cannot be nonobvious where a dependent claim stemming from that independent claim is invalid for obviousness," the court upheld the district court's finding of inconsistent verdicts. ${ }^{677}$ The court rejected Comaper's contention that Antec waived its right to challenge the inconsistent verdicts by failing to raise an objection prior to jury dismissal because the jury returned a special verdict and circuit law did not require a contemporaneous objection to a special verdict in order to preserve the right to appeal inconsistent verdicts. ${ }^{688}$ In the Third Circuit, where Comaper originated, if a district court is presented with inconsistent verdicts, and the evidence would support either of them, the district court must order a new trial. ${ }^{629}$ Instead of granting a new trial, the district court had held that the evidence could not support a finding that the three dependent claims were obvious, and granted Comaper's renewed motion for judgment as a matter of law. ${ }^{630}$ The Federal Circuit disagreed with the trial court on this issue, finding that the evidence could support either verdict, and remanded for a new trial on the issue of invalidity. ${ }^{631}$

In 2010, the Federal Circuit also reinforced the district court's discretion in interpreting ambiguous verdict forms. In Telcordia Technologies, Inc. v. Cisco Systems, Inc., ${ }^{632}$ the Federal Circuit held that the district court was not clearly erroneous in finding that the jury compensated a party only for past infringement where the verdict form was unclear regarding whether a damages award compensates a party for past and ongoing infringement or merely past infringement. ${ }^{633}$ The verdict form in Telcordia asked the jury to "identify the amount of monetary damages that will compensate Telcordia for Cisco's infringement." ${ }^{634}$ The jury entered a verdict for

[^60]$\$ 6,500,000$, but the form was unclear regarding whether this amount was for both past and ongoing infringement. ${ }^{635}$ The district court found that the award compensated only past infringement and ordered the parties to negotiate a royalty rate to cover post-judgment sales. ${ }^{636}$

Based on the evidence in the record, including three sets of damages numbers, none of which equaled $\$ 6,500,000$, the Federal Circuit held that the district court did not abuse its discretion in interpreting the verdict form. ${ }^{637}$ The panel noted that "[d]istrict courts have broad discretion to interpret an ambiguous verdict form, because district courts witness and participate directly in the jury trial process." ${ }^{338}$ Thus, "[i]n the absence of an express statement in the verdict, [the Federal Circuit] cannot determine whether the jury compensated Telcordia for all of Cisco's infringing activities." ${ }^{639}$

## 4. Post-trial matters

## a. Post-trial motions under Rule 50, 52, and 59

The denial of a motion for judgment as a matter of law (JMOL) is reviewed under regional circuit law. ${ }^{640}$ In Orion IP, LLC v. Hyundai Motor America, ${ }^{641}$ the district court determined that Hyundai waived its right to JMOL by failing to make a proper motion under Federal Rule of Civil Procedure 50(a) before submission to the jury. ${ }^{642}$ Although Hyundai's purported Rule 50 (a) motion-two sentences in the middle of a discussion on jury instructions-was "insufficient" and "cursory" in itself, the court looked to the context, including previous discussions, the trial transcript, and the final jury instructions, in holding that the request for a "partial judgment as a matter of law" was sufficient under the Fifth Circuit's "liberal" construction of Rule 50 (a) ${ }^{643}$ Finally, the court reversed the district court's denial of Hyundai's post-verdict JMOL on the issue of anticipation, holding that "a reasonable jury would not have a legally

[^61]sufficient evidentiary basis to find that the claims at issue were not anticipated. ${ }^{644}$

The Federal Circuit also had the opportunity this past year to consider the implications of failing to file post-trial motions. In i4i Ltd. Partnership v. Microsoft Corp. ${ }^{645}$ the jury had found that Microsoft infringed, and had awarded $\$ 200$ million in damages on a reasonable royalty theory. On appeal, Microsoft sought to challenge the sufficiency of the evidence regarding damages. ${ }^{6+6}$ But the court found that the procedural posture of the case limited its ability to consider the issue. ${ }^{647}$ In particular, the court noted that Microsoft had failed to file a pre-verdict JMOL motion challenging the sufficiency of the damages' evidence. According to the court, "[o]n appeal, what that strategic decision means for Microsoft is that we cannot decide whether there was a sufficient evidentiary basis for the jury's damages award." ${ }^{648}$ Instead, the court found that it was "constrained to review the verdict under the much narrower standard applied to denials of new trial motions. ${ }^{669}$ Under that standard, the court could overturn the verdict only upon a clear showing of excessiveness, which in turn required Microsoft to clearly show that there was no evidence to support the jury's damages award. ${ }^{650}$

## b. Costs

In Shum v. Intel Corp., ${ }^{651}$ the court settled the question of who is a "prevailing party" for the purposes of awarding costs under Federal Rule of Civil Procedure 54(d)(1). ${ }^{652}$ Shum had filed multiple claims against a former business partner and Intel, alleging correction of inventorship and various state law claims concerning intellectual property rights developed with the former business partner, including a claim for $\$ 409$ million in damages. ${ }^{653}$ In the district court Shum succeeded in only one aspect-he won his correction of inventorship claims for most of the patents-in-suit-but recovered no money. ${ }^{654}$ Both parties filed for costs under Rule 54(d)(1). ${ }^{655}$ The district court concluded that the defendants were the "prevailing

[^62]parties" and awarded each party the costs associated with the claims they won. ${ }^{656}$ The award netted to $\$ 134,368$ for the defendants. ${ }^{657}$ Shum appealed. ${ }^{\text {658 }}$

The Federal Circuit held that only one side could be the prevailing party under Rule 54, and here the defendants were the prevailing party, a question governed by Federal Circuit law. ${ }^{659}$ The court looked only to the text and Congress's use of the singular "party" preceded by the definite article "the." ${ }^{560}$ Those word choices meant only one party could prevail in the case. ${ }^{661}$ The difficulty was in choosing the prevailing party in a mixed judgment case. ${ }^{662}$ The court held that while a party was not required to win on every claim, it was required to obtain some relief that "must materially alter the legal relationship between the parties by modifying one party's behavior in a way that 'directly benefits' the opposing party." ${ }^{663}$ Based on this reasoning, Shum's relief was insufficient because he did not recover any money. ${ }^{664}$ Moreover, his success on the correction of inventorship claims did little to change the legal relationship with the defendants because it gave him no greater rights than what he had already obtained through an agreement with his former business partner. ${ }^{665}$

Judge Newman dissented, arguing that "[b]y every measure Shum is the prevailing party" because the defendants lost exclusive ownership of the patents. ${ }^{666}$ As a result, "Shum is now assured that he and his transferees cannot be sued on these patents, and that his right to practice and to grant licenses to the patented subject matter is not subject to challenge., ${ }^{667}$ Regarding costs, the district court, at a minimum, should have awarded "no costs," which Judge Newman viewed as the common practice when both parties lose important aspects of the case. ${ }^{668}$

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656. Id., 97 U.S.P.Q.2d (BNA) at 1529.
657. Id., 97 U.S.P.Q.2d (BNA) at 1530.
658. Id., 97 U.S.P.Q.2d (BNA) at 1530.
659. Id. at 1367, 97 U.S.P.Q.2d (BNA) at 1532.
660. Id., 97 U.S.P.Q.2d (BNA) at 1532.
661. Id., 97 U.S.P.Q.2d (BNA) at 1532.
662. Id., 97 U.S.P.Q.2d (BNA) at 1532.
663. Id., 97 U.S.P.Q.2d (BNA) at 1532-33.
664. Id. at 1369, 97 U.S.P.Q.2d (BNA) at 1533.
665. Id., 97 U.S.P.Q.2d (BNA) at 1534.
666. Id. at 1372-73,97 U.S.P.Q.2d (BNA) at }1535\mathrm{ (Newman, J., dissenting).
667. Id. 1373, 97 U.S.P.Q.2d (BNA) at 1536.
668. Id., 97 U.S.P.Q.2d (BNA) at 1537.
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## B. Federal Circuit Practice

## 1. Appellate jurisdiction

Because the Federal Circuit's jurisdiction ${ }^{669}$ in large part depends on the district court's proper exercise of exclusive patent jurisdiction, ${ }^{670}$ most appellate jurisdiction issues concern the question of whether the district court had patent jurisdiction to hear the case. Cases on that point are discussed above. ${ }^{671}$ The following cases concern other aspects of appellate jurisdiction.

Therasense, Inc. v. Becton, Dickinson, $\mathcal{E} C o .{ }^{672}$ presented an issue of the court's jurisdiction over a cross-appeal. ${ }^{673}$ Below, a jury found that Becton infringed two of Therasense's claims, but that both claims were invalid. ${ }^{674}$ Judgment was thus entered in Becton's favor on all counts. ${ }^{675}$ Regardless, Becton filed a cross-appeal against one of the jury's findings. ${ }^{676}$ The court dismissed the cross-appeal for lack of jurisdiction because a cross-appeal is proper only when "acceptance of the argument [the party] wishes to advance would result in a reversal or modification of the judgment rather than an affirmance." ${ }^{677}$

In another case presenting a significant question of the court's appellate jurisdiction, Avid Identification Systems v. Crystal Import Corp. ${ }^{678}$ the issues centered on whether the terms of a settlement agreement between the parties eliminated the existence of a case or controversy. ${ }^{679}$ Specifically, Crystal agreed that it would not directly oppose Avid's motion for reconsideration of the district court's finding of inequitable conduct and not contest the standing, jurisdiction, mootness, or case and controversy requirements of the inequitable conduct decision on appeal to the Federal Circuit. ${ }^{680}$ The court nonetheless scrutinized its ability to hear the case, noting that it must always address its own jurisdiction sua sponte even if the parties themselves do not raise the question of jurisdiction. ${ }^{681}$ Because

[^63]Crystal was still free to oppose Avid's motion on the merits on appeal, the court found "[a] live controversy [between the parties] still exists because [the competitor] remained free under the settlement agreement to oppose this appeal on the merits." ${ }^{\text {"682 }}$ The panel also dismissed the significance of the competitor's failure to file a brief on appeal and the fact that the amount at stake on appeal-the jury's infringement award of $\$ 26,981$-was de minimis compared to the other sums awarded in the case. ${ }^{683}$

## 2. Waiver and preservation of error

Taylor Brands, LLC v. GB II Corp. ${ }^{684}$ dealt with the unusual argument, rejected by the Federal Circuit, that an agreement on the form of a final judgment order amounts to an agreement on the substance of the order such that the appellant waived its right to appeal. ${ }^{685}$ Taylor Brands sued GB II for infringement. ${ }^{686}$ GB II obtained partial summary judgment, and, in order to obtain a final appealable order, the parties stipulated to a final judgment that the district court subsequently entered. ${ }^{687}$ Taylor Brands appealed, and GB II moved to dismiss, arguing that Taylor Brands, by agreeing to the stipulated order, waived its appellate rights. ${ }^{\text {688 }}$

The Federal Circuit rejected GB II's argument, recognizing that the case turned on the "distinction between consenting to the substance of a judgment (i.e., agreeing as to what the substantive outcome of the judgment will be) and merely consenting to the judgment's form (including agreeing that the judgment will be final instead of interlocutory)." ${ }^{689}$ In this case, Taylor Brands gave no indication that it was consenting to the substance of the judgment. ${ }^{690}$ The absence of an express reservation of appellate rights did not change the result "because merely agreeing to the form of a judgment does not in itself imply that the party agrees with the judgment's substantive outcome or intends to abandon its position on the issues." ${ }^{\text {"691 }}$ The Federal Circuit found that this case was thus unlike those in which parties agreed to the entry of a final judgment based on a settlement agreement or a voluntary dismissal, "both of

[^64]which necessarily imply a party's consent to the substantive outcome" of the case. ${ }^{6}$

In Fujifilm Corp. v. Benun ${ }^{694}$ the court considered Fuji's assertion that defendants had waived two of their arguments on appeal. ${ }^{695}$ First, defendants included an argument about patent exhaustion in a Rule 50(b) motion that they did not also include in an earlier Rule 50(a) motion for JMOL. ${ }^{696}$ Ordinarily, this exclusion would preclude raising the objection in the Rule 50 (b) motion, ${ }^{697}$ but Fuji failed to timely object, and thus the court found defendants did not waive their exhaustion argument. ${ }^{698}$ Second, defendants made an estoppel argument on appeal that was not raised in either defendants' Rule 50 (a) or Rule 50(b) motions. ${ }^{699}$ The court found waiver because Fuji lacked notice that defendants were maintaining the argument beyond their pre-trial motions, and thus Fuji's objection could not be untimely. ${ }^{700}$

## C. Patent and Trademark Office Practice

In Hyatt v. Kappos, ${ }^{701}$ the en banc court clarified the limitations on introducing new evidence in $\S 145$ civil actions. ${ }^{,{ }^{702}}$ The Patent Act affords "a patent applicant who is dissatisfied with the decision of the Board of Patent Appeals and Interferences... regarding his application, ${ }^{\text {03 }}$ to have a federal district court decide whether he "is entitled to receive a patent for his invention . . . as the facts in the case may appear. ${ }^{704}$ After an extensive review of the legislative and drafting history, the court held that " $\$ 145$ imposes no limitation on an applicant's right to introduce new evidence before the district

[^65]court, apart from the evidentiary limitations applicable to all civil actions contained in the [federal rules]." ${ }^{705}$

Hyatt, representing himself pro se, filed a patent application, but an examiner for the PTO rejected all of Hyatt's claims. ${ }^{706}$ Hyatt appealed to the Board of Patent Appeals and Interferences, which reversed many, but not all, of the examiner's rejections. ${ }^{707}$ Hyatt then filed a civil action in the District of Columbia against the Director of the Patent Office pursuant to 35 U.S.C. $\S 145 .^{708}$ Hyatt sought to introduce a declaration in the $\S 145$ action that he could have, but did not, introduce in the proceedings before the PTO. ${ }^{709}$ The district court held that it could not consider the declaration because Hyatt's failure to submit it to the PTO was negligent, and "the district court need not consider evidence negligently submitted after the end of administrative proceedings." ${ }^{, 710}$ A divided Federal Circuit panel affirmed, ${ }^{711}$ but the court vacated that decision and chose to hear the case en banc. ${ }^{712}$

The en banc majority considered the legislative and drafting history of 35 U.S.C. $\S 145$ and concluded that the provision was meant to allow patent applicants to introduce new evidence before a district court, regardless of whether that evidence was also presented to the PTO. ${ }^{713}$ Focusing on the 1927 amendments to the patent application process, the court recognized that both proponents and opponents of retaining the civil action in 35 U.S.C. § 145 recognized that this provision imposed no limitation on introducing new evidence. ${ }^{714}$ Proponents argued that "an applicant's right to introduce evidence that had not been before the Patent Office created a truly distinct, and therefore valuable, alternative to an on-the-record appeal." ${ }^{715}$ Opponents disapproved of the provision precisely because a § 145 action allowed an applicant to introduce new evidence to the district court. ${ }^{716}$ The $\S 145$ action survived, however, thus indicating that it was understood at the time to allow

[^66]the unfettered introduction of new evidence in a § 145 proceeding before the district court. ${ }^{717}$

The district court also rejected the PTO's arguments for a more limited right to introduce new evidence, the most significant of which was based on the Supreme Court's decision in Morgan v. Daniels, ${ }^{718}$ and its characterization of a $\S 194$ action as "something in the nature of a suit to set aside a judgment.."719 Those sorts of actions, the PTO argued, traditionally did not allow the introduction of new evidence. ${ }^{720}$ The en banc court disagreed, viewing Morgan as "a case about what standard of review ought to apply when the district court decides whether an applicant is entitled to a patent on exactly the same record that was before the Patent Office.,"721 So when the petitioner relies solely on the record before the court and introduces no new evidence in a § 145 action, "the district court reviews the Patent Office fact findings for substantial evidence (i.e., according to the court/agency standard of review)..722 But when the applicant offers new evidence in the district court, "the court acts as a factfinder with respect to that new evidence and would make de novo fact findings if the evidence conflicts with any related Patent Office finding.",723 These "dual standards of review," the majority held, would "maintain an appropriate level of deference to agency findings, while preserving to the court its role as factfinder with respect to new evidence., ${ }^{\text {,24 }}$ The majority lastly noted that although it rejected limitations on admissibility, the court was free to consider the proceedings before the PTO in assessing the weight of the new evidence., ${ }^{725}$

The principal dissent came from Judge Dyk, joined by Judge Gajarsa. ${ }^{726}$ They argued that the Administrative Procedure Act provided the appropriate standard of review, and it "permits supplementation in court only when agency procedures are inadequate." ${ }^{\text {"27 }}$ The only inadequacy of the PTO's procedure, according to the dissent, was the failure to allow live testimony concerning an application. ${ }^{728}$ In that sense, $\S 145$ contemplates live

[^67]testimony in the district court because live testimony cannot be submitted to the PTO but "does not provide for a trial de novo or excuse the applicant from submitting affidavit evidence to the PTO., ${ }^{729}$ The dissent went on to offer its own analysis of the legislative and drafting history, finding support for its position and reasons for rejecting the majority's opinion. ${ }^{730}$ In concluding its views, the dissent recognized the risk of allowing patent applicants to save their evidence for introduction before the district court. ${ }^{731}$ " $[\mathrm{I}] \mathrm{t}$ is not somehow fantastic," Judge Dyk wrote, "to imagine that applicants will elect to bypass the PTO in favor of a second bite at the apple in the district court," and "[t]hey will do so exactly in those circumstances where an expert agency would reject the evidence but a non-expert district court might be convinced to accept it., ${ }^{\text {,732 }}$

## D. International Trade Commission

Although Federal Circuit judges did not dispute the appropriate standard of review for International Trade Commission (ITC) rulings, they hotly disputed its application in General Protecht Group, Inc. v. International Trade Commission. ${ }^{733}$ Pass \& Seymour owned several patents for common household ground fault circuit interrupters ("GFCIs") and sought an order from the ITC prohibiting the importation of GFCI's from General Protecht Group and others (GPG), alleging that the imported GFCIs infringed the patents. ${ }^{734}$ An administrative law judge (ALJ) found that the GFCIs would infringe the patents, and the ITC affirmed. ${ }^{735}$

The majority cited the familiar standard of review from the Administrative Procedures Act: "this court reviews the Commission's legal determinations de novo and its factual findings for substantial evidence., ${ }^{736}$ The majority then applied that standard and reversed several of the ITC's findings. ${ }^{737}$ Judge Newman vigorously dissented, making clear her view that the majority misapplied the standard of review. ${ }^{738}$ In her view, the ITC's ruling was supported by substantial evidence, but the "court now finds its own facts, applies theories that were not raised by any party, uses incorrect standards of review, and

[^68]creates its own electrical technology contrary to the uniform and unchallenged expert testimony. ${ }^{, 739}$

The dispute over the claim term "detection circuit . . . to generate a predetermined signal" provides an example of Judge Newman's reasoning. ${ }^{740}$ The majority recognized that the appellants did not ask the ITC to review the ALJ's construction of this term and did not raise it before the Federal Circuit. ${ }^{711}$ Rather, GPG claimed that "the ALJ effectively modified the construction or misapplied it.. ${ }^{742}$ The ALJ had based his finding on Pass \& Seymour's expert, who testified that a "predetermined signal" originated from outside the "detection circuit." ${ }^{743}$ The majority called the expert's testimony "plainly inconsistent with the asserted claims ... and the ALJ's construction," ${ }^{744}$ indicating that the "detection circuit" should generate the "predetermined signal." ${ }^{745}$ In that sense, the expert's testimony "is not substantial evidence to support a finding" of infringement. ${ }^{746}$
Judge Newman disagreed, noting in many instances that her "colleagues do not discuss the support for the Commission's findings that the [infringing GFCIs] have a detection circuit that generates a predetermined signal." ${ }^{777}$ The "definition of 'generate' was not disputed by any party before the Commission; thus the record is sparse and argument is nil., ${ }^{748}$ Moreover, the expert witnesses all similarly understood the term and focused their testimony on whether the term was infringed." "79 "Instead," Judge Newman concluded, "the court creates a theory not proposed by any party, and rules that a signal that originates from the line terminal is not generated by the detection circuit and thus not 'generated." ${ }^{750}$ Judge Newman's dissent continued in a similar vein with the other infringement issues on appeal, ultimately leading her to conclude that the majority had "disregard[ed] the rulings and findings of the Commission, and render[ed] de novo rules and findings on new theories to which the parties have had no opportunity to respond., ${ }^{751}$

[^69]Another case, Vizio, Inc. v. International Trade Commission, ${ }^{752}$ likewise involved assertions by the dissent that the majority was relying on arguments that no party had raised below. There, the majority addressed three separate claim construction issues, upholding the Commission on the first two, but overturning it on the third issue, which related to the proper interpretation of the terms "for identifying" and "suitable for use in identifying." ${ }^{753}$ Based on the construction of those terms that the court adopted, the court also overturned, in part, the Commission's infringement determination. ${ }^{754}$ The dissent, however, contended that the third claim construction issue had not been raised on appeal Thus, Judge Clevenger would have relied on the rule that "litigants waive their right to present new claim construction disputes if they are not timely raised" to preclude consideration of this issue. ${ }^{755}$ At the very least, Judge Clevenger would have remanded to the Commission for the Commission to make additional factual findings regarding how the allegedly infringing products work in light of the new claim construction. ${ }^{756}$

## III. Patentability and Validity

This section reviews the Federal Circuit's treatment of patentability and validity issues in 2010. With cases in this area taken en banc by the court and even taken for review by the Supreme Court, 2010 was an active year for patentability and validity jurisprudence.

## A. Clear and Convincing Standard

Perhaps the most dramatic change of 2010 in the validity context will come as a result of a case decided by the Federal Circuit this year that is on review before the Supreme Court. In its review of the appeal from i4i Limited Partnership v. Microsoft Corp., ${ }^{757}$ the Supreme Court will consider the standard for proving invalidity. ${ }^{758}$ Section 282 of the Patent Act provides that "[a] patent shall be presumed valid" and that "[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." ${ }^{759}$ The Federal Circuit has interpreted that statutory presumption as

[^70]requiring clear and convincing evidence to prove a patent is invalid. ${ }^{760}$ The question presented to the Supreme Court in Microsoft's appeal of the Federal Circuit's $i 4 i$ decision concerns that judicially created burden of proof: "Whether the court of appeals erred in holding that Microsoft's invalidity defense must be proved by clear and convincing evidence." ${ }^{761}$

While the Supreme Court has not previously ruled on the issue, it has suggested that the clear-and-convincing standard may not be correct, at least not where the PTO did not consider the prior art at issue. ${ }^{762}$ In KSR, International Co. v. Teleflex Inc., ${ }^{763}$ the Supreme Court stated that "the rationale underlying the presumption-that the PTO, in its expertise, has approved the claim-seems much diminished" in cases where the patentee "fail[ed] to disclose" the prior art at issue to the PTO. ${ }^{764}$ Nonetheless, in its 2010 decisions, the Federal Circuit uniformly adhered to its requirement that invalidity must be proven by clear and convincing evidence. ${ }^{765}$

Already, many interested parties have weighed in on the Supreme Court's review, filing amicus curiae briefs. The case will be argued in Spring 2011, although without participation by Chief Justice Roberts, who has recused himself. ${ }^{766}$ While predictions are, by their nature, unreliable, the consensus of the bar is that the Court will eliminate the Federal Circuit's judicially imposed "clear and convincing" requirement for invalidating patents, or at least eliminate it for prior art not considered by the PTO. Indeed, the

[^71]Federal Circuit itself, although adhering to its clear-and-convincing standard in decisions issued after its $i 4 i$ decision, has indirectly defended the notion that prior art already considered by the PTO may especially warrant the court's higher standard. In Pressure Products Medical Supplies, Inc. v. Greatbatch Ltd., ${ }^{767}$ where the Federal Circuit affirmed the holding that the patents were anticipated and rendered obvious by clear and convincing evidence, the court noted that the PTO "examined" the prior art "twice during the examination and re-examination of" one of the patents at issue, and "nevertheless, allowed the [patent], instilling the statutory presumption of validity into" the patents at issue. ${ }^{768}$ A decision in $i 4 i$ is expected by June 2011.

## B. Obviousness

Under § $103(\mathrm{a})$ of the Patent Act, a patent may not be obtained "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." ${ }^{769}$

Obviousness is a question of law based on underlying factual inquiries. The relevant factual inquiries include "the Graham factors": (1) the scope and content of the pertinent prior art; (2) the level of ordinary skill in the art; (3) the differences between the claims and the prior art; and (4) objective, secondary indications of nonobviousness (such as commercial success, long felt but unsolved need, and the failure of others to create the invention). ${ }^{770}$ In $K S R$, the Supreme Court explained that the obviousness inquiry should be "expansive and flexible," account for "common sense," and consider the "ordinary creativity" of a person of ordinary skill, who is "not an automaton." ${ }^{771}$

Because obviousness cases often depend on the underlying facts, a recitation of each case on obviousness decided in 2010 provides limited insight into the overall state of Federal Circuit law. Nevertheless, many decisions warrant mention because of their articulation of relevant legal principles. In particular, the Federal Circuit has continued to give meaning to the Supreme Court's guidance in KSR.

[^72]
## 1. Obviousness in the continued wake of KSR

In the three years since the Supreme Court decided $K S R$, issues regarding the obviousness defense have, not surprisingly, often arisen in the application of $K S R$, and many decisions continue to give content to $K S R$ 's articulation of the obviousness standard.

One such development is the resolution of obviousness on summary judgment. Whereas obviousness traditionally was an issue decided by a jury, the Supreme Court's summary invalidation of the claim in KSR as obvious has emboldened litigants to seek, and district courts to grant, summary judgment of obviousness. As a result, the Federal Circuit has increasingly been called upon to review obviousness decided on summary judgment.

The Federal Circuit has made clear that granting summary judgment of obviousness can be proper in appropriate circumstances. ${ }^{772}$ It reiterated in a decision this year that summary judgment is appropriate if the first three Graham factors-the scope and content of the prior art; the differences between the claims and the prior art; and the level of ordinary skill in the art-are not in material dispute, and obviousness "is apparent in light of these factors. ${ }^{\text {"773 }}$ The Federal Circuit also held that the question of motivation to combine, while an issue of fact, "may nonetheless be addressed on summary judgment or JMOL in appropriate circumstances.," ${ }^{\text {"74 }}$ Further, "expert testimony is not required when the references and the invention are easily understandable." ${ }^{775}$ In short, "in appropriate cases, the ultimate inference as to the existence of a motivation to combine references may boil down to a question of 'common sense,' appropriate for resolution on summary judgment or JMOL" and without the need for expert testimony. ${ }^{776}$

Where the standard was met, the Federal Circuit affirmed the grant of summary judgment of obviousness. ${ }^{\text {77 }}$ Where, however, there were material disputes as to what the prior art taught and whether the

[^73]combination of the prior art would be predictable, the court found summary judgment inappropriate. ${ }^{\text {778 }}$

In 2010, the Federal Circuit also considered the propriety of basing an obviousness holding on "common sense." In rejecting the Federal Circuit's rigid application of the "teaching, suggestion, or motivation" test (TSM test), $K S R$ noted that common sense can serve as a reason to combine or modify prior art and thus can be a means for determining obviousness. ${ }^{779}$ "Common sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." ${ }^{\text {.780 }}$

Nonetheless, reliance on "common sense" cannot be cursory. In Trimed, Inc. v. Stryker Corp., ${ }^{781}$ the Federal Circuit rejected the district court's reliance on common sense to find the claims obvious without any additional reasoning. ${ }^{782}$ On review, the Federal Circuit acknowledged that "an obviousness analysis 'may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference or expert opinion," but stated that, "to invoke 'common sense' or any other basis for extrapolating from prior art to a conclusion of obviousness, a district court must articulate its reasoning with sufficient clarity for review. ${ }^{, 783}$ The court went on to note, "merely saying that an invention is a logical, commonsense solution to a known problem does not make it so." ${ }^{784}$ Because the record and the district court's order lacked such reasoning, summary
778. Trimed, 608 F.3d at 1336, 1341-42, 95 U.S.P.Q.2d (BNA) at 1581 (reversing summary judgment while noting several factual questions); see also Green Edge Enters., L.L.C. v. Rubber Mulch, LLC, 620 F.3d 1287, 96 U.S.P.Q.2d 1425 (Fed. Cir. 2010) (affirming denial of summary judgment where material issues of fact existed); Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc., 617 F.3d 1296, 96 U.S.P.Q.2d (BNA) 1104 (Fed. Cir. 2010) (reversing summary judgment where disputed issues of material fact existed).
779. KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 402, 420, 82 U.S.P.Q.2d (BNA) 1385, 1388, 1397 (2007); see also Wyers, 616 F.3d at 1238, 95 U.S.P.Q.2d (BNA) at 1531 ("In particular, the $[K S R]$ Court emphasized the role of 'common sense': '[r]igid preventative rules that deny factfinders recourse to common sense . . . are neither necessary under our case law nor consistent with it."").
780. KSR, 550 U.S. at 420, 82 U.S.P.Q.2d (BNA) at 1397.
781. 608 F.3d 1333, 95 U.S.P.Q.2d (BNA) 1577 (Fed. Cir. 2010).
782. Id. at 1341-43, 95 U.S.P.Q.2d (BNA) at 1581-82 (Fed. Cir. 2010). In fact, the court had granted summary judgment simply by signing the defendant's motion. Id. at 1339, 95 U.S.P.Q.2d (BNA) at 1580.
783. Id. at 1342, 95 U.S.P.Q.2d (BNA) at 1582 (citing Perfect Web Techs., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1329-30, 92 U.S.P.Q.2d (BNA) 1849, 1854 (Fed. Cir. 2009) (internal citations omitted)).
784. Id. at 1343, 92 U.S.P.Q.2d (BNA) at 1583.
judgment was not supported and was reversed. ${ }^{785}$ By contrast, where the district court provided reasoning and the Federal Circuit agreed that common sense rendered the claims obvious, the court affirmed summary judgment of obviousness. ${ }^{786}$

The Federal Circuit applied a common-sense analysis in reversing the district court's holding of nonobviousness in Wyers v. Master Lock Co. ${ }^{787}$ In Wyers, the three patents involved locks that secure trailers to passenger vehicles. ${ }^{788}$ The patents claimed an improvement over prior art because they included a sleeve that allowed the hitch to be used with different sized receivers and included an external seal that protected the lock from the elements. ${ }^{789}$ Because the district court granted JMOL of infringement at the close of the evidence, the only questions for the jury were whether the defendant presented evidence that the patent's use of a "sleeve to adjust the operative thickness of a shank" and "use of an external flat flange seal would have been obvious. ${ }^{790}$ The jury found that the claims were not obvious and the district court denied the defendant's JMOL motion to the contrary, so that the court entered judgment on the verdict. ${ }^{791}$

On appeal, a preliminary issue was whether the district court had properly concluded, in denying the defendant's JMOL motion, that the jury could find that certain prior art was not relevant prior art. ${ }^{792}$ Two criteria determine whether prior art is relevant: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem. ${ }^{193}$ The Federal Circuit found the prior art relevant. ${ }^{794}$ Citing KSR, the Federal Circuit recognized that analogous prior art should be construed broadly and that a person of ordinary skill may look outside the specific field to "fit teachings of multiple patents together like pieces of a puzzle., ${ }^{\text {.795 }}$ While the prior art addressed padlocks, it was from the same field as

[^74]the patent, or at least reasonably pertinent to it, because the defined field of "locksmithing" inherently included padlocks. ${ }^{796}$ Thus, the district court erred in finding that prior art irrelevant. ${ }^{97}$

With the relevant prior art identified, the Federal Circuit turned to "whether there was a motivation to combine the sleeve with the prior art." ${ }^{798}$ Noting that KSR "emphasized the role of 'common sense,"" which may be sufficient to decide obviousness on summary judgment or JMOL, the court concluded that it was a matter of common sense to combine the references in the manner claimed by the patent, and the court therefore reversed the judgment of non-obviousness. ${ }^{799}$

Another recurring issue arising in the wake of $K S R$ is the relevance of the "motivation to combine" test, which $K S R$ rejected in its rigid application. ${ }^{\text {s00 }}$ Although recognizing that $K S R$ ruled that "motivation to combine" is not the only test for determining whether a claim is obvious, ${ }^{801}$ the Federal Circuit has continued to use that test to assess obviousness. ${ }^{802}$ For instance, in Western Union Co. v. MoneyGram

[^75]Payment Systems, ${ }^{803}$ the Federal Circuit held that, even though the prior art taught three specific elements of the claimed inventions, a person of ordinary skill in the art would not have been motivated to combine those elements with the prior art system, and thus the claims were not obvious. ${ }^{804}$

Motivation to combine was also at issue in Media Technologies Licensing, LLC v. Upper Deck Co., ${ }^{805}$ where the court split over the obviousness of the claims. ${ }^{806}$ The claimed improvement concerned the attachment of memorabilia to sports trading cards. ${ }^{807}$ After finding that the differences between the patent and the prior art were minimal, the majority addressed whether a person of ordinary skill in the art would have been motivated to combine the references, which were not sports-related. ${ }^{808}$ The patent owner argued that the claims were not obvious because there was "an inability to predict that a trading card would convey memorabilia authenticity" and "the trading card field contain[s] an infinite number of identified and unpredictable solutions. ${ }^{889}$ The majority rejected the argument and held that, even though the prior art references were not sportsrelated, it would have been obvious to a person of ordinary skill to attach a piece of memorabilia to a sports-related item, because there are only a finite number of predictable inventions for trading cards, and the accused infringers had to show only that "it would have been obvious to one skilled in the art to attach a sports-related item instead of those items attached in the prior art references., ${ }^{810}$

Chief Judge Rader, however, disagreed with the majority's opinion and filed a dissent. ${ }^{811}$ He claimed that the majority gave the case a cursory review because it did not take the subject matter seriously. ${ }^{812}$ Chief Judge Rader would have held the invention not obvious because none of the references were sports-related, and the prior references were "distinctly different" from the claimed invention. ${ }^{813}$

Another issue arising since $K S R$ is the "obvious to try" rationale for invalidating claims. ${ }^{814}$ Contrary to the state of Federal Circuit law prior to $K S R$, a claim may be invalidated if it would have been obvious

[^76]to a person of ordinary skill in the art to try a particular course of action. ${ }^{815}$ As the Supreme Court stated in KSR, " $[\mathrm{w}]$ hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp" and this "fact that a combination was obvious to try might show that it was obvious under [35 U.S.C.] § 103."816

In Rolls-Royce, PLC v. United Technologies Corp., ${ }^{817}$ the court considered the obvious-to-try rationale. At issue was a patent for aircraft engine fan blades that used a rearward sweep to reduce shockwaves. ${ }^{818}$ An earlier patent application claimed a forward sweep to reduce shockwaves. ${ }^{819}$ The defendant argued that the forward sweep was "an easily predictable and achievable variation" in view of the rearward sweep disclosure and thus it would have been obvious to try to change the sweep from rearward to forward. ${ }^{820}$

The Federal Circuit disagreed. ${ }^{821}$ It reiterated that an invention would have been obvious to try if "the possible approaches and selection to solve the problem" are "known and finite.,"222 Because a person of ordinary skill in the art would have had no reason to try a forward sweep, the sweep angle was not simply a matter of two choices-forward or rearward-but rather constituted a "broad selection of choices" including "any degree of sweep." ${ }^{223}$ Such a large number of choices cut against a finding of "obvious to try," and the court ultimately affirmed the conclusion that the claims were not obvious. ${ }^{824}$

## 2. Other obviousness issues

In addition to continued application and explication of $K S R$, the Federal Circuit addressed other issues in 2010 regarding obviousness. In Honeywell International, Inc. v. United States, ${ }^{825}$ the court emphasized

[^77]the importance of claim construction to the obviousness inquiry. ${ }^{826}$ Although the district court had correctly construed the claim, it deviated from that construction in comparing the claim to the prior art, because the prior art did not disclose that limitation. ${ }^{827}$ Reversing the obviousness conclusion, the Federal Circuit held that, under the proper claim construction, the patent would not be obvious in light of the prior art references. ${ }^{828}$

In Comaper Corp. v. Antec, Inc., ${ }^{829}$ the Federal Circuit reiterated its rule that "[a] broader independent claim cannot be nonobvious where a dependent claim stemming from that independent claim is invalid for obviousness. ${ }^{830}$ Following that rule, the appellate court agreed with the district court that the verdict was inconsistent because the jury found the dependent claims obvious but not the independent claims. ${ }^{831}$ As the remedy, the court remanded the case for a new trial because there was sufficient evidence to support the jury's verdict that the dependent claims were obvious. ${ }^{832}$

In Daiichi Sankyo Co. v. Matrix Laboratories, Ltd., ${ }^{833}$ the Federal Circuit applied the obviousness inquiry for patents involving chemical compounds, which "frequently turns on the structural similarities and differences between the compounds claimed and those in the prior art." ${ }^{834}$ Under that special analysis of the differences between the prior art and the patent (the third Graham factor) for patents concerning chemical compounds, the defendant must show "that a medicinal chemist of ordinary skill would have been motivated to select and then modify a prior art compound (e.g., a lead compound) to arrive at a claimed compound with a reasonable expectation that the new compound would have similar or improved properties compared with the old. ${ }^{835}$ This motivation, however, does not have to be "explicit in the art." ${ }^{836}$

[^78]The patent in Daiichi related to a chemical compound and its use for treating high blood pressure. ${ }^{837}$ The defendant argued that one of skill in the art would have been motivated to select a lead compound from a prior art and modify it to create the compound claimed in the patent. ${ }^{838}$ The district court held that the claim was not invalid as obvious, and the Federal Circuit affirmed. ${ }^{839}$

In rejecting the defendant's argument that one of skill in the art would choose "the structurally closest prior art compound" as the lead compound, the Federal Circuit explained that prior case law established that identifying the lead compound "must avoid hindsight bias; it must look at the state of the art at the time the invention was made to find a motivation to select and then modify a lead compound to arrive at the claimed invention." ${ }^{840}$ Selection of the lead compound "depends on more than just structural similarity, but also knowledge in the art of the functional properties and limitations of the prior art compounds," so that "[p]otent and promising activity in the prior art trumps mere structural relationships., ${ }^{841}$ Thus, the court held that the district court did not err in rejecting the defendant's proposed lead compound. ${ }^{842}$

The Federal Circuit further determined that even if one of skill in the art would have identified the defendant's proposed compound as the lead compound, the district court properly held that one of skill in the art would not have been motivated to modify the compound to what was claimed in the patent. ${ }^{843}$ To the contrary, the prior art taught away from the patent. ${ }^{844}$ Because the prior art actually showed a preference for using other elements in the compound, a prima facie case of obviousness was not established, and the conclusion of non-obviousness was affirmed. ${ }^{845}$

In $i 4 i$ Limited Partnership v. Microsoft Corp., ${ }^{846}$ addressing an issue not presented to the Supreme Court in its pending review of that case the Federal Circuit discussed the requirements for preserving for appeal a claimed error with respect to an obviousness determination after a jury trial. ${ }^{847}$ In rejecting the defendant's argument that its pre-verdict

[^79]JMOL on anticipation preserved the issue of obviousness for a postverdict JMOL and appeal, the court held that pre-verdict JMOL motions must include all theories involving prior art references that the party intends to challenge. ${ }^{848}$ Although the defendant's preverdict JMOL had raised invalidity by anticipation based on the onsale bar, it had not raised obviousness or any of the three prior art references at issue for obviousness. ${ }^{849}$ Thus, the defendant waived any challenge of the factual findings underlying the jury's obviousness determination, and the Federal Circuit was restricted to the ultimate legal question of nonobviousness with no authority to reach the correctness of any factual findings. ${ }^{850}$ Based on that circumscribed review, the Federal Circuit upheld the jury verdict in favor of i4i that the patent was not obvious. ${ }^{851}$

In Eli Lilly $\mathcal{E}$ Co. v. Teva Pharmaceuticals USA, Inc., ${ }^{852}$ the Federal Circuit reiterated that the patentee's own efforts, if performed by someone with greater than the defined level of ordinary skill, cannot support a claim that the patent is obvious. ${ }^{833}$ Affirming the district court's ruling that the claims were not invalid, ${ }^{854}$ the Federal Circuit rejected the defendant's arguments that statements by the patent owner's inventors proved that the inventions were obvious. ${ }^{855}$ As the Federal Circuit explained, one could not conflate the experienced and advanced scientists at Eli Lilly with a person of ordinary skill in the art, who was defined as someone with only a bachelor's degree in a scientific sphere with basic knowledge about animal studies and bioavailability. ${ }^{856}$

The Federal Circuit addressed the fourth Graham factor-objective, secondary indications of nonobviousness-in several cases in 2010. Secondary indications of nonobviousness include commercial success, a long felt but unsolved need, the failure of others to create the invention, and the presence of unexpected results. ${ }^{857}$ Secondary considerations of nonobviousness are "not just a cumulative or confirmatory part of the obviousness calculus but constitute[]

[^80]independent evidence of nonobviousness." ${ }^{\text {"588 }}$ Indeed, "[s]econdary considerations 'can be the most probative evidence of nonobviousness in the record, and enable[] the ... court to avert the trap of hindsight." ${ }^{859}$ They are not a discretionary consideration and must be considered if raised. ${ }^{860}$ On their merits, however, secondary considerations of nonobviousness "cannot overcome a strong prima facie case of obviousness." ${ }^{861}$

Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc., ${ }^{862}$ provides guidance on this area of law and particularly the importance of secondary considerations of nonobviousness in deciding whether a patent is invalid. ${ }^{863}$ There, the court noted the importance of secondary considerations and discussed whether such considerations can be addressed for the first time on appeal. ${ }^{864}$ The district court had granted summary judgment of invalidity due to obviousness, ${ }^{865}$ and the Federal Circuit agreed that the prior art established a prima facie case of obviousness. ${ }^{866}$ The district court, however, failed to consider the patentee's objective evidence of nonobviousness, including evidence of industry skepticism, industry praise, commercial success, and copying. ${ }^{867}$ The Federal Circuit found that to be error, although it refused to address that evidence for the first time on appeal. ${ }^{868}$ While certain cases may warrant consideration of secondary evidence by the appellate court in the first

[^81]instance, the Federal Circuit explained that this requires a case-bycase assessment, and suggested that initial appellate review of secondary considerations would be appropriate only where the objective evidence of nonobviousness did not overcome a "strong" prima facie case of obviousness. ${ }^{869}$ In Transocean, with all inferences resolved in favor of the patentee because it opposed summary judgment, the secondary evidence presented "a strong basis for rebutting the prima facie case., ${ }^{870}$ As a result, the court reversed the grant of summary judgment of obviousness and remanded to the trial court for further consideration. ${ }^{871}$

In Geo M. Martin Co. v. Alliance Machine Systems International LLC, ${ }^{872}$ the Federal Circuit emphasized that most secondary considerations must have a nexus to the claimed invention. ${ }^{873}$ There, the patentee argued that several secondary considerations, such as commercial success, failure of others, and industry praise, supported a nonobvious conclusion. ${ }^{874}$ The Federal Circuit, however, found insufficient evidence of a nexus between the alleged secondary considerations and the patent to have relevance. ${ }^{875}$

In Geo M. Martin, the court also elaborated on the conclusion to be drawn from copying as a secondary consideration of obviousness.. ${ }^{876}$ The patentee claimed that copying supported non-obviousness, but the court reached the opposite conclusion. ${ }^{877}$ The court observed that "[i]ndependently made" inventions within a short of period of time provide evidence of obviousness. ${ }^{\text {878 }}$

## C. Anticipation

Section 102 of the Patent Act sets forth the bases on which a claim can be invalid because it is not novel. ${ }^{879}$ Section $102(\mathrm{~b})$ governs lack of novelty by anticipation, because prior art-another patent or a printed publication-discloses all of the elements of the claim at issue. ${ }^{\text {880 }}$ Under $\S 102(\mathrm{~b})$, a claim is anticipated if it "was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the

[^82]date of the application for patent in the United States." ${ }^{\text {,881 }}$ Determining that a claim is anticipated by prior art involves two analytical steps: "the first step requires construing the claim," and "[t]he second step in the analysis requires a comparison of the properly construed claim to the prior art. ${ }^{\text {"882 }}$ A single prior reference must "expressly or inherently disclose each claim limitation." ${ }^{883}$ In addition, "the reference must 'enable one of ordinary skill in the art to make the invention without undue experimentation." ${ }^{884}$ The party asserting invalidity must prove anticipation with clear and convincing evidence. ${ }^{885}$

Anticipation is a question of fact, reviewed for substantial evidence when tried to a jury. ${ }^{886}$ As with obviousness, which depends on underlying factual determinations, the factual issue of anticipation can be determined on summary judgment if there are no material facts in dispute. ${ }^{887}$ Where genuine disputes exist, however, summary judgment is improper. ${ }^{888}$

Because anticipation often depends on facts specific to the case, an examination of each anticipation case this year is not warranted in this review of the state of Federal Circuit law. Nonetheless, certain decisions should be discussed for their reference to more broadly applicable legal doctrines.

Anticipation often involves claim construction issues. In Marrin v. Griffin, ${ }^{889}$ the court noted the importance of claim construction to determining whether the prior art disclosed all the elements of the patent ${ }^{890}$ In a split decision, the court affirmed the grant of summary judgment, finding the patent anticipated. ${ }^{891}$ The patent involved a scratch-off label to mark beverage glasses without the use of a writing

[^83]implement. ${ }^{892}$ The issue on appeal was whether language included in the preamble should be read as a limitation. ${ }^{893}$ The panel majority affirmed the district court's conclusion that the preamble was not limiting because the preamble was intended only to state the purpose or expected use. ${ }^{894}$ Although the preamble can be limiting if it was relied on during the prosecution, ${ }^{895}$ the majority found no reliance in this case. ${ }^{896}$ In fact, the court noted that the patent owner itself claimed that the language was not a claim limitation. ${ }^{897}$ With all of the limitations from the body of the claims disclosed in the prior art, the majority affirmed the judgment of anticipation. ${ }^{898}$
Judge Newman disagreed with the majority and filed a dissent. ${ }^{899}$ Observing that "terms appearing in a preamble may be deemed limitations of a claim when they give meaning to the claim and properly define the invention," Judge Newman would have found the preamble limiting, ${ }^{900}$ and would have further found that the preamble differentiated the invention from known prior art. ${ }^{901}$

In Enzo Biochem, Inc. v. Applera Corp., ${ }^{902}$ the Federal Circuit clarified that "a claim cannot be both indefinite and anticipated." ${ }^{303}$ "If a claim is indefinite, the claim, by definition, cannot be construed" and thus the court should not proceed to an anticipation analysis if a conclusion of indefiniteness is reached. ${ }^{904}$

In Therasense, Inc. v. Becton, Dickinson $\mathcal{E}$ Co., ${ }^{905}$ the Federal Circuit addressed the requirement that the elements of the prior art be arranged in the same manner as the patent. ${ }^{996}$ The court concluded that the district court's jury instruction regarding anticipation was erroneous, but upheld the ruling of invalidity because the jury would have found the patent obvious regardless of the erroneous instruction. ${ }^{907}$ The court held that the instruction was erroneous

[^84]because "it makes sufficient, for the purposes of anticipation, a prior art disclosure of individual claims that 'could have been arranged' in a way that is not itself described or depicted in the anticipatory reference." According to the court, the correct rule for anticipation is that the arrangement of the elements must also be disclosed in the prior reference. ${ }^{999}$ The court added that the doctrine of "inherent disclosure" does not change this requirement. ${ }^{910}$ For anticipation to occur, the court said, not only must each element be disclosed, expressly or inherently, but the claim arrangement must also be disclosed, expressly or inherently. ${ }^{911}$

In a number of anticipation cases, the court addressed the qualifications for prior art to be relevant to the patent at issue under § 102(b). If the prior art is a non-patent reference, it must be a printed publication. ${ }^{912}$ To qualify as a printed publication, the reference "must have been disseminated or otherwise made accessible to persons interested and ordinarily skilled in the subject matter to which the advertisement relates prior to the critical date," which "is defined as the date one year prior to the filing date of the patent application." ${ }^{913}$

The court addressed what qualifies as prior art under § 102(b) in Orion IP, LLC v. Hyundai Motor America. ${ }^{914}$ There, the patent owner argued that a catalog was not a printed publication because it was revised after the critical date of the patent-i.e., it was revised within a year of the filing date of the patent application. ${ }^{95}$ The Federal Circuit disagreed because the catalog was published and used before that critical date. ${ }^{916}$ Its later revision did not alter those facts, rendering it qualifying prior art under § 102(b) $)^{917}$

The Federal Circuit also addressed whether the prior art qualified as a printed publication in ResQnet.com, Inc. v. Lansa, Inc. ${ }^{9.18}$ The accused infringer in the case argued that certain references were printed publications because they were included, by the patent owner, in reexamination. ${ }^{919}$ The patent owner objected that this use made them publicly accessible, explaining that it had learned of the

[^85]references from the accused infringer during the instant litigation. ${ }^{920}$ The district court agreed with the patent owner, and the Federal Circuit affirmed. ${ }^{921}$ Reiterating that the touchstone of a printed publication is "public accessibility,"922 the court held that no evidence showed that the references were publicly accessible, and the patent owner did not "convert [the] manuals into printed publication prior art by including them" in its materials to the PTO. ${ }^{923}$

To defeat an anticipation defense, the patent owner need not corroborate its expert witness's testimony about the prior art. In $i 4 i$ Ltd. Partnership v. Microsoft Corp., ${ }^{94}$ the Federal Circuit affirmed the jury's verdict that the claims were not invalid. ${ }^{925}$ The defendant argued that the patent owner failed to rebut the defendant's prima facie case of invalidity because the patent owner failed to corroborate its expert testimony. ${ }^{926}$ The Federal Circuit disagreed, holding that the patent owner did not need corroborating testimony. ${ }^{977}$ Corroboration is required if the witness's testimony alone is asserted to prove invalidity. ${ }^{928}$ In this case, the expert's testimony was asserted to prove validity and did not have to meet the clear and convincing standard required to prove invalidity. ${ }^{929}$ The court stated that it knew "of no corroboration requirement for inventor testimony asserted to defend against a finding of invalidity by pointing to deficiencies in the prior art. ${ }^{\text {"930 }}$

By contrast, as the court reiterated this year in Lazare Kaplan International, Inc. v. Photoscribe Technologies, Inc., ${ }^{931}$ corroboration is necessary when a witness seeks to invalidate a patent with his or her testimony alone. ${ }^{932}$ Nonetheless, the Federal Circuit "has 'not impose[d] an impossible standard of 'independence' on corroborative evidence by requiring that every point... be

[^86]corroborated by evidence having a source totally independent of the [witness]., ${ }^{933}$ Instead, a "rule of reason" analysis is applied, asking whether the testimony has been sufficiently corroborated. ${ }^{934}$ Because there was strong support for the witness's testimony in Lazare, the court did not disturb the invalidity judgment. ${ }^{935}$

In two cases, the court engaged in statutory interpretation to decide priority in the anticipation context. In Encyclopaedia Britannica, Inc. v. Alpine Electronics of America, Inc., ${ }^{936}$ the court affirmed a district court decision invalidating two patents that were related to multimedia database search systems because they were anticipated by Britannica's previously filed foreign application. ${ }^{937}$ The analysis turned on the application of $\S 120$, which sets forth the requirements for benefiting from an earlier filing date than the date on which an application is filed. ${ }^{938}$ Section 120 provides that a patent application disclosed in a prior application
shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application. ${ }^{939}$
In Encyclopaedia Britannica, the patentee claimed that, pursuant to § 120, its patents, filed in 2005, pre-dated the foreign application that was published in 1991 and was found to anticipate the 2005 patents under $\S 102(\mathrm{~b}) .{ }^{940}$ According to the patentee, the patents at issue were entitled to an earlier priority date than the foreign application, based on a chain of patents and patent applications leading back to 1989. ${ }^{941}$ Within that chain, however, was a patent application filed in 1993-in other words, it was filed after the effective date of the allegedly anticipating 1991 foreign application-that was submitted without a filing fee, without a declaration signed by the inventors, and missing its entire first page, thus making no reference to

[^87]previously filed patents or applications such as the 1989 application. ${ }^{942}$ The 1993 application was later abandoned. ${ }^{943}$

Because there was no factual dispute that the foreign application disclosed all of the elements of the claims in suit, the only issue on appeal, one of first impression for the Federal Circuit, was "whether 35 U.S.C. § 120 requires an intermediate application in a priority chain to 'contain a specific reference to the earlier filed application'" for the chain to continue to the earlier application. ${ }^{944}$ The patent owner argued that the language of $\S 120$ allowed for "similarly entitled" applications to not contain a reference to a specific earlier filed application unless they were the final applications in the priority chains. ${ }^{94}$

The Federal Circuit disagreed with the patent owner, relying on the plain language of the statute requiring an application to contain or be amended to contain "a specific reference to the earlier filed application." ${ }^{946}$ Thus, the court held that each application in the chain of priority must refer to the prior applications under § $120 .{ }^{947}$ Here, because the 1993 application did not include a reference to the 1989 application, the patentee could not claim priority to 1989 through the 1993 application. ${ }^{948}$ Without the 1989 priority date, the patents were anticipated by the 1991 foreign patent applications, and accordingly the court affirmed summary judgment of invalidity. ${ }^{949}$

In In re Giacomini, ${ }^{950}$ the court interpreted § 102(e)(2), which provides that a person is entitled to a patent unless "the invention was described in... a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent ...."951 At issue was a patent that, although filed one month after the patent application at issue, claimed priority based on the filing date of a provisional application. ${ }^{952}$ The PTO granted priority to that patent, and on that basis found the application at issue anticipated. ${ }^{953}$

[^88]On appeal, the Federal Circuit considered whether § 102(e)'s phrase "patent granted on an application" included provisional applications (and non-provisional applications). ${ }^{954}$ The court held that it did, relying on the "encompassing rule" in § 111(b)(8) that provisions in Title 35 "relating to applications for patent" "shall apply to provisional applications.. ${ }^{9555}$ Additionally, because under § 119(e) a non-provisional patent application receives the benefit of an earlier filing date of its corresponding provisional application, ${ }^{956}$ if a patent disclosing the same invention "was carried forward from an earlier U.S. provisional application or U.S. non-provisional application," then a later application describing the same invention is not patentable. ${ }^{957}$ Accordingly, in Giacomini, the other patent was treated as though it was filed on the date of its earlier provisional application, and therefore qualified as anticipatory prior art. ${ }^{958}$

In reaching this conclusion, the court rejected the applicant's argument that § 119(e) shifted that patent's priority date but not its effective date for anticipation purposes. ${ }^{959}$ The patent owner relied on the decision in In re Hilmer, ${ }^{960}$ in which the Federal Circuit's predecessor distinguished a U.S. patent's priority date under § 119 from its effective reference date under $\S 102(\mathrm{e})$, where priority was based on an earlier foreign application. ${ }^{961}$ The court in Giacomini explained that Hilmer was irrelevant because it was decided when § 119 "only governed the benefit of claiming priority to an earlier filing date in foreign countries," that is, before Congress added the provision in $\S 119(\mathrm{e})$ regarding provisional U.S. applications. ${ }^{962}$ Further, § 102(e) makes plain that the reference date for a domestic patent is based on its priority date, because the statute governs only U.S. patents. ${ }^{963}$ Hilmer, which concerned an earlier foreign application, thus did not govern priority based on an earlier U.S. provisional application. ${ }^{964}$

[^89]Finally, the Federal Circuit's anticipation decision in King Pharmaceuticals, Inc. v. Eon Laboratories, Inc., ${ }^{965}$ affirming the claims' invalidity, could have broad consequences for pharmaceutical claims. ${ }^{966}$ The patents in King concerned methods for increasing the therapeutic effectiveness (bioavailability) of metaxalone, a muscle relaxant used to treat musculoskeletal conditions. ${ }^{967}$ In particular, the patents disclosed a method of "increasing the bioavailability of metaxalone by administration of an oral dosage form with food." ${ }^{968}$

As an initial matter, the court held that one claim was anticipated because it merely claimed a new benefit of an old process. ${ }^{969}$ The prior references, although not mentioning that taking metaxalone with food would increase the medicine's effectiveness, all disclosed taking metaxalone with food to avoid gastrointestinal side effects. ${ }^{970}$ The court held that the increased effectiveness was inherent in those prior art references, ${ }^{971}$ noting that "it is a general rule that merely discovering and claiming a new benefit of an old process cannot render the process again patentable., ${ }^{972}$ Therefore, the claimed new benefit of increased effectiveness was anticipated because it was "the natural result flowing from the operation as taught" in the prior art. ${ }^{973}$

Other claims added an "informing" step, a requirement that a patient be informed of the increased effectiveness of taking metaxalone with food. ${ }^{974}$ Thus, the question on appeal for those claims was "whether an otherwise anticipated method claim becomes patentable because it includes a step of 'informing' someone about the existence of an inherent property of that method.9 ${ }^{975}$ The Federal Circuit held that it did not, stating that " t$]$ he 'informing' limitation adds no novelty to the method, which is otherwise anticipated by the prior art., ${ }^{976}$ As the court explained, because the drug's improved effectiveness when taken with food was not patentable, the instruction to do so was similarly not patentable. ${ }^{977}$

[^90]In reaching this conclusion, the court relied on prior cases holding that a claim for printed material associated with a product, where the product is similar to products already in the prior art, is distinguishable over the prior art and patentable only if "there exists any new and unobvious functional relationship between the printed matter and the substrate. ${ }^{978}$ This line of cases involved the addition of printed material to a known product. ${ }^{979}$ In finding the claims anticipated in King, the court extended the printed matter doctrine from product claims that recite written material to method claims that recite speech acts. ${ }^{980}$

## D. Enablement

Under the enablement requirement of § 112, paragraph 1, the patent specification must 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 $\ldots$...981 To be enabling, which is assessed as of the filing date, the patent specification "must teach those skilled in the art how to make and use the full scope of the claimed invention without 'undue experimentation." ${ }^{\text {,982 }}$ Courts consider the following factors in determining if a disclosure requires undue experimentation: (1) the amount of experimentation that is necessary, (2) the amount of direction or guidance presented, (3) whether there are working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the skill of those practicing in the art, (7) whether the art is predicatable, and (8) the breadth of the claims. ${ }^{983}$ Enablement is a question of law reviewed de novo, based on underlying factual inquiries that are reviewed for clear error. ${ }^{984}$

The Federal Circuit addressed certain aspects of the enablement requirement in three 2010 cases. In Transocean Offshore Deepwater

[^91]Drilling, Inc. v. Maersk Contractors USA, Inc., ${ }^{985}$ the court made clear that, to satisfy the enablement requirement, the patent application has to enable only the invention, not the most efficient commercial embodiment of the invention. ${ }^{986}$ The patent in that case related to an apparatus for conducting offshore drilling that improved over the prior art by providing a more efficient system for that timeconsuming process. ${ }^{987}$ The district court granted summary judgment to the defendant, holding that the claims were not enabling based on the court's view that the specification did not include sufficient description of the claimed "'assembly . . operable to transfer tubular assemblies' or 'means ... for transferring tubular assemblies.'"988 According to the district court, a person "skill[ed] in the art could not practice the invention without undue experimentation. ${ }^{989}$ In reaching that conclusion, the court relied on evidence showing the patentee's difficulty in building a commercial embodiment of the claimed invention, where the patentee contracted with a third party to build the embodiment because the inventors allegedly "did not know how to construct" certain equipment. ${ }^{990}$

On appeal, the patentee argued that the district court erroneously required enablement of a commercial embodiment rather than the claimed invention itself.f The Federal Circuit agreed with the patentee, stating that the patent "is not required to enable the most optimized configuration, unless this is an explicit part of the claims.. ${ }^{992}$ Because the district court also erred in determining that there was no genuine issue as to undue experimentation, the Federal Circuit reversed the grant of summary judgment for lack of enablement. ${ }^{993}$

In Eli Lilly $\mathcal{E}$ Co. v. Teva Pharmaceuticals USA, Inc., ${ }^{994}$ the Federal Circuit emphasized that whether the patent specification is enabling depends on the view of a person of ordinary skill in the art to make and use the claimed invention, not someone with more advanced skills or experience. ${ }^{995}$ There, the patentee's scientists had advantages that prevented them from relying on certain knowledge that would

[^92]have enabled the patent to one of ordinary skill. Because enablement depends on whether a person of ordinary skill would rely on the disclosure, the defendant could not rely on advantages possessed by the patentee's scientists whose skill exceeded that level. . . . .,996

At the same time, however, a patentee cannot rely on a person of ordinary skill to supply information missing from the patent specification. In ALZA Corp. v. Andrx Pharmaceuticals, LLC, ${ }^{997}$ the court reiterated that, where a person of ordinary skill "would have been required to engage in an iterative, trial-and-error process to practice the claimed invention even with the help of the [] patent specification," the specification could only be considered a starting point or direction for further research and would not be entitled to a patent. ${ }^{988}$ That was the case in ALZA. The patent at issue was a "breakaway" from the prior art, with non-routine and difficult-todevelop methods for delivering the drug. Accordingly, the court concluded the asserted claims were not enabled and affirmed the judgment of invalidity. ${ }^{999}$

## E. Best Mode

Under the best mode requirement of $\S 112$, paragraph 1 , a patent specification must set forth the "best mode contemplated by the inventor of carrying out his invention., ${ }^{1000}$ The best mode requirement "comprises part of the quid pro quo of the patent grant, prohibiting inventors from receiving the benefit of the right to exclude while at the same time concealing from the public preferred embodiments of their inventions." ${ }^{1001}$ Compliance with the best mode requirement is a question of fact, but the scope of the invention to which the best mode applies presents a question of law. ${ }^{1002}$

A two-pronged inquiry governs compliance with the best mode requirement: Under the first, subjective prong, "the court must determine whether, at the time the patent application was filed, the inventor possessed a best mode of practicing the claimed invention."1003 Under the second, objective prong, the court asks

[^93]whether the inventor "concealed" the preferred mode from the public. ${ }^{1004}$

Two significant decisions in 2010 addressed the best mode requirement. In Ajinomoto Co., Inc. v. International Trade Commission, ${ }^{1005}$ the Federal Circuit affirmed the ITC's determination that two patents related to improved methods of producing the amino acid lysine did not disclose the inventors' best mode of carrying out the invention. ${ }^{1006}$ In reaching that conclusion, the Federal Circuit addressed the parties' dispute as to whether the best mode concerned the overall production of lysine claimed in the patent, or only the claimed invention's new innovations. ${ }^{1007}$ In response, the court emphasized that the entire "invention claimed" is the relevant disclosure, not merely the "innovative aspects" or "inventive features" of the invention. ${ }^{1008}$ Noting that the best mode requirement captures the "two way street" of the patent grant, the court explained:"[i]nfringement requires all claim limitations to be present, not just those that distinguish the claim from the prior art. So too with the best mode requirement, which applies to the invention claimed, with all its limitations, not just the novel ones."1009 The court affirmed the ITC determination that the patents did not adequately disclose the best mode of carrying out the invention. ${ }^{1010}$

In Green Edge Enterprises, L.L.C. v. Rubber Mulch Etc., L.L.C., ${ }^{1011}$ the Federal Circuit reversed the district court's determination, rendered on summary judgment, that a patent for synthetic mulch colored with acrylic colorant to imitate natural mulch violated the best mode requirement. ${ }^{1012}$ It was undisputed that the inventor had a subjective preference for one mode, so the only issue was the second stepwhether the evidence objectively showed that the inventor concealed the best mode from the public. ${ }^{1013}$ That question turned on whether the inventor "disclosed its best mode when it disclosed a material by a name that did not exist and failed to identify the material that it actually used." ${ }^{1014}$ Noting "that an inventor using a proprietary product in his preferred embodiment must, 'at a minimum,... provide supplier/trade name information in order to satisfy the best

[^94]mode requirement,'" the court concluded that there was a genuine issue of material fact as to whether the best mode had been disclosed. ${ }^{1015}$ The court found that the named material "would not have described the precise color preferred by the inventors." ${ }^{1016}$ When viewed in the light most favorable to the inventor, however, one could conclude that the material named "could have allowed a person to obtain a product with the best formulation."1017 Because that presented a genuine issue of material fact, summary judgment for violation of the best mode requirement was improper. ${ }^{1018}$

## F. Written Description

Section 112, paragraph 1, of the Patent Act provides that " $[t]$ he specification shall contain a written description of the invention." ${ }^{\text {"1019 }}$ "Adequate written description requires that the applicant 'convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the [claimed] invention." ${ }^{1020}$ "Compliance with the written description requirement is a question of fact., ${ }^{1021}$

In March 2010, sitting en banc, the Federal Circuit issued one of its most important opinions to date regarding the requirement in § 112, paragraph 1. Addressing whether the written description requirement is an independent requirement, or if it applies only to the enablement requirement of $\S 112$, the court held in Ariad Pharmaceuticals, Inc. v. Eli Lilly $\mathcal{E}$ Co. ${ }^{1022}$ that " $\S 112$, first paragraph, contains two separate description requirements: a 'written description [i] of the invention, and [ii] of the manner and process of making and using [the invention'].,"1023 Thus, the court confirmed that, to be patentable and valid, a patent must contain a written description of the invention, and this requirement is separate and unique from the written description of enablement requirement. ${ }^{1024}$ Enablement requires a written description "of the manner and

[^95]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."1025 By contrast, as the court explained, the test for satisfying the first requirement in § 112-the written description of the invention-"is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." ${ }^{1026}$ " $[\mathrm{T}]$ he hallmark of written description is disclosure . . . the specification must describe an invention understandable to [a] skilled artisan and show that the inventor actually invented the invention claimed., ${ }^{1027}$

Of the several written description cases decided since Ariad, the outcomes have varied. In some cases, the Federal Circuit affirmed decisions finding adequate written description, ${ }^{1028}$ and in other cases it affirmed findings of inadequate written description. ${ }^{1029}$ In still other cases, the Federal Circuit disagreed with findings of invalidity for lack of written description, either determining that sufficient written description existed, ${ }^{1030}$ or that at least genuine issues of material fact precluded summary judgment. ${ }^{1031}$ In these decisions, the court reiterated that, while the test for written description "has never been whether the patent includes a description of the steps that may be used to prove infringement," ${ }^{1032}$ the test does not simply ask whether a person of skill in the art could "envision" the invention. ${ }^{1033}$ Instead, the specification must reasonably convey to one skilled in the art "that the inventor had possession of the claimed subject matter as of the filing date." ${ }^{1034}$

Beyond Ariad's clarification, one particular issue concerning written description that arose in 2010 concerned the context of interference proceedings. The issue concerned which disclosure should be used to construe the claims subject to a written description

[^96]challenge, when the applicant copied the claims from another patent to provoke an interference. In Robertson $v$. Timmermans ${ }^{1035}$ and Koninklijke Philips Electronic N.V., v. Cardiac Science Operating Co., ${ }^{1036}$ the two cases in which that issue arose, the court answered that the originating disclosure should be used. ${ }^{1037}$ Citing prior precedent, the court reiterated that "when a party challenges written description support for an interference count or the copied claim in an interference, the originating disclosure provides the meaning of the pertinent claim language., ${ }^{11938}$

The issue arose because the Board of Patent Appeals and Interferences held that the specification of the patent at issue was irrelevant to construing a claim term in the application of a competitor on which the interference was based. ${ }^{1039}$ That application, which claimed an earlier priority date than the patent at issue, had forced the interference by copying the claims from the patent at issue. ${ }^{1040}$ In refusing to consider the specification of the patent from which the claims originated, the Board relied on its regulation in 37 C.F.R. $\S 41.200$ (b), which provides that "[a] claim shall be given its broadest reasonable construction in light of the specification or patent in which it appears." ${ }^{1041}$

Reversing and remanding in each case, the Federal Circuit faulted the Board and the district court for applying $\S 41.200$ (b) in the face of contrary and overriding judicial authority. ${ }^{1042}$ The Federal Circuit had previously held that "when a party challenges written description support for an interference count or the copied claim in an interference, the originating disclosure provides the meaning of the pertinent claim language." ${ }^{1043}$ "[B]ecause the PTO lacks the substantive rulemaking authority to administratively set aside [that] judicial precedent," district courts and the Board "must follow judicial precedent instead of 37 C.F.R. § 41.200 (b) when a party challenges another's written description during an interference

[^97]proceeding., ${ }^{1044}$ In each case, the Federal Circuit reversed and remanded, for consideration in light of the original specification. ${ }^{1045}$

## G. Indefiniteness

Section 112, paragraph 2 mandates a definiteness requirement: "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." ${ }^{1046}$ The definiteness requirement ensures that "the claims, as interpreted in view of the written description, adequately perform their function of notifying the public of the scope of the patentee's right to exclude." ${ }^{1047}$ Indefiniteness is a legal question reviewed de novo. ${ }^{1048}$

In 2010, the Federal Circuit addressed claim definiteness rulings in several published cases. Notably, while there are arguably divergent standards in the Federal Circuit on indefiniteness, ${ }^{1049}$ the court in each case declined to find the claims indefinite, ${ }^{1050}$ at most remanding to the district court for further proceedings on the issue in view of a change in claim construction announced on appeal. ${ }^{1051}$

[^98]Beyond resting on fact-specific issues in addressing indefiniteness arguments, certain general principles of this area of law were discussed. For instance, in Funai Electric Co. v. Daewoo Electronics Corp., ${ }^{1052}$ the Federal Circuit recognized that, because of the strict rules governing patent applications, claim terms are not always written in the most elegant, straightforward language. "The protocols of claim writing can lead to awkward phrasing, for the claim is restricted to a single sentence, no matter how complex the invention; and claim content is burdened by tradition"; and the draftsman, although necessarily writing for persons knowledgeable in the field of the invention, "knows that ultimately the patent must survive the legal scrutiny of lay judges and juries. ${ }^{11053}$ Accordingly, "[a]n ungainly claim is not thereby indefinite, when its meaning can be understood by a person experienced in the field of the invention, on review of the patent documents. ${ }^{11054}$ In emphasizing this approach, the court invoked Judge Learned Hand's guidance that, "[a]s in any other written instrument, words [of a patent claim] are capable of many meanings; [the court] must translate them into the underlying purpose of their user."1055

In Telcordia Technologies, Inc. v. Cisco Systems, Inc., ${ }^{1056}$ the Federal Circuit addressed the definiteness requirement in the context of means-plus-function claims, and split on whether the requirement was satisfied in that case. ${ }^{1057}$ For a means-plus-function claim to satisfy the definiteness requirement, "the written description must clearly link or associate structure to the claimed function. ${ }^{11058}$ The majority opinion, authored by Chief Judge Rader and joined by Judge Lourie, looked to the written description to see if "an ordinary artisan would understand [it] to clearly link or associate the controller [in question] with the claimed function,",1059 and concluded that "an ordinary artisan would know how to both interpret the specification and actually build a circuit."1060 The majority thus affirmed the district court's decision finding the claim language definite. ${ }^{1061}$ In her

[^99]dissent, Judge Prost disagreed that the patent disclosure clearly linked the structure of the controller with the claimed function "to the extent required by this court's precedent." ${ }^{1062}$ According to Judge Prost, it was insufficient "that a skilled artisan can follow the clues in the patent and solve the mystery of what structure must perform the claimed function," because the specification must "clearly link a particular structure with a claimed function."1063

In two other cases, the Federal Circuit addressed the definiteness of claim terms using words of degree. In Hearing Components, Inc. v. Shure Inc., ${ }^{1064}$ the patents were directed to hearing-aid elements and required the device to be configured to be "readily installed and replaced by a user." ${ }^{1065}$ The district court concluded that the "readily installed" requirement was indefinite and, therefore, the claim was invalid. ${ }^{1066}$ The Federal Circuit reversed, reiterating that not all terms of degree are indefinite and that the test is "whether the patent's specification supplies some standard for measuring the scope of the phrase." ${ }^{1067}$ The patent in Hearing Components provided some standard for measuring the "readily installed" phrase. The specification explained that one of the advantages of the patent was that it "requires no tools for installation or removal," and it distinguished prior art that made removal and replacement difficult, particularly in light of the fact that many people who wear hearing aids are elderly and may have difficulty seeing and manipulating small parts. ${ }^{1068}$ Based on those examples, the Federal Circuit reversed the district court's indefiniteness holding. ${ }^{1069}$

In the other case, Enzo Biochem, Inc. v. Applera Corp., ${ }^{1070}$ the court addressed patents directed to techniques for labeling and detecting nucleic acids (such as DNA and RNA), and determined that the claim phrase "not interfering substantially" did not render the claim indefinite. ${ }^{1071}$ Even though a "precise numerical measurement" was not identified, the patent specification and prosecution history "provide[d] at least some guidance" to define the scope of the claims. ${ }^{1072}$

[^100]
## H. Patentable Subject Matter

In June 2010, the Supreme Court issued its decision in Bilski v. Kappos, ${ }^{1073}$ addressing the most basic question of patent law: what constitutes patentable subject matter. ${ }^{1074}$ Under 35 U.S.C. § 101, " $[\mathrm{w}]$ hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title., ${ }^{11775}$ At issue in Bilski was the patentability of a "process," one of the four categories identified in $\S 101$ and defined elsewhere in the Patent Act as a "process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material." ${ }^{1076}$ Over time, the Federal Circuit had settled on a "machine-or-transformation" test under which a process patent would be eligible only "if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.,"1077 This test arguably made it more difficult to patent business-method claims and system claims.

Bilski held that the Federal Circuit's machine-or-transformation test, although "a useful and important clue," was not the sole test for determining § 101's patent eligibility of process claims. ${ }^{1078}$ In Bilski, the Supreme Court emphasized that, under § 101's broad language, a subject matter is entitled to protection if it falls within "any" subject matter in the four independent categories and "any" improvement in that subject matter qualifying for protection. ${ }^{1079}$ Nonetheless finding the risk-management method at issue in Bilski to be unpatentable, the Supreme Court relied on its prior precedent on the unpatentability of abstract ideas. ${ }^{1080}$ Thus, the Supreme Court ultimately affirmed the invalidity holding, but in doing so broadened the test for § 101 .

Prior to the Supreme Court's decision in Bilski, the Federal Circuit in 2010 continued to apply its machine-or-transformation test. In SiRF Technology, Inc. v. International Trade Commission, ${ }^{1081}$ the court affirmed an ITC ruling that certain patents related to global positioning systems ("GPS") recited patentable subject matter. ${ }^{1082}$ Relying on its then-definitive machine-or-transformation test, the

[^101]court found that a GPS receiver is a machine and that it was integral to the disputed claims. ${ }^{1083}$ Because the method could not be performed without the device, the disputed claims were properly directed to patentable subject matter. ${ }^{1084}$

After Bilski, the court had an opportunity to address the patent eligibility of medical treatment claims. In King Pharmaceuticals, Inc. v. Eon Laboratories, Inc., ${ }^{1085}$ the district court found a medical treatment claim invalid under § 101. ${ }^{1086}$ The claims concerned methods for increasing the therapeutic effectiveness of a drug used to treat musculoskeletal conditions by taking the drug with food. ${ }^{1087}$ Based on § 101, the district court invalidated one claim that added to the claimed treatment method an "informing" requirement-i.e., that the patient be informed of the increased effectiveness of the drug if taken with food. ${ }^{1088}$ The Federal Circuit reversed the § 101 holding because, in concluding that the claim did not recite patentable subject matter, the district court had focused on only the "informing" limitation. ${ }^{1089}$ As the court explained, Supreme Court authority has long made clear that the $\S 101$ "patentability analysis is directed to the claim as a whole, not individual limitations."1090 ${ }^{109}$ By improperly focusing on the patentability of one limitation in isolation, the district court improperly applied § 101. ${ }^{1091}$ The Federal Circuit, however, did not itself determine whether the claim as a whole satisfied § 101. ${ }^{1092}$ Instead, noting that "as an appellate court, we are not limited to a district court's stated reasons for invalidating claims and can affirm a grant of summary judgment on any ground supported by the record and adequately raised below," the court found the claim invalid due to anticipation, an argument that was raised but not decided below. ${ }^{1093}$

In Prometheus Laboratories, Inc. v. Mayo Collaborative Services, ${ }^{1094}$ which was returned to the Federal Circuit for consideration in light of Bilski, the Federal Circuit found that the medical treatment claims satisfied

[^102]§ 101-the same conclusion it had reached in its original, pre-Bilski decision in that case. ${ }^{1095}$ The claims concerned a method for determining whether a patient has received a therapeutically effective amount of drugs used to treat inflammatory bowel diseases with minimum toxic side effects. ${ }^{1096}$ The court found that the claims containing an "administering" step recited a patent-eligible application of naturally occurring correlations, not merely the natural correlation itself which would be unpatentable, because "the human body necessarily undergoes a transformation" when drugs are administered to it, "which is itself not a natural process."1097 The court reached the same conclusion even for claims requiring only a "determining" step of whether a certain level of toxicity existedwithout any prior "administering" step. As the court explained, determining levels of toxicity "necessarily involves a transformation" because some "manipulation" is necessary to extract materials from the human body to determine their content. ${ }^{1098}$ In reaching these conclusions, the Federal Circuit relied on its earlier application of its machine-or-transformation test, stating that Bilski "rejected the machine-or-transformation test only as a definitive test." ${ }^{1099}$

In Research Corp. Technologies v. Microsoft Corp., ${ }^{1100}$ the court turned to patent eligibility of a different type of subject matter-claims for digital image halftoning, the process of generating electronic display and print images using only a small number of pixel colors while appearing to display a much greater number of colors and shades. ${ }^{1101}$ The district court had held that the patents did not satisfy § 101. ${ }^{1102}$ Reversing, the Federal Circuit reiterated, based on Supreme Court precedent, that there are "only three exceptions to the Patent Act's broad patent-eligibility principles: 'laws of nature, physical phenomena, and abstract ideas.'"1103 In Research Corp., it was undisputed that "abstract ideas" was the only potentially relevant category. ${ }^{1104}$ Stating that Bilski "invited this court to develop 'other limiting criteria that further the purpose of the Patent Act and are not inconsistent with its text,'" the Federal Circuit held that there was

[^103]nothing abstract in the processes claimed. ${ }^{1105}$ Focusing on the invention as a whole, the court observed that it "presents functional and palpable applications on the field of computer technology," and that the incorporation of algorithms and formulas into such specific applications with physical components did not prevent patent eligibility under $\S 101 .{ }^{1106}$ In reaching this conclusion, the court held that it "will not presume to define 'abstract' beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act." ${ }^{1107}$ The court noted, however, that the basic gatekeeper function of § 101 did not preclude abstractness challenges under § 112. ${ }^{1108}$ Because the challenge in Research Corp. rested only on § 101, the court reversed the district court's summary judgment that the patents did not claim patent-eligible inventions and remanded. ${ }^{1109}$

Finally, in Intervet Inc. v. Merial Ltd., ${ }^{1110}$ although the majority did not address § 101, Judge Dyk wrote a separate opinion to discuss the patentability of "isolated" DNA molecules. ${ }^{1111}$ An "isolated" DNA molecule is generally defined as having been separated from its natural environment in the human body, and is often used to identify persons predisposed to diseases and to treat diseases. ${ }^{1112}$ The majority did not reach the patent eligibility of the isolated DNA molecules claimed in the patent because § 101 was not at issue on appeal. ${ }^{1113}$ In his separate opinion, Judge Dyk wrote that the court's decision on other issues in the case should not be read to indicate that the claims satisfied § 101, and indicated his view that claims for the isolated DNA molecules "do in fact raise serious questions of patentable subject matter." "114 Judge Dyk nonetheless observed that, although the court has not yet directly addressed the § 101 question for such "product of nature" claims, the court has "upheld the validity of

[^104]several gene patents." ${ }^{1115}$ Describing the § 101 test for such "product of nature" claims as whether the claimed product is "qualitatively different from the product occurring in nature," Judge Dyk stated that "[i]t is far from clear that an 'isolated' DNA sequence is qualitatively different from the product occurring in nature such that it would pass" that test. ${ }^{1116}$ As he stated, "[t]he mere fact that such a DNA molecule does not occur in isolated form in nature does not, by itself, answer the question."1117 In light of Judge Dyk's separate opinion in Intervet, a decision on this issue, which could have significant impact on the biotechnology industry if the court rejects such claims, will likely decide whether isolated DNA molecules are in fact distinct from their natural state in the human body to be patent eligible under § 101. ${ }^{1118}$

## I. Double Patenting

The doctrine of double patenting, which stems from § 101's statement that an inventor may obtain "a" patent for an invention, prevents applicants from obtaining multiple patents for the same invention. ${ }^{1119}$ The doctrine has two forms-statutory double patenting, which prohibits applying for a second patent for the same invention, and the judicially-created obviousness-type double patenting, which prohibits patent applications for slight variations of the invention already patented.

The Federal Circuit addressed obviousness-type double patenting in two significant decisions this year. In Sun Pharmaceutical Industries, Ltd. v. Eli Lilly $\mathcal{E}$ Company, ${ }^{1120}$ the court addressed obviousness-type double patenting for pharmaceutical compounds and their uses. ${ }^{1121}$ Both patents in Sun related to gemcitabine, the active ingredient in one of the defendant's products. ${ }^{1122}$ The earlier patent claimed gemcitabine itself, as well as a method of using it to treat viral infections. ${ }^{1123}$ Its specification, however, also disclosed using gemcitabine to treat cancer. ${ }^{1124}$ The later patent claimed a

[^105]method of using gemcitabine to treat cancer. ${ }^{1125}$ The earlier patent had already expired, but the later patent does not expire until 2012. ${ }^{1126}$

The district court held that certain claims of the later patent were invalid for obviousness-type double patenting. ${ }^{1127}$ Prior Federal Circuit precedent already established that claims of a later patent are invalid for obviousness-type double patenting "where an earlier patent claimed a compound, disclosing its utility in the specification, and a later patent claimed a method of using the compound for a use described in the specification of the earlier patent., "1128 "[A] claim to a method of using a composition is not patentably distinct from an earlier claim to the identical composition in a patent disclosing the identical use., ${ }^{1129}$

The patent owner attempted to distinguish the prior precedent, and thereby preclude application of the double-patenting doctrine to its later patent, by arguing that those cases involved earlier specifications that disclosed a single use for the compound, whereas the earlier patent in this case disclosed multiple uses, and a use other than the one claimed in the later patent was necessary to the earlier patent. ${ }^{1130}$ The Federal Circuit rejected that argument and held that the cases were not so limited. ${ }^{1131}$ "[O]bviousness-type double patenting encompasses any use for a compound that is disclosed in the specification of an earlier patent claiming the compound and is later claimed as a method of using that compound. ${ }^{11132}$ The prior precedent did not limit its application based on the number of uses disclosed in the prior patent's specification. ${ }^{1133}$ Here, in determining that the asserted claims of the later patent were invalid for obviousness-type double patenting, the district court properly followed the Federal Circuit's prior precedent and considered all uses for the compound described in the earlier patent's specification. ${ }^{1134}$

The Federal Circuit also rejected the patent owner's argument that the court should consult the specification of an earlier application of

[^106]the prior patent, rather than the specification of the patent as issued. ${ }^{1135}$ The earlier application did not disclose the cancer use claimed in the later patent; that use was added in a continuation-inpart application that resulted in the first patent. ${ }^{1136}$ Although acknowledging a "general rule that an earlier patent's specification is not available to show obviousness-type double patenting," the court stated that "there are 'certain instances' where the specification of an earlier patent may be used in the obviousness-type double patenting analysis." ${ }^{1137}$ "Specifically, the specification's disclosure may be used to determine whether a claim 'merely define[s] an obvious variation of what is earlier disclosed and claimed,' 'to learn the meaning of [claim] terms,' and to 'interpret [] the coverage of [a] claim.'"1138 But the relevant specification to consult is that of the issued patent, not an earlier application of that patent. ${ }^{1139}$ This holding comported with the court's claim construction precedent, which relies on the specification of the issued patent to determine the scope of a claim. ${ }^{1140}$ This holding also comported with the purpose of the double-patenting doctrine, which seeks to avoid continuing protection beyond the expiration of the first patent for essentially the same invention. ${ }^{1141}$ Thus, the double-patenting analysis "is concerned with the issued patent and the invention disclosed in that issued patent, not earlier drafts of the patent disclosure and claims."1142 Finding no error in the district court's conclusion that the later patent's claimed use was described in the earlier patent's specification, the court affirmed the judgment of invalidity of the later patent's claims. ${ }^{1143}$

[^107]In Boehringer Ingelheim International GmbH v. Barr Laboratories, Inc., ${ }^{1144}$ the court confronted an attempt to avoid rejection for obviousnesstype double patenting by retroactive terminal disclaimer. ${ }^{1145}$ Terminal disclaimers are expressly permitted under 35 U.S.C. § 253: "A patentee, whether of the whole or any sectional interest therein, may, on payment of the fee required by law, make disclaimer of any complete claim, stating therein the extent of his interest in such patent. ${ }^{11146}$ The patentee in Boehringer, however, made the disclaimer retroactively after the patent had expired. ${ }^{1147}$

Building on the principle that "a patentee may file a disclaimer after issuance of the challenged patent or during litigation, even after a finding that the challenged patent is invalid for obviousness-type double patenting," the patentee in Boehringer argued that its retroactive terminal disclaimer was effective to cure obviousness-type double patenting. ${ }^{1148}$ The court rejected the patentee's argument, explaining that "when a patentee does not terminally disclaim the later patent before the expiration of the earlier related patent, the later patent purports to remain in force even after the date on which the patentee no longer has any right to exclude others from practicing the claimed subject matter." ${ }^{1149}$ Allowing the later patent to remain in force would wrongly limit others from using the invention after the original patent period has expired, contrary to the purpose of the double-patenting doctrine. ${ }^{1150}$ "The patentee cannot undo this unjustified timewise extension by retroactively disclaiming the term of the later patent because it has already enjoyed rights that it seeks to disclaim." ${ }^{1151}$

The court, however, accepted the patentee's argument that the safe harbor provision in $\S 121$ protected the patent at issue from invalidity on the basis of double patenting. ${ }^{1152}$ Section 121 provides in relevant part that
[a] patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office

[^108]or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application. ${ }^{1153}$
The safe harbor, therefore, intends to protect applicants from "losing rights when an application is divided." ${ }^{1154}$

The Federal Circuit rejected the defendant's argument that § 121 does not apply to a patent that is a "divisional of a divisional": " $[\mathrm{A}]$ ssuming all other requirements of § 121 are met, the safe-harbor provision may apply to a divisional of a divisional of the application in which a restriction requirement was entered. ${ }^{1155}$ Although the court agreed with the defendant that the statute's "as a result of" provision applied to both the earlier patent and the patent at issue-i.e., that both the earlier patent and the patent at issue had to be filed "as a result of a requirement for restriction"-the court took a broad view of that language. ${ }^{1156}$
[S]o long as consonance is met, it makes no difference in terms of compliance with the 'as a result of' requirement whether the applicant responds to the examiner's restriction requirement by filing one or more divisional applications from the original application, or instead files a single divisional application followed by successive additional divisionals. ${ }^{1157}$
Because the patentee met all requirements of the safe harbor provision, the court reversed the district court's judgment of invalidity for obviousness-type double patenting, and remanded for further proceedings. ${ }^{1158}$

## J. Recapture Doctrine

Under $\S 251$, a patentee, within two years of receiving a patent, may surrender that patent and seek reissue to enlarge the scope of the original claims if, "through error without any deceptive intent," his original patent claimed "less than he had a right to claim." ${ }^{1159}$ The right to reissue, however, is limited by the rule against recapture, under which reissue claims are invalid if their scope was broadened to reach subject matter surrendered in prosecuting the original
1153. 35 U.S.C. § 121 (2006).
1154. Boehringer, 592 F.3d at 1350, 93 U.S.P.Q. 2 d (BNA) at 1425.
1155. Id. at 1352, 93 U.S.P.Q.2d (BNA) at 1426.
1156. Id. at 1353, 93 U.S.P.Q.2d (BNA) at 1426.
1157. Id., 93 U.S.P.Q.2d (BNA) at 1426.
1158. Id. at 1354, 93 U.S.P.Q.2d (BNA) at 1427.
1159. 35 U.S.C. § 251 (2006).
claims. ${ }^{1160}$ The rule against recapture contains three steps: (1) the court construes the reissued claims to determine whether and in what aspect they are broader than the original claims; (2) if the reissue claims are broader, the court determines whether the patentee surrendered subject matter during prosecution and whether the broader aspects relate to the surrendered subject matter; and (3) the court determines whether the material claims were sufficiently narrowed in other respects to avoid the recapture rule. ${ }^{1161}$

The rule against recapture was applied this year in MBO Laboratories, Inc. v. Becton, Dickinson $\mathcal{E}$ Company. ${ }^{1162}$ There, the Federal Circuit affirmed a district court's ruling finding a reissue patent disclosing a design for hypodermic safety syringes invalid for violating the rule against recapture. ${ }^{163}$ The parties did not dispute the first and third steps of the recapture analysis, so the sole issue was whether, during the original prosecution of the patent, MBO "clearly and unmistakably surrendered claiming a guard body that moved relative to a fixed needle" for the safety syringe design patented. ${ }^{1164}$ In reviewing the prosecution history, the Federal Circuit emphasized that it sought to "clarify that a patentee may violate the rule against recapture by claiming subject matter in a reissue patent that the patentee surrendered while prosecuting a related patent application," not just the prosecution history related to the patent in question. ${ }^{1165}$ On the facts of that case, including the prosecution history of related patent applications, the court affirmed the district court's holding that certain claims of the patent in question were invalid for violating the rule against recapture. ${ }^{1166}$ The court, however, reversed the district court's decision to invalidate the entire patent, making clear that "when a reissue patent contains the unmodified original patent claims and the reissue claims, a court can only invalidate the reissue claims under the rule against recapture., ${ }^{1167}$

## K. Inventorship

Inventorship arose in Solvay S.A. v. Honeywell International, Inc., ${ }^{1168}$ where the Federal Circuit reversed a district court decision

[^109]invalidating five patent claims on the view that the defendant was "another inventor" under 35 U.S.C. § $102(\mathrm{~g})(2) .{ }^{1169}$ Under $\S 102(\mathrm{~g})(2)$, a person is not entitled to a patent if "before [the applicant's] invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed or concealed it."1170 Beginning with the principle that an invention consists of two aspects-conception and reduction to practice-the threshold issue was whether the defendant had conceived of the invention at issue. ${ }^{1171}$ "Conception is 'the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.'"172 In Solvay, the defendant had "reproduced the invention previously conceived and reduced to practice by [its Russian contractor] in Russia." ${ }^{1173}$ On those facts, the court held that the defendant did not conceive of the invention and would not be considered an inventor under § $102(\mathrm{~g})(2) .{ }^{1174}$ Thus, the district court erred in finding the claims invalid. ${ }^{1175}$ As yet another reason for rejecting the § $102(\mathrm{~g})(2)$ defense, the Federal Circuit noted the fact that the Russian contractor's "engineers first conceived the invention in Russia," which failed to satisfy the requirement under the statute that the invention be made "in this country." 1776

## L. Inequitable Conduct

Every patent applicant, his or her attorney, and other persons involved with the prosecution of a patent application "ha[ve] a duty of candor and good faith" in dealing with the U.S. Patent and Trade Office (PTO). ${ }^{1177}$ The "inequitable conduct" defense to patent infringement is rooted in this duty of candor. ${ }^{1178}$ If the duty is breached, the patent may be rendered unenforceable under the inequitable conduct doctrine. ${ }^{1779}$

[^110]To establish inequitable conduct, an accused infringer must present clear and convincing evidence that "the applicant (1) made an affirmative misrepresentation of material fact, failed to disclose material information, or submitted false material information, and (2) intended to deceive" the PTO. ${ }^{1180}$ If the court finds that materiality and intent to deceive was proven by clear and convincing evidence, then the court must balance the equities to determine whether the conduct was sufficiently egregious to justify finding the patent unenforceable. ${ }^{1181}$ Mistake, negligence, or even gross negligence does not support an inequitable conduct conclusion. ${ }^{1182}$ The determination is committed to the district court's discretion and is subject to review for an abuse of discretion, although any underlying findings the district court renders on materiality and intent are reviewed for clear error. ${ }^{1183}$

PTO Rule 56 provides guidance on the materiality inquiry. It states that information is material to prosecution of a patent application if the information is not cumulative of information already before the PTO and the information: (1) establishes "a prima facie case of unpatentability of a claim," or (2) "refutes, or is inconsistent with" positions taken by the applicant during patent prosecution. ${ }^{1184}$ This rule was adopted in 1992; before that time, the rule used a "reasonable examiner" standard, defining information as material "where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent."1185 The reasonable examiner standard and other standards are also used for the judicial inquiry into inequitable conduct. ${ }^{1186}$

For decades, the Federal Circuit has expressed concern about abuse of the inequitable conduct defense. More than twenty years ago, the Federal Circuit bemoaned that "the habit of charging inequitable conduct in almost every major patent case has become an

[^111]absolute plague." ${ }^{1187}$ In many inequitable conduct decisions, continuing into 2010, panels frequently issue divided opinions with sharp disputes, and various judges have individually criticized the state of the doctrine and called for en banc review. ${ }^{1188}$

This year, the court responded to the internally and externally criticized inequitable conduct doctrine by granting en banc review in Therasense, Inc. v. Becton, Dickinson $\mathcal{E}$ Co. ${ }^{1189}$ Indeed, in upholding the inequitable conduct ruling in a 2-1 decision in Therasense, the panel majority in that case acknowledged that inequitable conduct rulings should be uncommon, describing that case as one of the rare instances in which a finding of inequitable conduct is justified."1190 The en banc proceedings in Therasense include the fundamental question whether "the materiality-intent-balancing framework for inequitable conduct should be modified or replaced, and if so, what standard should be used."1191

Oral argument was heard in November, and a decision is expected in 2011. In the meantime, the Federal Circuit has continued to address inequitable conduct. This section discusses those cases in chronological order.

In Trading Technologies International, Inc. v. eSpeed, Inc., ${ }^{1192}$ the district court found no inequitable conduct, and the Federal Circuit affirmed. ${ }^{1193}$ The patents at issue claimed "software for displaying the market for a commodity traded in an electronic exchange., ${ }^{1194}$ The inequitable conduct charge was based on the lack of disclosure of the inventor's use of certain custom software both before and after the date he believed to be the relevant priority date. ${ }^{1195}$ As for the later use, the record showed that the inventor relied on the priority date in good faith, the examiner never questioned that priority date, and the inventor's use of the software after that date would not have materially changed the examiner's analysis. ${ }^{1196}$ On those facts, the Federal Circuit held that the district court did not clearly err in

[^112]finding the software's use after that priority date immaterial. ${ }^{1197}$ The court further held that there was no clear error in ruling that any prepriority date activities not disclosed were also not relevant. ${ }^{1198}$ While "[e]xperimental uses of the patented invention may in some instances give rise to an issue of patentability . . . [the inventor] tested the software for his own confidential, personal purposes," and, thus, the district court did not err in ruling that such use was immaterial. ${ }^{1199}$

In Avid Identification Systems, Inc. v. Crystal Import Corp., ${ }^{1200}$ the Federal Circuit affirmed the ruling that the patent was unenforceable because the patentee's founder had failed to disclose prior art to the PTO. ${ }^{1201}$ Avid addressed for the first time who constitutes an individual "substantively involved" in a patent's prosecution such that he or she owes a duty of candor to the PTO. ${ }^{1202}$ The patent concerned a chip implanted in animals to aid their identification and recovery when lost. ${ }^{1203}$ In finding inequitable conduct, the district court faulted as material the founder's failure to disclose his sales demonstrations of products that constituted "the closest prior art" to the claims in suit. ${ }^{1204}$ The critical issue for the ultimate inequitable conduct judgment was whether the founder fell within the category of individuals who owe a duty of candor to the PTO. ${ }^{1205}$

Under PTO Rule 56, individuals owing a duty include "(1) each named inventor; (2) [e]ach attorney or agent who prepares or prosecutes the application; and (3) '[e]very other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.' ${ }^{1206}$ The founder was not an inventor or an attorney or agent who prepared the patent application, so resolution of the issue depended on whether he was otherwise "substantively involved" in the patent's prosecution. ${ }^{1207}$ The Federal Circuit agreed that the

[^113]founder was "substantially involved" because he was involved in the corporation's research and development and in the preparation of the patent application relating to that research. ${ }^{1208}$ Recognizing that Avid presented the first opportunity for the court to define the "substantively involved" category, the court also explained that, in deciding the issue, courts may consider "a variety of factors, such as the individual's position within the company, role in developing or marketing the patented idea, contact with the inventors or prosecutors, and representations to the PTO., ${ }^{1209}$ Because the founder fell within Rule 56 and the court agreed that he acted with intent to deceive the PTO by withholding material information, the court affirmed the unenforceability judgment. ${ }^{1210}$
Judge Linn both concurred and dissented. ${ }^{1211}$ He would have excluded from Rule 56 's duty of candor "corporate officers, managers, employees, and all other individuals who are neither aware of the technical details or legal merits of the application nor engaged in the preparation or prosecution thereof. ${ }^{, 1121}$

In Optium Corp. v. Emcore Corp., ${ }^{1213}$ the Federal Circuit again affirmed the district court's ruling, this time finding the absence of inequitable conduct. ${ }^{1214}$ The patents related to improvements in an optical communication system that uses lasers to transmit signals. ${ }^{1215}$ The patentee failed to disclose a prior art article that the inventors had cited to their employer (the patent owner) in an internal research report and in an invention disclosure form. ${ }^{1216}$ In agreeing that inequitable conduct was not shown, the court reiterated that intent to deceive is a separate inquiry from materiality. ${ }^{1217}$ On the facts of that case, a special master determined that, even assuming that the article was material, intent could not be inferred merely on that basis, and there was no other evidence of intent to deceive. ${ }^{1218}$ The district court adopted the special master's recommendation and granted summary judgment based on inequitable conduct. ${ }^{1219}$ The Federal Circuit affirmed the decision, reiterating that materiality

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1208. Avid, 603 F.3d at 974-75, 94 U.S.P.Q.2d (BNA) at 1851-52.
1209. Id. at }976\textrm{n}.3,94\mathrm{ U.S.P.Q.2d (BNA) at 1853 n.3.
1210. Id. at 977, 94 U.S.P.Q.2d (BNA) at 1853.
1211. Id., 94 U.S.P.Q.2d (BNA) at }1853\mathrm{ (Linn, J., concurring in part and dissenting
in part).
1212. Id. at 978, 94 U.S.P.Q.2d (BNA) at }1854
1213. 603 F.3d 1313, 94 U.S.P.Q.2d (BNA) }1925\mathrm{ (Fed. Cir. 2010).
1214. Id. at 1313, 94 U.S.P.Q.2d (BNA) at 1925.
1215. Id. at 1315, 94 U.S.P.Q.2d (BNA) at 1926.
1216. Id. at 1318, 94 U.S.P.Q.2d (BNA) at 1928.
1217. Id. at 1321, 94 U.S.P.Q.2d (BNA) at 1930-31.
1218. Id. at 1319, 94 U.S.P.Q.2d (BNA) at 1929.
1219. Id., 94 U.S.P.Q.2d (BNA) at 1929.
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alone is insufficient to prove intent. ${ }^{1220}$ Judge Prost wrote a concurring opinion to prevent the majority opinion from being interpreted as holding "that a high level of materiality is entirely irrelevant to an inference of intent. ${ }^{" 221}$ As Judge Prost explained, " $[w]$ ithin that balancing test, the more material the omission or the misrepresentation, the lower the level of intent required to establish inequitable conduct, and vice versa." ${ }^{1222}$

In Taltech Ltd. v. Esquel Enterprises Ltd., ${ }^{1223}$ the Federal Circuit, in a highly fact-specific split decision, affirmed the ruling of inequitable conduct and the resulting fee award under $\S 285 .{ }^{1224}$ There, the patentee had failed to disclose two references. ${ }^{1225}$ The majority and the dissent disputed the references' materiality and cumulativeness and also disagreed on whether intent and materiality should be analyzed as separate inquiries. ${ }^{1226}$ According to the majority opinion, authored by Judge Mayer, "the dissent's belief that intent requires facts wholly distinct from those establishing materiality is incorrect., ${ }^{1227}$ Judge Gajarsa, in dissent, countered that the majority's analysis conflated materiality and intent. ${ }^{1228}$

In Orion IP, LLC v. Hyundai Motor America, ${ }^{1229}$ the Federal Circuit affirmed the district court's ruling of no inequitable conduct. ${ }^{1230}$ The patent concerned a method for enabling salespersons to use a computerized system to select the appropriate parts for a customer's particular needs. ${ }^{1231}$ The inequitable conduct charge was based on alleged on-sale bar activities that, before the critical date for patentability and validity, the patentee had used a commercial embodiment of the patent and licensed the invention for development of the commercial embodiment. ${ }^{1232}$ Allegedly contradicting those activities, the patentee had submitted to the PTO that "the invention had not been in public use or on sale before the critical date. ${ }^{11233}$ The district court, however, rejected those activities

[^114]as immaterial, and, in a short analysis, the Federal Circuit agreed, emphasizing that the evidence showed "that the invention was not ready for patenting until after the critical date." ${ }^{1234}$

In Aspex Eyewear Inc. v. Clariti Eyewear, Inc., ${ }^{1235}$ the Federal Circuit considered whether the district court had erred in not fully developing the record on inequitable conduct before ruling that the case was not sufficiently exceptional to warrant $\S 285$ fees. ${ }^{1236}$ The inequitable conduct charges in Aspex were based on a patent application, of which the inventor was aware but did not bring to the PTO's attention, that the PTO later considered in granting reexamination of the patent in suit. ${ }^{1237}$ Further, the assignee of the patent at issue had purchased the assets of the company that owned that patent application and, therefore, the defendant argued that the assignee "should have required disclosure of the [patent] application to the examiner." ${ }^{1238}$ The defendant claimed materiality based on the inventor's concern that the patent applicant had used some of the inventor's drawings in the application. ${ }^{1}$.

The Federal Circuit held that the district court did not err in deciding the inequitable conduct issue without holding a full trial. ${ }^{1240}$ The Federal Circuit agreed that the threshold requirements of showing materiality and intent by clear and convincing evidence were not met because " $[\mathrm{n}] \mathrm{o}$ evidence of deceptive intent was presented"; the inventor's "concern about [the applicant's] possible use of his information does not impart materiality"; and there was no evidence the inventor or his assignee saw the application or was aware of its contents while his application was pending. ${ }^{1241}$ Further, the district court had already decided, on summary judgment, that the assignee was equitably estopped from pursuing its infringement claims against the defendant. ${ }^{1242}$ In those circumstances, the district court did not err in declining to hold a full trial on inequitable conduct, and the ruling of no inequitable conduct was affirmed. ${ }^{1243}$

In Leviton Manufacturing Co. v. Universal Security Instruments, Inc., ${ }^{1244}$ the court, in another split decision, vacated the district court's award, on summary judgment, of attorneys' fees and costs to the accused

[^115]infringer based on inequitable conduct and vexatious litigation of lawyers for the patentee. ${ }^{1245}$ The panel majority found "genuine issues of material fact" that required remand for an evidentiary hearing on the inequitable conduct charge. ${ }^{1246}$ Although agreeing that another patent application and related litigation were material, the panel majority ruled that the district court improperly "inferred an intent to deceive based on [an attorney's] failure to advise the PTO of the [patent] application and related litigation, which is an omission, not an affirmative misrepresentation., ${ }^{1247}$ In reaching this conclusion, the panel majority noted that the Federal Circuit "rarely affirm[s] a grant of summary judgment of inequitable conduct, and in those cases where we have affirmed, the applicants did something other than fail to disclose a commonly owned application or related litigation. "1248 The lawyer had a plausible explanation for failing to disclose the application, and his failure to explain non-disclosure of the related litigation was insufficient alone to find that he intended to deceive the PTO. ${ }^{1249}$ With genuine issues remaining, the court remanded for a bench trial. ${ }^{1250}$
In Advanced Magnetic Closures, Inc. v. Rome Fastener Corp., ${ }^{1251}$ the court reviewed a district court ruling that a patent for a magnetic snap fastener commonly used in purses was unenforceable due to inequitable conduct based on a false claim of inventorship. ${ }^{1252}$ The court discerned no clear error in the district court's finding that the inventor had falsely claimed to the PTO that he was the sole inventor without listing his employee as at least a co-inventor. ${ }^{1253}$ The Federal Circuit affirmed the inequitable conduct ruling. ${ }^{1254}$

In Ring Plus, Inc. v. Cingular Wireless Corp., ${ }^{1255}$ the court reversed a determination based on alleged misrepresentations to the PTO about two prior art references. ${ }^{1256}$ The patent at issue "disclose[d] a software based algorithm and method for generating and delivering messages over a phone line during a 'ringing signal' period. ${ }^{11257}$ In

[^116]the Background section of its patent, the applicant stated that, unlike that software-based patent, the two references "propose[d] hardware based systems, but no software to operate those systems," and the district court found that this was a material misrepresentation. ${ }^{1258}$ The Federal Circuit identified no error in that finding, but disagreed on intent to deceive. ${ }^{1259}$ The district court had "premised its finding of intent almost entirely on its view that the references unambiguously disclose software" for operating telephone systems (like the software systems at issue in the patent in suit), and the Federal Circuit held that the references' disclosure of software was not "so plain" or unambiguous. ${ }^{1260}$ Because the evidence "gives rise to the inference that applicants believed that [the references] did not disclose software for operating a telephone system," the district court clearly erred in finding intent to deceive, and the Federal Circuit reversed the determination of inequitable conduct. ${ }^{1261}$

In Golden Hour Data Systems, Inc. v. emsCharts, Inc., ${ }^{1262}$ the Federal Circuit vacated the inequitable conduct ruling and remanded for further proceedings on the issue. ${ }^{1263}$ The patent disclosed systems for integrating data used in emergency medical transport, which is often conducted by helicopter. ${ }^{1264}$ The inequitable conduct determination was based on a brochure that was not disclosed to the PTO. ${ }^{1265}$ Although agreeing that the brochure was material even if it was not prior art, ${ }^{1266}$ the court held that there was insufficient evidence of deceptive intent because it contradicted the patentee's submissions. ${ }^{1267}$ "The key question" on intent was whether the patentee's CEO or patent agent had actually read the brochure to recognize that the brochure was inconsistent with the patentee's representations to the PTO. ${ }^{1268}$ On that issue, "the district court did not actually find that either [the CEO] or [the patent agent] was aware of the inside contents of the brochure. ${ }^{11269}$ The Federal Circuit noted that it would be inappropriate to make factual findings in the

[^117]first instance, so it remanded the case to the district court to make that determination. ${ }^{1270}$
Judge Newman dissented, writing that materiality was reasonably disputed and that it was "inappropriate for this court to remand for another shot at it" because "deceptive intent was not established at the trial of this issue.."1271

In Cancer Research Technology Ltd. v. Barr Laboratories, Inc., ${ }^{1272}$ the court reviewed a ruling of inequitable conduct in the prosecution of a patent for compounds forming the active ingredient in a cancer treatment drug. ${ }^{1273}$ The district court ruled that the patent was unenforceable for inequitable conduct because the inventor failed to disclose information about human testing showing that some of the compounds were ineffective, which directly contradicted the patent regarding the drug's broad utility in treating cancers. ${ }^{1274}$ The Federal Circuit held that the inequitable conduct ruling was erroneous because the district court based its decision on nothing more than the withholding of highly material information. ${ }^{1275}$ In reaching this conclusion, the court reiterated that "materiality and intent are separate requirements, and intent to deceive cannot be found based on materiality alone." ${ }^{1276}$ The court is not permitted to infer that the applicant "should have known" that the information was material, to show an intent to deceive, simply because the applicant knew about the information and it was material. ${ }^{1277}$ There must be some evidence that the applicant understood that the information was material. ${ }^{1278}$

In dissent, Judge Prost wrote that the panel opinion "veers from our precedent" in two respects. ${ }^{1279}$ First, it "creates a new evidentiary standard for establishing inequitable conduct" by "[r]equiring separate evidence for each prong"-a requirement that "has no basis in [the court's] precedent." ${ }^{1280}$ Second, the majority decision "inexplicably rejects the district court's unassailable credibility

[^118]determinations"-determinations that "are virtually unreviewable by this court." ${ }^{1281}$

In Lazare Kaplan International, Inc. v. Photoscribe Technologies, Inc., ${ }^{1282}$ the Federal Circuit vacated the district court's ruling of inequitable conduct and, therefore, vacated an award of attorney's fees based on the inequitable conduct determination. ${ }^{183}$ The patents disclosed systems for marking gemstones with microscopic spots for authentication and tracking purposes. ${ }^{1884}$ In a very brief analysis, the court held that, even if the omitted information was material, "the district court clearly erred by inferring that [the patentee's] counsel intended to deceive the PTO by withholding the information."1285

As these decisions show, inequitable conduct issues continue to arise in the Federal Circuit, and their resolution is often by a divided panel. Clarification of the proper legal standard in the en banc decision to issue in Therasense is thus eagerly awaited by the bar.

## IV. Infringement

In 2010, the Federal Circuit reaffirmed many basic aspects of infringement analysis. For example, the Federal Circuit had opportunities to confirm the importance of plain language as a source of meaning, as well as highlighting the role that other claims and the specification can play in construing claims. More generally, the Court continued its efforts to refine the rules regarding what sources the courts should consider in a claim construction analysis and how much weight those sources should receive.
In one of the bigger developments for infringement jurisprudence this year, the Federal Circuit attempted to clarify the showing of knowledge that is necessary to prove intent for an induced infringement claim. Specifically, in SEB, S.A. v. Montgomery Ward $\mathcal{E}$ Co., ${ }^{1286}$ the Federal Circuit held that the "knowledge of the patent" requirement can be satisfied by showing that the accused infringer manifested a "deliberate indifference to" or "knew of and disregarded" a risk that its activities were covered by a patent. ${ }^{1287}$ On

[^119]October 12, 2010, though, the United States Supreme Court granted certiorari in the case, so the final word on this issue is yet to come. ${ }^{1288}$

Two other developments also merit special mention. First, in Akamai Technologies v. Limelight Networks, the court clarified the test for joint patent infringement, holding that the test is met only if the joint defendants have either an agency relationship or a contractual obligation to perform the acts necessary to establish infringement. ${ }^{1289}$ Second, the Federal Circuit provided further insight on the question of determining design patent infringement in view of its 2008 Egyptian Goddess decision. ${ }^{1290}$

## A. Claim Construction

An infringement analysis requires two steps. First, the court construes the claims at issue, and, second, the court or jury compares those claims to the accused product. ${ }^{1291}$ In its 1998 en banc decision in Cybor Corp. v. FAS Technologies, Inc., the Federal Circuit confirmed that issues of claim construction-the first step-are reviewed de novo without deference to the decision below. ${ }^{1292}$ Since then, however, various judges of the Federal Circuit have engaged in an ongoing debate about whether that is the proper standard. In Trading Technologies International, Inc. v. eSpeed, Inc., now-Chief Judge Rader included in his opinion for the panel a lengthy analysis of the law leading up to Cybor Corp., including Supreme Court authority recognizing that claim construction is not a purely legal issue. ${ }^{1293}$ Addressing the claim-construction issues before the panel in that case, Chief Judge Rader observed that the district court's construction included factual findings, such as findings about the technical background of the claimed invention and the understanding of a person of skill in the art. ${ }^{1294}$ Strongly suggesting that review "without the slightest iota of deference" is improper, he acknowledged that the court's en banc decision in Cybor Corp. tied his hands, requiring him to conduct a non-deferential review. ${ }^{1295}$ Adding to Chief Judge Rader's comments, Judge Ron Clark, sitting by

[^120]designation in Trading Technologies, joined the debate and provided a district court judge's perspective. In a concurring opinion, he explained that the Cybor Corp. standard had undesirable influencesit could discourage settlement and increase the likelihood of appeal. ${ }^{1296}$ As he explained, parties receiving an unfavorable claim construction often conclude that their own view of complicated patent claims will fare better on appeal, where no deference is given to those findings, when that view may unnecessarily extend proceedings. ${ }^{1.97}$ Noting that the patent application process provides applicants the opportunity to clearly delineate their claims in the specification, he rhetorically asked "[w]hat public policy is advanced by a rule requiring the determination of underlying facts by more than one court, especially when the likely result is that another group of citizens will be required to 'volunteer' for lengthy jury duty on remand?" ${ }^{1298}$

Trading Technologies, of course, did not settle the debate. In that case and others, the court was bound by the Cybor Corp. standard. Turning to the Federal Circuit's application of that standard in its claim construction jurisprudence, much of it was unremarkable. The court continued to hold that the analysis must start (and sometimes ends) with the plain language of the claims. The court also provided additional guidance as to what other sources courts may review, and how to weigh those sources. Rather than being discarding or radically developing its claim construction jurisprudence in 2010, the court followed or provided minor elaborations on prior doctrines and rules.

## 1. Claim construction starts with claim language

Claim construction starts with the claim language. ${ }^{1299}$ The Court must ascertain 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." ${ }^{1300}$ In addition, "other claims of the patent . . . can also be valuable sources of enlightenment as to the meaning of a claim term., ${ }^{1301}$

[^121]a. Cases relying on the plain language of the claims

During the past year, the Court had multiple cases in which it reaffirmed the importance of the plain meaning of claim language. For example in i4i Limited Partnership v. Microsoft Corp., ${ }^{1302}$ the Federal Circuit conducted a plain language analysis of the term "distinct storage files," and held that this term did not require that the files be subject to "independent manipulation," (the ability to change one file independent of another) ${ }^{1303}$

In arriving at this result, the Court noted that none of the claims mentioned "independent manipulation," an omission that the Court found significant. ${ }^{1304}$ "Had the inventors intended this limitation, they could have drafted the claims to expressly include it., ${ }^{1305}$

In In re Suitco Surface, Inc., ${ }^{1306}$ the Federal Circuit used the plain language of a claim term to overturn the Board's construction of "an improved material for finishing the top surface of the floor... [comprising]: at least one elongated sheet including a uniform flexible film of clear plastic material." ${ }^{1307}$

During a reexamination of the patent, the Board had construed "material for finishing the top surface of the floor" to mean "requiring a material that is structurally suitable for placement on the top surface of a floor," which could include any layer above the floor regardless of whether it was the top or final layer. ${ }^{1308}$

The Federal Circuit found the Board's construction to be unreasonable based on the plain language of the claim. ${ }^{1309}$ "A material cannot be finishing any surface unless it is the final layer on that surface." ${ }^{13110}$ The court found that the PTO's construction "ignored reality" by allowing the finishing material to fall anywhere above the surface being finished, regardless of whether it actually "finishes" the surface. ${ }^{1311}$

## b. Cases noting that claim construction should track ordinary and customary meanings

The Court also confirmed that in performing a plain language analysis, the goal is to use the ordinary and customary meaning of a

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1302. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010), cert. granted,
131 S. Ct. }647\mathrm{ (2010).
1303. Id. at 842, 93 U.S.P.Q.2d (BNA) at 1951.
1304. Id., 93 U.S.P.Q.2d (BNA) at 1952.
1305. Id., 93 U.S.P.Q.2d (BNA) at 1952.
1306. F.3d 1255, 94 U.S.P.Q.2d (BNA) }1640\mathrm{ (Fed. Cir. 2010).
1307. Id., 94 U.S.P.Q.2d (BNA) at 1641.
1308. Id., 94 U.S.P.Q.2d (BNA) at 1643.
1309. Id., 94 U.S.P.Q.2d (BNA) at 1644.
1310. Id., 94 U.S.P.Q.2d (BNA) at 1643.
1311. Id., 94 U.S.P.Q.2d (BNA) at 1643.
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term to one of ordinary skill in the art. In Comaper Corp. v. Antec, Inc. ${ }^{1312}$ for example, the Federal Circuit upheld the district court's claim constructions. ${ }^{1313}$ The lower court had construed the terms "case," "drive bay slot," and "second opening" in a patent involving a cooling device for computer drives. ${ }^{1314}$

As to the last of these three, the court had construed "second opening" to mean "a separate opening that is exposed to the drive bay region." ${ }^{1315}$ Antec, by contrast, argued that "second opening' must mean "a separate opening in the case located so as to pull or exhaust air from the central area of the drive bay region."1316

On appeal, the court affirmed the district court, finding that "the district court's construction faithfully tracks the ordinary and customary meaning of the term in light of the intrinsic evidence., ${ }^{1317}$

## c. Cases relying on other claims to shed light on the meaning of claim terms

The Federal Circuit also had the opportunity to confirm that, in construing language in one claim, courts are free to consider how other claims in the same patent use the same term, or otherwise impact meaning. For example, in Schindler Elevator Corp. v. Otis Elevator Co. ${ }^{1318}$ the Federal Circuit held that the district court erred in its construction of the terms "information transmitter" and "recognition device" in claim 1 of the patent. In doing so, the court specifically noted that "[o]ther claims of the patent in question, both asserted and unasserted, can... be valuable sources of enlightenment as to the meaning of a claim term., ${ }^{1319}$ In particular, the court noted that the way in which "recognition device" was used in a dependent claim supported a specific understanding of the term in that dependent claim, and, by extension, that same construction should apply to the independent claim at issue. ${ }^{1320}$

Similarly, in Enzo Biochem, Inc. v. Applera Corp., ${ }^{1321}$ the court relied on the principle that "claim terms are normally used consistently

[^122]throughout the patent" to select between competing constructions of a disputed claim term. ${ }^{1322}$

However, in Haemonetics Corp. v. Baxter Healthcare Corp. ${ }^{1323}$ (discussed in further detail in section IV(A)(1)(f)), this was not the case. In this decision, the Federal Circuit held that internal claim syntax trumps the principal that claim terms are used consistently throughout a patent. The preamble of the relevant independent claim denoted that the phrase "centrifugal unit" encompassed both a centrifugal component and a plurality of tubes. ${ }^{1324}$ The specification and other independent claims indicated that the centrifugal unit did not include the tubes. ${ }^{1325}$ The court ruled that " $[t]$ he patentee's inconsistent use of identical height and radius limitations for two different embodiments thus indicates that 'the centrifugal unit' in the context of the dimensional limitations must have different meanings in the context of different claims." ${ }^{1326}$

## d. A case on incorporating structural limitations into method claims

In Akamai Technologies, Inc. v. Limelight Networks, Inc., ${ }^{1327}$ the Federal Circuit rejected the argument that it is improper to incorporate structural limitations into a method claim. ${ }^{1328}$ The district court had construed method claims related to the delivery of web content by requiring that the claimed "given name server" to be selected was the "alternative domain name system." ${ }^{1329}$ On appeal, the patent holder argued that the construction "improperly incorporated a structural limitation" into the method claims. ${ }^{1330}$ The Federal Circuit disagreed, nothing that method claims commonly recite structural details, and those can be "properly included" in the claim. ${ }^{1331}$ Accordingly, the Court affirmed the construction. ${ }^{1332}$

## e. The impact of the preamble on the construction of claim language

One often recurring question is the extent to which the preamble to a claim acts as a separate claim limitation. The court considered that question in a number of cases in 2010.

[^123]In Marrin v. Griffin, ${ }^{1333}$ the Federal Circuit found that the preamble did not act as a limitation. ${ }^{1334}$ The patent described a scratch-off label used to mark beverage containers and cups so that, when attending a party, guests can keep track of their cups. ${ }^{1335}$ On appeal, the defendants argued that the district court erred in failing to treat the preamble language-"[a] scratch-off label for permitting a user to write thereon without the use of a marking implement"-as a separate limitation. ${ }^{1336}$

The Federal Circuit admitted that "clear reliance on a preamble during prosecution can distinguish a claimed invention from the prior art and render the preamble a claim limitation," but found no such reliance in the prosecution history. ${ }^{1337}$ To the contrary, the original version of the claims included the limitation "in legible lines, thereby providing a writing means whereby a person can mark on the label without the need for a writing implement."1338 ${ }^{11}$ The applicants told the examiner during prosecution that "writing means is not an element of Applicant's claims, and does not appear in the new claims." ${ }^{1339}$ "Because the [applicants] expressly attested that the 'writing means' language was not a claim limitation, they cannot now assert that it was such a limitation. "1340

In dissent, Judge Newman wrote that "precedent establishes that the preamble limits the claims when it distinguishes the use of the claimed article from the prior art,... as well as when it contains language that is essential to the description of the invention." ${ }^{1341}$ And she asserted that the patentees had relied on the preamble language to distinguish prior art during the prosecution. ${ }^{1342}$

Similarly, in American Medical Systems, Inc. v. Biolitec, Inc., ${ }^{1343}$ the Federal Circuit found that a disputed preamble term did not limit the asserted claims. ${ }^{1344}$ There, the preamble to each of the asserted claims contained one of two phrases, either "[a] method for photoselective

[^124]vaporization of the tissue" or "[a]n apparatus for photoselective vaporization of tissue. ${ }^{1345}$

The Federal Circuit concluded that "photoselective vaporization" was not a claim limitation. ${ }^{1346}$ In reaching that determination, the court noted that nothing in the prosecution history suggested that the inventors included the preamble language to distinguish their invention from prior art systems. ${ }^{1347}$ Moreover, the preamble term is not "a necessary antecedent basis" for interpreting the claim language, and it provides no "context essential to understanding" to meaning of the body of the claim. ${ }^{1348}$ Nor does the use of "photoselective" in the preamble embody an essential component of the invention. ${ }^{1349}$ Rather, it "is simply a descriptive name for the invention that is fully set forth in the bodies of the claims. ${ }^{1350}$

The court also noted that some of the apparatus claims identified preferred laser wavelengths, and others did not. ${ }^{1351}$ In light of this inconsistency, if "photoselective" were independently limiting, then it would either be redundant or in conflict with the specific wavelength range set forth in the body of those claims. ${ }^{1352}$ Likewise, the claim language of the asserted method claims made clear that no particular wavelength was required by the claims. ${ }^{1333}$ In short, "the language in the body of the claims recites a complete invention for achieving the stated purpose of applying laser radiation in a high volumetric power density." ${ }^{1}$

Finally, the court looked to the specification and found that it further confirmed that "photoselective vaporization" is a label "for the overall invention and not a limitation on the claims." ${ }^{13555}$ More specifically, the court held that the specification shows that, while wavelength is one of the variable employed in the invention, the claims are not limited to particular wavelengths exhibiting particular levels of differential absorption in tissue and water. ${ }^{1356}$

In dissent, Judge Dyk observed that the jurisprudence on when a preamble is a limitation is confusing, and he argued for a clear rule: "[I]t seems to me that a rule recognizing that all preambles are

[^125]limiting would make better sense and would better serve the interests of all concerned. ${ }^{11357}$ He further stated that the time has come for the Federal Circuit to sit en banc to finally resolve the ambiguity in the rule. ${ }^{1358}$

In contrast to these first two cases, in Vizio, Inc. v. ITC, ${ }^{1359}$ the court did conclude that the preamble limited the scope of the claims. In particular, the court noted that the preambles of two of the claims provided that the claims were directed to "an apparatus for decoding a datastream" and "a method for decoding MPEG compatible packetized program information," respectively. ${ }^{1360}$ The court held that this preamble language is properly construed as a claim limitation, because "'decoding' is the essence or a fundamental characteristic of the claimed invention." ${ }^{1361}$ Without the preambles' limiting language describing the intent to decode, "the apparatus of claim 1 and the method of claim 23 would have little meaning.,"1362

Finally, in Hearing Components, Inc. v. Shure, Inc., ${ }^{1363}$ the court again found preamble language to impose a claim limitation. In particular, the patent which was directed to a hearing aid earpiece with disposable wax guard, included the preamble language providing that "said wax guard being readily installed and replaced by a user."

Looking to the prosecution history, the Federal Circuit held that the patent applicant had clearly relied on the "readily" statement in the preamble in distinguishing the patent from the prior art. ${ }^{1364}$ Moreover, the claim recites a membrane that permits a user to position a guard over an outlet port, but the "readily installed" phrase refers to the entire wax guard and "therefore is more limiting." ${ }^{1365}$ Based on these factors, the Federal Circuit concluded that the "readily installed" phrase was a claim limitation. ${ }^{1366}$

[^126]
## f. Cases noting the importance of giving effect to all claim language

In Haemonetics Corp. v. Baxter Healthcare Corp., ${ }^{1367}$ the Federal Circuit reaffirmed the importance of giving effect to all of the language in the claims. There, the claim language called for "[a] centrifugal unit comprising a centrifugal component and a plurality of tubes... with the centrifugal unit having a radius between 25 and 50 mm and a height between 75 and $125 \%$ of the radius.".1368 The dispute between the parties was whether the reference to the radius of the "centrifugal unit" included the tubes or only the vessel itself.

The Federal Circuit emphasized that it must "construe claims with an eye toward giving effect to all their terms . . . even if it renders the claims inoperable or invalid." ${ }^{1369}$ The court held that the preamble's use of "A centrifugal unit comprising a centrifugal component and a plurality of tubes" "unambiguously defines 'centrifugal unit' as 'comprising' two structural components: a centrifugal component and a plurality of tubes... [and] then recites, not the centrifugal component and not $a$ centrifugal unit, but 'the centrifugal unit' as 'having a radius between 25 and 50 mm and a height between 75 and $125 \%$ of the radius." ${ }^{1370}$ The court found that failing to include the tubes in the radius calculation would impermissibly "fail to give effect to the claim language 'comprising a centrifugal component.'"1371

## g. Effect of listing claim elements separately

In Becton, Dickinson $\mathcal{E}$ Co v. Tyco Healthcare Group, $L P{ }^{1372}$ the Federal Circuit discussed the implications for claim construction when a claim lists multiple elements. There, the relevant claim language referred to "[a] shieldable needle assembly comprising: a needle cannula ...; a guard...; a hinged arm ...; spring means connected to said hinged arm for urging said guard along said needle cannula." ${ }^{1373}$ In construing this language, the district court held that the claim "did not require a spring means that was a distinct structural element from the hinged arm. ${ }^{11374}$

[^127]The Federal Circuit reversed the trial court. According to the Court, "where a claim lists elements separately, 'the clear implication of the claim language' is that those elements are 'distinct component[s]' of the patented invention." ${ }^{1375}$ The court also noted that if the two separate phrases were understood to refer to a single structure, then the claims would become nonsensical. ${ }^{1376}$ "A claim construction that renders asserted claims facially nonsensical 'cannot be correct." ${ }^{1377}$

## 2. The specification as a tool for claim construction

The Federal Circuit has long held that claims "must be read in view of the specification, of which they are a part. ${ }^{11378}$ Indeed, the court has indicated that the specification is often the single best guide to the meaning of a disputed term. ${ }^{1379}$ The court's decisions in 2010 showed that this principle remains alive and well.

## a. Using the specification to clarify ambiguous claim language

In Schindler Elevator Corp. v. Otis Elevator Co., ${ }^{1380}$ the Federal Circuit looked to the specification to confirm its understanding of claim language in a patent involving a device for calling an elevator. ${ }^{1381}$ In particular, the claim called for an "information transmitter" and a "recognition device." The dispute surrounded the extent to which these were required to work automatically (i.e., without user input). The court relied heavily on language in the specification to resolve the dispute. The court noted that the specification called for information to be "communicated automatically," and for this to occur "without any personal action" by the elevator user. But, the court further noted that the way in which "personal action" was used in the specification made it clear that not all user action (e.g., walking into the lobby) was "personal action." Rather, automatically or

[^128]without personal action merely meant that the user did not manually call the elevator. ${ }^{1382}$

Likewise, in Power-One, Inc. v. Artesyn Techs., Inc., ${ }^{1383}$ the court was required to interpret the phrase "point-of-load regulators" (POL regulators) in a patent claiming a power control system that includes a plurality of POL regulators connected to a "system controller" by a serial data bus. ${ }^{1384}$ The patent did not expressly define the term "POL regulator," but the lower court construed the claim language to require that the POL regulator be, inter alia, "near" the devices being powered. ${ }^{1385}$

On appeal, Artesyn challenged the district court's construction, claiming that "near" was facially vague and subjective. ${ }^{1386}$ The Federal Circuit, however, rejected this argument. The court held that relative terms like "near" are "insolubly ambiguous only if they provide no guidance to those skilled in the art as to the scope of that requirement." ${ }^{1387}$ The court found that specification language provided such guidance. It stated that the POL regulator would be located "just upstream from the load being powered," and also provided that "[i]deally, the POL regulator would be physically located adjacent to the corresponding electronic circuit so as to minimize the length of the low voltage, high current lines through the electronic system. ${ }^{11388}$ According to the court, this provided sufficient guidance that "a skilled artisan in distributed power systems would know where to place the regulator to accomplish that stated objective." ${ }^{1389}$

The Federal Circuit turned to the specification to construe two disputed claim terms in Rolls-Royce, PLC v. United Technologies Corp. ${ }^{1390}$ The case involved patents related to turbofan jet engines that used swept fan blades to reduce noise and increase efficiency. ${ }^{1391}$

[^129]The key issue on appeal was the extent to which the patents covered fan blades that were swept forward. ${ }^{1392}$ The Rolls-Royce patent clearly did-it claimed a fan structure for use in a turbofan jet engine featuring individual blades with leading edges that, at the outer edge, "defin[e] a forward sweep angle." ${ }^{1393}$ The question, though, was whether the United Technologies patent also claimed such a fan structure. In that patent, the relevant claim called for the fan blade's leading edge to be "translated forward relative to a leading edge with the same sweep angle as an outward boundary of the intermediate region to provide a sweep angle that causes the blade to intercept the shock." ${ }^{1394}$ "Translated forward" and "a sweep angle that causes the blade to intercept the shock" were the contested terms. ${ }^{1395}$

The BPAI had construed "a sweep angle that causes the blade to intercept the shock" as "broad enough to cover fan blades with an outer region that has a rearward sweep angle or a forward sweep angle. ${ }^{1396}$ Rolls-Royce appealed, and the district court reversed. ${ }^{1397}$ According to the court, the relevant language included blades with an outer region which is moved axially forward and has a rearward sweep angle. ${ }^{1398}$

The Federal Circuit construed "translated forward" and "a sweep angle that causes the blade to intercept the shock" in the patent application by looking at the plain language of the terms, the specification, and the prosecution history. ${ }^{1399}$ When the plain language of the terms was inconclusive, the Federal Circuit turned to the specification. ${ }^{1400}$

Based on the specification, the Federal Circuit concluded that "translated forward" meant "moved forward toward the axial direction. ${ }^{1401}$ In reaching that result, the court relied on figures in the specification and their accompanying text. In this text, the patentee used the term "translated forward" in that manner, and the court "honor[ed] the applicant's choice to define that term with reference to the axial direction. ${ }^{1402}$

[^130]Additionally, based on the specification the court constructed the term to mean "a rearward sweep angle in the outer region that is constant or decreasing., ${ }^{1103}$ The text of the specification states that the sweep angle is "nonincreasing (decreases, or at least does not increase) with increasing radius." ${ }^{1104}$ Based on this language and the embodiments described in the specification, the Federal Circuit concluded that the patent did not contemplate forward sweep in the outer region. ${ }^{1405}$

In Trading Technologies International, Inc. v. eSpeed, Inc., ${ }^{1406}$ the Federal Circuit affirmed the lower court's construction of "static" in view of the specification. ${ }^{1407}$ The case involved a patent for displaying commodity prices, and called for transactions to be displayed on a grid comprised of "static" price levels. TTI argued for a construction of "static" that allowed for some changes in price levels based on the specification, which reads "[t]he values in the price column are static; that is, they do not normally change positions unless a re-centering command is received." The district court, however, said that static meant that the prices could not change at all, absent a manual recentering command. In the patentee's view, this made two important changes to the claim-adding "manual" in front of command (thus not allowing for automatic re-centering commands) and deleting "normally" (i.e., the prices could not change at all absent a recentering command).

The Federal Circuit affirmed the district court based on its review of the specification. It noted that after raising "re-centering commands," "from that point forward, the specification only discusses manual re-centering commands" and contains no reference to any kind of automatic re-centering command. The specification also referred to improving the prior art through the present invention by adopting "a one click centering feature., ${ }^{1108}$ The court read "one click" to require manual input. ${ }^{1409}$

With respect to the district court's deletion of "normally" from the specification definition, the court held that allowing automatic changes to the price axis in response to market changes would "defy the invention's goal to 'ensure[] fast and accurate execution of

[^131]trades." ${ }^{1140}$ If the display was only "normally" static, the prices could change just as the trader was getting ready to execute a trade, causing him to make a trade he did not intend to make. ${ }^{1411}$

The specification also played a critical role in the Federal Circuit's construction of three disputed claim terms in Silicon Graphics, Inc. v. ATI Technologies, Inc. ${ }^{1412}$ This case involved a patent relating to computer graphics systems such as the type used to animate the Pixar Animation Studios movies Toy Story and Wall-E. ${ }^{1413}$ In relevant part, the patent describes "[a] computer system comprising... a rasterization circuit coupled to the process that rasterizes the primitive according to a rasterization process which operates on a floating point format; ... wherein the rasterization circuit performs scan conversion on verticies having floating point color values."1144

On appeal, Silicon Graphics ("SG") challenged the district court's construction of three claim terms: "a rasterization process," "scan conversion," and "s10e5."1415 The district court construed "rasterization" to mean "a graphics operations that translates threedimensional primitives into a set of corresponding fragments or pixels or both and fills them in. ${ }^{11416}$ The district court noted that this encompassed "two specific aspects: (1) translating three-dimensional primitives into a set of corresponding pixels and fragments and (2) filling in those pixels or fragments" and that the "process as a whole operates on a floating point format." ${ }^{1117}$

On appeal, SG argued that the relevant claims in the patent referred to one or more rasterization processes, not a single process, and that not all of the separate processes need be floating point. Instead, SG argued that "a rasterization process" should be construed to mean that "one or more' of the rasterization processes (e.g., scan conversion, color, texture, fog, shading) operate in floating point format." ${ }^{1418}$

Relying heavily on the language in the specification, the Federal Circuit agreed with SG. The court found that the patent specification explicitly teaches that rasterization "consists of multiple processes: 'The processes pertaining to scan converting, assigning colors, depth buffering, texturing, lighting, and anti-aliasing are collectively known

[^132]as rasterization." "1419 Thus, the claim reference to "a rasterization process," actually refers to "one of the subsets of rasterization." ${ }^{1420}$ Accordingly, the limitation "a rasterization process which operates on a floating point format" means "one or more of the rasterization processes operate on a floating point format." ${ }^{1421}$ In addition to the specification, the claim language supported this construction. As such, the court reversed the district court's construction.

As for "scan conversion," the dispute again centered around whether the conversion must be done in floating point format, with SG contending that it need not be. ${ }^{1422}$ Here, however, the Federal Circuit disagreed with SG. The court noted that the Summary of Invention states that "[s]pecifically, the scan conversion process is now handled entirely on a floating point basis." ${ }^{1423}$ While other parts of the specification state that "one or several" rasterization operations can be performed in fixed point without departing from the scope of the invention, the "specification never states that scan conversion is one of those operations." ${ }^{1424}$ To the contrary, "when the specification refers to the specific process of 'converting a projected point, line, or polygon, or the pixels of a bitmap or image, to fragments, each corresponding to a pixel in the frame buffer,' it also teaches that 'this rasterization process is performed exclusively in a floating point format.'"1425

As for the final term, "s10e5," the district court had construed the term to mean "a 16 bit floating point format composed of one sign bit, ten mantissa bits, and five exponent bits, with an exponent bias of 16." ${ }^{1426}$ In reaching that result, the district court had relied on specification language that "the 16-bit floating point format utilized in one embodiment of the present invention is designated using the nomenclature, 's10e5,' where 's' specifies one (1) sign bit, '10' specifies ten (10) mantissa bits, and 'e5' specifies five (5) exponent bits, with an exponent bias of $16 .{ }^{, 1427}$ SG, however, argued that the construction should not have included the exponent bias.

After reviewing the specification, the Federal Circuit agreed with SG. The court found nothing in the specification to suggest the

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1419. Id., 95 U.S.P.Q.2d (BNA) at 1422.
1420. Id., 95 U.S.P.Q.2d (BNA) at 1422.
1421. Id. at 790-791, 95 U.S.P.Q.2d (BNA) at }1422
1422. Id. at 791, 95 U.S.P.Q.2d (BNA) at 1423.
1423. Id., 95 U.S.P.Q.2d (BNA) at 1423.
1424. Id., 95 U.S.P.Q.2d (BNA) at 1424.
1425. Id., 95 U.S.P.Q.2d (BNA) at 1424.
1426. Id. at 792,95 U.S.P.Q.2d (BNA) at 1424.
1427. Id., 95 U.S.P.Q.2d (BNA) at 1424.
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patentee intended to make that particular embodiment of s10e5 coextensive with the claims. ${ }^{1428}$

In Becton, Dickinson $\mathcal{E}$ Co v. Tyco Healthcare Group, LP, the Federal Circuit also looked at the specification in addition to the language of the claims. Based on the specification, the court discovered that "the only elements disclosed in the specification as 'spring means' for urging the guard forward are separate structures from the hinged arm and its hinges." ${ }^{1429}$ The court held that "the specification comports with the plain language of the claims, fully supporting the conclusion that the spring means is a separate structural component of the patented invention."

In Spansion, Inc. v. ITC, ${ }^{1431}$ the court relied on the specification to confirm the common and ordinary understanding in the art of certain claim language. The patent-at-issue involved a semiconductor assembly, and it called for "bonding wires" that extend "downwardly alongside" the edges of the chip. ${ }^{1432}$ The particular question was whether the bonding wires could first extend up and away before moving downward and still meet the claim limitation. The Commission had held that "downwardly alongside" meant "along the side of the semiconductor chip" ${ }^{1433}$ based on the specification describing "bonding wires as conventional and the understanding of one of skill in the art that the conventional wire bonding process may cause bonding wires to extend up, out, and then down."

The Federal Circuit rejected appellants' argument that this construction renders "alongside" superfluous because it does not specify how far from the semiconductor chip edge the bonding wires are allowed to fan out. ${ }^{1435}$ Looking at the specification, the court noted that the figures use conventional bonding, in which wires may extend up and outward before moving downward. Further, Appellants concede "all accused products use [such] conventional wire bonding" and failed to "point to any language in the specification that discloses wires bonded in a different manner., ${ }^{1436}$

In Lazare Kaplan International, Inc. v. Photoscribe Technologies, Inc., ${ }^{1437}$ the Federal Circuit reversed the district court's claim construction in a case involving an invention for using a fixed laser for

[^133]microinscription of gemstones based on the language of the claims and the specification. ${ }^{1438}$ The patent called for "controlling the directing of the focused laser energy based on the marking instructions and the imaging, to selectively generate a marking on the gemstone based on the instructions." ${ }^{1139}$ Based on plain meaning and two passages in the specification, the district court had construed this term to mean that the user generated the marking instructions, but that only automatic feedback could be use to control the laser once the burn process started.

On appeal, Lazare argued that the specification makes clear that the language "encompasses control based on both automated and manual feedback that occurs either before or during the laser burn process." ${ }^{1440}$ The court agreed with Lazare, finding nothing in the language of the claims precluded manual feedback during the marking process. ${ }^{1441}$ Turning to the specification, the court noted the language cited above. As for the specification language on which the district court relied, the court acknowledged "this sentence 'does not talk about those operations being done by a human operator,' but neither does the sentence foreclose a role for a human in the optical feedback process." ${ }^{1442}$ Moreover, the next sentence in the specification did contemplate a human role, and throughout the rest of the specification there are multiple references to things the "user" can do. ${ }^{1433}$ The court considered the statements together to find that "one of ordinary skill in the art at the time of the invention would have understood the term 'controlling the directing ... based on ... the imaging' to include control based on either automated or manual feedback derived from optical images of a gemstone . . . ."1444

In Intervet Inc. v. Merial Ltd., ${ }^{1445}$ the Federal Circuit similarly relied on the patent specification in reversing the district court's claim construction, albeit in a split decision. ${ }^{1446}$ The patent related to isolation of pathogenic strains of Postweaning Multisystemic Wasting Syndrome ("PMWS"), a disease affecting livestock pigs. ${ }^{1477}$ Merial isolated certain strains of porcine circovirus, previously believed to be nonpathogenic, that were pathogenic and associated with PMWS. ${ }^{1448}$

[^134]Merial dubbed this type of circovirus "PCV-2." ${ }^{1449}$ The patent categorizes previously known, nonpathogenic circoviruses as belonging to category "PCV-1," and the patent identifies five pathogenic porcine circovirus strains as being representative of the new PCV-2. ${ }^{1450}$ In relevant part, the patent claims "[a] vector comprising an isolated DNA molecule comprising a sequence selected from the group consisting of ORFs ${ }^{1451} 1$ to 13 of porcine circovirus type II., ${ }^{1452}$ Following a Markman hearing where the district court construed "porcine circovirus type II" and "ORFs 1-13", the district court entered summary judgment of non-infringement. ${ }^{14: 3}$

On appeal, Merial challenged the district court's claim construction on each of these terms. ${ }^{1454}$ As to the first, the district court had limited "porcine circovirus type II" to the five examples disclosed in the specification. ${ }^{1455}$ The Federal Circuit, however, rejected that reading. ${ }^{1456}$ In doing so, the court looked to the specification, which described the five deposited strains as "representative of" a "type of porcine circovirus." ${ }^{1457}$ According to the court, "[s]equences [will be] representative of the scope of broader genus claims if they indicate that the patentee has invented species sufficient to constitute the genera." ${ }^{11458}$ "Claims properly directed to a genus may be adequately supported by the patent disclosure if a sufficient number of species is disclosed so as to properly identify the scope of the genus." ${ }^{1459}$ The court found that test met here. ${ }^{1460}$

The Federal Circuit likewise rejected the district court construction of "ORFs 1-13," which had limited the term to only exact copies of the specific ORFs enumerated in an example disclosed in the patent specification. ${ }^{1461}$ The Federal Circuit observed that the specification "explains that the ORFs listed in the table are representative, and one of skill in the art would understand that slight natural variation is to

[^135]be expected." ${ }^{1462}$ The court further noted that limiting the term as the district court had would "exclude from the claimed ORFs two of the four sequenced strains of PCV-2, the ORF variations for which sequences are expressly disclosed following the table in Example 13. ${ }^{1163}$

Judge Dyk, in dissent, endorsed the district court's construction of "ORFs 1-13." ${ }^{1464}$ Looking at the specification, he noted that the patent contains an assertion that the " 13 ORFs are the following" and then provides a description of the 13 ORFs. ${ }^{1465}$ According to Judge Dyk, because the patentee had acted as his 'own lexicographer and clearly set forth a definition of the disputed claim term,' the definition in the specification controls." ${ }^{1466}$

## b. Using the specification to limit claims

While the court can rely on the specification as an interpretive tool, the court generally should not read the specification as adding claim limitations. In Silicon Graphics, Inc. v. ATI Technologies, Inc., ${ }^{1467}$ for example, the court reversed a district court claim construction for improperly using the specification to impose claim limitations: "A construing court's reliance on the specification must not go so far as to 'import limitations into claims from examples or embodiments appearing only in a patent's written description... unless the specification makes clear that 'the patentee . . . intends for the claims and the embodiments in the specification to be strictly coextensive., ${ }^{1168}$ In that case, the Federal Circuit found nothing in the specification to suggest the patentee intended to make that particular embodiment coextensive with the claim term at issue. ${ }^{1469}$

In Akamai Technologies, Inc. v. Limelight Networks, Inc., ${ }^{1470}$ by contrast, the court did find that the specification language limited the claims. ${ }^{1471}$ There, the patent involved methods to improve the delivery of content from internet sites to individual users. ${ }^{1472}$ The dispute involved the claim language "associated with an

[^136]alphanumeric string., ${ }^{1473}$ The district court construed the limitation to require "that the alphanumeric string include the embedded object's original URL (the URL including the hostname of the computer on which the actual object resided within the content provider's domain)." ${ }^{1474}$ The district court found that "[t]he specification discloses no other way [except the original URL] that an object is associated with an alphanumeric string, nor is there any suggestion or teaching that an association which did not include the URL for the embedded object could be used in an embodiment of the invention." ${ }^{1475}$

On appeal, Akamai argued that the district court improperly "imported a limitation from the specification into the claims and thereby limited the scope of the claims to the specification's preferred embodiment. ${ }^{11476}$ The Federal Circuit, however, rejected that argument, noting that including the original URL in the alphanumeric strings was "not merely discussed as a preferred embodiment. ${ }^{1477}$ "Instead, the written description specifically refers to strings including the object's original URL as 'the invention.'"1478 The court then listed five additional quotes from the specification confirming that conclusion. ${ }^{1479}$ According to the court, "the specification as a whole makes clear that including the object's original URL is the only method to achieve the claimed association between an alphanumeric string and the embedded object. Indeed it is the only method described.'

## c. Claims generally should not be construed to exclude preferred embodiments

The court also reaffirmed its oft-stated principle that generally a claim construction should not be read to exclude the preferred embodiment. In SEB S.A. v. Montgomery Ward $\mathcal{E}$ Co., ${ }^{1481}$ the court held that "[a] construction that would not read on the preferred embodiment would rarely if ever be correct and would require highly persuasive evidentiary support." ${ }^{1482}$ Accordingly, the court found that

[^137]the limitation at issue in that case "cannot be read so broadly as to exclude th[e] preferred embodiment." ${ }^{1883}$

On the other hand, the court also noted that there are exceptions to that principle. In Baran v. Medical Device Technology, ${ }^{1884}$ Baran filed suit alleging infringement of two patents directed to automated biopsy instruments. ${ }^{1485}$ The dispute on appeal centered on the meaning of "detachable" and "releasably engaging." ${ }^{1486}$ One asserted claim required that the "stylet means" be "detachable" from the "cannula means," and required the "biopsy actuator" to have a means for "releasably and fixedly" engaging another claimed element. ${ }^{1487}$ The district court had construed those terms as requiring the ability to remove the parts without loss or damage to other parts. ${ }^{11}$

On appeal, the patentee proposed a definition for the terms "detachable" and "releasably" that did not include the "without loss or damage" condition. ${ }^{1489}$ He claimed that imposing that condition would exclude one of the disclosed embodiments. ${ }^{1990}$

The Federal Circuit was not persuaded. ${ }^{1491}$ It noted that there is no reason that every patent claim must read on every embodiment. ${ }^{1492}$ In this instance, a different claim of the patent-in-suit read on the embodiment on which the patentee relied. ${ }^{1993}$ Thus, there was no need to construe the asserted claim to also read on that embodiment. ${ }^{194}$

## 3. Prosecution history

It is well settled that in performing claim construction, the court should also take into account the patent's prosecution history. ${ }^{1495}$ "[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

[^138]would otherwise be." ${ }^{1996}$ In 2010, the Federal Circuit considered the impact of prosecution history on claim meaning in several decisions.

## a. Using prosecution history to construe ambiguous terms

In i4i Limited Partnership v. Microsoft Corp., the court found strong evidence in the prosecution history that i4i did not intend the claim term "distinct" to require separate files. ${ }^{1497}$ In particular, in distinguishing its invention from the Mizuta prior art patent, i4i described Mizuta as "stor[ing] 'all document information . . . in one file ... the document file.' ...i4i, and then explained that Mizuta 'lacked any notion of . . 'distinct storage means." ${ }^{11988}$ The court read this evidence as support for construing distinct to mean separate. ${ }^{1499}$

In Trading Technologies International, Inc. v. eSpeed, Inc., the Federal Circuit was faced with the question of whether a "static price display" did not move, or normally did not move. ${ }^{1500}$ In addition to information that the court gleaned from the specification, the court also found that the patentees had jettisoned the word "normally" during patent prosecution. ${ }^{1501}$ The examiner initially rejected the claims because "static display was vague and indefinite."1502 The examiner asked the applicants "to claim 'to what extent,' 'to what degree,' and 'on what basis' the displays 'change." ${ }^{1503}$ In response, the applicants explained "the values in the price column ... do not change (unless a re-centering command is received). ${ }^{1504}$ According to the court, this disclaimed the idea of "normally."1505

## b. Role of the prosecution history of other patent applications

In Rolls-Royce, PLC v. United Technologies Corp., involving an interference proceeding, UTC attempted to point to the prosecution history of a related application to support its claim construction for "translated forward." ${ }^{1506}$ In particular, UTC referred the court to the
1496. Id., 5 U.S.P.Q.2d (BNA) at 1329 (citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582-83 (Fed. Cir. 1996)).
1497. i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 842-43, 93 U.S.P.Q.2d (BNA) 1943, 1952 (Fed. Cir. 2010).
1498. Id., 93 U.S.P.Q.2d (BNA) at 1952.
1499. Id., 93 U.S.P.Q.2d (BNA) at 1952.
1500. Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1352, 93 U.S.P.Q.2d (BNA) 1805, 1814 (Fed. Cir. 2010).
1501. Id. at 1355, 93 U.S.P.Q.2d (BNA) at 1814.
1502. Id. at 1354, 93 U.S.P.Q.2d (BNA) at 1815.
1503. Id., 93 U.S.P.Q.2d (BNA) at 1815.
1504. Id., 93 U.S.P.Q.2d (BNA) at 1815.
1505. Id., 93 U.S.P.Q.2d (BNA) at 1815.
1506. Rolls-Royce, PLC v. United Techs. Corp., 603 F.3d 1325, 1333 (Fed. Cir. 2010) (arguing that "translated forward" means "moved forward toward the direction of the relative velocity vector").
prosecution history of its related patent in which "translated" was used in connection with the embodiments disclosed in two figures that also appeared in the patent-in-issue. ${ }^{1507}$ The court rejected this evidence, not because prosecution history from related patents can never be considered, but because here the related patent prosecution history addressed only the term "translation," while the court's construction of "translated forward" was primarily focused on identifying the direction indicated by "forward." ${ }^{1508}$ Ultimately, the court declined to unreasonably broaden a specific claim term based on "questionable prosecution history when the specification requires a particular construction."1509

Similarly, in Spansion, Inc. v. ITC, the court was again asked to consider the prosecution history of a related patent, but concluded that it did not provide relevant information. ${ }^{1510}$ More specifically, in construing the claim term "downwardly alongside," the court looked first to the specification, but then also considered the prosecution history of the patent-in-suit. ${ }^{1511}$ During prosecution of that patent, the applicant argued that it had disclaimed certain subject matter during the prosecution of a related patent. ${ }^{1512}$ The court reviewed the prosecution history for the related patent, however, and found that the disclaimers involved subject matter outside the patent-in-suit and thus did not apply. ${ }^{1513}$

## c. Prosecution disclaimer

Consistent with its previous jurisprudence, in Schindler Elevator Corp. v. Otis Elevator Co., the Federal Circuit again noted that actions during prosecution can constitute a disclaimer, thereby "narrow[ing] the scope of a claim." ${ }^{1514}$ The court also noted, however, that "[a]n argument made to an examiner constitutes a disclaimer only if it is 'clear and unmistakable.'"1515 In Schindler, the court reversed a lower

[^139]court claim construction that had relied on a prosecution disclaimer, finding that the patentee had not unambiguously disavowed the subject matter. ${ }^{1516}$

In Vizio, Inc. v. ITC, the Federal Circuit also addressed the issue of disclaimer. ${ }^{1517}$ There, during prosecution the examiner had rejected the claims that were later asserted in the suit as anticipated by a particular prior art reference. ${ }^{1518}$ The patentees had argued over the objection making assertions about both the patented invention and the prior art reference. ${ }^{1519}$ The court held that the arguments constituted a limited disclaimer, narrowing the patent claims, although not to the extent that the alleged infringer desired. ${ }^{1520}$

In ERBE Electromedizin GmbH v. Canady Technology LLC, the court relied on the prosecution history to confirm the construction that it adopted based on claim language. ${ }^{1521}$ The patent in ERBE related to argon gas enhanced electrosurgical products for electrosurgery. ${ }^{1522}$ The question was the meaning of the claim term "low flow rate." ${ }^{1523}$ Following a Markman hearing, the district court construed "low flow rate" to mean "a rate of flow less than about 1 liter/minute and producing flow velocities less than $19 \mathrm{~km} /$ hour such that the gas exiting through the distal end opening forms a non-laminar inert gas temperature., ${ }^{1524}$

In upholding the district court's construction, the Federal Circuit began with the claim language, noting that one of the claims describes "low flow rate" as being "less than about 1 liter/minute," ${ }^{1525}$ while another explains that "low flow rate" is "a not directed, nonlaminar stream. ${ }^{1526}$ Likewise, the specification stated that the patented invention sought to overcome the problems caused by directed gas flow by claiming "low argon gas flows that produce a low, not directed, non-laminar stream of gas exiting the tube. ${ }^{, 1527}$ The specification provides an exemplary flow rate of less than 1 liter per minute. ${ }^{1528}$

[^140]The court then looked to the prosecution history to confirm this understanding. ${ }^{1529}$ In particular, during prosecution, the applicant had distinguished a prior art reference by focusing on the fact that the new invention used "very low flow rates (i.e. about 1 liter per minute)," while in the prior art reference "the specific flow rate may be adjusted from 1-12 liters per minute., ${ }^{1530}$ Although ERBE argued that this language in the prosecution history should not be treated as a limitation because there was no express disclaimer, the court noted that "the examiner had rejected the pending claims with a low flow rate in light of the prior art until the applicants distinguished their invention." ${ }^{1531}$

## d. The effect of amendments

In Comaper Corp. v. Antec, Inc., ${ }^{1532}$ the Federal Circuit addressed the effect of amendments to claim language that occur during prosecution. ${ }^{1533}$ During prosecution, the application, which was directed to a cooling device for a computer drive, was repeatedly rejected as anticipated by a particular prior art reference. ${ }^{1534}$ To distinguish the prior art reference, the applicants and the examiner agreed to add a claim limitation stating that the "case occupies substantially the entire drive bay slot., ${ }^{11535}$ "Because the phrase . . . was added to distinguish [a prior art reference], the use of the term 'slot' in [that reference] is significant." ${ }^{1536}$ The reference had defined "slot" as the two-dimensional opening in the computer housing, which the court adopted as the meaning for the patent as well. ${ }^{1.337}$

Arguments based on amendments during prosecution history may not be enough, however, to overcome other sources of evidence. In Akamai Techs., Inc. v. Limelight Networks, Inc., discussed above, Akamai attempted to use the prosecution history to support its claim construction for "associated with an alphanumeric string." ${ }^{1538}$ As noted above, the district court construed the limitation to require that the alphanumeric string include a URL. On appeal, Akamai urged the court to look at the prosecution history. During an examiner interview in connection with a preliminary amendment the patentee had asserted that "alphanumeric string" could be comprised

[^141]of just the host name. ${ }^{1539}$ The court, however, was not persuaded: "Even if we agreed with Akamai that the patentee indicated in the prosecution history that the alphanumeric string associated with an object could include only a hostname, this is not enough to overcome the clear description of the invention in the specification." ${ }^{1540}$

## 4. Extrinsic evidence

All materials used to interpret a claim term that is extrinsic to the patent-i.e., materials other than the claims, specification, written description, and prosecution history-are collectively referred to as "extrinsic evidence." Examples include expert and inventor testimony, dictionaries, and learned treatises. ${ }^{1541}$ Extrinsic evidence generally carries less weight than evidence in the intrinsic record.

While not breaking new ground on the use of extrinsic evidence, the Court did address the issue in a few cases in 2010.

## a. Using dictionaries to construe a claim

In Comaper Corp. v. Antec, Inc., ${ }^{1542}$ the Federal Circuit confirmed that it is appropriate to consult a dictionary for guidance when the specification does not suggestion a particular construction for a claim term. The district court had construed "case" to mean "a structure for containing and holding something," ${ }^{1543}$ rejecting a narrower reading urged by the patent holder. ${ }^{1544}$ In reaching its decision, the district court consulted a general dictionary definition for guidance. ${ }^{1545}$ The Federal Circuit approved of that use and affirmed the district court's construction. ${ }^{1546}$

## b. Using other extrinsic evidence to construe a claim

In Rolls-Royce, PLC v. United Technologies Corr., ${ }^{1547}$ the Court considered claim terms in a patent for aircraft engine fan blades that used a rearward sweep to reduce shockwaves. ${ }^{1548}$ For the construction of "a sweep angle that causes the blade to intercept the shock," the defendant, in addition to relying on the specification, presented

[^142]expert testimony on the various simulations he conducted, to support its proposed construction that certain forward sweeps fell within the term. ${ }^{1549}$ The Federal Circuit rejected that proposed construction, and in doing so rejected the defendant's argument that a person of ordinary skill in the art at the time of the invention conducting the expert's simulations would not have concluded that a forward sweep is sometimes required to practice the invention. ${ }^{1550}$ The Court also reiterated the less weight that extrinsic evidence carries, holding that "this extrinsic evidence in no way overcomes the intrinsic evidence in the specification that excludes" the very interpretation offered by the expert. ${ }^{1551}$

In AstraZeneca LP v. Apotex, Inc., ${ }^{1552}$ the defendants appealed from a preliminary injunction barring them from launching a generic version of a drug made and distributed under FDA approval by AstraZeneca, the patent holder. ${ }^{1553}$ The defendants were seeking FDA approval to manufacture and sell a generic version of the drug for a twice-daily use not claimed in the patents. ${ }^{1554}$

In addressing the defendants' argument that the claims were invalid, the Federal Circuit reiterated that questions of validity often turn on claim construction. ${ }^{1555}$ And in construing the claims, the Federal Circuit agreed with the district court that the specification supported the patent holder's proposed construction. ${ }^{1556}$ In doing so, the Federal Circuit held that the district court properly relied on the testimony of the patent holder's expert to understand how the claimed invention worked and to construe the disputed term in a manner consistent with that understanding. ${ }^{1557}$ Especially where the defendants did not take issue with the district court's reliance on expert testimony, did not seriously dispute the expert's explanation of how the claimed invention worked, and did not provide contrary testimony, the Federal Circuit saw no error in relying on the expert testimony. ${ }^{1558}$ That testimony, in combination with the intrinsic

[^143]evidence, supported the district court's construction of the term in dispute. ${ }^{1559}$

## 5. Construing means-plus-function claims

Construction of a means-plus-function claim is a two step process where the court first determines the claimed function and then identifies the corresponding structure in the written description that performs that function. ${ }^{1560}$ While it is well accepted that the "means for" phrase in a claim gives rise to a presumption that the claim is a means-plus-function claim, the question arose in Baran v. Medical Device Technology ${ }^{1561}$ regarding the placement of that phrase in the claim. The patent was directed to a biopsy needle. ${ }^{1562}$ In construing a means-plus-function claim, the district court identified two functions-a "release" function and a "retention" function. ${ }^{1563}$ The patent holder argued that no "release" function could be found because the word "release" preceded the "means for" clause and therefore merely modified the claim as "releasable," rather than expressing a function. ${ }^{1564}$ Agreeing with the district court that both functions were recited, the Court rejected the patent holder's argument regarding the placement of the term "release."1565 The relevant inquiry was whether the term is purely functional, which "release" was. It was not "an idle description" but instead performed the important function of producing a spring-loaded release on the instrument. ${ }^{1566}$ Accordingly, its placement before the "means for" phrase did not eliminate it from the claim's functional scope. ${ }^{1.567}$

## 6. Claim differentiation

The doctrine of claim differentiation creates a presumption that different terms have different meanings. ${ }^{1568}$ The doctrine serves to ensure that limitations of a dependent claim are not read into the parent claim so that the two claims would cover the same invention. The presumption, however, can be overcome by intrinsic evidence

[^144]showing that the patentee irrefutably used the terms to mean the same thing. The presumption is strongest when a different interpretation would be the only way to make a dependent claim more limiting than the independent claim on which it depends. ${ }^{1569}$

The Federal Circuit addressed claim differentiation in a number of its 2010 cases. In Bradford Co. v. ConTeyor North America, Inc., ${ }^{1570}$ the patents related to certain shipping containers including "dunnage," which is a collection of collapsible pouches that hold parts that are designed to be easily re-erected and reused multiple times. ${ }^{1571}$ All of the asserted claims required that the dunnage be "coupled to" the container in certain respects, which the district court construed to require a direct attachment. ${ }^{1572}$

On appeal, the Federal Circuit agreed with the plaintiff that the district court had erroneously construed the phrase too narrowly to require a direct attachment. ${ }^{1573}$ The Court held that, because a dependent claim clearly recited a dunnage with an indirect attachment, the doctrine of claim differentiation established the presumption that the independent claim used the phrase in a broader manner, so that the claims would in fact have different scopes. ${ }^{1574}$ Although admonishing the patent bar to not improperly represent claim differentiation as a "conclusive basis" for construing a claim, the Federal Circuit concluded that nothing in the intrinsic evidence overcame the presumption. ${ }^{1575}$

In ERBE Electromedizin GmbH v. Canady Tech. LLC, the Federal Circuit reiterated that claim differentiation is not controlling. While the doctrine "may be helpful in some cases," it is merely "one of many tools used by courts in the analysis of claim terms." Because the intrinsic evidence in that case established a particular construction, the doctrine of claim differentiation could not compel a different construction, even if the result was that surplusage may have existed in some claims. ${ }^{1576}$

In Pressure Products Medical Supplies v. Greatbatch Ltd., the Federal Circuit addressed the relevance, if any, of claim differentiation to

[^145]means-plus-functions claims. The patent at issue concerned a medical device known as an "introducer," which allows a surgeon, during the performance of a surgical procedure, to place and remove catheters or pacemaker leads in blood vessels. ${ }^{1577}$ The invention claimed a way to remove the valve of the device in a manner that would not cause significant blood loss. ${ }^{1578}$ At issue was a means-plusfunction claim with corresponding structure of a "score line." Although ultimately rejecting the district court's construction on other grounds, ${ }^{1579}$ it did not rely on the doctrine of claim differentiation. As the Court explained, it is not necessary to broadly construe a term in a means-plus-function claim to satisfy the doctrine, because such claims inherently include structures other than the corresponding structure expressly identified in the specification. Under 35 U.S.C. § 112, If 6, a means-plus-function claim "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."

## B. Infringement

## 1. Literal infringement

After a claim is properly construed, the patentee has the burden of showing that each and every element recited in the claim is found in the accused product or process in order to establish that the claim is literally infringed. ${ }^{1580}$ The absence of any one claim element in the accused product or process is sufficient to preclude a finding of literal infringement since each element is material and essential. ${ }^{1581}$

The Federal Circuit's claim construction determination often resolves literal infringement through summary judgment. For instance, where the district court's construction was correct, the Federal Circuit has affirmed summary judgment on the issue of infringement, based on the claim construction. ${ }^{1582}$ Likewise, the
1577. 599 F.3d at 1311.
1578. Id.
1579. The Federal Circuit found error in the broad definition of the term "score line" to include structures not disclosed in the specifications. Id. at 1316-17, 94 U.S.P.Q.2d (BNA) at 1266-67.
1580. Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575, 34 U.S.P.Q.2d (BNA) 1673, 1678 (Fed. Cir. 1995) (citing Becton Dickinson \& Co. v. C.R. Bard, Inc., 922 F.2d 792, 796, 15 U.S.P.Q.2d (BNA) 1097, 1099 (Fed. Cir. 1990)).
1581. Wolverine World Wide, Inc. v. Nike, Inc., 38 F.3d 1192, 1199, 32 U.S.P.Q.2d (BNA) 1338, 1345 (Fed. Cir. 1994) (quoting Perkin-Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528, 1533, 3 U.S.P.Q.2d (BNA) 1321, 1325 (Fed. Cir. 1987)).
1582. See, e.g., Trading Technologies International, Inc. v. eSpeed, Inc., 595 F.3d 1340 (Fed. Cir. 2010) (affirming summary judgment of non-infringement based on claim construction); Bid for Position, LLC v. AOL, LLC, 601 F.3d 1311 (Fed. Cir. 2010) (same); Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325 (Fed. Cir. 2010)
(same); Baran v. Med. Device Techs., Inc., 2010 WL 3178377 (Fed. Cir. 2010)

Federal Circuit has reversed claim construction and, because that controlled the infringement analysis, entered judgment for the appealing party. ${ }^{1583}$

In cases where the Federal Circuit's claim construction did not resolve the infringement issues and cases that reached the jury, various issues concerning infringement arose.

## 2. Infringement of a claim reciting capability and not actual operation

In Finjan v. Secure Computing, the Federal Circuit held that software sold in locked or inactivated form can directly infringe apparatus claims because the claims recited only a capability, not actual operation. ${ }^{1584}$ The asserted patents related to computer security software. ${ }^{1.585}$ Defendants argued that the claims required actual operability, and therefore they did not directly infringe because their products were disabled when sold. ${ }^{1586}$

The jury found direct infringement of apparatus claims. ${ }^{1587}$ On appeal, the Federal Circuit explained that, to infringe a claim that recites capability rather than actual operation, the accused device only has to be capable of the claimed operation. ${ }^{1588}$ Because that was the case with the defendants' products, the court affirmed the infringement verdict on those claims. ${ }^{1589}$

## 3. Infringement of a method claim

A basic requirement of infringement of a method claim is that every step must be performed. A contract to perform a step does not satisfy that requirement. In Lincoln National Life Insurance Co.v. Transamerica Life Insurance Co., ${ }^{1590}$ the court held that a contract to perform a step in a method claim did not establish that the step was

[^146]actually being carried out. The court required actual proof that the defendant was performing the step in question. ${ }^{1591}$

## 4. Infringement of a design patent

In 2010 the court addressed infringement of design patents, the test of which it had changed two years earlier in Egyptian Goddess, Inc. v. Swisa, Inc. ${ }^{1592}$ In that 2008 decision, the Federal Circuit eliminated the "point of novelty" requirement for infringement of a design patent, leaving the patent holder with the burden of proving infringement under only the "ordinary observer" test. ${ }^{1593}$ Under that test, the patent holder must show that an ordinary observer would think the accused infringing design and the patented design were substantially the same. ${ }^{1.594}$

In Crocs, ${ }^{1595}$ the Federal Circuit set out in detail the "ordinary observer" approach. In determining whether a design patent for footwear was infringed, it emphasized that the "ordinary observer" test requires attention to the overall appearance. ${ }^{1596}$ As the court cautioned, "the concentration on small differences in isolation" could improperly distract from the overall appearance of the design. ${ }^{1597}$ In conducting that analysis in Crocs, the court considered such ornamental elements as the curves in the design, the strap assembly, and the base of the footwear item, all of which would lead an ordinary observer to believe the products were the same. ${ }^{1598}$ Thus, the court concluded that infringement was shown.

In Richardson v. Stanley Works, Inc., the owner of a patent for the design of a multi-function carpentry tool appealed decision that its patent was not infringed by the defendant's line of tools. ${ }^{1599}$ After a bench trial, the district court entered judgment of noninfringement. ${ }^{1600}$ In reaching that conclusion, it did not consider the functional aspects of the design, considering only whether the ornamental aspects would deceive an ordinary observer into thinking the tools were the same. ${ }^{1601}$ The Federal Circuit upheld the non-

[^147]infringement judgment. ${ }^{1602}$ Although the district court had recited the ornamental features, its non-infringement determination did not engage in an improper element-by-element comparison but instead applied an overall comparison to find that an ordinary observer would not think the two tools were the same. ${ }^{1603}$

## 5. Sale and offer for sale in the United States

Section 271(a) of Title 35 defines an infringer as one who "without authority makes, uses, offers to sell, or sells any patented invention, within the United States." ${ }^{1604}$ In Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc., ${ }^{1605}$ the defendant challenged both that an "offer to sell" and a "sale" had occurred within the scope of the statute. ${ }^{1066}$

The case concerned Transocean's patents related to an "improved apparatus for conducting offshore drilling.", ${ }^{1607}$ There was no dispute that the defendant had offered its accused product for sale for performance in the United States, but it contended that because the negotiations were conducted in Norway, not the United States, the offer did not fall within the geographic scope of $\S 271$ (a). ${ }^{1608}$ The district court agreed on summary judgment, but the Federal Circuit vacated that judgment. ${ }^{1609}$ The court explained that the "focus should be not on the location of the offer, but rather the location of the future sale that would occur pursuant to the offer." ${ }^{1610}$ In reaching this conclusion, the court relied on the statute itself, which precludes "offers to sell... within the United States."1611 The court found no support for reading that language as "offers within the United States to sell" or "offers made within the United States to sell within the United States." ${ }^{\text {"1612 }}$

Regarding whether the defendant could face liability for a "sale" within the scope of $\S 271$ (a), the Federal Circuit vacated the grant of summary judgment of non-infringement on that issue as well. As it had with the "offer for sale" issue, the defendant argued that the contractual negotiation and execution in Norway precluded § 271 (a) liability, which the Federal Circuit rejected for the same reason. It

[^148]held "that a contract between two U.S. companies for the sale of the patented invention with delivery and performance in the U.S. constitutes a sale under $\S 271$ (a) as a matter of law., ${ }^{1613}$ The court also rejected the defendant's argument that, because its rig was not completely constructed, it did not qualify as a sale. ${ }^{1614}$ The court reiterated that a sale "is not limited to the transfer of tangible property; a sale may also be the agreement by which a transfer takes place." ${ }^{\text {"615 }}$

## 6. Joint infringement

In 2010, the Federal Circuit addressed the issue of joint infringement, which provides a theory of direct infringement where one entity does not actually perform each and every step of the claim. Most notably, at the end of the year, it held in Akamai v. Limelight ${ }^{1616}$ that joint infringement requires an agency relationship or a contractual obligation, further limiting the instances in which joint infringement is likely to be found. ${ }^{1617}$

In prior decisions, the Federal Circuit restricted direct infringement based on joint liability to instances where "one party exercises 'control or direction' over the entire process such that every step is attributable to the controlling party." ${ }^{\text {"1618 }}$ It emphasized, however, that one cannot avoid liability for infringement "simply by contracting out steps of a patented process to another entity." ${ }^{1619}$ In Akamai, the Federal Circuit elaborated on those decisions.

At issue in Akamai were patents directed to a method for efficiently delivering web content. ${ }^{1620}$ The defendant performed all of the steps of the method except for the step of "tagging" the chosen content to be delivered, which was performed by its customers. ${ }^{1621}$ The patent holder, therefore, relied on a theory of joint infringement, arguing that the defendant controlled or directed the activities of its customers. ${ }^{1622}$ After a jury verdict finding infringement, the district court granted the defendant' motion for JMOL of noninfringement. ${ }^{1623}$ Relying on Miniauction, the district court in Akamai

[^149]found that there was "no material difference" between the defendant's interaction with its customers in that case and the interactions of the defendant in Muniauction, where the defendant had merely provided instructions on how to use the web system at issue in that case. ${ }^{1624}$

On appeal, the Federal Circuit affirmed the finding of noninfringement. After describing BMC Resources and Miniauction as setting forth "a foundational basis" for its joint infringement jurisprudence, the Akamai court further explained that "what is essential is not merely the exercise of control or the providing of instructions, but whether the relationship between the parties is such that acts of one may be attributed to the other." ${ }^{, 1625}$ For such a relationship to exist, an agency or contractual relationship must exist. As the court held, "as a matter of Federal Circuit law that there can only be joint infringement when there is an agency relationship between the parties who perform the method steps or when one party is contractually obligated to the other to perform the steps." ${ }^{1626}$

Applying that test to the facts of the case, the Federal Circuit held that no evidence showed that the defendant's customers were acting as its agents in performing the "tagging" step. ${ }^{1627}$ Nor did a contractual relationship exist. While the customers contracted with the defendant for authority to use the defendant's system, nothing obligated the customer to actually use that service and, in that process, select and "tag" material for delivery. ${ }^{1628}$

## 7. Doctrine of equivalents

If an accused device does not literally infringe a claim, it may still infringe under the "doctrine of equivalents." ${ }^{11629}$ Under the doctrine, "[i]f two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape." ${ }^{1630}$ This method of determining equivalence is known as the "function-way-result" test.

In 2010, the Federal Circuit addressed certain legal principles that can preclude a finding of infringement under the doctrine of equivalents.

[^150]
## a. Prosecution history estoppel

The doctrine of prosecution history estoppel provides an important limitation on the application of the doctrine of equivalents. Under the doctrine, " $[\mathrm{w}]$ here an amendment narrows the scope of the claims, and that amendment is adopted for a substantial reason related to patentability, the amendment gives rise to a presumption of surrender for all equivalents" that fall between the original claim and the amended claim. ${ }^{1631}$ Thus, statements and claim amendments made during prosecution can "prevent[] recapture of subject matter surrendered during prosecution of the patent., ${ }^{11632}$ Prosecution history estoppel is an issue of law. ${ }^{1633}$ Prosecution history estoppel, however, is only a presumption that can be overcome by showing that one skilled in the art at the time of the amendment would not have been expected to draft a claim to include the alleged equivalent. ${ }^{1634}$

In Trading Technologies International, Inc. v. eSpeed, Inc., the Federal Circuit agreed with the district court that prosecution history estoppel precluded the plaintiff from relying on the doctrine of equivalents to prove infringement. ${ }^{1635}$ The patents concerned software for displaying the market for commodities traded electronically, and a term at issue was "static display of prices." ${ }^{1636}$ During prosecution, the applicant amended the claims to include additional language that the static price display does not move automatically. ${ }^{1637}$ While a proper claim construction would not have limited the claims to manual re-centering, the patent owner's amendments surrendered coverage for any subject matter that moved automatically. ${ }^{1638}$ Because the accused system's price level automatically drifted towards the center of the display after every change in the inside market, Trading Technologies was prevented from asserting the system was an equivalent. ${ }^{1639}$

In Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc., ${ }^{1640}$ the Federal Circuit held that prosecution history estoppel barred Spine Solutions from arguing that the accused product's two anchors for an intervertebral implant, used to replace disks in the spinal column,

[^151]were equivalent to the claimed "single anchor," and held as a matter of law that the accused product did not infringe under the doctrine of equivalents. ${ }^{1641}$ In addition to asserting that the district court erred in granting summary judgment of literal infringement, Medtronic argued that the district court erred in granting summary judgment of infringement under the doctrine of equivalents. ${ }^{1642}$ With respect to that issue, Medtronic contended that the patent applicant had made a clear surrender of any designs containing more than one anchor during prosecution. ${ }^{1643}$ The Federal Circuit agreed, ruling that the applicants had expressly distinguished the claimed invention over another patent by asserting that "a reference disclosing two anchors does not disclose a device affirmatively claiming a single anchor" and that "reciting a negative limitation in the form of a single element is not disclosed by prior art which teaches more than one element." ${ }^{1644}$ Prosecution history estoppel therefore barred Spine Solutions from arguing that a two-anchor device was equivalent to the claimed implant. ${ }^{1645}$
In Funai Electric Co. v. Daewoo Electronics Corp., ${ }^{1646}$ the Federal Circuit addressed the issue of prosecution history estoppel and whether a patentee lost its range of equivalents with regard to a claim term when it cancelled the relevant claim after it was rejected during prosecution. ${ }^{1647}$ The patentee had cancelled two claims and then added the limitations from those claims into a dependant claim. ${ }^{1648}$ The district court determined that no estoppel existed, and the Federal Circuit agreed. ${ }^{1649}$ In reaching that conclusion, the Federal Circuit relied on the Supreme Court's authority in Festo, which recognized that there are some cases where an amendment cannot reasonably be viewed as surrendering a particular equivalent. ${ }^{1650}$ In particular, the Festo Court stated: "[T]he rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question"; "[i]n those cases the patentee can overcome the presumption that prosecution history estoppel bars a finding of equivalence." ${ }^{1651}$ Applying the principles set out in Festo, the Federal

[^152]Circuit in Funai held that the basis for the defendant's prosecution estoppel theory was "merely tangential" to the prosecution. Thus, the claims were properly sent to the jury, and because the defendant did not challenge the jury verdict, the judgment of infringement was affirmed. ${ }^{1652}$

## b. The all-elements / anti-violation rule

Under the "all-elements rule," a patentee may not assert equivalence under a theory that would entirely vitiate a claim element. ${ }^{1653}$ Claim vitiation occurs when there is a "clear, substantial difference or a difference in kind" between the claim limitation and the accused product, not when there is only a subtle difference. ${ }^{1654}$

In Adams Respiratory Therapeutics, Inc. v. Perrigo Co., the Federal Circuit addressed whether claims containing specific numeric ranges could be infringed under the doctrine of equivalents or if that would violate the all-elements rule by rendering irrelevant the numeric range set forth in the claims. ${ }^{1655}$ The patents concerned certain formulations of a drug to treat congestion. ${ }^{1656}$ A dependent claim at issue included the limitation that the medication contain "at least" a certain specified amount of the drug. ${ }^{1657}$ The district court held that the "at least" term indicated an absolute lower limit of the range and held that allowing the plaintiff to show infringement under the doctrine of equivalents would vitiate the quantity limitation. ${ }^{1658}$

On appeal, the plaintiff argued that the Federal Circuit had previously concluded that infringement under the doctrine of equivalents could apply to claims requiring a specific numeric range. ${ }^{1699}$ Citing numerous authorities, the Federal Circuit agreed. ${ }^{1660}$ The court held that " $[t]$ he recitation of a specific numerical value does not by itself foreclose the application of the doctrine of equivalents," and that the "addition of 'at least' in this case does not change this analysis." ${ }^{1661}$ Thus, the court vacated the district court's grant of summary judgment of non-infringement on the doctrine of equivalents.

[^153]
## C. Other Infringement Doctrines

## 1. Induced infringement

Under $\S 271(\mathrm{~b})$ of Title 35, "[w]hoever actively induces infringement of a patent shall be liable as an infringer."

In SEB S.A. v. Montgomery Ward $\mathcal{E}$ Co., the Federal Circuit addressed the knowledge requirement for induced infringement. ${ }^{1662}$ The patents related to deep fryers that the defendant had manufactured overseas and sold to retailers in the United States, after basing its design on a reverse-engineering of the plaintiff's deep fryers. ${ }^{1663}$ On appeal, the defendant, which had been found by the jury to be liable for induced infringement, argued that it could not be liable for induced infringement because it had no actual knowledge of the patent. ${ }^{1664}$

The Federal Circuit affirmed. ${ }^{1665}$ Although its prior decision in $D S U$ Medical Corp. v. JMS Co. had stated that "[t]he 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," ${ }^{1666}$ in $S E B$, where the defendant had not known of the patent, the court limited that statement, explaining that $D S U$ did not "set out the metes and bounds of the knowledge of the patent requirement." ${ }^{1667}$ SEB described the standard as whether the accused infringer was deliberately indifferent to a known risk. ${ }^{1668}$ On that standard, the court affirmed. "[H]ighly suggestive" of such deliberate indifference was the defendant's failure to inform its counsel that it had copied the plaintiff's products. ${ }^{1669}$

The Supreme Court has granted certiorari in $S E B$ to address the standard for inducing infringement. The case presents this question: "Whether the legal standard for the state of mind element of a claim for actively inducing infringement under 35 U.S.C. $\S 271(\mathrm{~b})$ is 'deliberate indifference of a known risk' that an infringement may occur, as the Court of Appeals for the Federal Circuit held, or 'purposeful, culpable expression and conduct' to encourage an infringement, as this Court taught in MGM Studios, Inc. v. Grokster, Ltd."? The case was argued in February 2011, and a decision is expected by June 2011.

[^154]The Federal Circuit's induced infringement cases also addressed whether product instructions, and user support resources, may support a finding of inducement. In i4i LP v. Microsoft Corp., the Federal Circuit held that based on the evidence presented at trial, a reasonable jury could have concluded that Microsoft had the "affirmative intent to cause direct infringement." ${ }^{1670}$ Microsoft had marketed the accused product along with online training and user support resources, which provided customers with detailed instructions on how to use the accused product. ${ }^{1671}$

In AstraZeneca LP v. Apotex Inc., ${ }^{1672}$ the Federal Circuit affirmed the injunction of the defendant's launch of a generic version of a corticosteroid treatment for asthma patients. ${ }^{1673}$ AstraZeneca's method patent related to once-daily dosing of the drug. On its product label, Apotex omitted all references to once-daily dosages. However, the FDA required Apotex to include "downward titration" language that encouraged patients to reduce their daily intake of the drug to the lowest dose that provides a beneficial effect. AstraZeneca asserted that the "downward titration" statements effectively instructed consumers to use the drug once daily and induced them to infringe its patent.

Apotex contended that it lacked the requisite specific intent to induce infringement because it was the FDA that had required Apotex to include the downward-titration statements. Additionally it argued that its product label allowed for non-infringing use of the drug. The Federal Circuit was not persuaded by Apotex's arguments and agreed with AstraZeneca. The court held that the downward titration would necessarily result in some users engaging in the patented method. Moreover, the court ruled that redesigning the label around the infringing use showed that Apotex had the requisite knowledge and intent to induce infringement.

## 2. Contributory infringement

A party is liable for contributory infringement if it "offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use

[^155]in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use."1674

A party can overcome a claim on contributory infringement if it can show that the accused product has a substantial non-infringing use. In i4i LLP v. Microsoft Corp., ${ }^{1675}$ Microsoft was unsuccessful in trying to do so. Despite Microsoft's evidence of some noninfringing uses for its XML editor, the Federal Circuit held that the contributory infringement verdict was not unreasonable. ${ }^{1676}$ In particular, Microsoft presented evidence at trial that some users save XML documents in non-infringing binary formats. ${ }^{1677}$ Despite this evidence, the court held that the noninfringing use was not a practical or worthwhile use and not one that the accused product was designed and marketed to accomplish. ${ }^{1678}$

## 3. Piercing the corporate veil to find individual liability

In Wordtech Systems Inc. v. Integrated Networks Solutions Inc., the Federal Circuit addressed the issue of employee liability for all three bases of infringement-direct, induced, and contributory infringement. ${ }^{1679}$ The patents concerned compact disc duplication devices that copied files from computer memory to multiple discs. ${ }^{1680}$ The plaintiff sued the corporation and two individual employees. ${ }^{1681}$ All three parties were found liable on all three grounds of infringement, but only the individual defendants appealed the infringement verdicts. ${ }^{1682}$ On each ground, they argued that their corporation was valid and that they acted as officers of the corporation; therefore, the plaintiff could not pierce the corporate veil to hold them individually liable. ${ }^{1683}$ The Federal Circuit accepted the argument for direct infringement, but rejected it for induced and contributory infringement.

Citing prior precedent, the Federal Circuit explained that the corporate veil shields a company's officers from individual liability for direct infringement committed by the officers in the name of the corporation, unless the corporation is not valid or is merely the

[^156]officers' "alter ego." ${ }^{1684}$ That analysis is governed by ordinary principles on piercing the corporate veil. ${ }^{1685}$ In Wordtech, however, the jury was never instructed on those principles or asked to determine whether the alleged corporation was valid. ${ }^{1686}$ Because "a correctly instructed jury could have concluded" that the corporation validly existed and did not serve as the individuals' alter ego, the direct infringement verdict could not stand, and a new trial was required. ${ }^{1687}$

On induced and contributory infringement, however, the corporate veil cannot shield individuals from liability. As long as the patent holder can show that that the corporate officers "actively assist[ed] with their corporation's infringement," they may be personally liable for inducement. ${ }^{1688}$ Likewise, if the patent holder can show that the officers directed or participated in the infringing conduct, they may be personally liable for contributory infringement. ${ }^{1689}$

## 4. Willful infringement

In 2007, the Federal Circuit's Seagate en banc decision set out a new test for willful infringement. ${ }^{1690}$ It overruled the "due care" standard for avoiding a willfulness finding, under which "a potential infringer has an affirmative duty of due care not to infringe a known patent." ${ }^{1691}$ Under Seagate, to establish willfulness, the patentee must first show "that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent."1692 If this threshold showing is made, the patentee must also establish that "this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer., ${ }^{11993}$

[^157]As a practical matter, the threshold objective showing not only allows for more summary judgments on willfulness, it may also require consideration of all trial defenses. For example, based on a review of available patent dockets, 40 percent of summary judgments of no willfulness have been granted since the Seagate holding. ${ }^{1694}$ And, in these cases courts have, in fact, focused on the threshold objective showing and the reasonableness of the defenses to infringement. ${ }^{1695}$

In SEB S.A. v. Montgomery Ward E Co., the Federal Circuit thoroughly examined Seagate. ${ }^{1696}$ The district court had initially granted SEB's motion for enhanced damages and attorneys' fees based on the jury's finding of willfulness; however, after the Federal Circuit issued Seagate, the district court vacated its ruling. ${ }^{1697}$ The court emphasized that, although there was record evidence that could satisfy the Seagate standard for willfulness, the evidence was "not so one-sided or overwhelming to allow the Court to conclude that a jury, properly instructed under the new Seagate standard, was required to find, by clear and convincing evidence, willful infringement. ${ }^{11698}$

The Federal Circuit affirmed, concluding that there was no reversible error in the district court's analysis. ${ }^{1699}$ The result for SEB, however, might have been different if it had asked for a new trial under Seagate. The Federal Circuit stated that it "might have granted [such a] request in light of the district court's conclusion that the willfulness verdict could have gone either way under the Seagate test." ${ }^{1700}$

Under the Seagate standard, defenses to infringement, even if unsuccessful, may be sufficient to defeat a willful infringement finding. In Spine Solutions, Inc. v. Medtronic Sophamor Danek USA, Inc., the Federal Circuit reversed the district court's determination that the defendant had willfully infringed the patent. ${ }^{1701}$ The defendant argued that its infringement defenses and its reliance on them were reasonable, and thus its manufacture of the infringing products was not objectively reckless to warrant a willful infringement determination. The Federal Circuit agreed, holding that " $[\mathrm{t}]$ his

[^158]'objective' prong of Seagate tends not to be met where an accused infringer relies on a reasonable defense to a charge of infringement." ${ }^{1702}$ Even though the jury disagreed on the merits of that defense (regarding the obviousness of the asserted patent), the defendant had raised a substantial question. ${ }^{1703}$ As such, the defendant was not objectively reckless in relying on its obviousness defense.

Prompt redesign efforts may also defeat a willful infringement claim. In Trading Technologies International, Inc. v. eSpeed International, Ltd., the Federal Circuit stated that " $[p]$ rompt redesign efforts and complete removal of infringing products in a span of a few months suggest that eSpeed was not objectively reckless. ${ }^{1704}$ In particular, neither party disputed that eSpeed began redesigning the accused product immediately after Trading Technologies commenced the infringement suit, replacing the accused product with the redesigned product within four months. ${ }^{1705}$ Because that evidence and the record as a whole showed no objective recklessness, the Federal Circuit agreed with the district court's grant of judgment as a matter of law that no reasonable jury could have found eSpeed willfully infringed the asserted patents.

Redesign efforts were also central to a finding of no willfulness in Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc. ${ }^{1706}$ The Federal Circuit agreed with the district court that no showing of willfulness could be made, given that the defendant had modified its rig to conform to an injunction entered against another party found to have infringed Transocean's patents. ${ }^{1707}$ The Federal Circuit held that this conduct "show[ed] intent to avoid infringement." ${ }^{1708}$ Accordingly, the Court affirmed summary judgment of no willfulness. ${ }^{1779}$

Finally, in i4i Limited Partnership v. Microsoft Corporation, the Federal Circuit reiterated that a challenge to the jury's willfulness finding is distinct from a challenge to the district court's determination to award enhanced damages based on that finding. ${ }^{1710}$ Because
1702. Id., 96 U.S.P.Q.2d (BNA) at 1651 (citing i4i Ltd P'ship v. Microsoft Corp., 598 F.3d 831, 860, 93 U.S.P.Q.2d (BNA) 1943, 1965 (Fed. Cir. 2010); DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 567 F.3d 1314, 1336-37, 90 U.S.P.Q.2d (BNA) 1865, 1880-81 (Fed. Cir. 2009)).
1703. Id., 96 U.S.P.Q.2d (BNA) at 1651 (citing In re Seagate Tech., LLC, 497 F.3d at 1360, 1371, 83 U.S.P.Q.2d (BNA) at 1865 (Fed. Cir. 2007)).
1704. 595 F.3d 1340, 1358 (Fed. Cir. 2010).
1705. Id. at 1358.
1706. 617 F.3d 1296, 1313-14 (Fed. Cir. 2010).
1707. Id.
1708. Id. at 1313.
1709. Id.
1710. 598 F.3d 831 (Fed. Cir. 2010), cert. granted on other grounds.

Microsoft's opening brief focused on the district court's rationale for awarding enhanced damages, Microsoft's "passing reference" to its post-verdict JMOL motion challenging the legal sufficiency of the jury's finding of willfulness was insufficient to raise the argument on appeal. ${ }^{1711}$ In any event, the court held that even if Microsoft had raised the issue, the verdict would remain. ${ }^{1712}$ A reasonable jury could have found willful infringement based on evidence including the attendance of Microsoft employees at demonstrations of the patented software, receiving sales kits that identified the patentee's software as patented, and designing Microsoft's software to perform in the same manner as the patented software. ${ }^{1713}$

## V. Remedies and Limitations on Recovery

## A. Damages

## 1. General damages

## a. Reasonable royalties

Title 35 U.S.C. § 284 provides that, once patent infringement is found, "a patentee is entitled to 'damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.'" ${ }^{1714}$ A reasonable royalty rate can be determined by three means: (1) an established royalty rate; (2) "the infringer's profit projections for infringing sales"; or (3) "a hypothetical negotiation between the patentee and infringer based on the factors in Georgia-Pacific Corp. v. U.S. Plywood Corp., ${ }^{1715}$

In 2010, the Federal Circuit decided several cases pertaining to reasonable royalty rates determined by the hypothetical negotiation approach, most of which discuss and expand upon the court's recent decision in Lucent Technologies, Inc. v. Gateway, Inc. ${ }^{1716}$ In Lucent, the Federal Circuit refused to allow a patentee to rely on certain licenses to determine a royalty rate because the licenses were "radically different from the hypothetical agreement under consideration" and the district court was not presented with evidence regarding the
1711. Id.
1712. Id
1713. Id.
1714. ResQNet.com, Inc. v. Lansa, Inc., 954 F.3d 860, 86893 U.S.P.Q.2d (BNA)

1553 (Fed. Cir. 2010) (quoting 35 U.S.C. § 284).
1715. Wordtech Systems, Inc. v. Integrated Networks Solutions, Inc., 609 F.3d 1308,

1319, 95 U.S.P.Q.2d (BNA) 1619 (Fed. Cir. 2010) (citing Georgia-Pacific Corp. v. U.S. Plywood, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).
1716. 580 F.3d 1301 at 1308, 92 U.S.P.Q.2d (BNA) 1555 (Fed. Cir. 2009).
subject matter of the licenses. ${ }^{1717}$ The relevant consideration is whether the license is sufficiently linked to the patent in suit. ${ }^{1718}$

In ResQNet.com, Inc. v. Lansa, Inc., ${ }^{1719}$ ResQNet.com sued Lansa for infringement of five patents pertaining to screen recognition and terminal emulation processes for local personal computers. ${ }^{1720}$ After a bench trial, the district court found infringement and ordered Lansa to pay $\$ 506,305$ in damages. ${ }^{1721}$ The $12.5 \%$ royalty rate underlying the damages award was based on the testimony of ResQNet's expert, who relied on seven existing licenses issued by the patentee.

On appeal, a divided panel of the Federal Circuit vacated the damages award. ${ }^{1722}$ In a per curiam opinion, Judge Lourie and Judge Rader concluded that the district court "relied on speculative and unreliable evidence divorced from proof of economic harm linked to the claimed invention," a practice "inconsistent with sound damages jurisprudence., ${ }^{1723}$ In support of this conclusion, the court noted: " $[\mathrm{A}]$ reasonable royalty analysis requires a court to hypothesize, not to speculate. At all times, the damages inquiry must concentrate on compensation for the economic harm caused by the infringement of the claimed invention." ${ }^{1724}$

Considering the first Georgia-Pacific factor, the majority determined that five of the seven licenses "had no relationship to the claimed invention." ${ }^{1225}$ Moreover, the rates of those licenses were not consistent with the rate for the other two licenses, which "arose out of litigation over the patents in suit. ${ }^{31226}$

The majority then analogized this case with the court's recent decision in Lucent. ${ }^{1727}$ Like Lucent, the district court had "made no effort to link certain licenses to the infringed patent., ${ }^{11288}$

[^159]The court also relied on its prior decision in Trell v. Marlee Electronics Corp. ${ }^{1729}$ In Trell, the Federal Circuit vacated a $6 \%$ royalty rate because the district court failed to consider the differences between a prior license and the patent in suit. ${ }^{1730}$ When comparing the two cases, the ResQNet.com majority concluded that the case before the court was "far more egregious" than Trell because the parties in Trell never disputed that the license at issue related to the patent in suit. ${ }^{1731}$ In ResQNet.com, the issue was hotly disputed. ${ }^{1732}$

The majority also chastised the district court for being influenced by the defendant's decision not to offer expert testimony on damages. ${ }^{1733}$ The majority emphasized that ResQNet had the burden of persuasion on the issue; not until ResQNet met this burden "with reliable and sufficient evidence," did the defendant have any obligation to rebut ResQNet's expert. ${ }^{1734}$
Judge Newman vigorously dissented. ${ }^{1735}$ In her view, the majority had "create[d] a new rule" that excluded from royalty considerations licenses that do not directly license the patent in suit or "licenses [that] include subject matter in addition to that which was infringed. ${ }^{1736}$ According to Judge Newman, neither Lucent nor any other case requires this "blanket exclusion of relevant evidence., "1737

ResQNet.com and Lucent were also analyzed in Wordtech Systems, Inc. v. Integrated Networks Solutions, Inc. ${ }^{1738}$ Wordtech involved three patents related to systems for self-operating compact disc duplication. ${ }^{1739}$ A jury found infringement and awarded Wordtech several hundred thousands of dollars in damages. ${ }^{1740}$

Applying regional circuit law requiring a court to "uphold the jury's finding unless the amount is grossly excessive or monstrous, clearly not supported by the evidence, or based only on speculation or guesswork, ${ }^{1741}$ the Federal Circuit reversed the damages award as excessive. ${ }^{1742}$ Analyzing the first Georgia-Pacific factor and Lucent, the

[^160]Federal Circuit emphasized that, under Lucent, courts should pay attention to whether the license provides a lump-sum or running royalty. ${ }^{1743}$ The panel also discussed ResQNet.com's ${ }^{1744}$ holding "that comparisons of past patent licenses to the infringement must account for 'the technological and economic differences' between them.""175

Like Lucent and ResQNet.com, Wordtech's licenses were not sufficiently comparable. ${ }^{1746}$ Specifically, only two of Wordtech's licenses were lump-sum licenses, neither of which provided a basis for comparison with the defendants' infringing sales because "[n]either license describes how the parties calculated each lump sum, the licensees' intended products, or how many products each licensee expected to produce." ${ }^{1747}$ Moreover, the eleven running-royalty licenses were not relevant because they did not reveal a basis for comparison between the running royalty and the lump-sum award. ${ }^{1788}$

In Finjan, Inc. v. Secure Computing Corp., ${ }^{1749}$ the Federal Circuit upheld a jury damages award in the face of ResQNet.com analysis. ${ }^{1750}$ A jury found that the defendants infringed all of Finjan's patents, ${ }^{1751}$ and awarded Finjan over $\$ 9$ million in damages.

The Federal Circuit affirmed the damages award. ${ }^{1752}$ Although Finjan's expert had improperly included sales to the United States government in his calculations, this error did not require a new trial because the district court properly instructed the jury not to include sales to the United States government in its damages calculation. ${ }^{1733}$ Because "[j]urors are 'presumed to have followed' the instructions they were given" ${ }^{1754}$ and the defendants had not rebutted this presumption, the award was upheld. ${ }^{1755}$

The panel also walked through the defendants' arguments regarding Georgia-Pacific factors 1, 10, 11, and 13, ${ }^{1756}$ rejecting each

[^161]one. ${ }^{1757}$ The panel disagreed with the defendants' characterization of factor 11 as focusing on use by the customer, rather than use by the infringer. ${ }^{1758}$ Once sold, the defendants were using the infringing product, regardless of whether customers activated the infringing features. ${ }^{1759}$ Turning to factors 10 and 13 , the panel noted that record evidence supported a jury finding that the patented inventions were more than "tiny features in the accused products," contrary to the defendants' argument. ${ }^{1760}$

Finally, the panel noted that its recent decision in ResQNet.com ${ }^{1761}$ held that past patent licenses must account for differences in the technologies and economic circumstances of the contracting parties. ${ }^{1762}$ In this case, Finjan's expert explained the "multiple differences" between the Finjan-Microsoft license introduced at trial and a hypothetical negotiated license between Finjan and the defendants, such that the jury could discount the license. ${ }^{1763}$

In evaluating the Georgia-Pacific factors, the panel admitted that Finjan's damages theory had "potential flaws," but it reiterated that it was for the jury to "decide for itself what to accept or reject." ${ }^{1764}$ Because the panel concluded that the jury award was within the range supported by the record, and that the defendants failed to show that the award "[was] bereft of 'a reasonable basis' in the record," the panel affirmed the award. ${ }^{1765}$

Lucent was also discussed by the Federal Circuit in i4i Ltd. Partnership v. Microsoft Corp. ${ }^{1766}$ There, the jury found infringement and awarded $\$ 200$ million in damages. ${ }^{1767}$ Microsoft appealed the

[^162]damages award on several grounds, including that the award was not a reasonable royalty rate under Lucent..$^{1768}$

The Federal Circuit disagreed. Relevant to that decision was the procedural posture of the case. In Lucent, the defendant had filed a pre-verdict JMOL motion challenging the sufficiency of the evidence on damages. ${ }^{1769}$ Microsoft filed no such motion, and this failure required the Federal Circuit to review the award under the narrow standard of review applicable to denials of motions for new trial-a clear showing that the damages award was excessive. ${ }^{1770}$ Under this deferential standard, even though the damages award was high, it was supported by the evidence in the record, including expert testimony that a reasonable royalty would be between $\$ 200$ and $\$ 207$ million. ${ }^{1771}$ Because "any reasonable royalty analysis necessarily involves an element of approximation, and uncertainty," the panel, applying its deferential standard of review, upheld the damages award. ${ }^{1}$

The Federal Circuit also upheld a reasonable royalty award in SEB S.A. v. Montgomery Ward $\mathcal{E}$ Co., Inc. ${ }^{1773}$ There, the jury found infringement and awarded $\$ 4,650,000$ in damages. ${ }^{1774}$ After the verdict, the defendant-Pentalpha-sought to offset its damages by the $\$ 2,000,000$ that the plaintiff had received in a settlement with another defendant. ${ }^{1775}$

One issue before the Federal Circuit was Pentalpha's motion for a new trial, which the district court denied, that was based on SEB's allegedly improper closing arguments that SEB made a "substantial profit" and "got something close to [its] list prices." ${ }^{1776}$ Pentalpha objected because, during trial, an SEB executive testified that, even though "he thought SEB made a profit, SEB did not always sell its deep fryers at list prices. ${ }^{1777}$ As a result, the district court granted

[^163]Pentalpha's JMOL motion regarding lost profits at the close of evidence, determining that there was nothing in the record to support a jury finding that SEB's fryers sold for a specific price. ${ }^{1778}$ Pentalpha argued that SEB's summation was inappropriate because of the district court's earlier ruling. ${ }^{1779}$ The district court denied the motion, determining that its lost profits ruling " $\mathrm{d}[\mathrm{id}]$ not mean that the jury could not consider SEB's expectations of profits as part of a hypothetical negotiation."1780

The Federal Circuit agreed. ${ }^{1781}$ The court noted that the reasonable royalty inquiry is a "hypothetical construct" for which expectation of success can be considered. Moreover, Pentalpha had the opportunity to highlight to the jury that SEB's calculation was only an expectation, not an actual price. The court found no abuse of discretion in the denial of a new trial. ${ }^{1782}$

In Fujifilm Corp. v. Benun, ${ }^{1783}$ the Federal Circuit also affirmed a damages award, finding that the award of $\$ 2.00$ per infringing sale running royalty and a lump sum royalty of $\$ 2,500,000$ was not clearly excessive. ${ }^{1784}$ The court recounted the evidence that Fuji presented regarding damages, including expert testimony regarding the "strong bargaining position" Fuji would have enjoyed, the Georgia-Pacific factors that affected the rate, and the acceptability of the methodology used by the expert, ultimately settling on a forty cent royalty rate. ${ }^{1785}$ The panel put great weight on the expert's testimony that the royalty amount would remain consistent even if there were changes in the royalty-base size. ${ }^{1786}$ This testimony provided the jury with sufficient information to reach Fuji's proposed royalty amount. ${ }^{1787}$
The panel rejected defendants' argument that, in light of the fortycent royalty rate to which Fuji's expert testified, the two-dollar rate was excessive. ${ }^{1788}$ In the defendants' view, the jury could only consider the infringing products. The panel, however, determined that the jury was entitled to take into account collateral sales of products even

[^164]if they did not infringe, as a hypothetical negotiation would likely take such information into account. ${ }^{1789}$

## b. Ongoing royalties

In Telcordia Technologies, Inc.. v. Cisco Systems, Inc., ${ }^{1790}$ the Federal Circuit reiterated that it is not an abuse of discretion to award ongoing royalties in lieu of an injunction when the record supports a finding that a patent holder has not been compensated for continuing infringement. ${ }^{1791}$ In such cases, the district court may direct the parties to first attempt to negotiate the terms of the ongoing royalty. ${ }^{1792}$ In Telcordia, the district court denied Telcordia's motion for a permanent injunction, then ordered the parties to negotiate an ongoing royalty rate. ${ }^{1793}$ The Federal Circuit remanded the case for the negotiations to continue. ${ }^{1794}$ As the court noted, the district court retained the authority to decide the issue if the parties could not agree, and the parties retained the right to appeal that determination. ${ }^{1795}$

## c. Notice

In Fujitsu Ltd. v. Netgear, Inc., ${ }^{1796}$ the Federal Circuit addressed the notice provisions of 35 U.S.C. § 287, which require that "any patented article" be marked in order for the patentee to recover damages in an infringement action, except for any portion of infringement in which the infringer was on notice and nonetheless continued to infringe. The court held that the notice provisions "do not apply where the patent is directed to a process or method., ${ }^{1797}$

In Funai Electric Co. v. Daewoo Electronics Corp., the court discussed the interplay of (i) actual notice and jury instructions and (ii) constructive notice and Original Equipment Manufacturer ("OEM") sales. ${ }^{1798}$
1789. Id., 95 U.S.P.Q.2d (BNA) at 1989 (citing Deere \& Co. v. Int'l Harvester Co., 710 F.2d 1551, 1559, 218 U.S.P.Q. 481, 487 (Fed. Cir. 1983)).
1790. 612 F.3d 1365, 95 U.S.P.Q.2d (BNA) 1673 (Fed. Cir. 2010)
1791. Id. at 1378, 95 U.S.P.Q.2d (BNA) at 1683 .
1792. Id. at 1379, 95 U.S.P.Q.2d (BNA) at 1683.
1793. Id., 95 U.S.P.Q.2d (BNA) at 1683 .
1794. Id., 95 U.S.P.Q.2d (BNA) at 1683.
1795. Id., 95 U.S.P.Q.2d (BNA) at 1683
1796. 620 F.3d 1321, 96 U.S.P.Q.2d (BNA) 1742 (Fed. Cir. 2010).
1797. Id. at 1332, 96 U.S.P.Q.2d (BNA) at 1751 (quoting Crown Packaging Tech., Inc. v. Rexam Beverage Can Co., 559 F.3d 1308, 1316, 90 U.S.P.Q.2d (BNA) 1186, 1192 (Fed. Cir. 2009) ).
1798. 616 F.3d 1357, 1372-75, 96 U.S.P.Q.2d (BNA) 1329, 1340-43 (Fed. Cir. 2010).

## i. Actual notice

In Funai, which concerned VCRs, Funai sent defendants a letter on April 3, 2003, citing six patents and noting specific VCR models that Funai believed infringed its patents. ${ }^{1799}$ This letter was followed by claim charts in June 2003. ${ }^{1800}$ Defendants admitted that the letter provided actual notice for the specific VCR models listed in the letter, but asserted that the letter was "legally insufficient" to show actual notice of any other VCR models, thereby limiting the damages period at least as to those non-listed models. ${ }^{1801}$

The Federal Circuit disagreed. ${ }^{1802}$ The court acknowledged that actual notice requires a letter that is "sufficiently specific to support an objective understanding that the recipient may be an infringer" ${ }^{1803}$ and "communicate[s] a charge of infringement of specific patents by a specific product or group of products." ${ }^{1804}$ According to the panel, however, once this threshold specificity is met, ensuing discovery can bring other models and related products within the scope of the notice. ${ }^{1805}$ Because the jury was instructed on the threshold notice requirements and defendants failed to show failure by the jury to implement this instruction, the court found no reason to reverse on this ground. ${ }^{1806}$

## ii. Constructive notice

In Funai, the Federal Circuit also addressed-for the first timethe applicability of $\S 287$ (a) and products sold through Original Equipment Manufacturer ("OEM") customers for resale. ${ }^{1807}$ Section 287(a) applies to "[p]atentees, and persons making, offering for sale, or selling within the United States any patented article for or under them or importing any patented article into the United States." ${ }^{1808}$ The evidence at trial established that, until 2003 when Funai sent a letter to defendants regarding infringement, about $90 \%$ of Funai's products were sold as Funai products and marked with its patents,

[^165]while the remaining products, sold to OEM customers, were not so marked. ${ }^{1809}$

On appeal, the panel held that, "when others than the patentee are involved in sales to the public, a 'rule of reason' is applied, 'consistent with the purpose of the constructive notice provision-to encourage patentees to mark their products," thereby giving the public notice of the patents and preventing infringement by innocent parties. ${ }^{1810}$ Accordingly, the court affirmed the ruling that the jury's application of the constructive notice to Funai's OEM sales was supported by substantial evidence. ${ }^{1811}$

In a concurrence, Judge Linn joined the majority's result, but applied a different rationale. ${ }^{1812}$ He stressed that the Federal Circuit "heretofore has not directly addressed the applicability of constructive notice to OEM sales" and that the instant case was not the proper forum to address the issue because the record on it was not fully developed. ${ }^{1813}$ Judge Linn would have affirmed that district court based solely on the Funai sales, which provided substantial evidence to fully support the verdict. ${ }^{1814}$

## d. Lost profits

This year, the Federal Circuit upheld a jury award of lost profits as supported by substantial evidence in Funai Electric Co. v. Daewoo Electronics Corp. ${ }^{1815}$ At trial, Funai presented evidence of lost profits based on (i) Funai's loss of a long-time large customer to defendants, and (ii) expert testimony and evidence that the VCR market "was essentially a two-supplier market." ${ }^{1816}$ Funai's expert also established that Funai's market share during the pertinent time period was $30 \%$, and that Funai lost $\$ 1,698,262$ in profits. ${ }^{1817}$ Defendants failed to introduce any contrary evidence. ${ }^{1818}$ Instead, defendants raised various complaints about Funai's evidence, including that Funai failed to establish its $30 \%$ market share and that "Funai's patented technology was not the basis for demand for the [defendants'] products." ${ }^{1819}$ The Federal Circuit rejected the defendants'

[^166]arguments, holding that the lost profits award was based on substantial evidence. ${ }^{1820}$

## e. Accounting

In Finjan, Inc. v. Secure Computing Corp., ${ }^{1821}$ the Federal Circuit held that Finjan was entitled to an accounting of damages for the seventeen-month period between the time that the district court entered judgment-March 28, 2008-and the date the court entered a permanent injunction-August 28, 2009. ${ }^{1822}$ The district court awarded additional damages up to March 28, but no further. ${ }^{1823}$ The Federal Circuit held that, under 35 U.S.C. § 284, "[w]hen damages are not found by a jury, the court shall assess them." ${ }^{1824}$ Moreover, "a patentee is 'not fully compensated' if 'the damages award did not include future lost sales." ${ }^{1825}$ Thus, the Federal Circuit determined that Finjan was entitled to compensation for any infringing sales that occurred before the injunction's effective date. ${ }^{1826}$

The panel also rejected the defendants' argument that Finjan waived its right to these damages because its complaint only sought damages that were proven at trial. As the Federal Circuit observed, the complaint "also sought [s]uch further and other relief as the Court and/or jury may deem proper and just." ${ }^{1827}$

## 2. Enhanced damages

The Federal Circuit considered enhanced damages in two cases this year. In i4i Limited Partnership v. Microsoft Corp., ${ }^{1828}$ the district court enhanced a damages award under 35 U.S.C. § 284, a statute that allows the court to "increase damages up to three times the amount found or assessed by the jury" if a jury has found willful infringement. ${ }^{1829}$ The jury was given an instruction on the willful infringement standard-an instruction to which Microsoft did not object-and it expressly found that "i4i prove[d] by clear and

[^167]convincing evidence that Microsoft's infringement was willful. ${ }^{1830}$ The jury awarded i4i $\$ 200,000,000$ in damages, and i4i made a motion for enhanced damages based on the willfulness finding. ${ }^{1831}$ The district court applied the factors outlined in Read Corp. v. Portec, Inc., ${ }^{1832}$ and enhanced the jury damages by $\$ 40,000,000$. ${ }^{1833}$

The Federal Circuit concluded that the district court's enhancement, although higher than awards in other cases, was not an abuse of discretion. ${ }^{1834}$ The court explained that the district court "made detailed factual findings which, taken together, support its award." ${ }^{1835}$ Additionally, the district court correctly refused to reapply the Seagate willfulness test because "the standard for deciding whether-and by how much-to enhance damages is set forth in Read, not Seagate. . . The test for willfulness is distinct and separate from the factors guiding a district court's discretion regarding enhancing damages." ${ }^{1836}$

According to the Federal Circuit, a prerequisite to enhancing damages under § 284 is a determination of willfulness, but the jury considered and determined willfulness prior to the district court's Read analysis. ${ }^{1837}$ Microsoft did not dispute the content of the Seagate jury instruction, only the district court's analysis on enhanced damages. ${ }^{1838}$ While the panel did agree with Microsoft that an

[^168]enhancement based solely on litigation misconduct would be improper, the district court considered litigation misconduct only after it concluded that the Read factors supported enhancement. ${ }^{1839}$ The Federal Circuit therefore affirmed the damages award.

The Federal Circuit upheld a district court's decision not to enhance damages in Funai Electronic Co. v. Daewoo Electronics Corp. ${ }^{1840}$ In that case, the jury found that defendants infringed Funai's patents willfully. ${ }^{1841}$ After Funai requested enhanced damages based on willfulness, the district court analyzed the nine Read factors, and found that three favored enhancement, one supported enhancement "weakly," and five factors did not favor enhancement. ${ }^{1842}$ Stating that it was a "close call," the court denied Funai's request. ${ }^{1843}$

The Federal Circuit determined that the district court did not abuse its discretion in refusing to enhance damages. ${ }^{1844}$ The court disagreed with the district court's approach to one Read factor-the duration of the defendant's knowing infringement-holding the that district court's statement that "the focus of this factor is whether or not the infringer has continued to infringe after there has been a judicial finding that a particular device infringes the asserted patent" was "too rigid." ${ }^{1845}$ However, that finding was not dispositive because enhancement decisions were "informed by the totality of the circumstances." ${ }^{1846}$ The overall circumstances in Funai did not warrant reversal. ${ }^{1847}$

## B. Attorneys' Fees

The Federal Circuit decided seven cases involving attorneys' fees in 2010, several of which provided the historically rare sight of the Federal Circuit reversing district courts with regard to discretionary fee awards. ${ }^{1848}$ The Patent Act provides that "[t]he court in exceptional cases may award reasonable attorney fees to the

[^169]prevailing party." ${ }^{1849}$ An "exceptional" case can be proven "by showing: inequitable conduct before the PTO; litigation misconduct; vexatious, unjustified, and otherwise bad faith litigation; a frivolous suit or willful infringement." ${ }^{1850}$ Similarly, 28 U.S.C. § 1927 provides another method whereby "[a] district court can require an attorney to pay the opposing party's reasonable costs, expenses, and attorney's fees when that attorney 'so multiplies the proceedings in any case unreasonably and vexatiously." ${ }^{1851}$ To make this determination the Federal Circuit reviews a district court's finding of an "exceptional" case for clear error, and if a case is truly "exceptional," the court reviews the district court's decision to award attorneys' fees for abuse of discretion. ${ }^{1852}$ In reviewing an award of attorneys' fees, the court will conduct a rigorous review of the record rather than blindly deferring to the district court's ruling. ${ }^{1853}$

The Federal Circuit reversed a fee award in Medtronic Navigation, Inc. v. BrainLAB Medizinische ComputerSysteme GmbH. ${ }^{1854}$ In that case, after the district court issued its claim construction order, the defendant indicated an intent to seek summary judgment. The district court informed the defendant that issues of fact existed, and ultimately denied summary judgment. The defendant raised its arguments again on JMOL, which again was denied. The jury found infringement. After dismissing the jury, the district court judge stated that he "enjoyed working with counsel" and "that both sides, all of you, have presented the case in the best possible way. ${ }^{1855}$

Thereafter, the defendant renewed its JMOL motion, and the court granted it, finding non-infringement for all patents in suit. The court noted that, with respect to one patent, the jury's infringement finding "resulted from plaintiffs' deliberate distortion of the court's claim construction rulings and abuse of advocacy." ${ }^{1856}$ Medtronic appealed the district court's findings, and the Federal Circuit affirmed without commenting on the district court's remarks regarding plaintiff's counsel's advocacy. ${ }^{1857}$

[^170]After the appeal, BrainLAB filed a petition seeking attorneys' fees under 35 U.S.C. § 285 and 28 U.S.C. § 1927. BrainLAB argued that plaintiff's counsel "had prolonged a frivolous lawsuit and had obtained an improper jury verdict through litigation misconduct and abusive advocacy." ${ }^{1858}$ The district court agreed, concluding that the case was "exceptional," awarding attorneys' fees under § 285, and holding Medtronic's counsel jointly responsible both under § 1927 and the court's inherent power to assess fees against counsel engaged in abusive litigation conduct. ${ }^{1859}$ According to the district court, the plaintiff "should have accept[ed] that the claims construction rulings stripped the merits from this case" and either should have taken an interlocutory appeal from the construction order or abandoned the case in light of BrainLAB's summary judgment motion, ${ }^{1860}$ and that plaintiff's counsel "had engaged in various forms of litigation misconduct," including misleading the jury and wrongfully arguing the law. ${ }^{1861}$

The Federal Circuit reversed. ${ }^{1862}$ Noting a "reluctance to secondguess" the district court on fee awards, the Federal Circuit determined that the court's exceptionality finding could not be upheld. ${ }^{1863}$ With regard to the district court's finding that Medtronic should have abandoned its claims, the Federal Court noted that the "presumption that an assertion of infringement of a duly granted patent is made in good faith" can only be overcome by clear and convincing evidence that the "claims were vexatious, unjustified, or frivolous, and were pursued in bad faith." ${ }^{1864}$ Such evidence was not present in the instant case. ${ }^{1865}$ In fact, the district court's denial of the defendant's summary judgment and initial JMOL motions "undermined" any finding that the claims in suit were frivolous. ${ }^{1866}$ The court acknowledged that, had the plaintiff relied on false or misleading evidence to survive summary judgment, it would not be protected from sanctions based on a denial of summary judgment;

[^171]however, the district court in the instant case did not point to any false or misleading evidence, nor did the Federal Circuit find any. ${ }^{1867}$ Further, Medtronic revised its case and withdrew some of its claims based on the district court's claim construction ruling. ${ }^{1868}$

As to the alleged litigation misconduct, the court concluded that several statements made during closing and rebuttal arguments, and the testimony of Medtronic's expert witnesses were unobjectionable and could not have misled the jury. ${ }^{1869}$ The Federal Circuit did agree, however, with the district court's finding that the counsel had made statements intending to suggest to the jury that infringement by equivalents depended on comparing two specific machines, which was contrary to the court's instruction. ${ }^{1870}$ Nonetheless, and even though trial courts are generally accorded deference in imposing fees, that finding, alone, was insufficient to support the exceptionalcase finding under $\S 285 .{ }^{1871}$ The panel reversed the finding that the case was exceptional under $\S 285$, reversed the assessment of joint liability under $\S 1927$, and vacated the fee award. The panel further noted that the evidence did not support the district court's reliance on its inherent authority to support the fee award, emphasizing that a case must be beyond "exceptional" to justify a fee award under a court's inherent power. ${ }^{1872}$

Another reversal of a district court's imposition of attorneys' fees occurred in Leviton Manufacturing Co. v. Universal Security Instruments, Inc. Finding the case "exceptional" because of Leviton's inequitable conduct and vexatious litigation, the district court had awarded over one million dollars in fees to Meihao. ${ }^{1873}$ The Federal Circuit reversed the grant of summary judgment of inequitable conduct, finding that genuine issues of material fact remained as to whether Leviton had an intent to deceive the PTO in withholding a previous patent application. ${ }^{1874}$

In contrast, a divided panel of the Federal Circuit upheld a fee award based on inequitable conduct in Taltech Ltd. v. Esquel Enterprises $L t d .{ }^{1875}$ Following a bench trial, the district court determined that

[^172]Taltech engaged in inequitable conduct with respect to the patent in suit. ${ }^{1876}$ Based on this finding, as well as a litigation misconduct finding, the district court determined that the case was exceptional under § 285, and awarded attorneys' fees and costs to the defendant. ${ }^{1877}$ In a prior appeal, the Federal Circuit vacated the inequitable conduct determination and the attorneys' fees award (based in part on that determination) and remanded to the district court for further proceedings. ${ }^{1878}$ On remand, the district court again found the case to be exceptional based on two other instances of inequitable conduct and abusive litigation tactics. ${ }^{1879}$ The defendant again appealed. ${ }^{1880}$

A two-judge majority affirmed the exceptional-case finding on all three grounds. ${ }^{1881}$ The majority determined that the district court did not commit clear error with regard to its inequitable conduct findings, affirming the district court's first two bases for finding the case to be exceptional. ${ }^{1882}$ The panel further concluded that evidence in the recorded supported the district court's abusive-litigation finding based on the dismissal of the plaintiff's damages claim after discovery concluded; its waiver of a jury trial only weeks before the trial; its voluntary dismissal, in the middle of the trial, of five claims of infringement; and its withdrawal of an ITC complaint shortly before the hearing. ${ }^{1883}$ It "ill behoove[d]" the panel to second-guess the district court's finding "when the litigation occurred in front of the trial judge, not the appellate court." ${ }^{1884}$

A divided panel of the Federal Circuit upheld a district court's refusal to award fees in Aspex Eyewear Inc. v. Clariti Eyewear, Inc. ${ }^{1885}$ After several years of litigation over patents related to eyeglass frames, the district court ultimately dismissed the infringement claims on the ground of equitable estoppel based on Aspex's three years of silence. ${ }^{1886}$ Clariti moved to have the court find the case "exceptional" under § 285 based on either equitable estoppel, inequitable conduct,

[^173]or both and to award attorneys' fees, but the district court denied the motion. ${ }^{1887}$

A majority of the Federal Circuit panel affirmed the equitable estoppel ruling and agreed with the district court that an award of fees was inappropriate. ${ }^{1888}$ The majority noted that, "[e]ven in the absence of misconduct in the litigation or in securing the patent, attorney fees may be assessed when the litigation was objectively baseless and was brought in subjective bad faith." ${ }^{1889}$ According to the majority, however, $\S 285$ was the "exception to the American Rule concerning attorney fees, and is limited to circumstances in which the award of fees is necessary to prevent a gross injustice." ${ }^{1890}$ The panel concluded that defeat of Aspex's litigation position on summary judgment did not in and of itself establish that the suit was objectively baseless. ${ }^{1891}$

Clariti also argued that the case was exceptional based on a finding of inequitable conduct. ${ }^{1892}$ The district court, however, did not hold a trial on inequitable conduct, and was not required to hold such a trial because of the equitable estoppel finding on summary judgment. ${ }^{1893}$ In any event, the facts in evidence did not meet "the threshold levels of materiality and intent necessary to establish inequitable conduct by clear and convincing evidence., ${ }^{11994}$ Thus, the district court did not abuse its discretion by ruling that inequitable conduct had not been established. ${ }^{1895}$

The Federal Circuit also made several procedural rulings related to attorneys' fees. In SEB S.A. v. Montgomery Ward $\mathcal{E}$ Co., ${ }^{1896}$ the Federal Circuit refused to award fees on a basis different than the basis ordered by the district court. ${ }^{1897}$ The district court initially awarded attorneys' fees based on willfulness, but ultimately vacated this award in light of Seagate. ${ }^{1898}$ On appeal, SEB argued that an award of fees was warranted on grounds other than willful infringement, including

[^174]alleged litigation misconduct. ${ }^{1899}$ The Federal Circuit noted that the district court "did not find any litigation misconduct sufficient to warrant an award of attorneys' fees," and "decline[d] to impose attorneys' fees on a different basis than ordered by the district court." ${ }^{1900}$

After vacating an inequitable conduct finding, the Federal Circuit in Lazare Kaplan International, Inc. v. Photoscribe Technologies, Inc. ${ }^{1901}$ vacated an award of attorneys' fees based on the erroneous inequitable conduct determination. The panel reiterated that determining whether a case warrants an award of attorneys' fees under $\S 285$ is a two-step process. ${ }^{1902}$ The first step requires the court to determine whether the case is exceptional, a factual determination. ${ }^{1903}$ If the court finds the case to be exceptional, the second step requires the court to "determine whether attorney fees should be awarded," a discretionary determination. ${ }^{1904}$ In Lazare, the vacatur of the basis for the exceptional-case determination required vacatur of the exceptional-case finding and the fee award. ${ }^{1905}$

Nuances of regional circuit law can have a great impact in the realm of sanctions. In Advanced Magnetic Closures, Inc. v. Rome Fastener Corp. ${ }^{1906}$ the Federal Circuit determined that the appellant waived its argument with regard to attorneys' fees under $\S \S 285$ and 1927 because it failed to raise the issue in its appellate brief. ${ }^{1907}$ In that case, the appellant argued that the district court erred in determining that the case was exceptional under § 285, but did not argue in its brief that the fee award was improper based on litigation misconduct. ${ }^{1988}$ The district court had relied on litigation misconduct as an independent ground to support the finding of attorneys' fees against AMC pursuant to $\S 285$, as well as imposing joint and several liability among all of AMC's attorneys pursuant to § 1927. ${ }^{1999}$

The Federal Circuit affirmed the fee award. ${ }^{1910}$ Noting that "a party waives an argument not raised in its opening brief," the panel acknowledged that it "maintain[ed] discretion to address an argument not properly raised . . . if disregarding the argument would

[^175]result in an unfair procedure." ${ }^{1911}$ Because the appellant "clearly understood the issue, but simply never made the argument," the instant case did not "present a case in which this court should address the issue to remedy an unfair procedure."1912

The Rome court, however, reversed the sanctions imposed under $\S 1927 .{ }^{1913}$ Applying the Second Circuit's "strict standard," which requires "clear evidence that (1) the offending party's claims were entirely without color, and (2) the claims were brought in bad faiththat is, motivated by improper purposes such as harassment or delay" ${ }^{1914}$ with "a high degree of specificity in the factual findings," ${ }^{1915}$ the panel held that the district court did not address counsel's intent, nor did it find the subjective bad faith required to support an award under § 1927. ${ }^{1916}$

## C. Preliminary Injunction

In AstraZeneca LP v. Apotex, Inc., ${ }^{1917}$ a majority of a Federal Circuit panel upheld a preliminary injunction barring Apotex from launching its generic version of a budesonide drug. ${ }^{1918}$ In that case, AstraZeneca filed suit for a declaratory judgment against Apotex after the FDA approved Apotex's ANDA with regard to generic budesonide. ${ }^{1919}$ Apotex's ANDA was accompanied by a statement that Apotex did not seek approval for its drug for once-daily use, a method of use covered by two AstraZeneca patents. ${ }^{1920}$ Apotex's proposed label for its drug was essential identical to AstraZeneca's label, including language that patients should "titrate down" to the lowest effective dose, thereby implicating once-daily use. ${ }^{1921}$ AstraZeneca asserted that Apotex's generic drug would directly infringe certain kit claims in the AstraZeneca patents, and would induce infringement of certain method claims in one patent by including the titrate-down language on the label. ${ }^{1922}$

[^176]AstraZeneca requested a preliminary injunction barring Apotex from distributing budesonide, which the district court granted. ${ }^{1923}$ The district court determined that, although Apotex had shown a likelihood of success that the kit claims were invalid, it had not shown a likelihood of success on the method claims. ${ }^{1924}$ The court also found that AstraZeneca would suffer irreparable harm without an injunction because distribution of the generic drug could cause "layoffs and loss of consumer goodwill" and a confidential settlement agreement between AstraZeneca and another party made determining economic harm speculative. ${ }^{1925}$ The district court determined that "the public interest did not favor either party."," ${ }^{1926}$

A divided panel of the Federal Circuit affirmed the preliminary injunction. ${ }^{1927}$ With respect to the likelihood of success on the merits, the record supported the conclusion that AstraZeneca was likely to withstand a validity challenge and succeed on its infringement claims with respect to the method claims. ${ }^{1928}$ On the irreparable harm prong, the majority agreed that AstraZeneca would suffer harm without an injunction. ${ }^{1929}$ It would be complete speculation to put a number on what this market would have been worth to AstraZeneca. ${ }^{1930}$ Further, the panel agreed with AstraZeneca that any "data generated during the settlement negotiations was influenced by the relative bargaining power of the parties and is not an accurate reflection of a market with only AstraZeneca and Teva.,"1931 Further, although the finding that distribution of Apotex's generic budesonide and the subsequent removal of the drug from the market, resulting in confusion and price changes, would cause immeasurable harm was not "particularly strong," the majority concluded that the district court did not clearly err in this determination. ${ }^{1932}$ As to the harm of possible layoffs, that was based on undisputed testimony, and thus the district court did not commit clear error. ${ }^{1933}$

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## D. Permanent Injunction

## 1. Scope

The Federal Circuit decided two cases addressing general concerns about the scope of permanent injunctions. In Ortho-McNeil Pharmaceutical, Inc. v. Lupin Pharmaceuticals, Inc., ${ }^{1934}$ the Federal Circuit upheld the district court's determination to extend the term of the patent pursuant to 35 U.S.C. § $156 .{ }^{1935}$ The court then granted a motion for an injunction preventing the defendants from infringing during the extended term of the patent. ${ }^{1936}$

The Federal Circuit upheld the injunction. ${ }^{1937}$ The court noted that, other than sale and use, "the extended term does not encompass any other exclusionary patent rights." ${ }^{1938}$ Additionally, "an extended patent term does not apply to unrelated uses of an FDAapproved product.. ${ }^{11939}$ Because Lupin failed to assert that the drug at issue had any non-pharmaceutical uses, the Federal Circuit concluded that the injunction did not exceed a proper scope but instead was "commensurate with the patent rights of exclusion.", ${ }^{1940}$

In contrast, the Federal Circuit rejected the scope of an injunction in Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc. ${ }^{1941}$ based on the extraterritorial reach of the injunction. There, the district court issued a permanent injunction preventing Medtronic from, among other things, "using, selling, offering for sale, or otherwise transferring any of the accused devices that have already been exported. ${ }^{11942}$ The Federal Circuit determined that the district court abused its discretion, ${ }^{1943}$ concluding that "Medtronic's overseas sales . . . cannot infringe any U.S. patent, and there is little risk that the infringing devices will be imported. ${ }^{1944}$ Therefore, according to the panel, the exterritorial scope of the injunction could only be based on a desire to remedy past infringement. ${ }^{1945}$ Because "[a]n injunction is only proper to prevent future infringement of a patent, not to remedy past infringement," the injunction was an abuse of discretion. ${ }^{1946}$

[^178]
## 2. eBay factors

The Federal Circuit decided two cases this year pertaining to proper application of eBay in permanent injunction analysis. In Spansion, Inc. v. International Trade Commission, ${ }^{1947}$ the Federal Circuit held that the eBay factors applicable to injunctive relief analysis under 35 U.S.C. § 283 did not apply to injunctive relief issued by the ITC under $\S 337$. Spansion involved an ITC exclusion order that the defendants appealed. ${ }^{1948}$ On appeal, Spansion argued that the injunction should be vacated because the Commission did not give any meaningful consideration to the public-interest prong of the eBay injunctive relief test. ${ }^{1949}$

The Federal Circuit disagreed. Recounting the legislative history of § 337, the panel held that the history "indicates that Congress intended injunctive relief to be the normal remedy for a Section 337 violation and that a showing of irreparable harm is not required to receive such injunctive relief." ${ }^{1950}$ The court then turned to the injunctive relief available in a district court under § 284. ${ }^{1951}$ The panel noted that Congress made this type of relief discretionary and explicitly stated that the relief should be exercised "in accordance with the principles of equity." ${ }^{1952}$ Relying on Supreme Court precedent, the court further explained that "section 283 did not endorse or establish a categorical grant of injunctive relief... but [r]ather, the decision whether to grant or deny injunctive relief under Section 283 depends on traditional principles of equity." ${ }^{1933}$ The panel then held that "[g]iven the different statutory underpinnings for relief before the Commission in Section 337 actions and before the district courts in suits for patent infringement, ... eBay does not apply to Commission remedy determinations under Section 337., ${ }^{1954}$ This decision thus preserves the ITC exclusion order as a powerful tool against importers of infringing items, though, given the statutory requirement that the complainant demonstrate the presence of a "domestic industry" in the product at issue, ${ }^{1955}$ this tool is not likely to be available to non-

[^179]practicing entities. ${ }^{1956}$ The Federal Circuit upheld the district court's application of eBay in i4i Ltd. Partnership v. Microsoft Corp. ${ }^{1957}$ After a jury found that Microsoft willfully infringed i4i's patent, the district court entered a permanent injunction preventing Microsoft from "selling, offering to sell, and/or importing into the United States" infringing products; the injunction went into effect sixty days from the day of the order. ${ }^{1958}$ With the exception of the timing issue, the Federal Circuit found that the district court did not abuse its discretion in ordering the injunction. ${ }^{1959}$ Reviewing the district court's application of the eBay factors, the Federal Circuit noted that "[i]t was proper for the district court to consider the evidence of past harm" when considering the irreparable injury factor because "[p]ast harm to a patentee's market share, revenues, and brand recognition is relevant for determining whether the patentee has suffered an irreparable injury." ${ }^{1960}$ The court explained that even though permanent injunctions are prospective relief, "the first eBay factor looks, in part, at what has already occurred." ${ }^{1961}$

With regard to the second eBay factor-inadequate remedies at law-the court concluded that there was no evidence that i4i was licensing the patent in suit, but rather it was a small company practicing its patent that lost "market share, brand recognition, and customer goodwill" because of the infringement. ${ }^{1962}$ These types of losses were hard to valuate, which was "evidence that remedies at law are inadequate., ${ }^{1963}$

In balancing hardship, the third eBay factor, the court held that the district court was correct to consider "the parties' sizes, products, and revenue sources" and properly ignored both the expenses incurred by Microsoft when it created the infringing software and the cost to redesign Word to prevent future infringement. ${ }^{1964}$ The fourth factor, the public interest, was adequately protected by the narrowness of the district court's injunction; purchasers of Word prior to the injunction's effective date were unaffected by its force, thus "minimiz[ing] disruptions to the market and the public." ${ }^{1965}$

[^180]The Federal Circuit disagreed with the effective date, however. ${ }^{1966}$ The only evidence regarding timing was the statement of a Microsoft employee that it would take at least five months for Microsoft to comply with the injunction. ${ }^{1967}$ With no evidence to support the district court's sixty-day timeframe, the Federal Circuit modified the injunction's effective date to five months from the date of the district court's order. ${ }^{1968}$

## E. Interest

## 1. Pre-judgment interest

In Telcordia Technologies, Inc. v. Cisco Systems, Inc., ${ }^{1969}$ the Federal Circuit held that, where it is unclear whether the jury's damages verdict includes prejudgment interest, it is not clearly erroneous for a district court to conclude that the award did not include prejudgment interest. ${ }^{1970}$ The Federal Circuit reiterated that district courts have broad discretion to interpret ambiguous verdict forms. ${ }^{1971}$

## 2. Post-judgment interest

In Taltech Ltd. v. Esquel Enterprises Ltd., ${ }^{1972}$ a divided panel of the Federal Circuit reversed the district court's post-judgment interest calculation. ${ }^{1973}$ On April 10, 2009, the district court imposed postjudgment interest to run from the 2007 date on which it originally awarded attorneys' fees. ${ }^{1974}$ This original judgment was reversed by the Federal Circuit in 2008, and the case was remanded to the district court for further proceedings that resulted in a new basis for attorneys' fees, which the court awarded. ${ }^{1975}$

The majority reversed the date that post-judgment interest began, stating that it should be calculated from the date of entry of the judgment supported by the evidence. ${ }^{1976}$ The interest could not be calculated from the date of the 2007 judgment reversed on appeal. ${ }^{1977}$ Relatedly, the rate to apply was the rate applicable to the legally sufficient judgment, not the prior judgment. ${ }^{1978}$

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1966. Id., 93 U.S.P.Q.2d (BNA) at 1968.
1967. Id. at 863-64, 93 U.S.P.Q.2d (BNA) at 1968.
1968. Id. at 864, 93 U.S.P.Q.2d (BNA) at 1968.
1969. 612 F.3d 1365, 95 U.S.P.Q.2d (BNA) 1673 (Fed. Cir. 2010).
1970. Id. at 1378, 95 U.S.P.Q.2d (BNA) at 1683.
1971. Id.
1972. 604 F.3d 1324, 95 U.S.P.Q.2d (BNA) 1257 (Fed. Cir. 2010).
1973. Id. at 1327, 95 U.S.P.Q.2d (BNA) at 1257.
1974. Id. at 1334-35, 95 U.S.P.Q.2d (BNA) at 1264.
1975. Id. at 1328, 95 U.S.P.Q.2d (BNA) at 1259.
1976. Id. at 1335, 95 U.S.P.Q.2d (BNA) at 1264.
1977. Id., 95 U.S.P.Q.2d (BNA) at 1264.
1978. Id., 95 U.S.P.Q.2d (BNA) at 1264.
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## VI. Alternate Sources of Liability or RelinQuishment of RIGHTS

A. Patent Misuse

In 2010, the Federal Circuit addressed both procedural and scope issues relating to patent misuse. The doctrine of patent misuse is a nonstatutory, judge-made defense to patent infringement claims. ${ }^{1979}$ The basic rule allows a patentee to "exploit his patent," but prevents the patentee from using the patent "to acquire a monopoly not embraced by the patent." ${ }^{1980}$ An alleged infringer may invoke the doctrine to assert that the patentee is attempting to expand the physical and temporal boundaries of the patent beyond the limits embodied by it. ${ }^{1981}$ With respect to licensing, the doctrine limits a patentee's right to use licensing conditions to expand a patent's reach. ${ }^{1982}$

## 1. Procedural issues

The Federal Circuit refused to determine patent misuse in the first instance in In Novo Nordisk v. Caraco Pharmaceutical Laboratories, Ltd. ${ }^{1983}$ There, a majority panel of the Federal Circuit refused to consider the patent misuse defense because the district court "expressly declined to address" it. ${ }^{1984}$ Because a finding of patent misuse is rare, the panel refused to make determinations on the issue in the first instance. ${ }^{1985}$

## 2. Scope

The en banc Federal Circuit limited the scope of the patent misuse doctrine in Princo Corp. v. ITC. ${ }^{1986}$ Princo involved Philips's licensing of patents needed to manufacture and sell recordable and rewritable CDs that met the technical standards expressed in the "Recordable CD Standard," also known as the "Orange Book." ${ }^{1987}$ The dispute turned on one specific element of this technology_the manner used to encode position information on the CDs. ${ }^{1988}$ While jointly developing the Orange Book standards, Philips and Sony each

[^181]developed and patented different methods to address position coding. ${ }^{1989}$ The Philips method, embodied in the Raaymakers patents, became the Orange Book standard; however, Sony's position coding method patent, the Lagadec patent, was also included in the Orange Book licensing packages. ${ }^{1990}$ All licenses in the licensing package, including the Lagadec patent, had a "field of use" restriction that prevented a licensee from using the license to make anything other than Orange Book-compliant technology. ${ }^{1991}$

In the late 1990s, Princo entered a package licensing agreement with Philips, but Princo stopped paying the required licensing fees shortly thereafter. ${ }^{1992}$ Philips filed a complaint with the ITC alleging infringement by Princo of several of the Orange Book patents, including the Raaymakers patents but not including the Lagadec patent. ${ }^{1993}$ Princo asserted a defense of patent misuse based on the inclusion of the Lagadec patent in the licensing package. ${ }^{1994}$ After multiple proceedings, the ITC rejected all of Princo's patent misuse arguments. ${ }^{1995}$ On appeal, a divided panel of the Federal Circuit ruled against the ITC and Philips. ${ }^{1996}$

On en banc review, a majority of the Federal Circuit determined that the instant case did not involve patent misuse, holding that patent misuse cannot exist where the patent in suit is not the basis of the alleged misuse. ${ }^{1997}$ The majority emphasized that patent misuse is a narrow doctrine, ${ }^{1998}$ and that "the key inquiry under the patent misuse doctrine is whether, by imposing the condition in question, the patentee has impermissibly broadened the physical or temporal scope of the patent grant and has done so in a manner that has anticompetitive effects." ${ }^{1999}$ The doctrine does not and should not apply in all cases where a patentee engages in some kind of wrongful commercial conduct, but rather is reserved for "a handful of specific practices by which the patentee seemed to be trying to 'extend' his patent grant." ${ }^{200}$

Turning to the facts of Princo, the majority noted that those facts were "completely different" than prior cases of patent misuse. ${ }^{2001}$

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1989. Id., 96 U.S.P.Q.2d (BNA) at 1234.
1990. Id., 96 U.S.P.O.2d (BNA) at 1234-35.
1991. Id., 96 U.S.P.Q.2d (BNA) at 1235.
1992. Id. at 1323, 96 U.S.P.Q.2d (BNA) at }1235
1993. Id., 96 U.S.P.Q.2d (BNA) at 1235.
1994. Id., 96 U.S.P.Q.2d (BNA) at 1235.
1995. Id., 96 U.S.P.Q.2d (BNA) at 1235.
1996. Id. at 1325, 96 U.S.P.Q.2d (BNA) at 1236.
1997. Id., 96 U.S.P.Q.2d (BNA) at 1237.
1998. Id. at 1329, 96 U.S.P.Q.2d (BNA) at 1239 (internal quotation marks omitted).
1999. Id., 96 U.S.P.Q.2d (BNA) at 1239.
2000. Id., 96 U.S.P.Q.2d (BNA) at 1239.
2001. Id. at 1331, 96 U.S.P.Q.2d (BNA) at 1241.
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Here, the alleged patent misuse stemmed from a supposed horizontal agreement between Philips and Sony to limit access to the Lagadec patent, a patent completely different than the patents at issue in Princo. ${ }^{2002}$ According to the majority, the existence of a horizontal agreement between Philips and Sony to restrict access to the Lagadec patent could not constitute patent misuse because "[s]uch an agreement would not have the effect of increasing the physical or temporal scope of the patent in suit" ${ }^{2003}$

Indeed, even if Philips were using licensing fees from the Orange Book patents to pay Sony enough royalties to incentify Sony to suppress the Lagadec patent, this practice was not "patent leverage, i.e. the use of the patent power to impose overbroad conditions on the use of the patent in suit," because the use of funds obtained from lawful activities to support different, anticompetitive behavior "does not place any conditions on the availability of Philips's patents to any potential licensees."2004 In its simplest form, Princo's argument was that it could not license the Lagadec patent for non-Orange Book uses, which was "not patent misuse under any court's definition."2005

Judges Dyk and Gajarsa dissented, arguing that the majority's holding was "directly contrary to the Supreme Court's view of patent misuse in its recent Illinois Tool Works decision, ${ }^{2006}$ in which the Court stated that " $[i] t$ would be absurd to assume that Congress intended to provide that the use of a patent that merited punishment as a felony [under the Sherman Act] would not constitute misuse." ${ }^{2007}$ The dissent interpreted the majority opinion as "emasculat[ing] the [patent misuse] doctrine," limiting it to instances of "unlawful tying arrangements and agreements extending the patent term."2008 In Judge Dyk's view, precedent and legislation "support[ed] a vigorous misuse defense, clearly applicable to agreements to suppress alternative technology."200

According to the dissent, the majority incorrectly treated the agreements to suppress the Lagadec technology as separate from the agreements to shield the Raaymakers patents from competition. ${ }^{2010}$ All of the agreements were part of the same course of conduct, and therefore "constitute[d] misuse of the Raaymakers patents."2011 In the

[^182]dissent's view, "the particular form or method by which the monopoly is sought to be extended is immaterial" to patent misuse analysis; rather, the question is merely whether the patent holder extended "the scope of [the] patent beyond the monopoly conferred by the patent laws." ${ }^{2012}$ Here, the effect of the alleged two-agreement system was to prevent access to the Lagadec patent for use in technology that could compete with the Orange Book compliant technology. Thus, any agreement between Sony and Philips to suppress the Lagadec technology could not be treated as separate from agreements relating to the Raaymakers patents. ${ }^{2013}$

In a short concurrence, Judges Prost and Mayer took a middleground approach, arguing that "a finding of patent misuse is unwarranted on this record because Princo failed to meet its burden of showing that any agreement regarding the Lagadec patent had anticompetitive effects." ${ }^{2014}$ Judge Prost concluded, however, that the patent misuse doctrine was not as narrow as the majority claimed, nor as expansive as the dissent asserted. ${ }^{2015}$

## B. Patent Exhaustion

This year, the Federal Circuit decided two cases pertaining to the patent exhaustion doctrine, also known as the first-sale doctrine. This doctrine states that a patentee's "unrestricted sale of a patented article, by or with the authority of the patentee" eliminates the original patent's applicability to the article. ${ }^{2016}$ In other words, once an authorized, unrestricted, United States sale of an article occurs, "the patentee's right to control the future sale and use of [the] article by enforcing the patent under which it was first sold" is exhausted. ${ }^{2017}$

The territorial aspect of an authorized first sale was at issue in Fujifilm Corp. v. Benun. ${ }^{2018}$ There, the Federal Circuit determined that the United States territoriality requirement announced in Jazz Photo Corp. v. International Trade Commission ${ }^{2019}$ was not affected by Quanta Computer, Inc. v. LG Electronics, Inc. ${ }^{2020}$ The case involved defendant's infringement of Fuji's lens-fitted film packages ("LFFP") patents, also known as single-use cameras. ${ }^{2021}$ The defendants bought Fuji's used

[^183]LFFPs, refurbished them, and sold them as new. ${ }^{2022}$ The defendants asserted that there was a patent-exhausting first sale of the LFFPs in question. ${ }^{2023}$ After a jury found in favor of Fuji, the district court denied the defendants' post-trial JMOL motion on several grounds, including inapplicability of the first-sale doctrine because the sales in question occurred in foreign countries. ${ }^{2024}$

On appeal, the defendants asserted several arguments, including that the Supreme Court's decision in Quanta eliminated the territoriality requirement for patent exhaustion announced in Jazz Photo Corp. in favor of a rule of "strict exhaustion" rule. ${ }^{2025}$ According to the defendants, Quanta's "[w]hether outside the country" language confirmed that no United States territoriality requirement applied. ${ }^{2026}$

The Federal Circuit disagreed, holding that Quanta did not eliminate Jazz Photo Corp.'s territorial requirement. ${ }^{2027}$ In fact, Quanta "did not involve foreign sales." ${ }^{2028}$ Moreover, in the majority's view, the phrase " $[\mathrm{w}]$ hether outside the country" referred to a practicing use, which could be "outside the country," while an infringing use had to occur in the country where the patent was enforceable. ${ }^{20}$

In Honeywell International, Inc. v. United States, ${ }^{2030}$ the Federal Circuit considered the impact of an infringing sale by an entity that later acquires the rights to a patent, holding that such a sale is not authorized and therefore does not invoke the first-sale doctrine. The patent at issue in Honeywell related to cockpit warning lights, and its application was filed by Allied Corporation in the late 1980s. The application was subject the Invention Secrecy Act ${ }^{2031}$ and ultimately made subject to a PTO-imposed secrecy order that prevented a patent from issuing until 2000. While the secrecy order was in effect,

[^184]Allied Corporation became AlliedSignal Inc., a company that, after merging with Honeywell, Inc., became Honeywell International, Inc. ${ }^{2032}$ That company ultimately amended the application, which issued as the patent in suit. ${ }^{2033}$ Two months after the patent issued, Honeywell filed a complaint against the United States seeking compensation under the Invention Secrecy Act for pre-issuance use of the invention and under 28 U.S.C. § 1498(a) ${ }^{2034}$ for post-issuance infringement of several claims. ${ }^{2035}$

Included in this complaint were claims based on the government's use of Color Multifunction Displays ("CMFDs") that were manufactured and sold by Honeywell Inc. to the government while AlliedSignal owned the rights to the application. ${ }^{2036}$ Because Honeywell Inc. made the infringing sale and was now part of the same company as AlliedSignal, the Court of Federal Claims held that the first-sale doctrine precluded Honeywell from recovering damages. ${ }^{2037}$

A majority of the Federal Circuit reversed. ${ }^{2038}$ After noting that the first sale doctrine applies only if there was "an authorized first sale," the majority held that Honeywell Inc.'s sale of infringing CMFDs was not authorized because, at the time of the sale, it had no rights under the patent, which was owned by AlliedSignal. ${ }^{2039}$ The fact that AlliedSignal and Honeywell Inc. were now the same company did not affect the analysis because Honeywell's current ownership could "not retroactively authorize the earlier sale." ${ }^{2040}$
Judge Mayer dissented, explaining that the first sale doctrine prevented Honeywell from recovering because the interests of the application's owner (AlliedSignal) were aligned with the company that sold the infringing CMFDs (Honeywell Inc.). ${ }^{2041}$ In Judge Mayer's view, the majority's rule improperly allowed Honeywell to

[^185]recover for infringement even though it received the profits from the infringing sales. ${ }^{2042}$

## CONCLUSION

The year 2010 brought change aplenty to the Federal Circuit, both structurally and doctrinally. More change in both categories looms on the horizon, courtesy of personnel changes as well as changes in the law from both the Supreme Court and Congress. This is as it should be, for the Federal Circuit is now a federal court of appeals in full flower-an appellate court like no other, but also an appellate court like any other.

## ADDENDUM

In our previous articles surveying the Federal Circuit's 2000 and 2006 jurisprudence, ${ }^{2043}$ 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 sort of questions we are frequently asked, as Federal Circuit practitioners, by our clients. The most frequent: "When can we expect a decision?" So we provided a statistical "snapshot" of the Federal Circuit's work in the years 2000 and 2006, based on our study of the court's published patent opinions from those years.

We have reprised that effort for the year 2010. In 2010, there were 116 published patent opinions by three-judge panels; in one special instance, a five-judge panel rendered a decision. ${ }^{2044}$ This number is appreciably larger than the number of published patent opinions in 2000 (ninety-two) and in 2006 (ninety-eight). In addition, we have provided a statistical look at separate opinions in these patent cases and how the presence of these separate opinions affects disposition time, as well as the most frequent lower-court or agency venues from which appeals originate, and a tally of how many Federal Circuit 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 fails to account for the presumably shorter disposition times 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 in instances 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 earlier surveys, we have found many of the results set forth below to be enlightening, and for that reason we are again sharing them with the bench, bar, and other persons interested in the work of the Federal Circuit.

[^186]Table 1: Published Patent Panel Opinions by Judge, January 1, 2010 - December 31, 2010

| Judge | Number <br> Authored | Number <br> on panel | Number <br> separate <br> opinions | Number <br> authored <br> generating <br> separate <br> opinions | Percent <br> author <br> (3-judge <br> panel) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Michel | 5 | 17 | 0 | 1 | 29.4 |
| Rader | 16 | 38 | 3 | $5^{2045}$ | 42.1 |
| Newman | 9 | 29 | 9 | 4 | 31.0 |
| Lourie | 13 | 33 | 0 | 1 | 39.4 |
| Bryson | 5 | 23 | 0 | 1 | 21.7 |
| Gajarsa | 8 | 27 | 3 | 2 | 29.6 |
| Linn | 15 | 34 | 4 | 2 | 44.1 |
| Dyk | 11 | 33 | 6 | 6 | 33.3 |
| Prost | 13 | 36 | 4 | 6 | 36.1 |
| Moore | 12 | 22 | 0 | 3 | 54.5 |
| Friedman | 0 | 11 | 0 | 0 | 0.0 |
| Archer | 0 | 5 | 0 | 0 | 0.0 |
| Mayer | 3 | 14 | 2 | 3 | 21.4 |
| Plager | 1 | 6 | 0 | 0 | 16.7 |
| Clevenge <br> r | 1 | 8 | 3 | 0 | 12.5 |
| Schall | 1 | 5 | 0 | 0 | 20.0 |
| Visiting <br> Judge | 1 | 9 | 1 | 0 | 11.1 |
| Per <br> Curiam | 2 | - | - | 1 | - |
| Court | 116 | $350^{2046}$ | 35 | 35 | - |

Table 1 sets forth some raw numbers about the published patent opinions issued by panels of the Federal Circuit during 2010, listed by judge.

[^187]The first column ("\# authored") reflects the number of majority patent opinions each judge published in 2010. Thus, former Chief Judge Michel authored five majority patent opinions that were published in 2010, Chief Judge Rader wrote sixteen, Judge Newman wrote nine, and so on. Chief Judge Rader led the way with sixteen opinions authored, followed by Judges Linn, Lourie, and Prost with fifteen, thirteen, and thirteen opinions respectively. Judges Newman, Gajarsa, and Bryson authored the fewest (among active judges who sat for the full year) with nine, eight, and five, respectively. Only two cases were decided per curiam, and one was authored by a visiting judge. The second column ("\# on panel") sets forth the number of times each judge was on a panel for one of those patent cases decided in 2010 and resulting in a published opinion. The range of variation among the active judges in this respect (e.g., Chief Judge Rader sat on thirty-eight of these panels, while Judge Moore sat on only twentytwo) is striking. 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 Chief Judge Rader is perhaps somewhat more likely, and Judge Moore perhaps somewhat less likely, to request that the panel publish its disposition, which requires the concurrence of a panel majority (two of three judges) under 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 2010. Two observations about this column are in order. First, these numbers reflect a high degree of unanimity in reasoning and result-only thirty-five separate opinions were filed in 2010 in 116 panel decisions. 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 2010, 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. There are a couple of curious data points that emerge here. First, each of the three opinions that Judge Mayer authored in 2010 generated a separate opinion from another member of the panel. Second, over half (six) of Judge Dyk's eleven authored opinions generated separate opinions-the same number of times that Judge Dyk himself wrote separately.

The final column ("\% author (3-judge panel")) in Table 1 indicates, based on the published patent opinions from 2010, 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 exactly $33.3 \%$ of the opinions. What stands out as significant from this data is that one judge-Judge Moore-in 2010 wrote over half (54.5\%) of the opinions in cases where she voted on published patent decisions.

Table 2: Separate Opinions In Patent Cases 2010

| Judge | Concur <br> in <br> Opinion | Concur <br> in <br> Judgment | Concur <br> in part, <br> Dissent <br> in part | Dissent | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Michel | 0 | 0 | 0 | 0 | 0 |  |
| Rader | 0 | 1 | 0 | 2 | 3 |  |
| Newman | 0 | 1 | 5 | 3 | 9 |  |
| Lourie | 0 | 0 | 0 | 0 | 0 |  |
| Bryson | 0 | 0 | 0 | 0 | 0 |  |
| Gajarsa | 0 | 1 | 0 | 2 | 3 |  |
| Linn | 1 | 1 | 2 | 0 | 4 |  |
| Dyk | 0 | 0 | 2 | 4 | 6 |  |
| Prost | 0 | 1 | 0 | 3 | 4 |  |
| Moore | 0 | 0 | 0 | 0 | 0 |  |
|  |  |  |  |  |  |  |
| Friedman | 0 | 0 | 0 | 0 | 0 |  |
| Archer | 0 | 0 | 0 | 0 | 0 |  |
| Mayer | 0 | 0 | 0 | 2 | 2 |  |
| Plager | 0 | 0 | 0 | 0 | 0 |  |
| Clevenger | 1 | 1 | 0 | 1 | 3 |  |
| Schall | 0 | 0 | 0 | 0 | 0 |  |
|  |  |  |  |  |  |  |
| Visiting <br> Judge | 1 | 0 | 0 | 0 | 1 |  |
|  |  |  |  |  |  |  |
| Court | 3 | 6 | 9 | 17 | 35 |  |

Table 2 sets forth a breakdown of the thirty-three separate opinions by type and by authoring judge. Again, because of the limited universe of separate opinions, these statistics may not carry much meaning. These numbers for 2010 illustrate the Federal Circuit's largely unanimous nature-only seventeen dissents, and nine partial dissents, were filed all year.

Table 3: Disposition Time By Judge (In Days)
January 1, 2010 - December 31, 2010

| Judge | Avg. time per opinion authored | Avg. time <br> per unanimous Opinion authored | Avg. time when writing separately | Avg. time when on panel |
| :---: | :---: | :---: | :---: | :---: |
| Michel | 108 | 107 | - | 125 |
| Rader | 170 | 156 | 188 | 150 |
| Newman | 228 | 231 | 165 | 170 |
| Lourie | 79 | 77 | - | 138 |
| Bryson | 107 | 101 | - | 120 |
| Gajarsa | 166 | 154 | 225 | 143 |
| Linn | 170 | 169 | 163 | 149 |
| Dyk | 109 | 93 | 148 | 126 |
| Prost | 124 | 106 | 114 | 134 |
| Moore | 92 | 78 | - | 117 |
|  |  |  |  |  |
| Friedman | - | - | - | 130 |
| Archer | - | - | - | 149 |
| Mayer | 151 | - | 152 | 141 |
| Plager | 62 | 62 | - | 141 |
| Clevenger | 154 | 154 | 141 | 137 |
| Schall | 161 | 161 | - | 122 |
|  |  |  |  |  |
| Visting Judges | 111 | 111 | 205 | 120 |
|  |  |  |  |  |
| Per Curiam | 132 | 52 | - | - |
|  |  |  |  |  |
| Court | 137 | 128 | 163 | 137 |

Table 3 sets forth average statistical information regarding the length of time it takes the Federal Circuit and its judges to dispose of published Federal Circuit patent appeals. This table is the most interesting of these statistics, 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 the date of argument (or submission) for each of the court's patent opinions published in 2010 from the PACER docket on the court's
website. We then calculated the difference, in days, between oral argument (or submission) and decision, and utilized 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 five published patent opinions Chief Judge Michel authored in 2010, the average amount of time from argument to decision was 108 days (slightly more than three months), while for the nine published patent opinions authored by Judge Newman, the average time from argument to decision was 228 days (about seven and a half 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 137 days, or a bit over four months.

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 opinionthe 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 judge. The average time for the entire court for issuance of unanimous published patent opinions was 128 days after argument, or about four months.

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 2010. 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 163 days, or a bit more than five months.

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 nonauthoring 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 117 days for Judge Moore to 170 days for Judge Newman. The court average, as previously noted, was 137 days from argument to decision for published patent cases.

Table 4A: Lower Court or agency Originating Case

| Lower Court or Agency | Number |
| :--- | :---: |
| Eastern District of Texas | 9 |
| District of Delaware | 9 |
| Southern District of New York | 8 |
| U.S. Patent and Trademark Office | 8 |
| U.S. International Trade Commission | 7 |
| Northern District of California | 7 |
| Central District of California | 6 |
| Eastern District of Virginia | 6 |
| District of the New Jersey | 6 |
| District of the District of Columbia | 5 |
| District of Massachusetts | 5 |
| District of Colorado | 3 |
| U.S. Court of Federal Claims | 2 |
| District of Arizona | 2 |
| Eastern District of Michigan | 2 |
| Northern District of Ohio | 2 |
| Southern District of California | 2 |
| Southern District of Florida | 2 |
| U.S. Supreme Court(remand) | 2 |
| Western District of Pennsylvania | 2 |
| Western District of Texas | 2 |
| Western District of Washington | 2 |
| Western District of Wisconsin | 2 |
| District of Connecticut | 1 |
| District of Maryland | 1 |
| District of Nevada | 1 |
| Eastern District of Missouri | 1 |
| Eastern District of New York | 1 |
| Eastern District of Pennsylvania | 1 |
| Northern District of Georgia | 1 |
| Northern District of Illinois | 1 |
| Northern District of Iowa | 1 |
| Northern District of Texas | 1 |
| Southern District of Indiana | 1 |
| Southern District of Ohio | 1 |
| Southern District of Texas | 1 |
| Western District of Michigan |  |
| Western District of Tennessee | 2 |
|  |  |
|  |  |


| Total | 116 |
| :--- | :---: |

Table 4B: Circuits Originating Case

| Circuit | Number |  |
| :--- | :---: | :---: |
| First Circuit | 5 |  |
| Second Circuit | 10 |  |
| Third Circuit | 18 |  |
| Fourth Circuit | 7 |  |
| Fifth Circuit | 13 |  |
| Sixth Circuit | 7 |  |
| Seventh Circuit | 4 |  |
| Eighth Circuit | 2 |  |
| Ninth Circuit | 20 |  |
| Tenth Circuit | 3 |  |
| Eleventh Circuit | 3 |  |
| D.C. Circuit | 5 |  |
| No circuit (agency or U.S. Court of Federal Claims) | 17 |  |
| Supreme Court of the U.S. (remand) | 2 |  |
|  |  |  |
| Total | 116 |  |

Tables 4A and 4B 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 Eastern District of Texas, the District of Delaware (the preferred state of incorporation for so many American companies), the Southern District of New York (New York City), and the Northern District of California (San Francisco, Oakland, and Silicon Valley), are leading the way.

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, Fifth, and Ninth Circuits would be the major patent law circuits today.

Table 5: Results of Published Opinions

| Holding | Number |
| :--- | :---: |
| Affirmed | 45 |
| Affirmed as modified | 1 |
| Affirmed in part, reversed in part | 5 |
| Affirmed in part, reversed in part, and remanded | 14 |


| Affirmed in part, reversed in part, vacated in part | 1 |
| :--- | :---: |
| Affirmed in part, reversed in part, vacated in part, and <br> remanded | 3 |
| Affirmed in part, vacated in part | 2 |
| Affirmed in part, vacated in part, and remanded | 5 |
| Mandamus granted | 1 |
| Reversed | 8 |
| Reversed and remanded | 16 |
| Reversed, remanded, and reassigned | 1 |
| Reversed and vacated | 1 |
| Reversed, vacated, and remanded | 3 |
| Reversed in part, vacated in part, and remanded | 2 |
| Transferred | 7 |
| Vacated and remanded | 116 |
| Total |  |

The final table, Table 5, sorts the "decretal language" from the Federal Circuit's published patent opinions in 2010 to demonstrate how many of those opinions resulted in alterations of the rights of the parties. ${ }^{2047}$ Table 5 thus shows that, in 2010, the Federal Circuit's 116 published patent opinions yielded across-the-board affirmances in forty-five cases; total reversals in twenty-seven cases (eight "Reversed," sixteen "Reversed and remanded," one "Reversed, remanded, and reassigned," one "Reversed and vacated," and one "Reversed in part, vacated in part, and remanded"); and a variety of remedies 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. Not only do these statistics wholly exclude the numerous cases disposed of under the court's Rule 36 (all of which, by definition, are affirmances), but it is also probable that the opinions 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"2048 -and those cases are more likely to result in different outcomes in the lower courts as compared to the body of unpublished opinions.

[^188]
[^0]:    1. See, e.g., Rochelle Cooper Dreyfuss, The Federal Circuit: A Case Study in Specialized Courts, 64 N.Y.U. L. Rev. 1, 6-7 (1989) (discussing the creation of the Federal Circuit as a response, in part, to the difficulties in reviewing patent cases); S. Jay Plager, The Federal Circuit as an Institution: On Uncertainty and Policy Levers, 43 Loy. L.A. L. Rev. 749, 750 (2010).
    2. See Gregory A. Castanias, Lawrence D. Rosenberg, Michael S. Fried \& Todd R. Geremia, Survey of the Federal Circuit's Patent Law Decisions in 2006: A New Chapter in the Ongoing Dialogue with the Supreme Court, 56 Am. U. L. Rev. 793, 798-816 (2007) (discussing "three waves" in the Supreme Court's approach to review of Federal Circuit patent decisions, beginning with a hands-off approach, moving to a more aggressive approach that addressed core issues in patent law, then finally using an actively reform-oriented approach); see also Paul R. Gugliuzza, Veterans Benefits in 2010: A New Dialogue Between the Supreme Court and the Federal Circuit, 60 AM. U. L. Rev. 845 (2011).
    3. See, e.g., Mark D. Janis, Patent Law in the Age of the Invisible Supreme Court, 2001 U. Ill. L. Rev. 387, 387 (2001).
    4. Castanias, et al., supra note 2, at 798.
[^1]:    5. See, e.g., Castanias et al., supra note 2, at 798; Janis, supra note 3, at 387.
    6. Castanias, et al., supra note 2, at 798.
    7. Janis, supra note 3, at 387.
    8. 130 S. Ct. 3218, 95 U.S.P.Q.2d (BNA) 1001 (2010).
    9. SEB S.A. v. Montgomery Ward \& Co., 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010), cert. granted sub nom. Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 458 (2010).
    10. i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010), cert. granted, 131 S. Ct. 647 (2010).
    11. Bd. of Trs. of the Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc., 583 F.3d 832, 92 U.S.P.Q.2d (BNA) 1442 (Fed. Cir. 2009), cert. granted, 131 S. Ct. 502 (2010).
    12. See, e.g., Kelly Casey Mullally, Gregory Castanias \& Franklin E. Gibbs, MedImmune v. Genentech, 4 J. Bus. \& TECH. L. 59, 61 (2009) (quoting Gregory Castanias, who described himself as a generalist intellectual property litigator).
    13. U.S. Court of Appeals for the Federal Circuit Visiting Judges, U.S. Court of Appeals for the Federal Circuit,
[^2]:    http://www.cafc.uscourts.gov/images/stories/announcements/2010/VJ_Chart_for_ Website_8.pdf. (last visited Mar 8, 2011).
    14. Id.
    15. See United States Court of Appeals for the Federal Circuit Judges Sitting by Designation with Other Circuits January 2010-present, U.S. Court of Appeals for the Federal Circuit,
    http://www.cafc.uscourts.gov/images/stories/announcements/2010/2010_CAFC_J udges_Sitting_by_Designation.pdf.
    16. 28 U.S.C.C. § 1295 (2006); see also id. § 1292 (c)-(d).
    17. See Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826, 831, 833, 62 U.S.P.Q.2d (BNA) 1801, 1804-05 (2002) (holding that the Federal Circuit does not have jurisdiction over patent claims that arise in counterclaims but not in complaint).
    18. Paul R. Michel, Chief Judge, U.S. Court of Appeals for the Fed. Circuit, 2009 State of the Court Speech as Prepared for Delivery at the Federal Circuit Bar Association Annual Bench-Bar Conference (June 19, 2009),
    http://www.cafc.uscourts.gov/images/stories/announcements/2009/soc09.pdf.
    19. Mike Scarcella, Federal Circuit Chief Judge Paul Michel Announces Retirement, Nat'L L.J. (Nov. 23, 2009), http://www.law.com/jsp/article.jsp?id=1202435764527.
    20. Id.

[^3]:    21. Haldane Robert Mayer, Circuit Judge, U.S. Court of Appeals for the Federal Circuit,
    http://www.cafc.uscourts.gov/judges/haldane-robert-mayer-circuit-judge.html (last visited Feb. 3, 2011).
    22. Judge Kathleen O'Malley Sworn-In on December 27, 2010, U.S. Court of Appeals for the Federal Circuit, http://www.cafc.uscourts.gov/announcements (last visited Feb. 3, 2011); Alvin A. Schall, Circuit Judge, U.S. Court of Appeals for the Federal Circuit, http://www.cafc.uscourts.gov/judges/alvin-a-schall-circuit-judge.html (last visited Feb 3, 2011).
    23. See U.S. Court of Appeals for the Federal Circuit Visiting Judges, U.S. Court of Appeals for the Federal Circuit,
    http://www.cafc.uscourts.gov/images/stories/announcements/2010/VJ_Chart_for_ Website_8.pdf; Judge Kathleen O'Malley Sworn-In on December 27, 2010, supra note 22.
    24. Office of the Press Secretary, President Obama Nominates Edward C. DuMont for the United States Court of Appeals for the Federal Circuit, The White House (April 14, 2010) http://www.whitehouse.gov/the-press-office/president-obama-nominates-edward-c-dumont-united-states-court-appeals-federal-circu;
    Judicial Nomination Materials: 111th Congress, U.S. Senate Committee on the JUDICIARY, http://judiciary.senate.gov/nominations/Materials111thCongress.cfm (last visited Feb. 2, 2011).
    25. Judicial Nomination Materials: 111th Congress, U.S. Senate Committee on the JUdiciary, http://judiciary.senate.gov/nominations/Materials111thCongress.cfm (last visited Feb. 2, 2011); Office of the Press Secretary, President Obama Names Two to U.S. Circuit Courts, The White House (Sept. 29, 2010), http://www.whitehouse.gov/the-press-office/2010/09/29/president-obama-names-two-us-circuit-courts-0; Judicial Nomination Materials: 111th Congress, supra note 24.
    26. Judicial Nomination Materials: 112th Congress, U.S. Senate Committee on the JUDICIARY, http://judiciary.senate.gov/nominations/Materials112thCongress.cfm (last visited Feb. 2, 2011).
[^4]:    33. Federal Circuit Announces Oral Argument Schedule for Atlanta, 717 Madison Place (Sept. 28, 2010, 6:19 p.m.), http://www.717madisonplace.com/?p=3066.
    34. See Michel, supra note 18.
    35. Federal Circuit Debuts New Web Site, U.S. Court of Appeals for the Federal Circuit, http://www.cafc.uscourts.gov/2010/page-2.html (last visited Feb. 10, 2011).
    36. Castanias, et al., supra note 2, at 975-85; 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).
    37. Markman v. Westview Instruments, Inc., 517 U.S. 370, 38 U.S.P.Q.2d (BNA) 1461 (1996).
[^5]:    38. Ex parte Markush, 1925 Dec. Comm'r Pat. 126 (1925).
    39. Ex parte Jepson, 1917 Dec. Comm'r Pat. 62 (1917).
    40. 130 S. Ct. 3218, 95 U.S.P.Q.2d (BNA) 1001 (2010).
    41. Id. at 3223, 95 U.S.P.Q.2d (BNA) at 1003.
    42. Id. at 3231, 95 U.S.P.Q.2d (BNA) at 1010.
    43. Id. at 3229, 95 U.S.P.Q.2d (BNA) at 1009.
    44. 35 U.S.C. $\S 101$ (2006). Under the statute, a "process" includes a "method." $I d . \S 100(\mathrm{~b})$.
    45. Bilski, 130 S. Ct. at 3224, 95 U.S.P.Q.2d (BNA) at 1004-05.
    46. Id., 95 U.S.P.Q.2d (BNA) at 1004-05.
    47. See In re Bilski, 545 F.3d 943, 949, 88 U.S.P.Q.2d (BNA) 1385, 1387 (Fed. Cir. 2008) (en banc).
    48. Id. at 954, 88 U.S.P.Q.2d (BNA) at 1391.
[^6]:    49. Bilski, 130 S. Ct. at 3225, 95 U.S.P.Q.2d (BNA) at 1005-06 (quoting Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980)).
    50. Id., 95 U.S.P.Q. 2d (BNA) at 1005-06 (internal quotation marks omitted).
    51. Id., 95 U.S.P.Q. 2d (BNA) at 1005-06.
    52. Id. at 3231, 95 U.S.P.Q.2d (BNA) at 1010.
    53. Id. at 3226, 95 U.S.P.Q.2d (BNA) at 1006-07.
    54. Id. at 3231, 95 U.S.P.Q.2d (BNA) at 1010.
    55. Id., 95 U.S.P.Q.2d (BNA) at 1010 .
    56. See id. at 3225-27, 95 U.S.P.Q.2d (BNA) at 1005-08.
    57. Castanias, et al., supra note 2, at 816.
    58. Bilski, 130 S. Ct. at 3225,95 U.S.P.Q.2d (BNA) at 1005-06.
    59. Id. at 3231, 95 U.S.P.Q.2d (BNA) at 1010 .
    60. Id. at 3226; 95 U.S.P.Q.2d (BNA) at 1006-07.
[^7]:    "you might as well throw darts" to rule on claim construction because the reversal rate is so high).
    70. See, e.g., Warrior Sports Inc. v. Dickinson Wright P.L.L.C., 666 F. Supp. 2d 749, 751 n. 1 (E.D. Mich. 2009) (noting that the Federal Circuit has been inconsistent on the issue of its jurisdiction over state claims arising from patent disputes); Abbott Labs. v. Sandoz, Inc., 500 F. Supp. 2d 846 (N.D. Ill. 2007) (attempting to predict what the Federal Circuit will do upon a third hearing of the same issue, when its previous two hearings had different results); Payne v. Tennessee, 501 U.S. 808 (1991) (reiterating that "in most matters it is more important that the applicable rule of law be settled than it be settled right'" (quoting Burnet v. Coronado Oil \& Gas Co., 285 U. S. 393, 406 (1932) (Brandeis, J., dissenting)); Dorsey v. Tisby, 234 P.2d 557, 564 (Or. 1951) ("[W]hen property rights are at stake, consistency, that is, adherence to precedent, is a . . virtue . . . .").
    71. Janis, supra note 3, at 387.
    72. See, e.g., MercExchange, L.L.C. v. eBay, Inc., 401 F.3d 1323, 1338, 74 U.S.P.Q.2d (BNA) 1225, 1238-39 (Fed. Cir. 2005) (articulating the general rule of granting a permanent injunction once infringement and validity have been established), rev'd, 547 U.S. 388, 78 U.S.P.Q.2d (BNA) 1577 (2006).
    73. See, e.g., eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388, 394-396, 78 U.S.P.Q.2d (BNA) 1577, 1580 (2006) (Roberts, C.J., concurring) (emphasizing the history of granting injunctive relief but holding that this does not warrant a general rule of injunctive relief); id. at 395-96, 78 U.S.P.Q.2d (BNA) at 1580-81 (Kennedy, J ., concurring) (highlighting the importance of the historical practice of granting injunctive relief in future decisions on whether to grant injunctive relief).

[^8]:    74. See id. at 396-97, 78 U.S.P.Q.2d (BNA) at 1580-81 (Kennedy, J., concurring) (discussing the rise of firms that use patents and the attendant injunctive relief to charge excessive licensing fees).
    75. See id. at 396, 78 U.S.P.Q.2d (BNA) at 1580 (Kennedy, J., concurring) (noting that the use of injunctive relief in patent cases reflects the difficulty of permitting monetary damages to compensate a plaintiff for the use of an invention against the plaintiff's wishes).
    76. Id. at 391-92, 394, 78 U.S.P.Q.2d (BNA) at 1578-80 (majority opinion).
    77. Bilski v. Kappos, 130 S. Ct. 3218, 3226, 95 U.S.P.Q.2d (BNA) 1001, 1006 (2010).
    78. In Microsoft Corp. v. i4i Ltd. Partnership, the Court will confront the question of whether challenges to the validity of a patent-at least in cases where the relevant prior art was not before the patent examiner-must be proved by clear and convincing evidence. Petition for Writ of Certiorari at i, Microsoft Corp. v. i4i Ltd P'ship, 131 S. Ct. 647 (2010) (No. 10-290), 2010 WL 3413088 at $*_{i i}$ [hereinafter Microsoft v. i4i Petition]. In Global-Tech Appliances Inc. v. SEB S.A., the Court will take up the question of the proper standard for finding induced patent infringement
[^9]:    under 35 U.S.C. $\S 271$ (b), particularly the role of knowledge of the specific patent. Petition for Writ of Certiorari at i, Global-Tech Appliances Inc. v. SEB S.A., 131 S. Ct. 458 (2010) (No. 10-6), 2010 WL 2813550 at *i [hereinafter Global-Tech v. SEB Petition]. Finally, in Board of Trustees of Leland Stanford Junior University v. Roche Molecular Systems, Inc., the Court will decide whether a university's right to inventions created through federally-funded research can be terminated when one of the inventors purports to assign the inventor's rights to a third party. Petition for Writ of Certiorari at i Bd. of Trs. of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 131 S. Ct. 502 (2010) (No. 09-1159), 2010 WL 1138571 at *i. [hereinafter Board v. Roche Petition].
    79. See Bilski, 130 S. Ct. at 3223 \& n.*, 95 U.S.P.Q.2d (BNA) at 1004.
    80. Id. at 3223 n.*, 95 U.S.P.Q.2d (BNA) at 1004.
    81. Id. at 3227, 95 U.S.P.Q.2d (BNA) at 1007-08 (plurality opinion).
    82. Id. at 3228, 95 U.S.P.Q.2d (BNA) at 1008-09 (plurality opinion).
    83. Id. at 3229, 95 U.S.P.Q.2d (BNA) at 1009-10 (plurality opinion).
    84. 131 S. Ct. 647 (2010), cert. granted., 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010).
    85. Microsoft v. i4i Petition, supra note 78, at *ii.

[^10]:    86. 35 U.S.C. § 282 (2006).
    87. See Jeffrey A. Lefstin, The Constitution of Patent Law: The Court of Customs and Patent Appeals and the Shape of the Federal Circuit's Jurisprudence, 43 Loy. L.A. L. Rev. 843, 869 (2010).
    88. 131 S. Ct. 458 (2010), cert. granted, 594 F.3d 1360, 1377, 93 U.S.P.Q.2d (BNA) 1617, 1628-29 (Fed. Cir. 2010).
    89. SEB S.A. v. Montgomery Ward \& Co., 594 F.3d 1360, 1377, 93 U.S.P.Q.2d (BNA) 1617, 1628-29 (Fed. Cir. 2010), cert. granted sub nom., Global-Tech Appliances Inc. v. SEB S.A., 131 S. Ct. 458 (2010)
    90. 131 S. Ct. 502 (2010), cert. granted, 583 F.3d 832, 836, 92 U.S.P.Q.2d (BNA) 1442, 1445 (Fed. Cir. 2009).
    91. Petition for Writ of Certiorari at i, Board of Trustees of Leland Stanford Junior University v. Roche Molecular Systems, Inc., 131 S. Ct. 502 (2010) (No. 091159), 2010 WL 1138571 at $*$ i.
    92. Bd. of Trs. of the Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 583 F.3d 832, 836, 92 U.S.P.Q.2d (BNA) 1442, 1445 (Fed. Cir. 2009).
[^11]:    93. U.S. Const. art. III, § 2, cl. 1.
    94. 35 U.S.C. § 281 (2006) (emphasis added).
    95. $I d . \S 100(\mathrm{~d})(2006)$.
    96. Id. § 261.
    97. See 60 Am. Jur. 2d Patents § 863 (2010) (citing cases finding standing for licensees).
    98. 631 F.3d 1257, 97 U.S.P.Q.2d (BNA) 1484 (Fed. Cir. Dec. 22, 2010).
    99. Id. at 1259-60, 97 U.S.P.Q.2d (BNA) at 1486.
    100. Id. at 1260, 97 U.S.P.Q.2d (BNA) at 1487-88.
    101. Id. at 1262, 97 U.S.P.Q.2d (BNA) at 1488.
    102. Id. at 1262-63, 97 U.S.P.Q.2d (BNA) at 1488-89 (quoting WiAV Solutions, LLC v. Motorola, Inc., 679 F. Supp. 2d 639, 648 (E.D. Va. 2009)).
    103. 134 F.3d 1481, 45 U.S.P.Q.2d (BNA) 1633 (Fed. Cir. 1998).
[^12]:    104. WiAV Solutions, 679 F. Supp. at 646-47.
    105. WiAV Solutions, 631 F.3d at 1256, 97 U.S.P.Q.2d (BNA) at 1490.
    106. Id., 97 U.S.P.Q. 2 d (BNA) at 1490 .
    107. Id. at 1266-67, 97 U.S.P.Q.2d (BNA) at 1491.
    108. Id. at 1266, 97 U.S.P.Q.2d (BNA) at 1491.
    109. Id. at 1267, 97 U.S.P.Q.2d (BNA) at 1491.
    110. Id. at 1267-68, 97 U.S.P.Q.2d (BNA) at 1491-92.
    111. 625 F.3d 1359, 96 U.S.P.Q.2d (BNA) 1977 (Fed. Cir. 2010).
    112. Id. at 1366, 96 U.S.P.Q.2d (BNA) at 1983.
    113. Id. at 1361, 96 U.S.P.Q.2d (BNA) at 1979.
[^13]:    114. Id., 96 U.S.P.Q.2d (BNA) at 1979
    115. Id., 96 U.S.P.Q.2d (BNA) at 1979.
    116. Id. at 1361-62, 96 U.S.P.Q.2d (BNA) at 1979-80.
    117. Id. at 1362, 96 U.S.P.Q.2d (BNA) at 1980.
    118. Id., 96 U.S.P.Q.2d (BNA) at 1980.
    119. Id. at 1363, 96 U.S.P.Q.2d (BNA) at 1981.
    120. Id. at 1364, 96 U.S.P.Q.2d (BNA) at 1981 (quoting DDB Techs., L.L.C. v. MLB Advanced Media, L.P., 517 F.3d 1284, 1290, 85 U.S.P.Q.2d 1942, 1946 (Fed. Cir. 2008)).
    121. Id. at 1364-65, 96 U.S.P.Q.2d (BNA) at 1982.
    122. Id. at 1365,96 U.S.P.Q.2d (BNA) at 1982.
    123. See id., 96 U.S.P.Q.2d (BNA) at 1982.
[^14]:    124. Id., 96 U.S.P.Q.2d (BNA) at 1983.
    125. See id. at 1366, 96 U.S.P.Q.2d (BNA) at 1983.
    126. Id., 96 U.S.P.Q.2d (BNA) at 1983 (emphasis added).
    127. Id. at 1368, 96 U.S.P.Q.2d (BNA) at 1985 (Newman, J., dissenting).
    128. Id. at 1370, 96 U.S.P.Q.2d (BNA) at 1987.
    129. Id. at 1372, 96 U.S.P.Q.2d (BNA) at 1988.
    130. 620 F.3d 1305, 96 U.S.P.Q.2d (BNA) 1640 (Fed. Cir. 2010).
    131. Id. at 1309-10, 96 U.S.P.Q.2d (BNA) at 1643.
    132. Id. at 1309, 96 U.S.P.Q.2d (BNA) at 1643 .
    133. See id. at 1318, 96 U.S.P.Q.2d (BNA) at 1650.
    134. Id., 96 U.S.P.Q.2d (BNA) at 1650 .
    135. Id., 96 U.S.P.Q.2d (BNA) at 1650 .
[^15]:    136. Id., 96 U.S.P.Q.2d (BNA) at 1650 .
    137. 604 F.3d 1354, 95 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
    138. Id. at 1357, 95 U.S.P.Q.2d (BNA) at 1322.
    139. Id. at 1358,95 U.S.P.Q.2d (BNA) at 1323 .
    140. Id., 95 U.S.P.Q.2d (BNA) at 1323.
    141. See id., 95 U.S.P.Q.2d (BNA) at 1323.
    142. Id. at 1363, 95 U.S.P.Q.2d (BNA) at 1327.
    143. Id. at 1361, 95 U.S.P.Q.2d (BNA) at 1325.
    144. Id., 95 U.S.P.Q.2d (BNA) at 1325.
    145. Id. at 1362, 95 U.S.P.Q.2d (BNA) at 1326.
    146. 626 F.3d 1213, 97 U.S.P.Q.2d (BNA) 1257 (Fed. Cir. 2010).
    147. Id. at 1216-17, 97 U.S.P.Q.2d (BNA) at 1259.
    148. Id. at 1215, 97 U.S.P.Q.2d (BNA) at 1258 .
    149. Id. at 1216, 97 U.S.P.Q.2d (BNA) at 1258.
[^16]:    150. Id. at 1217, 97 U.S.P.Q.2d (BNA) at 1259 .
    151. Id., 97 U.S.P.Q.2d (BNA) at 1258.
    152. Id. at 1217, 97 U.S.P.Q.2d (BNA) at 1259.
    153. Id., 97 U.S.P.Q.2d (BNA) at 1259.
    154. Id. at 1217-18, 97 U.S.P.Q.2d (BNA) at 1259-60.
    155. Id. at 1218, 97 U.S.P.Q.2d (BNA) at 1259-60.
    156. Id., 97 U.S.P.Q.2d (BNA) at 1260.
    157. Id. at 1219-20, 97 U.S.P.Q.2d (BNA) at 1260-61.
    158. Id. at 1219, 97 U.S.P.Q.2d (BNA) at 1260 .
    159. Id., 97 U.S.P.Q.2d (BNA) at 1260-61.
    160. 505 F.3d 1328, 85 U.S.P.Q.2d (BNA) 1074 (Fed. Cir. 2007).
    161. A123 Systems, 626 F.3d at 1219, 97 U.S.P.Q.2d (BNA) at 1261 (citing

    Biomedical Patent, 505 F.3d at 1339, 85 U.S.P.Q.2d (BNA) at 1081-82).
    162. Id. at 1220, 97 U.S.P.Q.2d (BNA) at 1261.

[^17]:    163. Id., 97 U.S.P.Q.2d (BNA) at 1262.
    164. Id. at 1221-22, 97 U.S.P.Q.2d (BNA) at 1262.
    165. Id. at 1222, 97 U.S.P.Q.2d (BNA) at 1263.
    166. See SIRF Tech., Inc. v. ITC Int'l Trade Comm'n, 601 F.3d 1319, 1325-26, 94 U.S.P.Q.2d (BNA) 1607, 1611 (Fed. Cir. 2010).
    167. Id. at 1326, 94 U.S.P.Q. 2 d (BNA) at 1612.
    168. Id., 94 U.S.P.Q.2d (BNA) at 1612.
    169. Id., 94 U.S.P.Q.2d (BNA) at 1611-12.
    170. Id., 94 U.S.P.Q. 2 d (BNA) at 1612.
    171. Id., 94 U.S.P.Q.2d (BNA) at 1612.
    172. Id. at 1325, 94 U.S.P.Q.2d (BNA) at 1611 (quoting DDB Techs., LLC v. MLB Advanced Media, LP, 517 F.3d 1284, 1289, 85 U.S.P.Q.2d 1942, 1946 (Fed. Cir. 2008)).
[^18]:    173. Id. at 1328, 94 U.S.P.Q.2d (BNA) at 1613.
    174. Id., 94 U.S.P.Q.2d (BNA) at 1613.
    175. Id., 94 U.S.P.Q.2d (BNA) at 1613.
    176. Id., 94 U.S.P.Q.2d (BNA) at 1613 .
    177. Id. at 1328-29, 94 U.S.P.Q.2d (BNA) at 1614.
    178. 614 F.3d 1333, 95 U.S.P.Q.2d (BNA) 1947 (Fed. Cir. 2010).
    179. Id. at 1335-36, 95 U.S.P.Q.2d (BNA) at 1948.
    180. Id. at 1336, 95 U.S.P.Q.2d (BNA) at 1948.
    181. Id., 95 U.S.P.Q.2d (BNA) at 1948.
    182. See id. at 1341, 95 U.S.P.Q.2d (BNA) at 1952.
    183. Id. at 1336, 95 U.S.P.Q.2d (BNA) at 1948.
[^19]:    184. Id. at 1341-42, 95 U.S.P.Q.2d (BNA) at 1952.
    185. Id. at 1342, 95 U.S.P.Q.2d (BNA) at 1952-53.
    186. Id. at 1343-44, 95 U.S.P.Q.2d (BNA) at 1953-54.
    187. 35 U.S.C. § 292 (a) (2006).
    188. 619 F.3d 1321, 96 U.S.P.Q.2d (BNA) 1304 (Fed. Cir. 2010).
    189. Id. at 1322, 96 U.S.P.Q.2d (BNA) at 1305.
    190. Id., 96 U.S.P.Q.2d (BNA) at 1305.
    191. Id. at 1323, 96 U.S.P.Q.2d (BNA) at 1306.
    192. Id. at 1323, 96 U.S.P.Q.2d (BNA) at 1306 .
    193. Id. at 1325, 96 U.S.P.Q.2d (BNA) at 1307 (quoting Vt. Agency of Natural Res. v. U.S. ex rel. Stevens, 529 U.S. 765, 773 (2000)).
    194. Id., 96 U.S.P.Q.2d (BNA) at 1307-08 ("Because the government would have standing to enforce its own law, Stauffer, as the government's assignees, also has standing to enforce section 292.").
    195. 529 U.S. 765 (2000).
[^20]:    196. Id. at 772-73.
    197. Stauffer, 619 F.3d at 1327, 96 U.S.P.Q.2d (BNA) at 1309.
    198. 21 U.S.C. § 355 (2006).
    199. See Teva Pharm. USA, Inc. v. Eisai Co., 620 F.3d 1341, 1343, 96 U.S.P.Q.2d (BNA) 1808, 1810 (Fed. Cir. 2010).
    200. 620 F.3d 1341, 96 U.S.P.Q.2d (BNA) 1808 (Fed. Cir. 2010).
    201. Id. at 1343, 96 U.S.P.Q.2d (BNA) at 1810 .
    202. Id., 96 U.S.P.Q.2d (BNA) at 1810.
    203. Id., 96 U.S.P.Q.2d (BNA) at 1810.
    204. See id., 96 U.S.P.Q.2d (BNA) at 1810.
    205. Id., 96 U.S.P.Q.2d (BNA) at 1810 .
    206. Id. at 1343-44, 96 U.S.P.Q.2d (BNA) at 1810.
    207. Id. at 1347, 96 U.S.P.Q.2d (BNA) at 1813 .
[^21]:    208. Id., 96 U.S.P.Q.2d (BNA) at 1814 (quoting Caraco Pharm. Labs., Ltd. v. Forest Labs., Inc., 527 F.3d 1278, 1293, 86 U.S.P.Q.2d (BNA) 1289, 1299 (Fed. Cir. 2008)) (internal quotation marks omitted).
    209. Id. at 1348-50, 96 U.S.P.Q.2d (BNA) at 1814-15.
    210. 28 U.S.C. § 1338(a) (2006) (granting exclusive jurisdiction to federal courts of any claim arising under federal patent law).
    211. 596 F.3d 1355, 93 U.S.P.Q.2d (BNA) 1917 (Fed. Cir. 2010).
    212. Id. at 1358-59, 93 U.S.P.Q.2d (BNA) at 1919-20.
    213. Id., 93 U.S.P.Q.2d (BNA) at 1919-20.
    214. Id. at 1359, 93 U.S.P.Q.2d (BNA) at 1920 (quoting Christianson v. Colt Indus.

    Operating Corp., 486 U.S. 800, 809, 7 U.S.P.Q.2d 1109, 1110 (1988)).
    215. Id., 93 U.S.P.Q.2d (BNA) at 1920.
    216. Id. at 1360, 93 U.S.P.Q.2d (BNA) at 1921.

[^22]:    217. Id., 93 U.S.P.Q.2d (BNA) at 1921.
    218. Id. at 1362, 93 U.S.P.Q.2d (BNA) at 1922.
    219. Id., 93 U.S.P.Q.2d (BNA) at 1921.
    220. 606 F.3d 1338, 95 U.S.P.Q.2d (BNA) 1366 (Fed. Cir. 2010).
    221. Id. at 1345, 95 U.S.P.Q.2d (BNA) at 1371.
    222. Id. at 1346, 95 U.S.P.Q.2d (BNA) at 1372.
    223. Id. at 1349, 95 U.S.P.Q.2d (BNA) at 1374.
    224. Id. at 1347, 95 U.S.P.Q.2d (BNA) at 1373.
    225. Id. at 1348, 95 U.S.P.Q.2d (BNA) at 1374.
    226. 599 F.3d 1277, 1282, 94 U.S.P.Q.2d (BNA) 1224, 1228 (Fed. Cir. 2010).
    227. Id. at 1282, 94 U.S.P.Q.2d (BNA) at 1228; see also 28 U.S.C. § 1295(a)(1) (2006).
[^23]:    228. LabCorp, 599 F.3d at 1282, 94 U.S.P.Q.2d (BNA) at 1228 (quoting Speedco, Inc. v. Estes, 853 F.2d 909, 912, 7 U.S.P.Q.2d (BNA) 1637, 1640 (Fed. Cir. 1988)) (internal quotation marks omitted).
    229. Id., 94 U.S.P.Q.2d (BNA) at 1228.
    230. Id., 94 U.S.P.Q.2d (BNA) at 1228 (quoting Grable \& Sons Metal Prods., Inc. v. Darue Eng'g \& Mfg., 545 U.S. 308, 314 (2005)) (internal quotation marks omitted).
    231. Id. at 1282-83, 94 U.S.P.Q.2d (BNA) at 1228-29.
    232. Id. at 1283, 94 U.S.P.Q.2d (BNA) at 1228.
    233. Id., 94 U.S.P.Q.2d (BNA) at 1228.
    234. Id., 94 U.S.P.Q.2d (BNA) at 1229; see Metabolite Labs. v. Lab. Corp. of Am. Holdings, No. 99-CV-870, 2001 WL 34778749, at *1 (D. Colo. Dec. 3, 2001), aff'd, 370 F.3d 1354 (Fed. Cir. 2004), vacated, 126 S. Ct. 601 (2005) (entering judgment in favor of Metabolite Laboratories).
    235. LabCorp, 599 F.3d at 1283, 94 U.S.P.Q.2d (BNA) at 1228.
    236. Id. at 1286, 94 U.S.P.Q.2d (BNA) at 1231. The Tenth Circuit ultimately affirmed the district court's judgment. See Lab. Corp. of Am. Holdings v. Metabolite Labs., No. 10-1194, 2011 WL 310574 (10th Cir. Feb. 2, 2011).
    237. Id. at 1287, 94 U.S.P.Q.2d (BNA) at 1231 (Dyk, J., dissenting).
    238. Id., 94 U.S.P.Q.2d (BNA) at 1232.
[^24]:    239. See id. at 1288, 94 U.S.P.Q.2d (BNA) at 1232.
    240. 531 U.S. 497 (2001).
    241. Id.; LabCorp, 599 F.3d at 1288, 94 U.S.P.Q.2d (BNA) at 1232 (Dyk, J., dissenting) (citing Semtek Int'l v. Lockheed Martin Corp., 531 U.S. 497, 508-09 (2001)). Semtek, however, arose under $\S 1332$ diversity jurisdiction, and the majority concluded that the decision should not be extended beyond that setting. See Semtek, 531 U.S. at 508.
    242. LabCorp, 599 F.3d at 1288, 94 U.S.P.Q.2d (BNA) at 1232 (Dyk, J., dissenting).
    243. 602 F.3d 1364, 94 U.S.P.Q.2d (BNA) 1763 (Fed. Cir. 2010).
    244. Id. at 1367-68, 94 U.S.P.Q.2d (BNA) at 1766-77.
    245. Id. at 1367, 94 U.S.P.Q.2d (BNA) at 1766.
    246. 616 F.3d 1267, 95 U.S.P.Q.2d (BNA) 1833 (Fed. Cir. 2010).
    247. Id. at 1282-93, 95 U.S.P.Q.2d (BNA) at 1845.
    248. Id. at 1281, 95 U.S.P.Q.2d (BNA) at 1844.
    249. Id. at 1281, 95 U.S.P.Q.2d (BNA) at 1844.
    250. Id., 95 U.S.P.Q.2d (BNA) at 1844.
    251. Id. at 1282, 95 U.S.P.Q.2d (BNA) at 1844.
[^25]:    252. Id. at 1283, 95 U.S.P.Q.2d (BNA) at 1845 .
    253. Id. at 1282, 95 U.S.P.Q.2d (BNA) at 1845.
    254. Id. at 1283, 95 U.S.P.Q.2d (BNA) at 1845.
    255. Id., 95 U.S.P.Q.2d (BNA) at 1845.
    256. See Petition for a Writ of Certiorari at i, Goodyear Luxembourg Tires, S.A. v. Brown, 131 S. Ct. 63 (2010) (No. 10-76), 2010 WL 2786988 at $*_{i}$ (seeking consideration of question involving personal jurisdiction over a foreign corporation because other entities distribute the corporation's products in the forum state); Petition for a Writ of Certiorari at i, J. McIntyre Machinery, Ltd. v. Nicastro, 131 S. Ct. 62 (2010) (No. 09-1343), 2010 WL 1789706 at $*_{i}$ (seeking consideration of question involving the role of the globalized economy in personal jurisdiction over foreign corporations who target the forum state for sale to consumers).
    257. 626 F.3d 1222, 97 U.S.P.Q.2d (BNA) 1351 (Fed. Cir. 2010).
    258. Id. at 1227-28, 97 U.S.P.Q.2d (BNA) at 1354.
    259. Id. at 1229, 97 U.S.P.Q.2d (BNA) at 1355.
    260. Id. at 1230, 97 U.S.P.Q.2d (BNA) at 1356 (quoting 3D Sys., Inc. v. Aarotech Labs., Inc., 160 F.3d 1373, 1376-77, 48 U.S.P.Q.2d 1773, 1775 (Fed. Cir. 1998)).
[^26]:    261. Id. at 1230-31, 97 U.S.P.Q.2d (BNA) at 1356.
    262. Id. at 1230-31, 97 U.S.P.Q.2d (BNA) at 1356 (quoting Burger King Corp. v. Rudzewicz, 471 U.S. 462, 474 (1985)).
    263. Id. at 1231, 97 U.S.P.Q.2d (BNA) at 1356.
    264. Id., 97 U.S.P.Q.2d (BNA) at 1356.
    265. Id. at 1231-33, 97 U.S.P.Q.2d (BNA) at 1357-58.
    266. Id. at 1231,97 U.S.P.Q.2d (BNA) at 1357.
    267. Id. at 1232-33, 97 U.S.P.Q.2d (BNA) at 1357-58.
    268. Id. at 1233, 97 U.S.P.Q.2d (BNA) at 1358.
    269. Id. at 1234, 97 U.S.P.Q.2d (BNA) at 1358-59.
[^27]:    270. Id. at 1234, 97 U.S.P.Q.2d (BNA) at 1358-59.
    271. Id. at 1235, 97 U.S.P.Q. 2 d (BNA) at 1360 .
    272. See id., 97 U.S.P.Q.2d (BNA) at 1360 .
    273. Id. at 1236, 97 U.S.P.Q.2d (BNA) at 1360 .
    274. Id. at 1235, 97 U.S.P.Q.2d (BNA) at 1359.
    275. Id. at 1236, 97 U.S.P.Q.2d (BNA) at 1360-61.
    276. Id. at 1238-39, 97 U.S.P.Q.2d (BNA) at 1362-63.
    277. Id. at 1238, 97 U.S.P.Q.2d (BNA) at 1362.
    278. Id. at 1239-40, 97 U.S.P.Q.2d (BNA) at 1363.
    279. 603 F.3d 1364, 95 U.S.P.Q.2d (BNA) 1179 (Fed. Cir. 2010).
[^28]:    280. Id. at 1366-67, 95 U.S.P.Q.2d (BNA) at 1181.
    281. Id. at 1367, 95 U.S.P.Q.2d (BNA) at 1181.
    282. Id. at 1369, 95 U.S.P.Q.2d (BNA) at 1183.
    283. Id., 95 U.S.P.Q.2d (BNA) at 1183.
    284. Id., 95 U.S.P.Q.2d (BNA) at 1182 (internal quotation marks omitted).
    285. Id. at 1367,95 U.S.P.Q.2d (BNA) at 1181.
    286. Id. at 1370, 95 U.S.P.Q.2d (BNA) at 1183.
    287. Id., 95 U.S.P.Q.2d (BNA) at 1183.
    288. Id., 95 U.S.P.Q.2d (BNA) at 1183.
    289. See id. at 1370-71, 95 U.S.P.Q.2d (BNA) at 1184.
[^29]:    290. Id. at 1370, 95 U.S.P.Q.2d (BNA) at 1183-84.
    291. Id. at 1372, 95 U.S.P.Q.2d (BNA) at 1185.
    292. 603 F.3d 1262, 94 U.S.P.Q.2d (BNA) at 1917 (Fed. Cir. 2010).
    293. See id. at 1271, 94 U.S.P.Q.2d (BNA) at 1923.
    294. See id. at 1272, 94 U.S.P.Q.2d (BNA) at 1924.
    295. Fed. R. Civ. P. 4(k) (2).
    296. Bradford, 603 F.3d at 1272, 94 U.S.P.Q.2d (BNA) at 1917.
    297. 574 F.3d 1403, 91 U.S.P.Q.2d 1609 (Fed. Cir. 2009).
    298. Bradford, 603 F.3d at 1272, 94 U.S.P.Q.2d (BNA) at 1924 (citing Touchcom,

    574 F.3d at 1415, 91 U.S.P.Q.2d (BNA) at 1616).
    299. Id., 94 U.S.P.Q.2d (BNA) at 1924.
    300. Id., 94 U.S.P.Q.2d (BNA) at 1924.

[^30]:    301. 28 U.S.C. §§ 2201-02 (2006).
    302. 620 F.3d 1341, 96 U.S.P.Q.2d (BNA) 1808 (Fed. Cir. 2010).
    303. Teva Pharm., 620 F.3d at 1349, 96 U.S.P.Q.2d (BNA) at 1815.
    304. Id., 96 U.S.P.Q.2d (BNA) at 1815.
    305. See id., 96 U.S.P.Q.2d (BNA) at 1814-15.
    306. Id. at 1349, 96 U.S.P.Q.2d (BNA) at 1814.
    307. Id., 96 U.S.P.Q.2d (BNA) at 1814.
    308. Id., 96 U.S.P.Q.2d (BNA) at 1815.
    309. Id., 96 U.S.P.Q.2d (BNA) at 1815.
    310. Id., 96 U.S.P.Q.2d (BNA) at 1815.
[^31]:    311. Id. at 1350, 94 U.S.P.Q.2d (BNA) at 1815.
    312. 599 F.3d 1377, 94 U.S.P.Q.2d (BNA) 1307 (Fed. Cir. 2010).
    313. Id. at 1385, 94 U.S.P.Q.2d (BNA) at 1314.
    314. Id. at 1379, 94 U.S.P.Q.2d (BNA) at 1310.
    315. Id. at 1380, 94 U.S.P.Q.2d (BNA) at 1310.
    316. Id. at 1379, 94 U.S.P.Q.2d (BNA) at 1310-11.
    317. Id. at 1383-84, 94 U.S.P.Q.2d (BNA) at 1312, 1314.
    318. Id. at 1385, 94 U.S.P.Q.2d (BNA) at 1314.
    319. Id. at 1381-82, 94 U.S.P.Q.2d (BNA) at 1311.
    320. Id. at 1381, 94 U.S.P.Q.2d (BNA) at 1311.
    321. Id., 94 U.S.P.Q.2d (BNA) at 1311 (internal quotation marks omitted) (citing SanDisk Corp. v. STMicroelectronics, Inc., 480 F.3d 1372, 1378, 82 U.S.P.Q.2d (BNA) 1173, 1178 (Fed. Cir. 2007) (internal quotation marks omitted)).
[^32]:    322. Id. at 1381, 94 U.S.P.Q.2d (BNA) at 1312.
    323. Id. at 1382, 94 U.S.P.Q.2d (BNA) at 1312.
    324. Id. at 1384, 94 U.S.P.Q.2d (BNA) at 1313 .
    325. Id. at 1384, 94 U.S.P.Q.2d (BNA) at 1313.
    326. Id. at 1384, 94 U.S.P.Q.2d (BNA) at 1313; see Fed. R. Civ. P. 15(d).
    327. Innovative Therapies, 599 F.3d at 1384, 94 U.S.P.Q.2d (BNA) at 1313; see also Fed. R. Civ. P. 15(c).
    328. Innovative Therapies, 599 F.3d at 1384, 94 U.S.P.Q.2d (BNA) at 1313.
    329. Id. at 1384-85, 94 U.S.P.Q.2d (BNA) at 1314.
    330. Id., 94 U.S.P.Q.2d (BNA) at 1314.
    331. 28 U.S.C. § 1331 (2006).
    332. Id. § 1367 (a).
[^33]:    333. Id. § 1338.
    334. 600 F.3d 1347, 94 U.S.P.Q.2d (BNA) 1286 (Fed. Cir. 2010).
    335. Id. at 1351, 94 U.S.P.Q. 2 d (BNA) at 1289.
    336. Id. at 1351, 94 U.S.P.Q.2d (BNA) at 1289.
    337. Id., 94 U.S.P.Q.2d (BNA) at 1289.
    338. Id. at 1352-53, 94 U.S.P.Q.2d (BNA) at 1290.
    339. See id. at 1353, 94 U.S.P.Q.2d (BNA) at 1291; see also 28 U.S.C. § 1338(a) (2006).
    340. HIF Bio, 600 F.3d at 1352, 94 U.S.P.Q.2d (BNA) at 1290 (quoting Christianson v. Colt Indus. Operating Corp., 486 U.S. $800,808-09,7$ U.S.P.Q.2d 1109, 1110 (1988)).
    341. Id. at 1353, 94 U.S.P.Q. 2 d (BNA) at 1291; see also 28 U.S.C. § 1338 (a).
    342. HIF Bio, 600 F.3d at 1357, 94 U.S.P.Q.2d (BNA) at 1294.
    343. Id. at 1355, 94 U.S.P.Q.2d (BNA) at 1292.
[^34]:    344. Id. at 1355-56, 94 U.S.P.Q.2d (BNA) at 1292-93.
    345. Id. at 1357, 94 U.S.P.Q.2d (BNA) at 1294.
    346. 609 F.3d 1378, 95 U.S.P.Q.2d (BNA) 1733 (Fed. Cir. 2010).
    347. Id. at 1379, 95 U.S.P.Q.2d (BNA) at 1734.
    348. Id. at 1379, 95 U.S.P.Q.2d (BNA) at 1734.
    349. Id., 95 U.S.P.Q.2d (BNA) at 1734.
    350. Id. at 1379-80, 95 U.S.P.Q.2d (BNA) at 1734.
    351. Id. at 1380, 95 U.S.P.Q.2d (BNA) at 1734-35.
    352. Id., 95 U.S.P.Q.2d (BNA) at 1735.
    353. Id., 95 U.S.P.Q.2d (BNA) at 1735 (internal quotation marks omitted) (citing In re Genentech, Inc., 566 F.3d 1338, 1342, 91 U.S.P.Q.2d (BNA) 1027, 1030 (Fed. Cir. 2009) (internal quotation marks omitted)).
[^35]:    354. Id. at 1381, 95 U.S.P.Q.2d (BNA) at 1735 (quoting In re TS Tech USA Corp., 551 F.3d 1315, 1319, 89 U.S.P.Q.2d (BNA) 1567, 1569 (Fed. Cir. 2008)).
    355. Id. at 1380-81, 95 U.S.P.Q.2d (BNA) at 1735 (quoting TS Tech, 551 F.3d at 1319, 89 U.S.P.Q.2d (BNA) at 1569).
    356. See infra text accompanying note 267.
    357. Id. at 1381, 95 U.S.P.Q. 2 d (BNA) at 1735.
    358. Id., 95 U.S.P.Q.2d (BNA) at 1735.
    359. Id., 95 U.S.P.Q.2d (BNA) at 1735.
    360. Id. at 1382, 95 U.S.P.Q.2d (BNA) at 1735.
    361. In re Acer Am. Corp., 626 F.3d 1252, 1254, 1256, 97 U.S.P.Q.2d (BNA) 1253,

    1254, 1256 (Fed. Cir. 2010).
    362. 626 F.3d 1252, 97 U.S.P.Q.2d (BNA) 1253 (Fed. Cir. 2010).
    363. Id. at 1254, 97 U.S.P.Q.2d (BNA) at 1254.
    364. Id., 97 U.S.P.Q.2d (BNA) at 1254.
    365. Id., 97 U.S.P.Q.2d (BNA) at 1254.
    366. Id. at 1254-55, 97 U.S.P.Q.2d (BNA) at 1255.

[^36]:    367. Id. at 1255, 97 U.S.P.Q.2d (BNA) at 1256.
    368. Id. at 1256, 97 U.S.P.Q.2d (BNA) at 1256 .
    369. 628 F.3d 1342, 97 U.S.P.Q.2d (BNA) 1250 (Fed. Cir. 2010).
    370. Id. at 1344, 97 U.S.P.Q.2d (BNA) at 1250-51.
    371. Id., 97 U.S.P.Q.2d (BNA) at 1251.
    372. Id., 97 U.S.P.Q.2d (BNA) at 1250.
    373. Id. at 1346-47, 97 U.S.P.Q.2d (BNA) at $1251,1253$.
    374. Id. at 1344, 97 U.S.P.Q.2d (BNA) at 1251 (citing In re Zimmer Holdings, Inc., 609 F.3d 1378, 1382, 95 U.S.P.Q.2d 1733, 1736 (Fed. Cir. 2010)).
    375. Id., 97 U.S.P.Q.2d (BNA) at 1251-52.
    376. Id. at 1347,97 U.S.P.Q.2d (BNA) at 1253.
    377. Id. at 1346, 97 U.S.P.Q.2d (BNA) at 1252 .
[^37]:    378. Id. at 1347, 97 U.S.P.Q.2d (BNA) at 1253.
    379. 21 U.S.C. § $355(\mathrm{j})(5)(\mathrm{C})(\mathrm{ii})$ (2006) (authorizing counterclaims by the applicant to require the patent holder to correct or delete information because the patent "does not claim either-(aa) the drug for which the application was approved; or (bb) an approved method of using the drug.").
    380. 601 F.3d 1359, 95 U.S.P.Q.2d (BNA) 1031 (Fed. Cir. 2010).
    381. Id. at 1368, 95 U.S.P.Q.2d (BNA) at 1038 (Clevenger, J., concurring).
    382. See id. at $1360,1362,95$ U.S.P.Q.2d (BNA) at 1033 , 1034 (majority opinion).
    383. Id. at 1361, 95 U.S.P.Q.2d (BNA) at 1033.
    384. Id. at 1362, 95 U.S.P.Q.2d (BNA) at 1034.
    385. 35 U.S.C. § 271 (e) (2) (2006).
    386. Id. § 271 (e) (5).
    387. 21 U.S.C. § $335(\mathrm{j})(5)(\mathrm{C})$ (ii) (I) (2006).
    388. Novo Nordisk, 601 F.3d at 1362, 95 U.S.P.Q.2d (BNA) at 1034.
[^38]:    389. Id. at 1363, 95 U.S.P.Q.2d (BNA) at 1034.
    390. Id. at 1362-63, 95 U.S.P.Q.2d (BNA) at 1034.
    391. See id. at 1363, 95 U.S.P.Q.2d (BNA) at 1034.
    392. Id., 95 U.S.P.Q.2d (BNA) at 1034.
    393. Id., 95 U.S.P.Q.2d (BNA) at 1034.
    394. Id., 95 U.S.P.Q.2d (BNA) at 1034.
    395. Id., 95 U.S.P.Q.2d (BNA) at 1035.
    396. Id., 95 U.S.P.Q.2d (BNA) at 1035.
    397. Id., 95 U.S.P.Q.2d (BNA) at 1035 .
    398. Id. at 1362-63, 95 U.S.P.Q.2d (BNA) at 1035; see also 21 U.S.C. § $355(\mathrm{j})(5)$ (C) (ii) (I) (2006).
    399. Novo Nordisk, 601 F.3d at 1364, 95 U.S.P.Q.2d (BNA) at 1036.
    400. Id., 95 U.S.P.Q.2d (BNA) at 1036.
[^39]:    401. Id., 95 U.S.P.Q.2d (BNA) at 1036 (emphasis added).
    402. Id. at 1364-65, 95 U.S.P.Q.2d (BNA) at 1036.
    403. Id. at 1365, 95 U.S.P.Q.2d (BNA) at 1036.
    404. Id. at 1366, 95 U.S.P.Q.2d (BNA) at 1037 (citing 21 U.S.C. §§ 355(b) (1), (c) (2), (j) (5) (C) (ii) (I) (2006)).
    405. See Novo Nordisk, 601 F.3d at 1366, 95 U.S.P.Q.2d (BNA) at 1037.
    406. Id. at 1368-69, 95 U.S.P.Q.2d (BNA) at 1039 (Dyk, J., dissenting).
    407. 268 F.3d 1323, 60 U.S.P.Q.2d (BNA) 1576 (Fed. Cir. 2001).
    408. Novo, 601 F.3d at 1370, 95 U.S.P.Q.2d (BNA) at 1040 (Dyk, J., dissenting).
    409. See id. at 1373, 1376, 1382, 95 U.S.P.Q.2d (BNA) at 1043, 1045, 1050.
    410. See id. at 1370-72, 95 U.S.P.Q.2d (BNA) at 1041-42.
[^40]:    411. Id. at 1380, 95 U.S.P.Q.2d (BNA) at 1048.
    412. 602 F.3d 1354, 94 U.S.P.Q.2d (BNA) 1742 (Fed. Cir. 2010).
    413. 35 U.S.C. § 256 (2006) (allowing for correction of the name of the inventor on an issued patent).
    414. Gillig, 602 F.3d at 1357, 94 U.S.P.Q.2d (BNA) at 1743.
    415. See Triple Tee Golf, Inc. v. Nike, Inc., No. 4:04-CV-302-A, 2007 WL 4260489,
    at *1 (N.D. Tex. Aug. 10, 2007), aff'd, 281 F. App'x. 368 (5th Cir. 2008).
    416. Id. at *14, *26, *28.
    417. Id. at *28.
    418. Triple Tee Golf, Inc. v. Nike, Inc., 281 F. App’x 368, 368 (5th Cir. 2008) (per curiam).
    419. Gillig, 602 F.3d at 1357, 94 U.S.P.Q.2d (BNA) at 1743.
    420. Id., 94 U.S.P.Q. 2 d (BNA) at 1744 (citing Triple Tee Golf, Inc. v. Nike, Inc., 618 F. Supp. 2d 586, 599 (N.D. Tex. 2009)).
[^41]:    421. Id. at 1361, 94 U.S.P.Q.2d (BNA) at 1746.
    422. Id., 94 U.S.P.Q.2d (BNA) at 1746 (quoting Test Masters Educ. Servs., Inc. v. Singh, 428 F.3d 559, 571 , 76 U.S.P.Q.2d (BNA) 1865, 1871 (5th Cir. 2005)).
    423. Id., 94 U.S.P.Q.2d (BNA) at 1746.
    424. Id. at 1362, 94 U.S.P.Q.2d (BNA) at 1746-47.
    425. Id., 94 U.S.P.Q.2d (BNA) at 1746.
    426. Id., 94 U.S.P.Q.2d (BNA) at 1746-47.
    427. Id., 94 U.S.P.Q.2d (BNA) at 1747.
    428. Id., 94 U.S.P.Q.2d (BNA) at 1747.
    429. Id., 94 U.S.P.Q.2d (BNA) at 1747.
    430. Id. at 1362-63, 94 U.S.P.Q.2d (BNA) at 1747-48.
[^42]:    431. Id., 94 U.S.P.Q.2d (BNA) at 1747 (quoting Computer Assocs. Int'l, Inc. v.

    Altai, Inc., 126 F. 3 d 365 , 370, 44 U.S.P.Q.2d (BNA) 1281, 1284 (2d Cir. 1997)) (internal quotation marks omitted).
    432. 617 F.3d 1296, 96 U.S.P.Q.2d (BNA) 1104 (Fed. Cir. 2010).
    433. Id. at 1300-01, 96 U.S.P.Q.2d (BNA) at 1106 .
    434. Id. at 1311, 96 U.S.P.Q.2d (BNA) at 1114.
    435. Id., 96 U.S.P.Q.2d (BNA) at 1114.
    436. Id., 96 U.S.P.Q.2d (BNA) at 1114.
    437. Id., 96 U.S.P.Q.2d (BNA) at 1114 .
    438. Id., 96 U.S.P.Q.2d (BNA) at 1114.
    439. Id., 96 U.S.P.Q.2d (BNA) at 1114.

[^43]:    440. Id., 96 U.S.P.Q.2d (BNA) at 1114.
    441. Id., 96 U.S.P.Q.2d (BNA) at 1114.
    442. 605 F.3d 1305, 94 U.S.P.Q.2d (BNA) 1856 (Fed. Cir. 2010).
    443. Id. at 1308-09, 94 U.S.P.Q.2d (BNA) at 1858.
    444. Id. at 1309, 94 U.S.P.Q.2d (BNA) at 1858-59.
    445. Id., 94 U.S.P.Q.2d (BNA) at 1859.
    446. Id., 94 U.S.P.Q.2d (BNA) at 1859.
    447. Id., 94 U.S.P.Q.2d (BNA) at 1859.
    448. Id. at 1310,94 U.S.P.Q.2d (BNA) at 1859.
    449. Id., 94 U.S.P.Q.2d (BNA) at 1859 (citing A.C. Aukerman Co. v. R.L. Chaides

    Constr. Co., 960 F.2d 1020, 1028 (Fed. Cir. 1992)) .
    450. Id., 94 U.S.P.Q.2d (BNA) at 1859 (quoting A.C. Aukerman, 960 F.2d at 1028)
    (internal quotation marks omitted).

[^44]:    451. Id. at 1310-11, 94 U.S.P.Q.2d (BNA) at 1859-60.
    452. Id. at 1311, 1314, 94 U.S.P.Q.2d (BNA) at $1860,1862$.
    453. Id. at 1312, 94 U.S.P.Q.2d (BNA) at 1861.
    454. Id. at 1309, 94 U.S.P.Q.2d (BNA) at 1858.
    455. Id., 94 U.S.P.Q.2d (BNA) at 1858.
    456. Id. at 1311-12, 94 U.S.P.Q.2d (BNA) at 1860.
    457. Id. at 1312, 94 U.S.P.Q.2d (BNA) at 1861.
    458. Id. at 1316, 94 U.S.P.Q.2d (BNA) at 1864 (Rader, J., dissenting).
    459. See id., 94 U.S.P.Q.2d (BNA) at 1864 (Rader, J., dissenting).
    460. Id. at 1317, 94 U.S.P.Q.2d (BNA) at 1864.
    461. 960 F.2d 1020 (Fed. Cir. 1992).
    462. Aspex Eyewear, 605 F.3d at 1317, 94 U.S.P.Q.2d (BNA) at 1864 (Rader, J., dissenting) (quoting A.C. Aukerman, 960 F .2 d at 1042) (internal quotation marks omitted).
    463. Id., 94 U.S.P.Q.2d (BNA) at 1864.
    464. Id. at 1318, 94 U.S.P.Q.2d (BNA) at 1866 (Rader, J., dissenting).
    465. Id. at 1319, 94 U.S.P.Q.2d (BNA) at 1866.
[^45]:    466. 619 F.3d 1357, 96 U.S.P.Q.2d (BNA) 1521 (Fed. Cir. 2010).
    467. Id. at 1361, 96 U.S.P.Q.2d (BNA) at 1524.
    468. Id. at 1361-62, 96 U.S.P.Q.2d (BNA) at 1524.
    469. Id. at 1358-59, 96 U.S.P.Q.2d (BNA) at 1522.
    470. Id. at 1359, 96 U.S.P.Q.2d (BNA) at 1522.
    471. Id., 96 U.S.P.Q.2d (BNA) at 1522 (emphasis removed).
    472. Id. at 1360, 96 U.S.P.Q.2d (BNA) at 1523 .
    473. Id., 96 U.S.P.Q.2d (BNA) at 1523 .
    474. Id., 96 U.S.P.Q.2d (BNA) at 1523.
    475. Id., 96 U.S.P.Q.2d (BNA) at 1523.
    476. Id., 96 U.S.P.Q.2d (BNA) at 1523 (quoting Baseload Energy, Inc. v. Roberts,

    654 F. Supp. 2d 21, 26-27 (D.D.C. 2009)).
    477. Id. at 1358, 96 U.S.P.Q.2d (BNA) at 1522.
    478. 395 U.S. 653, 162 U.S.P.Q. (BNA) 1 (1969).

[^46]:    479. See id. at 670, 162 U.S.P.Q. (BNA) at 8 (holding that licensee estoppel was inconsistent with the "spirit" of contract law, which attempts to balance the claims of the parties in line with the principles of good faith).
    480. Baseload, 619 F.3d at 1361, 96 U.S.P.Q.2d (BNA) at 1524.
    481. Id. at 1361-62, 96 U.S.P.Q.2d (BNA) at 1524.
    482. 238 F.3d 1362, 57 U.S.P.Q.2d (BNA) 1635 (Fed. Cir. 2001).
    483. Baseload, 619 F.3d at 1363, 96 U.S.P.Q.2d (BNA) at 1525.
    484. Id., 96 U.S.P.Q.2d (BNA) at 1525-26.
    485. Id., 96 U.S.P.Q.2d (BNA) at 1525.
    486. Id., 96 U.S.P.Q.2d (BNA) at 1525.
    487. Id., 96 U.S.P.Q.2d (BNA) at 1525.
    488. Id. at 1363-64, 96 U.S.P.Q.2d (BNA) at 1525 .
    489. Del. Valley Floral Grp., Inc. v. Shaw Rose Nets, LLC, 597 F.3d 1374, 1379,

    94 U.S.P.Q.2d (BNA) 1064, 1067 (Fed. Cir. 2010).

[^47]:    490. Id. at 1383,94 U.S.P.Q.2d (BNA) at 1071 .
    491. Id., 94 U.S.P.Q.2d (BNA) at 1071. (citing Shuford v. Fid. Nat'l Prop. \& Cas. Ins. Co., 508 F.3d 1337, 1345 (11th Cir. 2007)) .
    492. 597 F.3d 1374, 94 U.S.P.Q.2d (BNA) 1064 (Fed. Cir. 2010).
    493. Id. at 1378,94 U.S.P.Q.2d (BNA) at 1067.
    494. Id. at 1384, 94 U.S.P.Q.2d (BNA) at 1071.
    495. Id., 94 U.S.P.Q.2d (BNA) at 1071 (quoting Z.K. Marine, Inc. v. M/V Archigetis, 808 F. Supp. 1561,1563 (S.D. Fla 1992) (alteration in original)). For a discussion of the summary judgment issues presented in this case, see supra notes 486-92 and accompanying text.
    496. Del. Valley Floral, 597 F.3d at 1384, 94 U.S.P.Q.2d (BNA) at 1072.
    497. 606 F.3d 1353, 95 U.S.P.Q.2d (BNA) 1432 (Fed. Cir. 2010).
    498. Id. at 1365, 95 U.S.P.Q.2d (BNA) at 1441 (quoting Fed. R. Civ. P. 26(b) (3)).
    499. Id., 95 U.S.P.Q.2d (BNA) at 1441 (quoting FED. R. Civ. P. 26(b) (3) (A) (ii) ).
[^48]:    500. Id. at 1356-57, 95 U.S.P.Q.2d (BNA) at 1435.
    501. Id. at 1357, 95 U.S.P.Q.2d (BNA) at 1435 .
    502. Id., 95 U.S.P.Q.2d (BNA) at 1435-36.
    503. Id. at 1358, 95 U.S.P.Q.2d (BNA) at 1436.
    504. Id., 95 U.S.P.Q.2d (BNA) at 1436.
    505. Id. at 1365, 95 U.S.P.Q.2d (BNA) at 1442.
    506. Id., 95 U.S.P.Q.2d (BNA) at 1441.
    507. Id., 95 U.S.P.Q.2d (BNA) at 1441 (quoting Chaudhry v. Gallerizzo, 174 F.3d 394, 403 (4th Cir. 1999)).
    508. Id., 95 U.S.P.Q.2d (BNA) at 1441-42.
    509. Id., 95 U.S.P.Q.2d (BNA) at 1441.
    510. Id., 95 U.S.P.Q.2d (BNA) at 1442. The court also reversed the district court's grant of summary judgment on the inequitable conduct issue, thereby removing inequitable conduct as a basis to support the fee award. See id. at 1364, 95 U.S.P.Q.2d (BNA) at 1441.
[^49]:    511. 605 F.3d 1373, 95 U.S.P.Q.2d (BNA) 1399 (Fed. Cir. 2010).
    512. See id. at 1377, 95 U.S.P.Q.2d (BNA) at 1402.
    513. Id. at 1375, 95 U.S.P.Q.2d (BNA) at 1400 .
    514. Id. at 1378, 95 U.S.P.Q. 2 d (BNA) at 1402.
    515. Id. at 1377, 95 U.S.P.Q.2d (BNA) at 1401.
    516. Id., 95 U.S.P.Q.2d (BNA) at 1402.
    517. Id. at 1377-78, 95 U.S.P.Q.2d (BNA) at 1402.
    518. Id. at 1378, 95 U.S.P.Q.2d (BNA) at 1402 (quoting U.S. Steel Corp. v. United States, 730 F.2d 1465, 1468 (Fed. Cir. 1984)).
[^50]:    519. Id., 95 U.S.P.Q.2d (BNA) at 1402 (quoting U.S. Steel, 730 F.2d at 1468 n.3).
    520. See id. at 1379, 95 U.S.P.Q.2d (BNA) at 1403 (comparing district court decisions).
    521. Id. at 1379-80, 95 U.S.P.Q.2d (BNA) at 1403.
    522. Id. at 1380, 95 U.S.P.Q.2d (BNA) at 1404 .
    523. Id. at 1381, 95 U.S.P.Q.2d (BNA) at 1404.
    524. Id., 95 U.S.P.Q. 2 d (BNA) at 1404-05.
    525. Id. at 1382,95 U.S.P.Q. 2 d (BNA) at 1405 .
[^51]:    526. Carter v. ALK Holdings, Inc., 605 F.3d 1319, 1323, 94 U.S.P.Q.2d (BNA)

    1769, 1771 (Fed. Cir. 2010) (citing Worldwide Primates, Inc. v. McGreal, 87 F.3d 1252, 1254 (11th Cir. 1996)).
    527. Fed. R. Civ. P. 11 advisory committee's note.
    528. Id
    529. Carter, 605 F.3d at 1323, 94 U.S.P.Q.2d (BNA) at 1771.
    530. 594 F.3d 860, 93 U.S.P.Q.2d (BNA) 1553 (Fed. Cir. 2010) (per curiam).
    531. Id. at 873-76, 93 U.S.P.Q.2d (BNA) at 1563-65.
    532. Id. at 873, 93 U.S.P.Q.2d (BNA) at 1563 .
    533. Id. at 873-74, 93 U.S.P.Q.2d (BNA) at 1563.
    534. Id. at 874, 93 U.S.P.Q.2d (BNA) at 1563 .
    535. Id., 93 U.S.P.Q.2d (BNA) at 1564.
    536. Id., 93 U.S.P.Q.2d (BNA) at 1564.

[^52]:    537. Id. at 876, 93 U.S.P.Q.2d (BNA) at 1565 .
    538. Id. at 875, 93 U.S.P.Q.2d (BNA) at 1564.
    539. Id., 93 U.S.P.Q.2d (BNA) at 1564.
    540. Id., 93 U.S.P.Q.2d (BNA) at 1564-65.
    541. 605 F.3d 1319, 94 U.S.P.Q.2d (BNA) 1769 (Fed. Cir. 2010).
    542. Id. at 1321-22, 94 U.S.P.Q.2d (BNA) at 1770.
    543. Id. at 1321, 94 U.S.P.Q.2d (BNA) at 1770.
    544. Id. at 1322, 94 U.S.P.Q. 2 d (BNA) at 1771.
    545. Id., 94 U.S.P.Q.2d (BNA) at 1771. Section 122 requires the Patent and Trademark Office to keep patent applications confidential. 35 U.S.C. § 122 (2006). Carter contended that the prosecuting attorney violated the statute by listing two other persons as co-inventors, and thereafter disclosing the patent application subject matter to those two individuals. See Carter, 605 F.3d at 1325, 94 U.S.P.Q.2d (BNA) at 1773 .
    546. Carter, 605 F.3d at 1322, 94 U.S.P.Q.2d (BNA) at 1771.
    547. Id. at 1326, 94 U.S.P.Q.2d (BNA) at 1774.
[^53]:    548. Id. at 1325, 94 U.S.P.Q.2d (BNA) at 1773.
    549. Id. at 1326, 94 U.S.P.Q.2d (BNA) at 1774. Section 122 (a) provides that "applications for patents shall be kept in confidence by the Patent and Trademark Office." 35 U.S.C. § 122(a) (2006).
    550. Carter, 605 F.3d at 1325, 94 U.S.P.Q.2d (BNA) at 1773.
    551. Carter v. ALK Holdings, Inc., 510 F. Supp. 2d 1299, 1305 (N.D. Ga. 2007).
    552. See supra notes $340-41$ and accompanying text.
    553. Carter, 605 F.3d at 1325, 94 U.S.P.Q.2d (BNA) at 1774.
    554. Id. at 1326, 94 U.S.P.Q.2d (BNA) at 1774.
    555. 616 F.3d 1357, 96 U.S.P.Q.2d (BNA) 1329 (Fed. Cir. 2010).
    556. Id. at 1362, 96 U.S.P.Q.2d (BNA) at 1332.
[^54]:    557. Id., 96 U.S.P.Q.2d (BNA) at 1332.
    558. Id., 96 U.S.P.O. 2 d (BNA) at 1332.
    559. See id. at 1377-78, 96 U.S.P.Q.2d (BNA) at 1345 (applying South Korean law to find that there was no successor liability).
    560. Id. at 1378, 96 U.S.P.Q.2d (BNA) at 1345.
    561. Id. at 1378, 96 U.S.P.Q.2d (BNA) at 1345. The parties did not dispute that South Korean law governed the successor liability issue as between the two South Korean entities (DEC and DECL), so the court did not consider that issue. Id. at 1379, 96 U.S.P.Q. $2 d$ (BNA) at 1345.
    562. Id., 96 U.S.P.Q.2d (BNA) at 1345.
    563. See id. at 1379, 96 U.S.P.Q.2d (BNA) at 1346.
    564. Id., 96 U.S.P.Q.2d (BNA) at 1345.
    565. Id., 96 U.S.P.Q.2d (BNA) at 1346.
[^55]:    566. Id., 96 U.S.P.Q.2d (BNA) at 1346.
    567. Id. at 1379-80, 96 U.S.P.Q.2d (BNA) at 1346.
    568. Id. at 1380, 96 U.S.P.Q.2d (BNA) at 1346.
    569. Id., 96 U.S.P.Q.2d (BNA) at 1340.
    570. Id., 96 U.S.P.Q.2d (BNA) at 1346. (citing Wa. Mut. Bank, FA v. Superior Court, 15 P.3d 1071, 1080 (Cal. 2001)).
    571. Id., 96 U.S.P.Q.2d (BNA) at 1346. (quoting Wa. Mut. Bank, 15 P.3d at 1080).
    572. Id., 96 U.S.P.Q.2d (BNA) at 1346. (quoting Wa. Mut. Bank, 15 P.3d at 1081).
    573. Id., 96 U.S.P.Q.2d (BNA) at 1346-47.
    574. Id., 96 U.S.P.Q.2d (BNA) at 1346.
    575. Id., 96 U.S.P.Q.2d (BNA) at 1346.
    576. $130 \mathrm{~S} . \mathrm{Ct} 1181$ (2010).
    577. Id. at 1192 (holding that the principal place of business is "where a
    corporation's officers direct, control, and coordinate the corporation's activities").
    578. Funai, 616 F.3d at 1380, 96 U.S.P.Q.2d (BNA) at 1347 (quoting Hertz, 130
    S. Ct. at 1195).
    579. 614 F.3d 1354, 96 U.S.P.Q.2d (BNA) 1022 (Fed. Cir. 2010).
[^56]:    580. Id. at 1357, 96 U.S.P.Q.2d (BNA) at 1022.
    581. See id. at 1365, 96 U.S.P.Q.2d (BNA) at 1030 (applying Fifth Circuit law).
    582. Id., 96 U.S.P.Q.2d (BNA) at 1030 (quoting Horaist v. Doctor's Hosp. of Opelousas, 255 F.3d 261, 266 (5th Cir. 2001)).
    583. Id., 96 U.S.P.Q.2d (BNA) at 1030.
    584. Id., 96 U.S.P.Q.2d (BNA) at 1030.
    585. Id., 96 U.S.P.Q.2d (BNA) at 1030.
    586. Id., 96 U.S.P.Q.2d (BNA) at 1030.
    587. Id. at 1365-66, 96 U.S.P.Q.2d (BNA) at 1030.
    588. Id. at 1366, 96 U.S.P.Q.2d (BNA) at 1030. (citing Model Rules of Prof'l Conduct R. 4.2 (2010); Tex. Disciplinary R. Prof'l Conduct R. 4.02 (1989), Model Rules of Prof'l Conduct R. 4.2 (2010)).
    589. Id., 96 U.S.P.Q.2d (BNA) at 1030.
[^57]:    590. Id., 96 U.S.P.Q.2d (BNA) at 1030 .
    591. Id., 96 U.S.P.Q.2d (BNA) at 1030.
    592. Id., 96 U.S.P.Q.2d (BNA) at 1030-31.
    593. Id., 96 U.S.P.Q.2d (BNA) at 1031.
    594. Id., 96 U.S.P.Q.2d (BNA) at 1031.
    595. Richardson v. Stanley Works, Inc., 597 F.3d 1288, 1297, 93 U.S.P.Q.2d (BNA)

    1937, 1942 (Fed. Cir. 2010).
    596. Id. at 1296-97, 93 U.S.P.Q.2d (BNA) at 1942 (quoting Fed. R. Civ. P. 38(b),

    585 F.3d 1399 (11th Cir. 2009); Effective December 1, 2009, Rule 38(b) has been amended to provide the parties fourteen days to make a demand for a jury trial. Fed. R. Civ. P. 38(b).
    597. 597 F.3d 1288, 93 U.S.P.Q.2d (BNA) 1937 (Fed. Cir. 2010).
    598. Id. at 1296, 93 U.S.P.Q.2d (BNA) at 1941-42.
    599. Id. at 1297, 93 U.S.P.Q.2d (BNA) at 1942.

[^58]:    600. Id., 93 U.S.P.Q.2d (BNA) at 1942 (citing Richardson v. Stanley Works, Inc., No. CV-08-1040 PHX-NVW, 2009 WL 383554, at *1 (D. Ariz. Feb. 13, 2009)).
    601. Id., 93 U.S.P.Q.2d (BNA) at 1942 (citing Richardson, 2009 WL 383554, at *1).
    602. Id. at 1292, 93 U.S.P.Q.2d (BNA) at 1940.
    603. 584 F.2d 369 (10th Cir. 1978).
    604. Richardson, 597 F.3d at 1297 n.2, 93 U.S.P.Q.2d (BNA) at 1943.
    605. Id., 93 U.S.P.Q.2d (BNA) at 1943; (citing Anderson, 584 F.2d at 372).
    606. Id., 93 U.S.P.Q.2d (BNA) at 1942. Rule 39 (b) provides "Issues on which a jury trial is not properly demanded are to be tried by the court. But the court may, on motion, order a jury trial on any issue for which a jury might have been demanded." Fed. R. Civ. P. 39(b).
    607. 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010).
    608. Id. at 1372, 93 U.S.P.Q.2d (BNA) at 1617.
    609. Id. at 1372-73, 93 U.S.P.Q.2d (BNA) at 1625.
    610. Id. at 1373, 93 U.S.P.Q.2d (BNA) at 1625.
    611. Id., 93 U.S.P.Q.2d (BNA) at 1625 .
    612. Id., 93 U.S.P.Q.2d (BNA) at 1625-26.
[^59]:    613. 550 F.3d 1356, 89 U.S.P.Q.2d (BNA) 1535 (Fed. Cir. 2008).
    614. SEB, 594 F.3d at 1373, 93 U.S.P.Q.2d (BNA) at 1626 (quoting Sundance, 550
    F.3d at 1361, 89 U.S.P.Q.2d (BNA) at 1538-39).
    615. Id., 93 U.S.P.Q.2d (BNA) at 1626.
    616. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010).
    617. Id. at 852-53, 93 U.S.P.Q.2d (BNA) at 1959-60.
    618. Id. at 854, 93 U.S.P.Q.2d (BNA) at 1960-61.
    619. Id., 93 U.S.P.Q.2d (BNA) at 1961 (citing Fed. R. Evid. 702).
    620. Id. at 856, 93 U.S.P.Q.2d (BNA) at 1962 (internal quotation marks omitted) (quoting Daubert v. Merrell Dow Pharm., 509 U.S. 578, 596, 27 U.S.P.Q.2d (BNA) 1200, 1207 (1993)).
    621. Id. at 856, 93 U.S.P.Q.2d (BNA) at 1962. Rule 403 provides: "although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." Fed. R. Evid. 403.
    622. i4i, 598 F.3d at 856, 93 U.S.P.Q.2d (BNA) at 1962.
[^60]:    623. EMI Grp. N. Am., Inc., v. Cypress Semiconductor Corp., 268 F.3d 1342, 1348, 60 U.S.P.Q.2d (BNA) 1423, 1427 (Fed. Cir. 2001).
    624. 596 F.3d 1343, 93 U.S.P.Q.2d (BNA) 1873 (Fed. Cir. 2010). 625. Id. at 1349, 93 U.S.P.Q.2d (BNA) at 1878.
    625. Id. at 1349-50, 93 U.S.P.Q.2d (BNA) at 1878.
    626. Id. at 1350, 93 U.S.P.Q.2d (BNA) at 1878 (internal quotation marks omitted) (citing Callaway Golf Co. v. Acushnet Co., 576 F.3d 1331, 1344, 91 U.S.P.Q.2d (BNA) 1705, 1715 (Fed. Cir. 2009)).
    627. Id., 93 U.S.P.Q.2d (BNA) at 1878.
    628. Id., 93 U.S.P.Q.2d (BNA) at 1878.
    629. Id., 93 U.S.P.Q.2d (BNA) at 1878.
    630. Id. at 1345, 93 U.S.P.Q.2d (BNA) at 1874.
    631. 612 F.3d 1368, 95 U.S.P.Q.2d (BNA) 1673 (Fed. Cir. 2010).
    632. Id. at 1377-78, 95 U.S.P.Q.2d (BNA) at 1683.
    633. Id. at 1378, 95 U.S.P.Q.2d (BNA) at 1683.
[^61]:    635. Id., 95 U.S.P.Q.2d (BNA) at 1683.
    636. Id. at 1367, 95 U.S.P.Q.2d (BNA) at 1675 .
    637. Id. at 1379, 95 U.S.P.Q.2d (BNA) at 1683.
    638. Id. at 1378, 95 U.S.P.Q.2d (BNA) at 1683.
    639. Id., 95 U.S.P.Q.2d (BNA) at 1683.
    640. Orion IP, LLC v. Hyundai Motor Am., 605 F.3d 967, 973, 95 U.S.P.Q.2d
    (BNA) 1297, 1300 (Fed. Cir. 2010) (citing Z4 Techs., Inc. v. Microsoft Corp., 507
    F.3d 1340, 1346, 85 U.S.P.Q.2d (BNA) 1340, 1344 (Fed. Cir. 2007)).
    641. 605 F.3d 967, 95 U.S.P.Q.2d (BNA) 1297 (Fed. Cir. 2010).
    642. Id. at 973, 95 U.S.P.Q.2d (BNA) at 1300.
    643. Id. at $973-74,95$ U.S.P.Q.2d (BNA) at 1300 .
[^62]:    644. Id. at 977-78, 95 U.S.P.Q.2d (BNA) at 1304.
    645. 598 F.2d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010).
    646. Id. at 857, 93 U.S.P.Q.2d (BNA) at 1962.
    647. Id., 93 U.S.P.Q.2d (BNA) at 1962 (citing Lucent, 580 F.3d at 132, 92 U.S.P.Q.2d (BNA) at 1577).
    648. Id., 93 U.S.P.Q. 2 d (BNA) at 1962.
    649. Id., 93 U.S.P.Q.2d (BNA) at 1962-63.
    650. Id., 93 U.S.P.Q. 2 d (BNA) at 1962-63.
    651. 629 F.3d 1360, 97 U.S.P.Q.2d (BNA) 1528 (Fed. Cir. 2010).
    652. Id. at 1367, 97 U.S.P.Q.2d (BNA) at 1532.
    653. Id. at 1363, 97 U.S.P.Q.2d (BNA) at 1529.
    654. Id., 97 U.S.P.Q.2d (BNA) at 1529.
    655. Id., 97 U.S.P.Q.2d (BNA) at 1530 .
[^63]:    669. 28 U.S.C. § 1295 (2006).
    670. Id. § 1338.
    671. See supra notes 220-73 and accompanying text.
    672. 593 F.3d 1325, 93 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2010).
    673. Id. at 1328, 95 U.S.P.Q.2d (BNA) at 1483.
    674. Id. at 1330, 95 U.S.P.Q.2d (BNA) at 1483.
    675. Id., 95 U.S.P.Q.2d (BNA) at 1483.
    676. Id. at 1337, 95 U.S.P.Q.2d (BNA) at 1489.
    677. Id. at 1337, 95 U.S.P.Q.2d (BNA) at 1489 (quoting Bailey v. Dart Container Corp. of Mich., 292 F.3d 1360, 1362, 63 U.S.P.Q.2d (BNA) 1319, 1320 (Fed. Cir. 2002)).
    678. 603 F.3d 967, 94 U.S.P.Q.2d (BNA) 1845 (Fed. Cir. 2010).
    679. Id. at 971-72, 94 U.S.P.Q.2d (BNA) at 1848-49.
    680. Id. at 970-71, 94 U.S.P.Q.2d (BNA) at 1848.
    681. Id. at 971, 94 U.S.P.Q.2d (BNA) at 1848.
[^64]:    682. Id., 94 U.S.P.Q.2d (BNA) at 1849.
    683. Id. at 972, 94 U.S.P.Q.2d (BNA) at 1849.
    684. 627 F.3d 874, 97 U.S.P.Q.2d (BNA) 1150 (Fed. Cir. 2010).
    685. Id. at 876-77, 97 U.S.P.Q.2d (BNA) at 1152 .
    686. Id. at 875, 97 U.S.P.Q.2d (BNA) at 1151.
    687. Id. at 876, 97 U.S.P.Q.2d (BNA) at 1151-52.
    688. Id. at 876-77, 97 U.S.P.Q.2d (BNA) at 1152 .
    689. Id. at 878-79, 97 U.S.P.Q. 2 d (BNA) at 1153 .
    690. $I d$ d. at 879,97 U.S.P.Q.2d (BNA) at 1153-54.
    691. Id. at 878, 97 U.S.P.Q.2d (BNA) at 1153 .
[^65]:    692. Id. at 878-79, 97 U.S.P.Q.2d (BNA) at 1153.
    693. The case also involved another odd appellate issue. The trial court had denied defendant's motion for attorneys' fees. The plaintiff, though, sought to appeal this issue (on which it had won). Id. at 877, 97 U.S.P.Q.2d (BNA) at 1152. In a straightforward ruling, the Federal Circuit held that, because the plaintiff was not aggrieved by the trial court's order, it did not have standing to appeal. Id. at 880, 97 U.S.P.Q.2d (BNA) at 1154 .
    694. 605 F.3d 1366, 95 U.S.P.Q.2d (BNA) 1985 (Fed. Cir. 2010) (per curiam), cert. denied, 131 S. Ct. 839 (2010).
    695. Id. at 1371, 95 U.S.P.Q.2d (BNA) at 1988.
    696. Id., 95 U.S.P.Q.2d (BNA) at 1988.
    697. See Fed. R. Civ. P. 50(b) (specifying that a motion for judgment notwithstanding the verdict must follow an initial motion for directed verdict).
    698. Fujifilm, 605 F.3d at 1371, 95 U.S.P.Q.2d (BNA) at 1988. Fuji also argued that defendants waived the exhaustion argument by consenting to jury instructions, but that argument was also untimely. Id., 95 U.S.P.Q.2d (BNA) at 1988.
    699. Id., 95 U.S.P.Q.2d (BNA) at 1988.
    700. Id., 95 U.S.P.Q.2d (BNA) at 1988.
    701. 625 F.3d 1320, 96 U.S.P.Q.2d (BNA) 1841 (Fed. Cir. 2010) (en banc).
    702. Id. at 1322, 96 U.S.P.Q.2d (BNA) at 1843.
    703. Id., 96 U.S.P.Q.2d (BNA) at 1843.
    704. 35 U.S.C. § 145 (2006).
[^66]:    705. Kappos, 625 F.3d at 1323, 96 U.S.P.Q.2d (BNA) at 1843.
    706. Id., 96 U.S.P.Q.2d (BNA) at 1844 .
    707. Id. at 1323-24, 96 U.S.P.Q.2d (BNA) at 1844.
    708. Id. at 1324, 96 U.S.P.Q.2d (BNA) at 1844.
    709. Id., 96 U.S.P.Q.2d (BNA) at 1845.
    710. Id. at 1324-25, 96 U.S.P.Q.2d (BNA) at 1845 (quoting Hyatt v. Dudas, No. 030901 (HHK), 2005 WL 5569663, at *7 (D.D.C. Sept. 30, 2005)).
    711. Hyatt v. Doll, 576 F.3d 1246, 1246-48, 91 U.S.P.Q.2d (BNA) 1865, 1866 (Fed. Cir. 2009) rev'd en banc sub nom. Kappos, 625 F.3d at 1320, 96 U.S.P.Q.2d (BNA) at 1841.
    712. Kappos, 625 F.3d at 1325, 96 U.S.P.Q.2d (BNA) at 1845.
    713. Id. at 1326-31, 96 U.S.P.Q.2d (BNA) at 1846-50.
    714. Id. at 1328-30, 96 U.S.P.Q.2d (BNA) at 1847-49.
    715. Id. at 1328, 96 U.S.P.Q.2d (BNA) at 1848.
    716. Id. at 1329, 96 U.S.P.Q.2d (BNA) at 1848.
[^67]:    717. Id. at 1330-31, 96 U.S.P.Q.2d (BNA) at 1849-50.
    718. 153 U.S. 120 (1894).
    719. Id. at 124.
    720. Hyatt v. Dudas, No. 03-0901 (HHK), 2005 WL 5569663, at *5 (D.D.C. Sept. 30. 2005).
    721. Kappos, 625 F.3d at 1332, 96 U.S.P.Q.2d (BNA) at 1850-51.
    722. Id. at 1341, 96 U.S.P.Q.2d (BNA) at 1851.
    723. Id. at 1336, 96 U.S.P.Q.2d (BNA) at 1854.
    724. Id. at 1337, 96 U.S.P.O. 2 d (BNA) at 1854 .
    725. Id. at 1335, 96 U.S.P.Q.2d (BNA) at 1851-52.
    726. Id. at 1341, 96 U.S.P.Q.2d (BNA) at 1857 (Dyk, J., dissenting).
    727. Id. at 1342, 96 U.S.P.Q.2d (BNA) at 1857.
    728. Id., 96 U.S.P.Q.2d (BNA) at 1857.
[^68]:    729. Id., 96 U.S.P.Q.2d (BNA) at 1857.
    730. Id. at 1343-44, 96 U.S.P.Q.2d (BNA) at 1858-59.
    731. Id. at 1358, 96 U.S.P.Q.2d (BNA) at 1869-70.
    732. Id. at 1358, 96 U.S.P.Q.2d (BNA) 1841, 1870.
    733. 619 F.3d 1303, 96 U.S.P.Q.2d (BNA) 1292 (Fed. Cir. 2010).
    734. Id. at 1306,96 U.S.P.Q.2d (BNA) at 1293.
    735. Id., 96 U.S.P.Q.2d (BNA) at 1294.
    736. Id., 96 U.S.P.Q.2d (BNA) at 1294.
    737. Id. at 1313, 96 U.S.P.Q.2d (BNA) at 1299.
    738. Id., 96 U.S.P.Q.2d (BNA) at 1299 (Newman, J., dissenting).
[^69]:    739. Id. at 1314, 96 U.S.P.Q.2d (BNA) at 1299.
    740. Id. at 1307, 96 U.S.P.Q.2d (BNA) at 1295 (majority opinion).
    741. Id. at 1307-08, 96 U.S.P.Q.2d (BNA) at 1295.
    742. Id. at 1308, 96 U.S.P.Q.2d (BNA) at 1295.
    743. Id., 96 U.S.P.Q.2d (BNA) at 1295.
    744. Id., 96 U.S.P.Q. 2 d (BNA) at 1295.
    745. Id., 96 U.S.P.Q.2d (BNA) at 1295.
    746. Id., 96 U.S.P.Q.2d (BNA) at 1295.
    747. Id. at 1317, 96 U.S.P.Q.2d (BNA) 1292, 1301 (Newman, J., dissenting).
    748. Id., 96 U.S.P.Q.2d (BNA) at 1301.
    749. Id., 96 U.S.P.Q.2d (BNA) at 1301.
    750. Id., 96 U.S.P.Q.2d (BNA) at 1301.
    751. Id. at 1320, 96 U.S.P.Q.2d (BNA) 1292, 1304.
[^70]:    752. 605 F.3d 1330, 95 U.S.P.Q.2d (BNA) 1353 (Fed. Cir. 2010).
    753. Id. at 1336-42, 95 U.S.P.Q.2d (BNA) at 1358-62.
    754. Id. at 1343-44, 95 U.S.P.Q.2d (BNA) at 1363-64.
    755. Id. at 1345, 95 U.S.P.Q. 2 d (BNA) at 1364 (Clevenger, J., dissenting).
    756. Id. at 1346, 95 U.S.P.Q.2d (BNA) at 1365-66 (Clevenger, J., dissenting).
    757. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010), cert. granted sub nom. Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 647 (2010).
    758. Microsoft v. i4i Petition, supra note 78, at $*_{i}$.
    759. 35 U.S.C. § 282 (2006).
[^71]:    
    761. Microsoft v. i4i Petition, supra note 78, at ii; see also Microsoft Corp., 131 S. Ct. at 647 (granting certiorari).
    762. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 428-29, 82 U.S.P.Q.2d (BNA) 1385, 1400 (2007).
    763. 550 U.S. 398, 82 U.S.P.Q.2d (BNA) 1385 (2007).
    764. Id. at 426, 82 U.S.P.Q.2d (BNA) at 1399.
    765. See, e.g., Spansion, Inc. v. Int'l Trade Comm'n, 629 F.3d 1331, 1334, 97 U.S.P.Q.2d 1417, 1425 (Fed. Cir. 2010); W. Union Co. v. MoneyGram Payment Sys., Inc., 626 F.3d 1361, 1368, 97 U.S.P.Q.2d (BNA) 1263, 1269 (Fed. Cir. 2010); Solvay S.A. v. Honeywell Int'l, Inc., 622 F.3d 1367, 1374, 96 U.S.P.Q.2d (BNA) 1870, 1875 (Fed. Cir. 2010); Laryngeal Mask Co. Ltd. v. Ambu A/S, 618 F.3d 1367, 137374, 96 U.S.P.Q.2d (BNA) 1757, 1762 (Fed. Cir. 2010); Green Edge Enters., L.L.C. v. Rubber Mulch Etc., L.L.C., 620 F.3d 1287, 1299, 96 U.S.P.Q.2d (BNA) 1425, 1427 (Fed. Cir. 2010); Eli Lilly \& Co. v. Teva Pharms. USA, Inc., 619 F. 3 d 1329, 1336, 96 U.S.P.Q.2d (BNA) 1375, 1381 (Fed. Cir. 2010); Silicon Graphics, Inc. v. ATI Techs., Inc., 607 F.3d 784, 796, 95 U.S.P.Q.2d (BNA) 1417, 1427 (Fed. Cir. 2010); Honeywell Int'l, Inc. v. United States, 609 F.3d 1292, 1301, 95 U.S.P.Q.2d (BNA) 1193, 1203 (Fed. Cir. 2010); Orion IP, L.L.C. v. Hyundai Motor Am., 605 F.3d 967, 975, 95 U.S.P.Q.2d (BNA) 1297, 1302 (Fed. Cir. 2010); Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1366, 94 U.S.P.Q.2d (BNA) 1385, 1391 (Fed. Cir. 2010); Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1331, 94 U.S.P.Q.2d (BNA) 1321, 1325 (Fed. Cir. 2010); Ariad Pharms., Inc. v. Eli Lilly \& Co., 598 F.3d 1336, 1354, 94 U.S.P.Q.2d (BNA) 1161, 1174 (Fed. Cir. 2010).
    766. Microsoft Corp., 131 S. Ct. at 647 (granting certiorari, without participation by Chief Justice Roberts).

[^72]:    767. 599 F.3d 1308, 94 U.S.P.Q.2d (BNA) 1261 (Fed. Cir. 2010).
    768. Id. at 1318, 94 U.S.P.Q.2d (BNA) at 1268.
    769. 35 U.S.C. § $103(\mathrm{a})(2006)$.
    770. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 U.S.P.Q. 459, 467 (1966).
    771. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 415-21, 82 U.S.P.Q.2d (BNA) 1385, 1388-96 (2007).
[^73]:    772. See, e.g., Wyers v. Master Lock Co., 616 F.3d 1231, 1233, 95 U.S.P.Q.2d (BNA) 1525, 1527 (Fed. Cir. 2010) (reversing the district court's denial of motion for summary judgment because claims would have been obvious as a matter of law); Trimed, Inc. v. Stryker Corp., 608 F.3d 1333, 1341, 95 U.S.P.Q.2d (BNA) 1577, 157778 (Fed. Cir. 2010) (reversing and remanding the district court's grant of summary judgment).
    773. Trimed, 608 F.3d at 1341, 95 U.S.P.Q.2d (BNA) at 1581 (citing KSR, 550 U.S. at 427, 82 U.S.P.Q.2d (BNA) at 1400).
    774. Wyers, 616 F.3d at 1239, 95 U.S.P.Q.2d (BNA) at 1531.
    775. Id. at 1242, 95 U.S.P.Q.2d (BNA) at 1534.
    776. Id. at 1240, 95 U.S.P.Q.2d (BNA) at 1532.
    777. E.g., King Pharms., Inc. v. Eon Labs., Inc., 616 F.3d 1267, 95 U.S.P.Q.2d
    (BNA) 1833 (Fed. Cir. 2010); Dow Jones \& Co. v. Ablaise Ltd., 606 F.3d 1338, 95 U.S.P.Q.2d (BNA) 1366 (Fed. Cir. 2010); Media Techs. Licensing, L.L.C. v. Upper Deck Co., 596 F.3d 1334, 93 U.S.P.Q.2d (BNA) 1911 (Fed. Cir. 2010).
[^74]:    785. Id., 92 U.S.P.Q.2d (BNA) at 1583. The court took the extraordinary step of directing that, on remand, the case should be assigned to a different district judge. $I d$. at 1344, 92 U.S.P.Q.2d (BNA) at 1583.
    786. W. Union Co. v. MoneyGram Payment Sys., 626 F.3d 1361, 1373-74, 97 U.S.P.Q.2d (BNA) 1263, 1274 (Fed. Cir. 2010).
    787. 616 F.3d 1231, 95 U.S.P.Q.2d 1525 (Fed. Cir. 2010).
    788. Id. at 1233, 95 U.S.P.Q.2d at 1527.
    789. Id. at 1234-35, 95 U.S.P.Q.2d at 1527-28.
    790. Id. at 1236, 95 U.S.P.Q. 2 d at 1529.
    791. Id. at 1237, 95 U.S.P.Q.2d at 1529.
    792. Id. at 1237, 95 U.S.P.Q. 2 d at 1529.
    793. Id. at 1237, 95 U.S.P.Q.2d at 1530 (citing Comaper Corp. v. Antec, Inc., 596 F.3d 1343, 1351, 93 U.S.P.Q.2d (BNA) 1873, 1878-79 (Fed. Cir. 2010)).
    794. Id. at 1238, 95 U.S.P.Q. 2 d at 1530 .
    795. Id., 95 U.S.P.Q.2d at 1530 (citing KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 402, 82 U.S.P.Q.2d (BNA) 1385, 1390 (2007)).
[^75]:    796. Id., 95 U.S.P.Q.2d at 1530-31.
    797. Id., 95 U.S.P.Q. 2 d at 1530 .
    798. Id. at 1238, 95 U.S.P.Q.2d at 1530.
    799. Id. at 1246, 95 U.S.P.Q. 2 d at 1537.
    800. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418-19, 82 U.S.P.Q.2d 1385, 1388 (2007).
    801. See Wyers, 616 F.3d at 1238, 95 U.S.P.Q.2d (BNA) at 1530-31 ("Before the Supreme Court's decision in $K S R$, we required that a patent challenger show that a person of ordinary skill in the art would have had motivation to combine the prior art references and would have had a reasonable expectation of success in doing so. . .
    . KSR, however, instructs courts to take a more 'expansive and flexible approach' in determining whether a patented invention was obvious at the time it was made."); Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1374, 94 U.S.P.Q.2d (BNA) 1385, 1397 (Fed. Cir. 2010) (Although obviousness law "does not require an explicit teaching, suggestion, or motivation to combine prior art references, it may nevertheless be 'important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.'" (citations omitted)).
    802. See, e.g., King Pharms., Inc. v. Eon Labs., Inc., 616 F.3d 1267, 1281, 95 U.S.P.Q.2d (BNA) 1833, 1843 (Fed. Cir. 2010) (affirming obviousness judgment because it "would be obvious to a person of ordinary skill in the art to combine" teachings in the prior art); Wyers, 616 F.3d at 1240, 95 U.S.P.Q.2d (BNA) at 1532 ("[W]e consider whether the evidence established the existence of a motivation to combine references as to the" patents in suit."); Rolls-Royce, PLC v. United Techs. Corp., 603 F.3d 1325, 1339, 95 U.S.P.Q.2d (BNA) 1097, 1107 (Fed. Cir. 2010) ("A particular course or selection is not obvious to try unless some design need or market pressure or other motivation would suggest to one of ordinary skill to pursue the claimed course or selection."); Comaper Corp. v. Antec, Inc., 596 F.3d 1343, 1352, 93 U.S.P.Q.2d (BNA) 1873, 1879 (Fed. Cir. 2010) (finding that the obviousness analysis "typically invokes the familiar teaching-suggestion-motivation ('TSM') test, asking whether a person having ordinary skill in the art would have found some teaching, suggestion, or motivation to combine or modify the prior art references."); Therasense, Inc. v. Becton, Dickinson \& Co., 593 F.3d 1289, 1292, 1298, 93 U.S.P.Q.2d (BNA) 1489, 1491-92 (Fed. Cir. 2010) (affirming obviousness judgment where two prior patents disclosed every element of the patent at issue and a person of ordinary skill in the art would have been motivated to combine the elements).
[^76]:    803. 626 F.3d 1361, 97 U.S.P.Q.2d (BNA) 1263 (Fed. Cir. 2010).
    804. Id. at 1369-71, 97 U.S.P.Q.2d (BNA) at 1263, 1270-71.
    805. 596 F.3d 1334, 93 U.S.P.Q.2d (BNA) 1911 (Fed. Cir. 2010).
    806. Id. at 1335, 93 U.S.P.Q.2d (BNA) at 1912.
    807. Id. at 1336, 93 U.S.P.Q.2d (BNA) at 1912.
    808. Id. at 1338, 93 U.S.P.Q.2d (BNA) at 1914.
    809. Id., 93 U.S.P.Q.2d (BNA) at 1914.
    810. Id., 93 U.S.P.Q.2d (BNA) at 1914.
    811. Id. at 1339, 93 U.S.P.Q.2d (BNA) at 1911, 1915 (Rader, C.J., dissenting).
    812. Id. at 1340, 93 U.S.P.Q.2d (BNA) at 1915.
    813. Id. at 1341-42, 93 U.S.P.Q.2d (BNA) at 1916.
    814. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 421, 82 U.S.P.Q.2d (BNA) 1385, 1397 (2007).
[^77]:    815. Id. at 419-21, 82 U.S.P.Q.2d (BNA) at 1397. Prior to $K S R$, the Federal Circuit rejected the "obvious to try" rationale. See In re Deuel, 51 F.3d 1552, 1559, 34 U.S.P.Q.2d (BNA) 1210, 1216 (Fed. Cir. 1995).
    816. Id. at 421, 82 U.S.P.Q.2d (BNA) at 1397.
    817. 603 F.3d 1325, 95 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2010).
    818. Id. at 1327, 95 U.S.P.Q.2d (BNA) at 1098.
    819. Id. at 1329, 95 U.S.P.Q.2d (BNA) at 1099.
    820. Id. at 1338-39, 95 U.S.P.Q.2d (BNA) at 1106.
    821. Id., 95 U.S.P.Q.2d (BNA) at 1107.
    822. Id. at 1339, 95 U.S.P.Q.2d (BNA) at 1107 (quoting Abbott Labs. v. Sandoz, Inc., 544 F.3d 1341, 1351, 89 U.S.P.Q.2d (BNA) 1161 (Fed. Cir. 2008)) (internal quotation marks omitted).
    823. Id., 95 U.S.P.Q.2d (BNA) at 1107.
    824. Id. at 1339-41, 95 U.S.P.Q.2d (BNA) at 1107.
    825. 609 F.3d 1292, 95 U.S.P.Q.2d (BNA) 1193 (Fed. Cir. 2010).
[^78]:    826. Id. at 1298-99, 95 U.S.P.Q.2d (BNA) at 1198. The Federal Circuit filed an initial opinion in this case on February 18, 2010. Honeywell International, Inc. v. United States (Honeywell I), 596 F.3d 800, 93 U.S.P.Q.2d (BNA) 1740 (Fed. Cir. 2010). This opinion was superseded by the cited opinion issued on May 25, 2010. Honeywell, 609 F.3d 1292. However, the new opinion made no changes to the obviousness analysis.
    827. Honeywell, 609 F.3d at 1299, 93 U.S.P.Q.2d (BNA) at 1745.
    828. Id. at 1301, 93 U.S.P.Q.2d (BNA) at 1747.
    829. 596 F.3d 1343, 93 U.S.P.Q.2d (BNA) 1873 (Fed. Cir. 2010).
    830. Id. at 1350, 93 U.S.P.Q.2d (BNA) at 1878 (citing Callaway Golf Co. v. Acushnet Co., 576 F.3d 1331, 1344, 91 U.S.P.Q.2d (BNA) 1705, 1714 (Fed. Cir. 2009) (internal citations omitted)).
    831. Comaper Corp., 596 F.3d 1345, 93 U.S.P.Q.2d (BNA) at 1873.
    832. Id. at 1352, 1355, 93 U.S.P.Q.2d (BNA) at 1879-81.
    833. 619 F.3d 1346, 96 U.S.P.Q.2d (BNA) 1526 (Fed. Cir. 2010)
    834. Id. at 1352, 96 U.S.P.Q.2d (BNA) at 1531.
    835. Id., 96 U.S.P.Q.2d (BNA) at 1531 (citations omitted).
    836. Id., 96 U.S.P.Q.2d (BNA) at 1531 (citations omitted).
[^79]:    837. Id. at 1347, 96 U.S.P.Q.2d (BNA) at 1527.
    838. Id., 96 U.S.P.Q.2d (BNA) at 1530.
    839. Id. at 1351, 1357, 96 U.S.P.Q.2d (BNA) at 1530, 1535.
    840. Id. at 1354, 96 U.S.P.Q.2d (BNA) at 1532.
    841. Id., 96 U.S.P.Q.2d (BNA) at 1532.
    842. Id., 96 U.S.P.Q.2d (BNA) at 1532.
    843. Id. at 1354-55, 96 U.S.P.Q.2d (BNA) at 1533.
    844. Id. at 1354, 96 U.S.P.Q.2d (BNA) at 1533.
    845. Id. at 1357, 96 U.S.P.Q.2d (BNA) at 1534-35.
    846. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010), cert. granted, 131 S. Ct. 647 (2010).
    847. $i 4 i, 598$ F.3d at 845, 93 U.S.P.Q.2d (BNA) at 1954. The issue regarding obviousness has not been appealed to the Supreme Court. See Petition for Certiorari
[^80]:    at i Microsoft Corp. v. i4i Limited Partnership, 131 S. Ct. 647 (2010) (No. 10-290), 2010 WL 3413088 at $*_{\mathrm{ii}}$ (discussing the question presented as limited to the clear-and-convincing standard).
    848. Id., 93 U.S.P.Q.2d (BNA) at 1954.
    849. Id., 93 U.S.P.Q.2d (BNA) at 1954.
    850. Id., 93 U.S.P.Q.2d (BNA) at 1954.
    851. Id. at 846, 93 U.S.P.Q.2d (BNA) at 1954.
    852. 619 F.3d 1329, 96 U.S.P.Q.2d (BNA) 1375 (Fed. Cir. 2010).
    853. Id. at 1343-44, 96 U.S.P.Q.2d (BNA) at 1387.
    854. Id. at 1341, 96 U.S.P.Q.2d (BNA) at 1385.
    855. Id., 96 U.S.P.Q.2d (BNA) at 1385.
    856. Id. at 1040, 96 U.S.P.Q.2d (BNA) at 1384.
    857. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 U.S.P.Q. (BNA) 459, 467 (1966).

[^81]:    858. Crocs, Inc. v. Int'l Trade Comm'n, 598 F.3d 1294, 1310, 93 U.S.P.Q.2d (BNA) 1777, 1789 (Fed. Cir. 2010) (quoting Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc., 520 F.3d 1358, 1365, 86 U.S.P.Q.2d (BNA) 1196, 1202 (Fed. Cir. 2008)) (internal quotation marks omitted).
    859. Id., 93 U.S.P.Q.2d (BNA) at 1788 (quoting Custom Accessories, Inc. v. JeffreyAllan Indus., Inc., 807 F.2d 955, 960 (Fed. Cir. 1986)); see also Rolls-Royce, PLC v. United Techs. Corp., 603 F.3d 1325, 1339, 95 U.S.P.Q.2d (BNA) 1097, 1107 (Fed. Cir. 2010) ("In the obviousness analysis, secondary considerations are often some of the best 'independent evidence of nonobviousness.'" (quoting Ortho-McNeil, 520 F.3d at 1365)).
    860. Trimed, Inc. v. Stryker Corp., 608 F.3d 1333, 1343, 95 U.S.P.Q.2d 1577, 1583 (Fed. Cir. 2010).
    861. Wyers v. Master Lock Co., 616 F.3d 1231, 1246, 95 U.S.P.Q.2d (BNA) 1525, 1537 (Fed. Cir. 2010); see also W. Union Co. v. MoneyGram Payment Sys., 626 F.3d 1361, 1373, 97 U.S.P.Q.2d (BNA) 1263, 1273 (Fed. Cir. 2010) ("[W]eak secondary considerations generally do not overcome a strong prima facie case of obviousness."); Geo M. Martin Co. v. Alliance Mach. Sys. Int'l L.L.C., 618 F.3d 1294, 1306, 96 U.S.P.Q.2d (BNA) 1212, 1220 (Fed. Cir. 2010) ("Balancing all of the secondary considerations, this court agrees with the district court that, in light of the strong evidence of obviousness ... [the] evidence of non-obviousness, even if fully credited by a jury, would fail to make a difference in this case.").
    862. 617 F.3d 1296, 96 U.S.P.Q.2d (BNA) 1104 (Fed. Cir. 2010).
    863. See id. at 1305, 96 U.S.P.Q.2d (BNA) at 1109.
    864. Id., 96 U.S.P.Q.2d (BNA) at 1109 .
    865. Id. at 1302, 96 U.S.P.Q.2d (BNA) at 1107.
    866. Id. at 1303, 96 U.S.P.Q.2d (BNA) at 1108.
    867. Id. at 1304, 96 U.S.P.Q.2d (BNA) at 1109.
    868. Id., 96 U.S.P.Q.2d (BNA) at 1109.
[^82]:    869. Id., 96 U.S.P.Q.2d (BNA) at 1109.
    870. Id., 96 U.S.P.Q.2d (BNA) at 1109.
    871. Id. at 1305, 1313, 96 U.S.P.Q.2d (BNA) at 1109.
    872. 618 F.3d 1294, 96 U.S.P.Q.2d (BNA) 1212 (Fed. Cir. 2010).
    873. Id. at 1304,96 U.S.P.Q.2d (BNA) at 1219.
    874. Id., 96 U.S.P.Q.2d (BNA) at 1219.
    875. Id., 96 U.S.P.Q.2d (BNA) at 1219.
    876. Id. at 1305-06, 96 U.S.P.Q.2d (BNA) at 1220.
    877. Id. at 1305, 96 U.S.P.Q.2d (BNA) at 1220.
    878. Id. at 1305-06, 96 U.S.P.Q.2d (BNA) at 1220 .
    879. 35 U.S.C. § 102 (2006).
    880. Id. § $102(\mathrm{~b})$.
[^83]:    881. Id.
    882. Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1332, 94 U.S.P.Q.2d (BNA) 1321, 1326 (Fed. Cir. 2010) (citing Power Mosfet Techs., L.L.C. v. Siemens AG, 378 F.3d 1396, 1406, 72 U.S.P.Q.2d (BNA) 1129, 1135 (Fed. Cir. 2004)).
    883. Orion IP, L.L.C. v. Hyundai Motor Am., 605 F.3d 967, 975, 95 U.S.P.Q.2d (BNA) 1297, 1302 (Fed. Cir. 2010) (citing Finisar Corp. v. DirecTV Grp., Inc., 523 F.3d 1323, 1334, 86 U.S.P.Q.2d (BNA) 1609, 1618 (Fed. Cir. 2008)).
    884. Id., 95 U.S.P.Q.2d (BNA) at 1302 (quoting In re Gleave, 560 F.3d 1331, 1334, 90 U.S.P.Q.2d (BNA) 1235, 1238 (Fed. Cir. 2009)).
    885. Id., 95 U.S.P.Q.2d (BNA) at 1302.
    886. z4 Techs., Inc. v. Microsoft Corp., 507 F.3d 1340, 1347, 85 U.S.P.Q.2d (BNA) 1340, 1344 (Fed. Cir. 2007).
    887. Therasense, Inc. v. Becton, Dickinson \& Co., 593 F.3d 1289, 1310, 93 U.S.P.Q.2d (BNA) 1489, 1505 (Fed. Cir. 2010), reh'g granted per curiam, 374 F. App’x 35 (Fed. Cir. 2010).
    888. Trimed, Inc. v. Stryker Corp., 608 F.3d 1333, 1343, 95 U.S.P.Q.2d (BNA) 1577, 1583 (Fed. Cir. 2010).
    889. 599 F.3d 1290, 94 U.S.P.Q.2d (BNA) 1140 (Fed. Cir. 2010).
    890. Id. at 1294-95, 94 U.S.P.Q.2d (BNA) at 1142.
    891. Id. at 1292, 94 U.S.P.Q.2d (BNA) at 1140.
[^84]:    892. Id., 94 U.S.P.Q.2d (BNA) at 1140-41.
    893. Id., 94 U.S.P.Q.2d (BNA) at 1140 .
    894. Id. at 1294, 94 U.S.P.Q.2d (BNA) at 1141-42 (quoting Bicon, Inc. v. Straumann Co., 441 F.3d 945, 952, 78 U.S.P.Q.2d (BNA) 1267, 1273 (Fed. Cir. 2006)) (internal quotation marks omitted).
    895. See id., 94 U.S.P.Q.2d (BNA) at 1142 ("Clear reliance on a preamble during prosecution can distinguish a claimed invention from the prior art and render the preamble a claim limitation.").
    896. Id., 94 U.S.P.Q.2d (BNA) at 1142.
    897. Id., 94 U.S.P.Q.2d (BNA) at 1142.
    898. Id., 94 U.S.P.Q.2d (BNA) at 1142.
    899. Id. at 1296, 94 U.S.P.Q.2d (BNA) at 1143 (Newman, J., dissenting).
    900. Id. at 1297, 94 U.S.P.Q.2d (BNA) at 1144.
    901. Id. at 1297-99, 94 U.S.P.Q.2d (BNA) at 1144-46.
    902. 599 F.3d 1325, 94 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
    903. Id. at 1332, 94 U.S.P.Q.2d (BNA) at 1326.
    904. Id., 94 U.S.P.Q.2d (BNA) at 1326.
    905. 593 F.3d 1325, 93 U.S.P.Q.2d (BNA) 1481 (Fed. Cir. 2010).
    906. Id. at 1332, 93 U.S.P.Q.2d (BNA) at 1485.
    907. Id. at 1333, 1337, 93 U.S.P.Q.2d (BNA) at 1486, 1488.
[^85]:    908. Id. at 1332, 93 U.S.P.Q.2d (BNA) at 1485.
    909. Id., 93 U.S.P.Q.2d (BNA) at 1485.
    910. Id., 93 U.S.P.Q.2d (BNA) at 1485.
    911. Id. at 1332-33, 93 U.S.P.Q.2d (BNA) at 1485.
    912. 35 U.S.C. § 102(b) (2006).
    913. Orion IP, L.L.C. v. Hyundai Motor Am., 605 F.3d 967, 974, 95 U.S.P.Q.2d
    (BNA) 1297, 1301 (Fed. Cir. 2010) (internal citations omitted).
    914. 605 F.3d 967, 974, 95 U.S.P.Q.2d (BNA) 1297, 1301 (Fed. Cir. 2010).
    915. Id. at 974, 95 U.S.P.Q.2d (BNA) at 1301.
    916. Id. at 975, 95 U.S.P.Q.2d (BNA) at 1302.
    917. Id., 95 U.S.P.Q.2d (BNA) at 1302.
    918. 594 F.3d 860, 93 U.S.P.Q.2d (BNA) 1553 (Fed. Cir. 2010) (per curiam).
    919. Id. at 866, 93 U.S.P.Q.2d (BNA) at 1557.
[^86]:    920. Id., 93 U.S.P.Q.2d (BNA) at 1557.
    921. Id., 93 U.S.P.Q.2d (BNA) at 1557.
    922. Id., 93 U.S.P.Q.2d (BNA) at 1557 (citing In re Hall, 781 F.2d 897, 899, 228
    U.S.P.Q. (BNA) 453, 455 (Fed. Cir. 1986)).
    923. Id., 93 U.S.P.Q.2d (BNA) at 1557.
    924. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) at 1968 (Fed. Cir. 2010), cert. granted, 131 S. Ct. 647 (2010).
    925. Id. at 864, 93 U.S.P.Q.2d (BNA) at 1968. This issue is not before the Supreme Court on appeal. See Petition for Certiorari at i, Microsoft Corp. v. i4i Limited Partnership, 131 S. Ct. 647 (2010) (No. 10-290), 2010 WL 3413088, at *ii (discussing the question presented as limited to the clear-and-convincing standard).
    926. Id. at 845-47, 93 U.S.P.Q.2d (BNA) at 1955.
    927. Id. at 847, 93 U.S.P.Q.2d (BNA) at 1955.
    928. Id., 93 U.S.P.Q.2d (BNA) at 1955.
    929. Id., 93 U.S.P.Q.2d (BNA) at 1955.
    930. Id., 93 U.S.P.Q.2d (BNA) at 1955.
    931. 628 F.3d 1359, 97 U.S.P.Q.2d (BNA) 1437 (Fed. Cir. 2010).
    932. Id. at 1374, 97 U.S.P.Q.2d (BNA) at 1448 (quoting TypeRight Keyboard Corp. v. Microsoft Corp., 374 F.3d 1151, 1159, 71 U.S.P.Q.2d (BNA) 1501, 1506 (Fed. Cir. 2004) )
[^87]:    933. Id., 97 U.S.P.Q.2d (BNA) at 1448 (quoting Knorr v. Pearson, 671 F.2d 1368, 1374, 213 U.S.P.Q. (BNA) 196, 201 (C.C.P.A. 1982)).
    934. Id., 97 U.S.P.Q.2d (BNA) at 1448 (quoting Knorr v. Pearson, 671 F.2d 1368, 1374, 213 U.S.P.Q. (BNA) 196, 201 (C.C.P.A. 1982)) (citing Lacks Indus., Inc. v. McKechnie Vehicle Components USA, Inc., 322 F.3d 1335, 1349, 66 U.S.P.Q.2d (BNA) 1083, 1093 (Fed. Cir. 2003)).
    935. Id., 97 U.S.P.Q.2d (BNA) at 1448.
    936. 609 F.3d 1345, 95 U.S.P.Q.2d (BNA) 1660 (Fed. Cir. 2010).
    937. Id. at 1347, 95 U.S.P.Q.2d (BNA) at 1661.
    938. 35 U.S.C. § 120 (2006).
    939. Id.
    940. Encyclopaedia Britannica, Inc., 609 F.3d at 1347, 95 U.S.P.Q.2d (BNA) at 1661.
    941. Id., 95 U.S.P.Q.2d (BNA) at 1661.
[^88]:    942. Id., 95 U.S.P.Q.2d (BNA) at 1662. Declarations related to priority and previously filed applications are generally made on the application's first page.
    943. Id. at 1348, 95 U.S.P.Q.2d (BNA) at 1662.
    944. Id. at 1349, 95 U.S.P.Q.2d (BNA) at 1663 (citing In re Henriksen, 399 F.2d 253, 257, 158 U.S.P.Q. 224, 227 (C.C.P.A. 1968)).
    945. Id. at 1350, 95 U.S.P.Q.2d (BNA) at 1664.
    946. Id., 95 U.S.P.Q.2d (BNA) at 1664 (quoting 35 U.S.C. § 120 (2006)) (internal quotation marks omitted).
    947. Id. at 1352, 95 U.S.P.Q.2d (BNA) at 1665.
    948. Id., 95 U.S.P.Q.2d (BNA) at 1665.
    949. Id., 95 U.S.P.Q.2d (BNA) at 1665.
    950. 612 F.3d 1380, 95 U.S.P.Q.2d (BNA) 1698 (Fed. Cir. 2010).
    951. 35 U.S.C. § 102(e)(2) (2006); Giacomini, 612 F.3d at 1383, 95 U.S.P.Q.2d (BNA) at 1700 .
    952. Giacomini, 612 F.3d at 1381-82, 95 U.S.P.Q.2d (BNA) at 1699.
    953. Id. at 1382, 95 U.S.P.Q.2d (BNA) at 1699.
[^89]:    954. Id. at 1382, 95 U.S.P.Q.2d (BNA) at 1699.
    955. 35 U.S.C. § 111 (b) (8) (2006) (stating that the provisions of Title 35 "relating to applications for patent shall apply to provisional applications for patent, except as otherwise provided, and except . . . [in] sections 115, 131, 135, and 157 of this title").
    956. Id., 95 U.S.P.Q. 2d (BNA) at 1700 .
    957. Id., 95 U.S.P.Q. 2 d (BNA) at 1700 .
    958. Id. at 1384, 95 U.S.P.Q.2d (BNA) at 1700 .
    959. Id. at 1384-85, 95 U.S.P.Q.2d (BNA) at 1701.
    960. 359 F.2d 859, 149 U.S.P.Q. (BNA) 480 (C.C.P.A. 1966).
    961. Giacomini, 612 F.3d at 1384, 95 U.S.P.Q.2d (BNA) at 1701 (citing Hilmer, 359 F.2d at 861,870 , 149 U.S.P.Q. (BNA) at 482, 489).
    962. Id., 95 U.S.P.Q.2d (BNA) at 1701.
    963. Id. at 1385, 95 U.S.P.Q.2d (BNA) at 1701 (quoting 35 U.S.C. § 102(e) (2006)) (internal quotation marks omitted).
    964. Id., 95 U.S.P.Q.2d (BNA) at 1701; see In re Klesper, 397 F.2d 882, 885, 158 U.S.P.Q. (BNA) 256, 257-58 (C.C.P.A. 1968) (explaining that Hilmer clarified that "domestic and foreign filing dates stand on entirely different footings").
[^90]:    965. 616 F.3d 1267, 95 U.S.P.Q.2d (BNA) 1833 (Fed. Cir. 2010).
    966. Id. at 1269-70, 95 U.S.P.Q.2d (BNA) at 1835.
    967. Id. at 1270-71, 95 U.S.P.Q.2d (BNA) at 1835-36.
    968. Id. at 1270, 95 U.S.P.Q.2d (BNA) at 1835-36.
    969. Id. at 1275-76, 95 U.S.P.Q.2d (BNA) at 1839-40.
    970. Id., 95 U.S.P.Q.2d (BNA) at 1839-40.
    971. Id. at 1276, 95 U.S.P.Q.2d (BNA) at 1839.
    972. Id. at 1275, 95 U.S.P.Q.2d (BNA) at 1839 (quoting In re Woodruff, 919 F.2d 1575, 1578, 16 U.S.P.Q.2d (BNA) 1934, 1936 (Fed. Cir. 1990)) (internal quotation marks omitted).
    973. Id. at 1275-76, 95 U.S.P.Q.2d (BNA) at 1839 (quoting In re Oelrich, 666 F.2d 578, 581, 212 U.S.P.Q. (BNA) 323, 326 (C.C.P.A. 1981)) (internal quotation marks omitted).
    974. Id. at 1277, 95 U.S.P.Q.2d (BNA) at 1841.
    975. Id. at 1278, 95 U.S.P.Q.2d (BNA) at 1842.
    976. Id., 95 U.S.P.Q.2d (BNA) at 1842.
    977. Id., 95 U.S.P.Q.2d (BNA) at 1842.
[^91]:    978. Id. at 1278-79, 95 U.S.P.Q.2d (BNA) at 1842 (citing In re Gulack, 703 F.2d 1381, 1386, 217 U.S.P.Q. (BNA) 401, 404 (Fed. Cir. 1983)).
    979. Id. at 1279, 95 U.S.P.Q.2d (BNA) at 1842; see In re Ngai, 367 F.3d 1336, 1339, 70 U.S.P.Q.2d (BNA) 1862, 1864 (Fed. Cir. 2004) (per curiam) (preventing the entitlement to patent an existing product after adding a new set of instructions).
    980. King, 616 F.3d at 1279-80, 95 U.S.P.Q.2d (BNA) at 1843.
    981. 35 U.S.C. § 112 (2006).
    982. ALZA Corp. v. Andrx Pharms., LLC, 603 F.3d 935, 940, 94 U.S.P.Q.2d (BNA)

    1823, 1826 (Fed. Cir. 2010) (quoting Genentech, Inc. v. Novo Nordisk, A/S, 108 F.3d
    1361, 1365, 42 U.S.P.Q.2d (BNA) 1001, 1004 (Fed. Cir. 1997)) (internal quotation marks omitted).
    983. Id., 94 U.S.P.Q.2d (BNA) at 1826 (quoting Wands, 858 F.2d at 737, 8 U.S.P.Q.2d (BNA) at 1404) (internal quotation marks omitted).
    984. Id., 94 U.S.P.Q.2d (BNA) at 1826.

[^92]:    985. 617 F.3d 1296, 96 U.S.P.Q.2d (BNA) 1104 (Fed. Cir. 2010).
    986. Id. at 1306-07, 96 U.S.P.Q.2d (BNA) at 1110 (citing Nat'l Recovery Techs.,

    Inc. v. Magnetic Separation Sys., Inc., 166 F.3d 1190, 1196, 49 U.S.P.Q.2d (BNA) 1671, 1676 (Fed. Cir. 1999)).
    987. Id. at 1300-02, 96 U.S.P.Q.2d (BNA) at 1106-07.
    988. Id. at 1305, 96 U.S.P.Q.2d (BNA) at 1109-10.
    989. Id. at 1305-06, 96 U.S.P.Q.2d (BNA) at 1110.
    990. Id. at 1306, 96 U.S.P.Q.2d (BNA) at 1110.
    991. Id., 96 U.S.P.Q.2d (BNA) at 1110.
    992. Id. at 1307, 96 U.S.P.Q.2d (BNA) at 1110.
    993. Id., 96 U.S.P.Q.2d (BNA) at 1110-11.
    994. 619 F.3d 1329, 96 U.S.P.Q.2d (BNA) 1375 (Fed. Cir. 2010).
    995. Id. at 1340, 96 U.S.P.Q.2d (BNA) at 1384.

[^93]:    996. Id. at 1344, 96 U.S.P.Q.2d (BNA) at 1387.
    997. 603 F.3d 935, 94 U.S.P.Q.2d (BNA) 1823 (Fed. Cir. 2010).
    998. Id., 94 U.S.P.Q.2d (BNA) at 1827.
    999. Id. at 941-43, 94 U.S.P.Q.2d (BNA) at 1827-29.
    1000. 35 U.S.C. § 112 (2006).
    1001. Ajinomoto Co. v. Int'l Trade Comm'n, 597 F.3d 1267, 1272, 94 U.S.P.Q.2d (BNA) 1055, 1060 (Fed. Cir. 2010) (citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1330, 63 U.S.P.Q.2d (BNA) 1374, 1384 (Fed. Cir. 2002)).
    1002. Id. at 1272, 94 U.S.P.Q.2d (BNA) at 1060.
    1003. Green Edge Enters., LLC v. Rubber Mulch Etc., LLC, 620 F.3d 1287, 1296, 96 U.S.P.Q.2d (BNA) 1425, 1431.
[^94]:    1004. Id., 96 U.S.P.Q.2d (BNA) at 1431.
    1005. 597 F.3d 1267, 94 U.S.P.Q.2d (BNA) 1055 (Fed. Cir. 2010).
    1006. Id. at 1277, 94 U.S.P.Q.2d (BNA) at 1063.
    1007. Id. at 1273, 94 U.S.P.O.2d (BNA) at 1060.
    1008. Id. at 1274, 94 U.S.P.Q.2d (BNA) at 1061.
    1009. Id. at 1274-75, 94 U.S.P.Q.2d (BNA) at 1061.
    1010. Id. at 1276-78, 94 U.S.P.Q. $2 d$ (BNA) at 1063-64.
    1011. 620 F.3d 1287, 96 U.S.P.Q.2d (BNA) 1425 (Fed. Cir. 2010).
    1012. Id. at 1296-97, 96 U.S.P.Q.2d (BNA) at 1431-32.
    1013. Id. at 1296, 96 U.S.P.Q.2d (BNA) at 1431.
    1014. Id., 96 U.S.P.Q.2d (BNA) at 1431.
[^95]:    1015. Id. at 1296-97, 96 U.S.P.Q.2d (BNA) at 1431.
    1016. Id. at 1297, 96 U.S.P.Q.D. $2 d$ (BNA) at 1432.
    1017. Id., 96 U.S.P.Q.2d (BNA) at 1432.
    1018. Id., 96 U.S.P.Q.2d (BNA) at 1432.
    1019. 35 U.S.C. § 112 (2006).
    1020. Laryngeal Mask Co. v. AMBU, A/S, 618 F.3d 1367, 1373, 96 U.S.P.Q.2d (BNA) 1757, 1762 (Fed. Cir. 2010) (quoting Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 U.S.P.Q.2d (BNA) 1111, 1117 (Fed. Cir. 1991)).
    1021. Id. at 1373, 96 U.S.P.Q.2d (BNA) at 1762 (quoting ICU Med., Inc. v. Alaris Med. Sys., Inc., 558 F.3d 1368, 1376, 90 U.S.P.Q.2d (BNA) 1072, 1077 (Fed. Cir. 2009)) (internal quotation marks omitted).
    1022. 598 F.3d 1336, 94 U.S.P.Q.2d (BNA) 1161 (Fed. Cir. 2010).
    1023. Id. at 1344, 94 U.S.P.Q. 2 d (BNA) at 1166 (emphasis in original) (quoting 35 U.S.C. § 112 (2006)).
    1024. § 112; Ariad, 598 F.3d at 1344, 94 U.S.P.Q.2d (BNA) at 1166.
[^96]:    1025. § 112; Ariad, 598 F.3d at 1344, 94 U.S.P.Q.2d (BNA) at 1166.
    1026. Ariad, 598 F.3d at 1351, 94 U.S.P.Q.2d (BNA) at 1172.
    1027. Id., 94 U.S.P.Q.2d (BNA) at 1172.
    1028. E.g., Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc., 620 F.3d 1305, 1320, 96 U.S.P.Q.2d (BNA) 1640, 1652 (Fed. Cir. 2010); Yorkey v. Diab, 605 F.3d 1297, 1305, 94 U.S.P.Q.2d (BNA) 1444, 1450 (Fed. Cir. 2010).
    1029. E.g., Eli Lilly \& Co. v. Teva Pharms. USA, Inc., 619 F.3d 1329, 1344-45, 96 U.S.P.Q.2d (BNA) 1375, 1387-89 (Fed. Cir. 2010).
    1030. E.g., Goeddel v. Sugano, 617 F.3d 1350, 1356-57, 96 U.S.P.Q.2d (BNA) 1398, 1403-04 (Fed. Cir. 2010); Honeywell Int'l, Inc. v. United States, 609 F.3d 1292, 1301, 95 U.S.P.Q.2d (BNA) 1193, 1200-01 (Fed. Cir. 2010).
    1031. E.g., Laryngeal Mask Co. v. AMBU, A/S, 618 F.3d 1367, 1375, 96 U.S.P.Q.2d (BNA) 1757, 1763 (Fed. Cir. 2010).
    1032. Eli Lilly, 619 F.3d at 1345, 96 U.S.P.Q.2d (BNA) at 1388.
    1033. Goeddel, 617 F.3d at 1356, 96 U.S.P.Q.2d (BNA) at 1403.
    1034. Ariad Pharms., Inc. v. Eli Lilly \& Co., 598 F.3d 1336, 1351, 94 U.S.P.Q.2d (BNA) 1161, 1172 (Fed. Cir. 2010).
[^97]:    1035. 603 F.3d 1309, 94 U.S.P.Q.2d (BNA) 1954 (Fed. Cir. 2010).
    1036. 590 F.3d 1326, 93 U.S.P.Q.2d (BNA) 1227 (Fed. Cir. 2010).
    1037. Robertson, 603 F.3d at 1312, 94 U.S.P.Q.2d (BNA) at 1956; Philips, 590 F.3d at 1335-36, 93 U.S.P.Q.2d (BNA) at 1234.
    1038. Philips, 590 F.3d at 1335, 93 U.S.P.Q.2d (BNA) at 1234 (quoting Agilent

    Techs., Inc. v. Affymetrix, Inc., 567 F.3d 1366, 1375, 91 U.S.P.Q.2d (BNA) 1161, 1167
    (Fed. Cir. 2009)); accord Robertson, 603 F.3d at 1313, 94 U.S.P.Q.2d (BNA) at 1956.
    1039. Robertson, 603 F.3d at 1312-13, 94 U.S.P.Q.2d (BNA) at 1954, 1956.
    1040. Id. at 1310, 94 U.S.P.Q.2d (BNA) at 1955.
    1041. Id. at 1311,94 U.S.P.Q.2d (BNA) at 1956 (quoting 37 C.F.R. § 41.200 (b) (2009) (emphasis added)).
    1042. Robertson, 603 F.3d at 1313, 94 U.S.P.Q.2d (BNA) at 1957-58; Philips, 590 F.3d at 1338, 93 U.S.P.Q.2d (BNA) at 1236.
    1043. Philips, 590 F.3d at 1335, 93 U.S.P.Q.2d (BNA) at 1234 (emphasis in original) (quoting Agilent, 567 F.3d at 1375, 91 U.S.P.Q.2d (BNA) at 1167).

[^98]:    1044. Id. at 1337, 93 U.S.P.Q.2d (BNA) at 1234-35.
    1045. Robertson, 603 F.3d at 1313, 94 U.S.P.Q.2d (BNA) at 1957-58; Philips, 590 F.3d at 1338, 93 U.S.P.Q.2d (BNA) at 1236.
    1046. 35 U.S.C. § 112 (2006).
    1047. Honeywell Int'l, Inc. v. Int'l Trade Comm'n, 341 F.3d 1332, 1338, 68 U.S.P.Q.2d (BNA) 1023, 1028 (Fed. Cir. 2003)).
    1048. Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1366, 94 U.S.P.Q.2d
    (BNA) 1385, 1391 (Fed. Cir. 2010) (quoting Young v. Lumenis, Inc. 492 F.3d 1336, 1344, 83 U.S.P.Q.2d (BNA) 1191, 1196 (Fed. Cir. 2007)) (internal quotation marks omitted).
    1049. Compare Exxon Research \& Engr'g Co. v. United States, 265 F.3d 1371, 1375, 60 U.S.P.Q.2d (BNA) 1272, 1276 (Fed. Cir. 2001) (setting forth the "insolubly ambiguous" standard for finding a claim indefinite); with Athletic Alternatives v . Prince Mfg., 73 F.3d 1573, 1581, 37 U.S.P.Q.2d (BNA) 1365, 1372 (Fed. Cir. 1996) ("Where there is an equal choice between a broader and a narrower meaning of a claim, and there is an enabling disclosure that indicates that the applicant is at least entitled to a claim having the narrower meaning, we consider the notice function of the claim to be best served by adopting the narrower meaning.").
    1050. Spansion, Inc. v. Int'l Trade Comm'n, 629 F.3d 1331, 1346, 97 U.S.P.Q.2d 1417, 1427 (Fed. Cir. 2010); Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp., 616 F.3d 1357, 1372, 96 U.S.P.Q.2d (BNA) 1329, 1340 (Fed. Cir. 2010); Telcordia Techs., Inc. v. Cisco Sys., Inc., 612 F.3d 1365, 1377, 95 U.S.P.Q.2d (BNA) 1673, 1682 (Fed. Cir. 2010); Hearing Components, Inc., 600 F.3d at 1368, 94 U.S.P.Q.2d (BNA) at 1392-93; Power-One, Inc. v. Artesyn Techs., Inc., 599 F.3d 1343, 1350, 94 U.S.P.Q.2d (BNA) 1241, 1245 (Fed. Cir. 2010); Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1332-36, 94 U.S.P.Q.2d (BNA) 1321, 1326-29 (Fed. Cir. 2010); Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1358, 93 U.S.P.Q.2d (BNA) 1805, 1818 (Fed. Cir. 2010); Honeywell Int'l, Inc., 609 F.3d at 1292, 1302, 95 U.S.P.Q.2d (BNA) at 1193, 1202.
    1051. Haemonetics Corp. v. Baxter Healthcare Corp., 607 F.3d 776, 783-84, 95 U.S.P.Q.2d (BNA) 1556, 1561-62 (Fed. Cir. 2010) (remanding to the district court for further proceedings on the indefiniteness challenge, in light of the Federal Circuit's new claim construction).
[^99]:    1052. 616 F.3d 1357, 96 U.S.P.Q.2d (BNA) 1329 (Fed. Cir. 2010).
    1053. Id. at 1372, 96 U.S.P.Q.2d (BNA) at 1340.
    1054. Id., 96 U.S.P.Q.2d (BNA) at 1340 .
    1055. Id., 96 U.S.P.Q.2d (BNA) at 1340 (internal quotation marks omitted) (citing

    Dorsey v. Pilot Elec. Co., 32 F.2d 211, 212, 1 U.S.P.Q. (BNA) 203, 203 (2d Cir. 1929)).
    1056. 612 F.3d 1365, 95 U.S.P.Q.2d (BNA) 1673 (Fed. Cir. 2010).
    1057. Id. at 1376, 95 U.S.P.Q.2d (BNA) at 1681-82 (citing Biomedino, LLC v.

    Waters Techs. Corp., 490 F.3d 946, 950, 83 U.S.P.Q.2d (BNA) 1118, 1120 (Fed. Cir. 2007)).
    1058. Id., 95 U.S.P.Q.2d (BNA) at 1681.
    1059. Id. at 1377, 95 U.S.P.Q.2d (BNA) at 1682.
    1060. Id., 95 U.S.P.Q.2d (BNA) at 1682.
    1061. Id., 95 U.S.P.Q.2d (BNA) at 1682.

[^100]:    1062. Id. at 1379, 95 U.S.P.Q. 2d (BNA) at 1684 (Prost, J., dissenting).
    1063. Id. at 1380, 95 U.S.P.Q.2d (BNA) at 1684.
    1064. 600 F.3d 1357, 94 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2010).
    1065. Id. at 1366, 94 U.S.P.Q.2d (BNA) at 1391.
    1066. Id. at 1362, 94 U.S.P.Q.2d (BNA) at 1389.
    1067. Id. at 1367, 94 U.S.P.Q.2d (BNA) at 1391 (internal quotation marks omitted)
    (quoting Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1351, 75
    U.S.P.Q.2d (BNA) 1801, 1807 (Fed. Cir. 2005)).
    1068. Id. at 1367, 94 U.S.P.Q.2d (BNA) at 1392.
    1069. Id. at 1368, 94 U.S.P.Q.2d (BNA) at 1392.
    1070. 599 F.3d 1325, 94 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
    1071. Id. at 1336, 94 U.S.P.Q.2d (BNA) at 1329.
    1072. Id. at 1334, 94 U.S.P.Q. 2 d (BNA) at 1327.
[^101]:    1073. 130 S. Ct. 3218, 95 U.S.P.Q.2d (BNA) 1001 (2010).
    1074. Id. at 3223, 95 U.S.P.Q.2d (BNA) at 1004.
    1075. 35 U.S.C. § 101 (2006).
    1076. Id. § $100(\mathrm{~b})$.
    1077. In re Bilski, 545 F.3d 943, 954, 959-60, 88 U.S.P.Q.2d (BNA) 1385, 1391,

    1394-95 (Fed. Cir. 2008) (en banc).
    1078. Bilski, 130 S. Ct. at 3226-27, 95 U.S.P.Q.2d (BNA) at 1007.
    1079. $I d$. at 3225,95 U.S.P.Q.2d (BNA) at 1005.
    1080. Id., 95 U.S.P.Q.2d (BNA) at 1005 .
    1081. 601 F.3d 1319, 94 U.S.P.Q.2d (BNA) 1607 (Fed. Cir. 2010).
    1082. Id. at 1333, 94 U.S.P.Q.2d (BNA) at 1617.

[^102]:    1083. Id. at 1332, 94 U.S.P.Q.2d (BNA) at 1616.
    1084. Id. at 1333, 94 U.S.P.Q.2d (BNA) at 1617.
    1085. 616 F.3d 1267, 96 U.S.P.Q.2d (BNA) 1833 (Fed. Cir. 2010).
    1086. Id. at 1270, 95 U.S.P.Q.2d (BNA) at 1836.
    1087. King, 616 F.3d at 1270, 95 U.S.P.Q.2d (BNA) at 1836.
    1088. Id. at 1271, 95 U.S.P.Q.2d (BNA) at 1836.
    1089. Id. at 1277, 95 U.S.P.Q.2d (BNA) at 1841.
    1090. Id., 95 U.S.P.Q.2d (BNA) at 1841 (citing Parker v. Flook, 437 U.S. 584, 590, 198 U.S.P.Q. (BNA) 193, 197 (1978)).
    1091. Id., 95 U.S.P.Q.2d (BNA) at 1841.
    1092. See id. at 1278, 95 U.S.P.Q.2d (BNA) at 1841.
    1093. See id., 95 U.S.P.Q.2d (BNA) at 1841 (stating that the case "does not present the proper vehicle for determining whether claims covering medical treatment methods are eligible for patenting under $\S 101$ because" the claim is anticipated under § 102).
    1094. 628 F.3d 1347, 97 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. Dec. 17, 2010).
[^103]:    1095. Id. at 1349, 97 U.S.P.Q.2d (BNA) at 1099.
    1096. Id., 97 U.S.P.Q.2d (BNA) at 1099.
    1097. Id. at 1356-58, 97 U.S.P.Q.2d (BNA) at 1103-04.
    1098. Id. at 1357, 97 U.S.P.Q.2d (BNA) at 1104.
    1099. Id. at 1355, 97 U.S.P.Q.2d (BNA) at 1103.
    1100. 627 F.3d 859, 97 U.S.P.Q. $2 d$ (BNA) 1274 (Fed. Cir. 2010).
    1101. Id. at 862-63, 97 U.S.P.Q.2d (BNA) at 1276.
    1102. Id. at 862, 97 U.S.P.Q.2d (BNA) at 1276.
    1103. Id. at 867, 97 U.S.P.Q.2d (BNA) at 1279-80 (citing Diamond v. Chakrabarty, 447 U.S. 303, 309, 206 U.S.P.Q.2d (BNA) 193, 197 (1980)).
    1104. Id. at 867-68, 97 U.S.P.Q.2d (BNA) at 1280.
[^104]:    1105. Id. at 868, 97 U.S.P.Q.2d (BNA) at 1280 (citing Bilski v. Kappos, 130 S. Ct. 3218, 3231, 95 U.S.P.Q.2d (BNA) 1001, 1010 (2010)).
    1106. Id., 97 U.S.P.Q.2d (BNA) at 1280.
    1107. Id., 97 U.S.P.Q.2d (BNA) at 1280.
    1108. Id., 97 U.S.P.Q.2d (BNA) at 1280.
    1109. Id. at 874, 97 U.S.P.Q.2d (BNA) at 1284.
    1110. 617 F.3d 1282, 95 U.S.P.Q.2d (BNA) 1956 (Fed. Cir. 2010).
    1111. Id. at 1292, 95 U.S.P.Q.2d (BNA) at 1963-64 (Dyk, J., concurring in part and dissenting in part on other grounds).
    1112. Id. at 1285, 95 U.S.P.Q.2d (BNA) at 1958 (majority opinion).
    1113. Id. at 1284, 95 U.S.P.Q.2d (BNA) at 1958 (deciding issues of claim construction, noninfringement, and prosecution history estoppel).
    1114. Id. at 1292, 1294, 95 U.S.P.Q.2d (BNA) at 1964-65 (Dyk, J., concurring in part and dissenting in part on other grounds).
[^105]:    1115. Id. at 1293-94, 95 U.S.P.Q.2d (BNA) at 1964-65.
    1116. Id. at 1294-95, 95 U.S.P.Q.2d (BNA) at 1965.
    1117. Id. at 1295, 95 U.S.P.Q.2d (BNA) at 1965.
    1118. In fact, this issue is presented in Association of Molecular Pathology v. U.S.

    Patent and Trademark Office (Myriad Genetics), No. 2010-1406. Members of Jones Day are counsel in that case.
    1119. 35 U.S.C. § 101 (2006).
    1120. 611 F.3d 1381, 95 U.S.P.Q.2d (BNA) 1797 (Fed. Cir. 2010)
    1121. Id. at 1384, 95 U.S.P.Q.2d (BNA) at 1799.
    1122. Id. at 1383, 95 U.S.P.Q.2d (BNA) at 1798.
    1123. Id., 95 U.S.P.Q.2d (BNA) at 1798.
    1124. Id. at 1384, 95 U.S.P.Q.2d (BNA) at 1798.

[^106]:    1125. Id. at 1383, 95 U.S.P.Q.2d (BNA) at 1798-99.
    1126. Id., 95 U.S.P.Q.2d (BNA) at 1798.
    1127. Id. at 1384, 95 U.S.P.Q.2d (BNA) at 1799.
    1128. Id. at 1385, 95 U.S.P.Q.2d (BNA) at 1800 (citing Pfizer, Inc. v. Teva Pharms. USA, Inc., 518 F.3d 1353, 1363, 86 U.S.P.Q.2d (BNA) 1001, 1008 (Fed. Cir. 2008);
    Geneva Pharms., Inc. v. GlaxoSmithKline PLC, 349 F.3d 1373, 1385-86, 68
    U.S.P.Q.2d 1865, 1875 (Fed. Cir. 2003)).
    1129. Id., 95 U.S.P.Q.2d (BNA) at 1800.
    1130. Id., 95 U.S.P.Q.2d (BNA) at 1800 .
    1131. Id. at 1386, 95 U.S.P.Q.2d (BNA) at 1800.
    1132. Id., 95 U.S.P.Q.2d (BNA) at 1801 (emphasis added).
    1133. Id., 95 U.S.P.Q.2d (BNA) at 1801.
    1134. Id. at 1387, 95 U.S.P.Q.2d (BNA) at 1801.
[^107]:    1135. Id., 95 U.S.P.Q.2d (BNA) at 1801.
    1136. Id. at 1388, 95 U.S.P.Q.2d (BNA) at 1802.
    1137. Id. at 1387, 95 U.S.P.Q.2d (BNA) at 1801-02, (alteration in original) (quoting Geneva Pharms., Inc. v. GlaxoSmithKline PLC, 349 F.3d 1373, 1385, 68 U.S.P.Q.2d (BNA) 1865, 1875 (Fed. Cir. 2003)) (citing In re Basell Poliolefine Italia S.P.A.,

    547 F.3d 1371, 1378, 89 U.S.P.Q.2d (BNA) 1030, 1036 (Fed. Cir. 2008) (alterations in original)).
    1138. Id. at 1387-88, 95 U.S.P.Q.2d (BNA) at 1802 (quoting In re Basell, 547 F.3d at 1378, 89 U.S.P.Q.2d (BNA) at 1036) ("[W]e have expressly held that, where a patent claims a compound, a court performing an obviousness-type double patenting analysis should examine the specification to ascertain the coverage of the claim."). 1139. Id. at 1388, 95 U.S.P.Q.2d (BNA) at 1802.
    1140. Id., 95 U.S.P.Q.2d (BNA) at 1802.
    1141. Id. at 1389, 95 U.S.P.Q.2d (BNA) at 1803 (quoting In re Kaplan, 789 F.3d 1574, 1579-80 (Fed. Cir. 1986)).
    1142. Id., 95 U.S.P.Q.2d (BNA) at 1803.
    1143. Id., 95 U.S.P.Q.2d (BNA) at 1803. In dissenting from the denial of the petition for rehearing en banc in Sun, Judge Newman, joined by Chief Judge Rader and Judges Lourie and Linn, interpreted the panel's holding as contrary to the law of double patenting. According to Judge Newman, the panel's opinion in Sun "violates a vast body of precedent" that ignores the earlier patent's specification in the double-patenting analysis "other than to guide in construing the claims." Sun

[^108]:    Pharm. Indus., Ltd. v. Eli Lilly \& Co., 625 F.3d 719, 721-22, 96 U.S.P.Q.2d (BNA)
    1830, 1831-32 (Fed. Cir. 2010) (Newman, J., dissenting).
    1144. 592 F.3d 1340, 93 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2010).
    1145. Id. at 1342, 93 U.S.P.Q.2d (BNA) at 1418.
    1146. 35 U.S.C. § 253 (2006).
    1147. Boehringer, 592 F.3d at 1350, 93 U.S.P.Q.2d (BNA) at 1422.
    1148. Id. at 1347, 93 U.S.P.Q.2d (BNA) at 1422.
    1149. Id. at 1347-48, 93 U.S.P.Q.2d (BNA) at 1422.
    1150. Id. at 1348, 93 U.S.P.Q.2d (BNA) at 1422.
    1151. Id., 93 U.S.P.Q.2d (BNA) at 1423.
    1152. Id. at 1354, 93 U.S.P.Q.2d (BNA) at 1427.

[^109]:    1160. MBO Labs., Inc. v. Becton, Dickinson \& Co., 602 F.3d 1306, 1313, 94 U.S.P.Q.2d (BNA) 1598, 1602 (Fed. Cir. 2010) (citing Hester Indus., Inc. v. Stein, Inc., 142 F.3d 1472, 1480, 46 U.S.P.Q.2d (BNA) 1641, 1647 (Fed. Cir. 1998)).
    1161. Id. at 1314, 94 U.S.P.Q.2d (BNA) at 1603.
    1162. 602 F.3d 1306, 94 U.S.P.Q.2d (BNA) 1598 (Fed. Cir. 2010).
    1163. Id. at 1308, 94 U.S.P.Q.2d (BNA) at 1599.
    1164. Id. at 1314, 94 U.S.P.Q.2d (BNA) at 1603.
    1165. Id. at 1316, 94 U.S.P.Q.2d (BNA) at 1604.
    1166. Id. at 1319, 94 U.S.P.Q.2d (BNA) at 1607.
    1167. Id. at 1319, 94 U.S.P.Q.2d (BNA) at 1606 (emphasis added).
    1168. 622 F.3d 1367, 96 U.S.P.Q.2d (BNA) 1870 (Fed. Cir. 2010).
[^110]:    1169. Id. at 1386, 96 U.S.P.Q.2d (BNA) at 1883.
    1170. 35 U.S.C. § $102(\mathrm{~g})(2)(2006)$.
    1171. Solvay, 622 F.3d at 1376, 96 U.S.P.Q.2d (BNA) at 1876.
    1172. Id. at 1377, 96 U.S.P.Q.2d (BNA) at 1876 (citing Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228, 32 U.S.P.Q.2d (BNA) 1915, 1919 (Fed. Cir. 1994)).
    1173. Id., 96 U.S.P.Q.2d (BNA) at 1876.
    1174. Id. at 1378, 96 U.S.P.Q.2d (BNA) at 1878.
    1175. Id., 96 U.S.P.Q.2d (BNA) at 1878.
    1176. Id. at 1375-78, 96 U.S.P.Q.2d (BNA) at 1876-78.
    1177. 37 C.F.R. § 1.56 (2010).
    1178. See infra text accompanying notes 1219-1312 (providing the elements of the inequitable conduct defense).
    1179. See infra text accompanying notes 70-78 (discussing a court's role in deciding whether the patent should be unenforceable).
[^111]:    1180. Lazare Kaplan Int'l, Inc. v. Photoscribe Techs., Inc., 628 F.3d 1349, 1378, 97 U.S.P.Q.2d (BNA) 1437, 1451 (Fed. Cir. Dec. 22, 2010) (quoting Star Scientific, Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1365, 88 U.S.P.Q.2d (BNA) 1001, 1006 (Fed. Cir. 2008)) (internal quotation marks omitted), cert. denied, 129 S. Ct. 1595 (2009).
    1181. Id., 97 U.S.P.Q.2d (BNA) at 1451 (quoting Star Scientific, 537 F.3d at 1365, 88 U.S.P.Q.2d (BNA) at 1006).
    1182. Aspex Eyewear Inc. v. Clariti Eyewear, Inc., 605 F.3d 1305, 1316, 94 U.S.P.Q.2d (BNA) 1856, 1863 (Fed. Cir. 2010).
    1183. Lazare, 628 F.3d at 1381, 97 U.S.P.Q.2d (BNA) at 1451 (citing Star Scientific, 537 F.3d at 1365, 88 U.S.P.Q.2d (BNA) at 1006).
    1184. 37 C.F.R. § 1.56(b) (2010).
    1185. 37 C.F.R. § 1.56(a) (1991).
    1186. Digital Control Inc. v. Charles Mach. Works, 437 F.3d 1309, 1315-16, 77 U.S.P.Q.2d (BNA) 1823, 1828 (Fed. Cir. 2006) (observing that "several different standards of materiality," including the "reasonable examiner" test, have emerged).
[^112]:    1187. Burlington Indus., Inc. v. Dayco Corp., 849 F.2d 1418, 1422, 7 U.S.P.Q.2d (BNA) 1158, 1161 (Fed. Cir. 1988).
    1188. See infra text accompanying notes 1219-1312 (highlighting various judges' criticisms of the inequitable conduct doctrine).
    1189. 593 F.3d 1289, 1300, 93 U.S.P.Q.2d (BNA) 1489, 1498 (Fed. Cir. 2010), reh'g en banc granted, 374 F. App'x 35 (Fed. Cir. 2010).
    1190. Id. at 1300, 93 U.S.P.Q.2d (BNA) at 1489.
    1191. See Therasense, Inc. v. Becton, Dickinson \& Co., 374 F. App’x 35, 35-36 (Fed. Cir. 2010) (internal citations omitted) (granting a rehearing en banc and requesting that the parties file briefs addressing six specific issues).
    1192. 595 F.3d 1340, 93 U.S.P.Q.2d (BNA) 1805 (Fed. Cir. 2010).
    1193. Id. at 1345, 93 U.S.P.Q.2d (BNA) at 1808.
    1194. Id., 93 U.S.P.Q.2d (BNA) at 1808.
    1195. Id. at 1350, 93 U.S.P.Q.2d (BNA) at 1812.
    1196. Id. at 1362, 93 U.S.P.Q.2d (BNA) at 1821.
[^113]:    1197. Id., 93 U.S.P.Q.2d (BNA) at 1821.
    1198. Id., 93 U.S.P.Q.2d (BNA) at 1821.
    1199. Id., 93 U.S.P.Q.2d (BNA) at 1821.
    1200. 603 F.3d 967, 94 U.S.P.Q.2d (BNA) 1845 (Fed. Cir. 2010), cert. denied, 131 S. Ct. 909 (2011).
    1201. Id. at 973, 94 U.S.P.Q.2d (BNA) at 1850.
    1202. Id. at 969, 973, 94 U.S.P.Q.2d (BNA) at 1847, 1850.
    1203. Id. at 969, 94 U.S.P.Q.2d (BNA) at 1847.
    1204. Id. at 977, 94 U.S.P.Q.2d (BNA) at 1853.
    1205. Id. at 973, 94 U.S.P.Q.2d (BNA) at 1850. "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a) (2010).
    1206. Avid, 603 F.3d at 977, 94 U.S.P.Q.2d (BNA) at 1853.
    1207. 37 C.F.R. § 1.56 (c); see also Avid, 603 F.3d at 974, 94 U.S.P.Q.2d (BNA) at 1850 .
[^114]:    1220. Id. at 1321-22, 94 U.S.P.Q.2d (BNA) at 1930-31.
    1221. Id. at 1322, 94 U.S.P.Q.2d (BNA) at 1931 (Prost, J., concurring).
    1222. Id., 94 U.S.P.Q.2d (BNA) at 1932 (citing Akzo N.V. v. Int'l Trade Comm'n, 808 F.2d 1471, 1481-82 (Fed. Cir. 1986)).
    1223. 604 F.3d 1324, 95 U.S.P.Q.2d (BNA) 1257 (Fed. Cir. 2010).
    1224. Id. at 1327, 1335, 95 U.S.P.Q.2d (BNA) at 1257 ; see also 35 U.S.C. § 285
    (2006) ("The court in exceptional cases may award reasonable attorney fees to the prevailing party.").
    1225. Taltech Ltd., 604 F.3d at 1337, 95 U.S.P.Q.2d (BNA) at 1266.
    1226. See id. at 1332-34, 95 U.S.P.Q.2d (BNA) at 1262-65.
    1227. Id. at 1334, 95 U.S.P.Q.2d (BNA) at 1263-64.
    1228. Id. at 1341, 95 U.S.P.Q.2d (BNA) at 1270 (Gajarsa, J., dissenting).
    1229. 605 F.3d 967, 95 U.S.P.Q.2d (BNA) 1297 (Fed. Cir. 2010).
    1230. Id. at 967, 95 U.S.P.Q.2d (BNA) at 1297.
    1231. Id. at 970, 95 U.S.P.Q. 2 d (BNA) at 1298.
    1232. Id. at 978, 95 U.S.P.Q.2d (BNA) at 1304 .
    1233. Id., 95 U.S.P.Q.2d (BNA) at 1304.
[^115]:    1234. Id., 95 U.S.P.Q.2d (BNA) at 1304 (emphasis added).
    1235. 605 F.3d 1305, 94 U.S.P.Q.2d (BNA) 1856 (Fed. Cir. 2010).
    1236. Id. at 1315, 94 U.S.P.Q.2d (BNA) at 1863.
    1237. Id. at 1315, 94 U.S.P.Q.2d (BNA) at 1863.
    1238. Id., 94 U.S.P.Q.2d (BNA) at 1863.
    1239. Id., 94 U.S.P.Q.2d (BNA) at 1863.
    1240. Id., 94 U.S.P.Q.2d (BNA) at 1863.
    1241. Id. at 1315-16, 94 U.S.P.Q.2d (BNA) at 1864.
    1242. $I d$. at 1316, 94 U.S.P.Q. 2 d (BNA) at 1864.
    1243. Id., 94 U.S.P.Q.2d (BNA) at 1864.
    1244. 606 F.3d 1353, 95 U.S.P.Q.2d (BNA) 1432 (Fed. Cir. 2010).
[^116]:    1245. Id. at 1353, 95 U.S.P.Q.2d (BNA) at 1432.
    1246. Id. at 1363, 95 U.S.P.Q.2d (BNA) at 1440 .
    1247. Id. at 1360-63, 95 U.S.P.Q.2d (BNA) at 1440.
    1248. Id. at 1363, 95 U.S.P.Q.2d (BNA) at 1440. "We have not previously affirmed a grant of summary judgment based on a failure to disclose a commonly owned application or related litigation, and we decline to do so on the facts of this case." Id., 95 U.S.P.Q.2d (BNA) at 1440.
    1249. Id. at 1363-64, 95 U.S.P.Q.2d (BNA) at 1440.
    1250. Id. at 1364, 95 U.S.P.Q.2d (BNA) at 1440.
    1251. 607 F.3d 817, 95 U.S.P.Q.2d (BNA) 1513 (Fed. Cir. 2010).
    1252. Id. at 822, 95 U.S.P.Q.2d (BNA) at $1513,1515$.
    1253. Id. at 831-32, 95 U.S.P.Q.2d (BNA) at 1521-22.
    1254. Id. at 834, 95 U.S.P.Q.2d (BNA) at 1515.
    1255. 614 F.3d 1354, 96 U.S.P.Q.2d (BNA) 1022 (Fed. Cir. 2010).
    1256. Id. at 1354, 96 U.S.P.Q.2d (BNA) at 1022.
    1257. Id. at 1357, 96 U.S.P.Q.2d (BNA) at 1024.
[^117]:    1258. Id. at 1359-60, 96 U.S.P.Q.2d (BNA) at 1025.
    1259. Id. at 1361-62, 96 U.S.P.Q.2d (BNA) at 1026.
    1260. Id. at 1361, 96 U.S.P.Q.2d (BNA) at 1027.
    1261. Id. at 1362-63, 96 U.S.P.Q.2d (BNA) at 1028.
    1262. Id. at 1367, 96 U.S.P.Q.2d (BNA) at 1065.
    1263. Id. at 1369, 96 U.S.P.Q.2d (BNA) at 1065.
    1264. Id., 96 U.S.P.Q.2d (BNA) at 1066.
    1265. Id. at 1372, 96 U.S.P.Q. 2 d (BNA) at 1072.
    1266. Id. at 1374, 96 U.S.P.Q.2d (BNA) at 1070. The court explained that its prior case law, the PTO Rules, and the Manual of Patent Examining Procedure "make clear that information may be material even if it does not qualify as prior art." Id., 96 U.S.P.Q.2d (BNA) at 1070.
    1267. Id. at 1375-77, 380, 96 U.S.P.Q.2d (BNA) at 1070-72, 1074.
    1268. Id. at 1378, 96 U.S.P.Q.2d (BNA) at 1072.
    1269. Id. at 1379, 96 U.S.P.Q.2d (BNA) at 1073.
[^118]:    1270. Id. at 1380, 96 U.S.P.Q.2d (BNA) at 1074.
    1271. Id. at 1381, 96 U.S.P.Q.2d (BNA) at 1075 (Newman, J., dissenting).
    1272. 625 F.3d 724, 96 U.S.P.Q.2d (BNA) 1937 (Fed. Cir. 2010).
    1273. Id. at 726, 96 U.S.P.Q.2d (BNA) at 1937.
    1274. Id. at 728, 96 U.S.P.Q.2d (BNA) at 1939.
    1275. Id. at 733, 96 U.S.P.Q. 2d (BNA) at 1944.
    1276. Id., 96 U.S.P.Q.2d (BNA) at 1944 (citing Larson Mfg. Co. of S.D., Inc. v. Aluminart Prods. Ltd., 559 F.3d 1317, 1340, 90 U.S.P.Q.2d (BNA) 1257, 1272 (Fed. Cir. 2009)).
    1277. Id. at 733-34, 96 U.S.P.Q.2d (BNA) at 1944.
    1278. Id. at 734, 96 U.S.P.Q.2d (BNA) at 1944 (citing Critikon, Inc. v. Becton Dickinson Vascular Access, Inc., 120 F.3d 1253, 1256, 43 U.S.P.Q.2d (BNA) 1666, 1668 (Fed. Cir. 1997)).
    1279. Id. at 737, 96 U.S.P.Q.2d (BNA) at 1946 (Prost, J., dissenting).
    1280. Id., 96 U.S.P.Q.2d (BNA) at 1946-47.
[^119]:    1281. Id. at 737-38, 96 U.S.P.Q.2d (BNA) at 1946-47.
    1282. 628 F.3d 1359, 97 U.S.P.Q.2d (BNA) 1437 (Fed. Cir. 2010).
    1283. Id. at 1363-64, 97 U.S.P.Q.2d at 1440.
    1284. Id. at 1364, 97 U.S.P.Q.2d at 1440 .
    1285. Id. at 1378,97 U.S.P.Q.2d at 1452 ; see also $i d$. at 1380,97 U.S.P.Q.2d at 1453.
    1286. 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010), cert. granted sub
    nom., Global-Tech Appliances Inc. v. SEB S.A., 131 S. Ct. 458 (2010).
    1287. Id. at 1376, 93 U.S.P.Q.2d (BNA) at 1627-28 (citing Farmer v. Brennan, 511
    U.S. 825, 840 (1994)).
[^120]:    1288. Global-Tech, 131 S. Ct. at 458.
    1289. 629 F.3d 1311, 97 U.S.P.Q.2d (BNA) 1321, 1326-27 (Fed. Cir. 2010).
    1290. Richardson v. Stanley Works, Inc., 597 F.3d 1288, 1293-94, 93 U.S.P.Q.2d
    (BNA) 1937, 1939-40 (Fed. Cir. 2010); see also Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 88 U.S.P.Q.2d (BNA) 1658 (Fed. Cir. 2008).
    1291. Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F. $3 d$ 1340, 1350,93 U.S.P.Q.2d
    (BNA) 1805, 1812 (citing Abbott Labs. v. Sandoz, Inc., 566 F.3d 1282, 1288, 90
    U.S.P.Q.2d 1769, 1773 (Fed. Cir. 2009)).
    1292. 138 F.3d 1448 (Fed. Cir. 1998) (en banc).
    1293. Id. at 1350.
    1294. Id. at 1351.
    1295. Id.
[^121]:    1296. 595 F.3d at 1363 (Fed. Cir. 2010) (Clark, J., sitting by designation from the U.S. District Court for the Eastern District of Texas, concurring).
    1297. Id.
    1298. Id.
    1299. Phillips v. AWH Corp., 415 F.3d 1303, 1312-13, 75 U.S.P.Q.2d (BNA) 1321, 1326 (Fed. Cir. 2005) (en banc).
    1300. Id. at 1314, 75 U.S.P.Q.2d (BNA) at 1327 (citing Vitronics, 90 F.3d at 1582).
    1301. Id., 75 U.S.P.Q.2d (BNA) at 1327 (citing Vitronics, 90 F.3d at 1582).
[^122]:    1312. 596 F.3d 1343, 93 U.S.P.Q.2d (BNA) 1873 (Fed. Cir. 2010).
    1313. Id. at 1345, 93 U.S.P.Q.2d (BNA) at 1874.
    1314. Id. at 1347-49, 93 U.S.P.Q.2d (BNA) at 1876-78.
    1315. Id., 93 U.S.P.Q.2d (BNA) at 1877.
    1316. Id., 93 U.S.P.Q.2d (BNA) at 1877.
    1317. Id., 93 U.S.P.Q.2d (BNA) at 1877-78.
    1318. 593 F.3d 1275, 93 U.S.P.Q.2d (BNA) 1262 (Fed. Cir. 2010).
    1319. Id. at 1283, 93 U.S.P.Q.2d (BNA) at 1267 (quoting Phillips v. AWH Corp., 415 F.3d 1303, 1314, 75 U.S.P.Q.2d 1321, 1327 (Fed. Cir. 2005)).
    1320. Id., 93 U.S.P.Q.2d (BNA) at 1267.
    1321. 599 F.3d 1325, 94 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
[^123]:    1322. Id. at 1342, 94 U.S.P.Q.2d (BNA) at 1333 (quoting Phillips v. AWH Corp., 415 F.3d 1303, 1314, 75 U.S.P.Q.2d (BNA) 1321, 1328 (Fed. Cir. 2005) (en banc)).
    1323. 607 F. $3 \mathrm{~d} 776,95$ U.S.P.Q.2d (BNA) 1556 (Fed. Cir. 2010).
    1324. Id. at 782, 95 U.S.P.Q.2d (BNA) at 1560 .
    1325. Id. at 782, 95 U.S.P.Q.2d (BNA) at 1560.
    1326. Id. at 782, 95 U.S.P.Q.2d (BNA) at 1560.
    1327. 629 F.3d 1311, 97 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010)
    1328. Id., 97 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
    1329. Id. at 1329, 97 U.S.P.Q.2d (BNA) at 1333.
    1330. Id. at 1329, 97 U.S.P.Q.2d (BNA) at 1334.
    1331. Id. at 1329-30, 97 U.S.P.Q.2d (BNA) at 1334.
    1332. Id. at 1331, 97 U.S.P.Q.2d (BNA) at 1335.
[^124]:    1333. 599 F.3d 1290, 94 U.S.P.Q.2d (BNA) 1140 (Fed. Cir. 2010).
    1334. Id. at 1292, 1294, 94 U.S.P.Q.2d (BNA) at 1140-42.
    1335. Id. at 1292, 94 U.S.P.Q.2d (BNA) at 1140 (citation omitted).
    1336. Id. at 1292-94, 94 U.S.P.Q.2d (BNA) at 1140-41 (emphasis added)
    1337. Id., 94 U.S.P.Q.2d (BNA) at 1142.
    1338. Id., 94 U.S.P.Q.2d (BNA) at 1142.
    1339. Id., 94 U.S.P.Q.2d (BNA) at 1142 (citation and omitted) (internal quotation marks omitted).
    1340. Id., 94 U.S.P.Q.2d (BNA) at 1142.
    1341. Id. at 1296, 94 U.S.P.Q.2d (BNA) at 1143 (Newman, J., dissenting) (citing

    Vita-Mix Corp. v. Basic Holding, Inc., 581 F.3d 1317, 1323-24, 92 U.S.P.Q.2d (BNA)
    1340, 1344-45 (Fed. Cir. 2009); In re Bulloch, 604 F.2d 1362, 1365, 203 U.S.P.Q. (BNA) 171, 174 (C.C.P.A. 1979)).
    1342. Id., 94 U.S.P.Q.2d (BNA) at 1143 .
    1343. 618 F.3d 1354, 96 U.S.P.Q.2d (BNA) 1652 (Fed. Cir. 2010).
    1344. Id. at 1355, 96 U.S.P.Q.2d (BNA) at 1653.

[^125]:    1345. Id. at 1357, 96 U.S.P.Q.2d (BNA) at 1654 (internal quotation marks omitted).
    1346. Id., 96 U.S.P.Q.2d (BNA) at 1656.
    1347. Id., 96 U.S.P.Q.2d (BNA) at 1656 (citing Seachange Int'l, Inc. v. C-COR, Inc.,

    413 F.3d 1361, 1376, 75 U.S.P.Q.2d (BNA) 1385, 1394-95 (Fed. Cir. 2005)).
    1348. 618 F.3d at 1359, 96 U.S.P.Q.2d (BNA) 1652 (Fed. Cir. 2010).
    1349. Id., 96 U.S.P.Q.2d (BNA) at 1656.
    1350. Id., 96 U.S.P.Q.2d (BNA) at 1656.
    1351. Id., 96 U.S.P.Q.2d (BNA) at 1656.
    1352. Id., 96 U.S.P.Q.2d (BNA) at 1656.
    1353. Id. at 1360, 96 U.S.P.Q.2d (BNA) at 1657.
    1354. Id., 96 U.S.P.Q.2d (BNA) at 1657.
    1355. Id., 96 U.S.P.Q.2d (BNA) at 1658.
    1356. Id., 96 U.S.P.Q.2d (BNA) at 1658.

[^126]:    1357. Id. at 1363, 1364, 96 U.S.P.Q.2d (BNA) at 1659 (Dyk, J., dissenting).
    1358. Id., 96 U.S.P.Q.2d (BNA) at 1660 .
    1359. 605 F.3d 1330, 95 U.S.P.Q.2d (BNA) 1353 (Fed. Cir. 2010).
    1360. Id. at 1339-40, 95 U.S.P.Q.2d (BNA) at 1360 (Fed. Cir. 2010).
    1361. Id., 95 U.S.P.Q.2d (BNA) at 1361 (citing Poly-Amer., L.P. v. GSE Lining Tech.,

    Inc., 383 F.3d 1303, 1310, 72 U.S.P.Q.2d (BNA) 1685, 1689-90 (Fed. Cir. 2004); Jansen v. Rexall Sundown, Inc., 342 F.3d 1329, 1333, 68 U.S.P.Q.2d (BNA) 1154,
    1157-58 (Fed. Cir. 2003); Griffin v. Bertina, 285 F.3d 1029, 1033, 62 U.S.P.Q.2d
    (BNA) 1431, 1434 (Fed. Cir. 2002); Manning v. Paradis, 296 F.3d 1098, 1103, 63
    U.S.P.Q.2d (BNA) 1681, 1685 (Fed. Cir. 2002)).
    1362. Id. at 1341, 95 U.S.P.Q.2d (BNA) at 1361.
    1363. 600 F.3d 1357, 94 U.S.P.Q.2d (BNA) 1385 (Fed. Cir. 2010).
    1364. Id. at 1366, 94 U.S.P.Q.2d (BNA) at 1391 (citation omitted).
    1365. Id., 94 U.S.P.Q.2d (BNA) at 1391.
    1366. Id., 94 U.S.P.Q.2d (BNA) at 1391 (internal quotation marks omitted).

[^127]:    1367. 607 F.3d 776, 95 U.S.P.Q.2d (BNA) 1556 (Fed. Cir. 2010).
    1368. Id. at 780, 95 U.S.P.Q.2d (BNA) at 1559 (citation and omitted) (internal quotation marks omitted).
    1369. Id., 95 U.S.P.Q.2d (BNA) at 1560 (citing Chef Am., Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1374, 69 U.S.P.Q.2d (BNA) 1857, 1859-60 (Fed. Cir. 2004);
    Elekta Instrument S.A. v. O.U.R. Scientific Int'l, Inc., 214 F.3d 1302, 1309, 54 U.S.P.Q.2d (BNA) 1910 (Fed. Cir. 2000)).
    1370. Id. at 781-82, 95 U.S.P.Q. 2 d (BNA) at 1560.
    1371. Id. at 782, 95 U.S.P.Q.2d (BNA) at 1560 (citing Bicon, Inc. v. Straumann Co., 441 F.3d 945, 950, 78 U.S.P.Q.2d (BNA) 1267, 1272 (Fed. Cir. 2006)).
    1372. 616 F.3d 1249, 95 U.S.P.Q.2d (BNA) 1752 (Fed. Cir. 2010).
    1373. Id. at 1254, 95 U.S.P.Q.2d (BNA) at 1756 (citation omitted).
    1374. Id. at 1254, 95 U.S.P.Q.2d (BNA) at 1756 (citation omitted).
[^128]:    1375. Id., 95 U.S.P.Q. 2 d (BNA) at 1756-57 (quoting Gaus v. Conair Corp., 363 F.3d 1284, 1288, 70 U.S.P.Q.2d (BNA) 1380, 1383 (Fed. Cir. 2004); Engel Indus., Inc. v. Lockformer Co., 96 F.3d 1398, 1404-05 (Fed. Cir. 1996)).
    1376. Id., 95 U.S.P.Q.2d (BNA) at 1757 (quoting Schoenhaus v. Genesco, Inc., 440 F.3d 1354, 1357, 78 U.S.P.Q.2d (BNA) 1252, 1254 (Fed. Cir. 2006)).
    1377. Id., 95 U.S.P.Q.2d (BNA) at 1757 (quoting Schoenhaus v. Genesco, Inc., 440 F.3d 1354, 1357, 78 U.S.P.Q.2d (BNA) 1252, 1254 (Fed. Cir. 2006)).
    1378. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979, 34 U.S.P.Q.2d (BNA) 1321, 1329 (Fed. Cir. 1995) (en banc) (citing Autogiro Co. of Am. V. United States, 384 F.2d 391, 397, 155 U.S.P.Q. 697, 702 (Ct. Cl. 1967); Winans v. Denmead, 56 U.S. 330, 338 (1853); Bates v. Coe, 98 U.S. 31, 38-39 (1878)), aff'd, 517 U.S. 370 (1996)).
    1379. Phillips v. AWH Corp., 415 F.3d 1303, 1315, 75 U.S.P.Q.2d (BNA) 1321, 1327
    (Fed. Cir. 2005) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582,
    39 U.S.P.Q.2d (BNA) 1573, 1577 (Fed. Cir. 1996)).
    1380. 593 F.3d 1275, 93 U.S.P.Q.2d (BNA) 1262 (Fed. Cir. 2010).
    1381. Id. at 1282-86, 93 U.S.P.Q.2d (BNA) 1267-70.
[^129]:    1382. Id., 93 U.S.P.Q.2d (BNA) at 1268.
    1383. 599 F.3d 1343, 94 U.S.P.Q.2d (BNA) 1241 (Fed. Cir. 2010).
    1384. Id. at 1347, 94 U.S.P.Q.2d (BNA) at 1243.
    1385. Id., 94 U.S.P.Q.2d (BNA) at 1243.
    1386. Id., 94 U.S.P.Q.2d (BNA) at 1244.
    1387. Id., 94 U.S.P.Q.2d (BNA) at 1244 (citing Datamize, L.L.C. v. Plumtree Software, Inc., 417 F.3d 1342, 1347, 75 U.S.P.Q.2d (BNA) 1801, 1804-05 (Fed. Cir. 2005); Young v. Lumenis, Inc., 492 F.3d 1336, 1346, 83 U.S.P.Q.2d (BNA) 1191, 1196-97 (Fed. Cir. 2007); Cent. Admixture Pharm. Sevs., Inc. v. Advanced Cardiac Solutions, 482 F.3d 1347, 1356, 82 U.S.P.Q.2d (BNA) 1293, 1299 (Fed. Cir. 2006); Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347, 75 U.S.P.Q.2d (BNA) 1801, 1804-05 (Fed. Cir. 2005); Verve, L.L.C. v. Crane Cams, Inc., 311 F.3d 1116, 1120, 65 U.S.P.Q.2d (BNA) 1051, 1054 (Fed. Cir. 2002)).
    1388. Id., 94 U.S.P.Q.2d (BNA) at 1244.
    1389. Id., 94 U.S.P.Q.2d (BNA) at 1244.
    1390. 603 F.3d 1325, 95 U.S.P.Q.2d (BNA) 1097 (Fed. Cir. 2010).
    1391. Id., 95 U.S.P.Q.2d (BNA) at 1098.
[^130]:    1392. Id., 95 U.S.P.Q.2d (BNA) at 1099-1100.
    1393. Id. at 1329, 95 U.S.P.Q.2d (BNA) at 1100 (emphasis omitted) (citation and omitted) (internal quotation marks omitted).
    1394. Id., 95 U.S.P.Q.2d (BNA) at 1099-1100
    1395. Id., 95 U.S.P.Q.2d (BNA) at 1100.
    1396. Id., 95 U.S.P.Q.2d (BNA) at 1100 (internal quotation marks omitted).
    1397. Id., 95 U.S.P.Q.2d (BNA) at 1100 .
    1398. Id. at 1329-30, 95 U.S.P.Q.2d (BNA) at 1100.
    1399. Id. at 1330-37, 95 U.S.P.Q.2d (BNA) at 1101-05.
    1400. Id. at 1331, 95 U.S.P.Q.2d (BNA) at 1101.
    1401. Id., 95 U.S.P.Q.2d (BNA) at 1101 (internal quotation marks omitted).
    1402. Id., 95 U.S.P.Q.2d (BNA) at 1101.
[^131]:    1403. Id. at 1336, 95 U.S.P.Q.2d (BNA) at 1104 (internal quotation marks omitted).
    1404. Id., 95 U.S.P.Q.2d (BNA) at 1104.
    1405. Id.
    1406. 595 F.3d 1340, 93 U.S.P.Q.2d (BNA) 1805 (Fed. Cir. 2010).
    1407. Id. at 1353, 93 U.S.P.Q.2d (BNA) at 1814.
    1408. Id., 93 U.S.P.Q.2d (BNA) at 1814 (citation omitted).
    1409. Id., 93 U.S.P.Q.2d (BNA) at 1815 (citing Honeywell Int'l, Inc. v. ITT Indus., 452 F.3d 1312, 1318, 79 U.S.P.Q.2d (BNA) 1294, 1299 (Fed. Cir. 2006)).
[^132]:    1410. Id. at 1354, 93 U.S.P.Q.2d (BNA) at 1815.
    1411. Id., 93 U.S.P.Q.2d (BNA) at 1815.
    1412. 607 F.3d 784, 95 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2010).
    1413. Id., 95 U.S.P.Q.2d (BNA) at 1419.
    1414. Id. at 788, 95 U.S.P.Q.2d (BNA) at 1421.
    1415. Id. at 789, 95 U.S.P.O. 2 d (BNA) at 1422 .
    1416. Id. at 790, 95 U.S.P.Q.2d (BNA) at 1422 (internal citation and quotation marks omitted).
    1417. Id., 95 U.S.P.Q.2d (BNA) at 1422.
    1418. Id., 95 U.S.P.Q.2d (BNA) at 1422 (internal quotation marks omitted).
[^133]:    1428. Id. at 793, 95 U.S.P.Q.2d (BNA) at 1424.
    1429. 616 F.3d 1249, 1254, 95 U.S.P.Q.2d (BNA) 1752, 1757 (Fed. Cir. 2010).
    1430. Id. at 1255, 95 U.S.P.Q.2d (BNA) 1757.
    1431. 629 F.3d 1331, 97 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2010).
    1432. Id. at 1339, 97 U.S.P.Q.2d (BNA) 1421.
    1433. Id. at 1346, 97 U.S.P.Q.2d (BNA) 1427.
    1434. Id., 97 U.S.P.Q.2d (BNA) 1427.
    1435. Id., 97 U.S.P.Q.2d (BNA) 1427.
    1436. Id. at 1347, 97 U.S.P.Q.2d (BNA) 1427.
    1437. 628 F.3d 1359, 97 U.S.P.Q.2d (BNA) 1437 (Fed. Cir. 2010).
[^134]:    1438. Id. at 1370, 97 U.S.P.Q.2d (BNA) 1445.
    1439. Id. at 1367, 97 U.S.P.Q.2d (BNA) 1442.
    1440. Id., 97 U.S.P.Q.2d (BNA) 1442.
    1441. Id., 97 U.S.P.Q.2d (BNA) 1443.
    1442. Id. at 1368, 97 U.S.P.Q.2d (BNA) 1444.
    1443. Id. at 1369, 97 U.S.P.Q.2d (BNA) 1444.
    1444. Id. at 1367, 97 U.S.P.Q.2d (BNA) 1443.
    1445. 617 F.3d 1282, 95 U.S.P.Q.2d (BNA) 1956 (Fed. Cir. 2010).
    1446. Id. at 1291, 95 U.S.P.Q. 2 d (BNA) at 1963.
    1447. Id. at 1285, 95 U.S.P.Q.2d (BNA) at 1958.
    1448. Id., 95 U.S.P.Q.2d (BNA) at 1958.
[^135]:    1449. Id., 95 U.S.P.Q.2d (BNA) at 1958.
    1450. Id., 95 U.S.P.Q.2d (BNA) at 1958.
    1451. ORF or open reading frame is "a commonly used term in molecular genetics that has a standard textbook meaning. An ORF is a portion of a gene that contains a sequence of nucleotide bases that may be translated into a protein." Id., 95 U.S.P.Q.2d (BNA) at 1958.
    1452. Id. at 1286, 95 U.S.P.Q.2d (BNA) at 1959.
    1453. Id., 95 U.S.P.Q.2d (BNA) at 1959.
    1454. Id. at 1286-87, 95 U.S.P.Q.2d (BNA) at 1959.
    1455. Id. at 1287, 95 U.S.P.Q.2d (BNA) at 1960.
    1456. Id., 95 U.S.P.Q.2d (BNA) at 1960.
    1457. Id., 95 U.S.P.Q.2d (BNA) at 1960.
    1458. Id. (citing Enzo Biochem, Inc. v. Gen-Probe, Inc., 323 F.3d 956, 967,

    63 U.S.P.Q.2d (BNA) 1609, 1615 (Fed. Cir. 2002); In re Smythe, 480 F.2d 1376, 1383
    (C.C.P.A. 1973)).
    1459. Intervet, 617 F.3d at 1287, 95 U.S.P.Q.2d (BNA) at 1960.
    1460. Id., 95 U.S.P.Q.2d (BNA) at 1961.
    1461. Id. at 1288, 95 U.S.P.Q.2d (BNA) at 1961.

[^136]:    1462. Id., 95 U.S.P.Q.2d (BNA) at 1961.
    1463. Id., 95 U.S.P.Q.2d (BNA) at 1961.
    1464. Id. at 1295, 95 U.S.P.Q.2d (BNA) at 1966 (Dyk, J., dissenting in part, concurring in part).
    1465. Id., 95 U.S.P.Q.2d (BNA) at 1966.
    1466. Id., 95 U.S.P.Q.2d (BNA) at 1966 (citing Edward Lifesciences LLC v. Cook Inc., 582 F.3d 1322, 1329 (Fed. Cir. 2009)).
    1467. 607 F.3d 784, 95 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2010).
    1468. Id. at 792, 95 U.S.P.Q. 2d (BNA) at 1424 (citing JVW Enters., Inc. v. Interact

    Accessories, Inc., 424 F.3d 1324, 1335 (Fed. Cir. 2005)).
    1469. Id. at 793, 95 U.S.P.Q.2d (BNA) at 1424.
    1470. 629 F.3d 1311, 97 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
    1471. Id. at 1326, 97 U.S.P.Q.2d (BNA) at 1331.
    1472. Id. at 1315-1316, 97 U.S.P.Q.2d (BNA) at 1323-1324.

[^137]:    1473. Id. at 1325, 97 U.S.P.Q.2d (BNA) at 1331.
    1474. Id., 97 U.S.P.Q.2d (BNA) at 1331.
    1475. Id., 97 U.S.P.Q.2d (BNA) at 1331.
    1476. Id. at 1326, 97 U.S.P.Q.2d (BNA) at 1331.
    1477. Id., 97 U.S.P.Q.2d (BNA) at 1332.
    1478. Id., 97 U.S.P.Q.2d (BNA) at 1332.
    1479. Id. at 1326-27, 97 U.S.P.Q.2d (BNA) at 1332.
    1480. Id. at 1327, 97 U.S.P.Q.2d (BNA) at 1332.
    1481. 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010).
    1482. Id. at 1369, 93 U.S.P.Q.2d (BNA) at 1623.
[^138]:    1483. Id., 93 U.S.P.Q.2d (BNA) at 1623.
    1484. 616 F.3d 1309, 96 U.S.P.Q.2d (BNA) 1057 (Fed. Cir. 2010)
    1485. Id. at 1311, 96 U.S.P.Q.2d (BNA) at 1058.
    1486. Id. at 1312, 96 U.S.P.Q.2d (BNA) at 1059-60.
    1487. Id., 96 U.S.P.Q.2d (BNA) at 1059-60.
    1488. Id., 96 U.S.P.Q.2d (BNA) at 1060.
    1489. Id. at 1313, 96 U.S.P.Q.2d (BNA) at 1061.
    1490. Id. at 1316, 96 U.S.P.Q.2d (BNA) at 1063.
    1491. Id., 96 U.S.P.Q.2d (BNA) at 1063.
    1492. Id., 96 U.S.P.Q.2d (BNA) at 1063.
    1493. Id., 96 U.S.P.Q.2d (BNA) at 1063.
    1494. Id., 96 U.S.P.Q.2d (BNA) at 1063.
    1495. 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, 34 U.S.P.Q.2d 1321, 1330 (Fed. Cir. 1995)).
[^139]:    1507. Id.
    1508. Id. at 1335.
    1509. Id.
    1510. Spansion, Inc. v. ITC, 629 F.3d 1331, 1346-47 (Fed. Cir. 2010) (noting appellants' argument that a figure in a related patent specification and the corresponding description should limit the court's construction of the claim limitation and citing cases for the proposition that purported disclaimers directed to specific claim terms omitted or materially altered in subsequent applications do not apply).
    1511. Id. at 1347-48.
    1512. Id. at 1347-48 (discussing appellants' argument that during the prosecution of the ' 159 patent, the parent of the patent-in-suit, "the inventors expressly distinguished their invention" from a prior invention).
    1513. Id. at 1347.
    1514. Schindler Elevator Corp. v. Otis Elevator Corp., 593 F.3d 1275, 1285, 93 U.S.P.Q.2d (BNA) 1262, 1269 (Fed. Cir. 2010).
    1515. Id.
[^140]:    1516. Id. at 1285-86, 93 U.S.P.Q.2d (BNA) at 1269-70.
    1517. Vizio, Inc. v. ITC, 605 F.3d 1330, 95 U.S.P.Q.2d (BNA) 1353 (Fed. Cir. 2010).
    1518. Id. at 1339, 95 U.S.P.Q.2d (BNA) at 1360.
    1519. Id., 95 U.S.P.Q.2d (BNA) at 1360 .
    1520. Id. at 1340-41, 95 U.S.P.Q.2d (BNA) at 1361-62.
    1521. ERBE Electromedizin GmbH v. Canady Tech. LLC, 629 F.3d 1278,

    97 U.S.P.Q.2d (BNA) 1048 (Fed. Cir. 2010).
    1522. Id. at 1280, 97 U.S.P.Q.2d (BNA) at 1050.
    1523. Id. at 1282, 97 U.S.P.Q.2d (BNA) at 1052.
    1524. Id. at 1284, 97 U.S.P.Q.2d (BNA) at 1053.
    1525. Id. at 1285, 97 U.S.P.Q.2d (BNA) at 1053.
    1526. Id., 97 U.S.P.Q.2d (BNA) at 1053.
    1527. Id., 97 U.S.P.Q.2d (BNA) at 1053.
    1528. Id., 97 U.S.P.Q.2d (BNA) at 1053.

[^141]:    1529. Id., 97 U.S.P.Q.2d (BNA) at 1054.
    1530. Id .
    1531. Id. at 1286, 97 U.S.P.Q.2d (BNA) at 1054.
    1532. 596 F.3d at 1343, 93 U.S.P.Q.2d (BNA) 1873 (Fed. Cir. 2010).
    1533. Id. at 1349, 93 U.S.P.Q.2d (BNA) at 1879.
    1534. Id. at 1349, 93 U.S.P.Q.2d (BNA) at 1879.
    1535. Id. at 1349, 93 U.S.P.Q.2d (BNA) at 1879.
    1536. Id. at 1349, 93 U.S.P.Q.2d (BNA) at 1879.
    1537. Id. at 1349, 93 U.S.P.Q.2d (BNA) at 1879.
    1538. 629 F.3d 1311, 1328, 97 U.S.P.Q.2d (BNA) at 1896 (Fed. Cir. 2010).
[^142]:    1539. Id., 97 U.S.P.Q.2d (BNA) at 1896.
    1540. Id., 97 U.S.P.Q.2d (BNA) at 1896.
    1541. Phillips v. AWH Corp., 415 F.3d 1303, 1317, 75 U.S.P.Q.2d (BNA) 1321, 1340
    (Fed. Cir. 2005) (en banc) (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995)).
    1542. 596 F.3d 1343, 93 U.S.P.Q.2d (BNA) 1873 (Fed. Cir. 2010)
    1543. Id. at 1348, 93 U.S.P.Q.2d (BNA) at 1878.
    1544. Id., 93 U.S.P.Q.2d (BNA) at 1878.
    1545. Id., 93 U.S.P.Q.2d (BNA) at 1878.
    1546. Id., 93 U.S.P.Q.2d (BNA) at 1878.
    1547. 603 F.3d at 1330, 95 U.S.P.Q.2d 1097 (Fed. Cir. 2010).
    1548. Id., 95 U.S.P.Q.2d 1097.
[^143]:    1549. Id. at 133, 795 U.S.P.Q. 2d, at 2004.
    1550. Id., 795 U.S.P.Q. 2 d at 2004.
    1551. Id., 795 U.S.P.Q.2d at 2004.
    1552. 633 F.3d 1042, 92 U.S.P.Q.2d (BNA) 1029 (Fed. Cir. 2010).
    1553. Id., 92 U.S.P.Q.2d (BNA) at 1029.
    1554. Id., 92 U.S.P.Q.2d (BNA) at 1029.
    1555. Id., 92 U.S.P.Q.2d (BNA) at 1029 ("There is no serious dispute that the ' 528

    Patent would anticipate the majority of the asserted method claims if the term "budesonide composition" is interpreted to include the liposome embodiments disclosed in the ' 528 Patent and would not anticipate the method claims if the district court's construction was correct. Thus, the question before us is whether the district court correctly construed the term to exclude these embodiments.").
    1556. Id., 92 U.S.P.Q.2d (BNA) at 1029.
    1557. Id., 92 U.S.P.Q.2d (BNA) at 1029.
    1558. Id., 92 U.S.P.Q.2d (BNA) at 1029.

[^144]:    1559. Id., 92 U.S.P.Q.2d (BNA) at 1029.
    1560. See Applied Med. Res. Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1332, 478
    U.S.P.Q.2d (BNA) 1807, 1812 (Fed. Cir. 2006) (citing JVW Enters. v. Interact Accessories, Inc., 424 F.3d 1324, 1330, 76 U.S.P.Q.2d (BNA) 1641, 1645 (Fed. Cir. 2005)).
    1561. 616 F.3d 1309, 96 U.S.P.Q.2d (BNA) 1057 (Fed. Cir. 2010).
    1562. Id. at 1311, 96 U.S.P.Q.2d (BNA) at 1059.
    1563. Id. at 1316-17, 96 U.S.P.Q.2d (BNA) at 1061.
    1564. Id. at 1316-17, 96 U.S.P.Q.2d (BNA) at 1061.
    1565. Id. at 1316-17, 96 U.S.P.Q.2d (BNA) at 1061 .
    1566. Id. at 1316-17, 96 U.S.P.Q.2d (BNA) at 1061.
    1567. Id. at 1316-17, 96 U.S.P.Q.2d (BNA) at 1061.
    1568. See Bradford Co. v. ConTeyor N. Am., Inc., 603 F.3d 1262, 1271 (Fed. Cir. 2010).
[^145]:    1569. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910, 69 U.S.P.Q.2d
    (BNA) 1801, 1811 (Fed. Cir. 2004) (citing Sunrace Roots Enter. Co. v. SRAM Corp.,
    336 F.3d 1298, 1302-03, 67 U.S.P.Q.2d (BNA) 1438, 1441-42 (Fed. Cir. 2003);
    Wenger Mfg., Inc. v. Coating Machinery Mach. Sys., Inc., 239 F.3d 1225, 1233, 57
    U.S.P.Q.2d (BNA) 1679, 1684-85 (Fed. Cir. 2001); D.M.I., Inc. v. Deere \& Co., 755
    F.2d 1570, 1574, 225 U.S.P.Q. (BNA) 236, 238-39 (Fed. Cir. 1985)).
    1570. 603 F.3d a1262, 94 U.S.P.Q.2d (BNA) 1917 (Fed. Cir. 2010).
    1571. Id. at 1263-64, 94 U.S.P.Q.2d (BNA), at 1919.
    1572. Id. at 1265, 94 U.S.P.Q.2d (BNA), at 1920.
    1573. Id. at 1270, 94 U.S.P.Q.2d (BNA), at 1924.
    1574. Id. at 1271.
    1575. Id.
    1576. Id
[^146]:    (same); Akamai Techs., Inc. v. Limelight Networks, Inc., 629 F.3d 1311, 97 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010) (same); ERBE Elektromedizin GmbH v. Canady Tech., 629 F.3d 1278, 97 U.S.P.Q.2d (BNA) 1048 (Fed. Cir. 2010) (same); Solvay S.A. v. Honeywell Int'l, Inc., 622 F.3d 1367 (Fed. Cir. 2010) (finding no error in claim constructions and, on that basis, affirming summary judgment that certain claims were infringed and others were not).
    1583. See, e.g., Vizio, Inc. v. ITC, 605 F. 3 d 1330, 95 U.S.P.Q.2d (BNA) 1353 (Fed. Cir. 2010); Becton, Dickinson and Co. v. Tyco Healthcare Group, 616 F.3d 1249, 95 U.S.P.Q.2d (BNA) 1752 (Fed. Cir. 2010).
    1584. 626 F.3d 1197, 1205, 97 U.S.P.Q.2d (BNA) 1161, 1164 (Fed. Cir. 2010).
    1585. Id. at 1201, 97 U.S.P.Q.2d (BNA) at 1164.
    1586. Id. at 1204, 97 U.S.P.Q.2d (BNA) at 1167.
    1587. Id. at 1202, 97 U.S.P.Q.2d (BNA) at 1165.
    1588. Id. at 1204-05, 97 U.S.P.Q.2d (BNA) at 1167-68.
    1589. Id. at 1213, 97 U.S.P.Q.2d (BNA) at 1174.
    1590. Id.

[^147]:    1591. "The law of this circuit is axiomatic that a method claim is directly infringed only if each step of the claimed method is performed." Id. (citing Muniauction, 532 F.3d at 1328).
    1592. 543 F.3d 665 , 88 U.S.P.Q.2d (BNA) 1568 (Fed. Cir. 2008) (en banc).
    1593. Id. at 678,88 U.S.P.Q.2d (BNA) at 1571.
    1594. Id., 88 U.S.P.Q.2d (BNA) at 1571.
    1595. 598 F.3d 1294, 93 U.S.P.Q.2d (BNA) 1777 (Fed. Cir. 2010)
    1596. Id. at 1303, 93 U.S.P.Q.2d (BNA) at 1783.
    1597. Id., 93 U.S.P.Q.2d (BNA) at 1783.
    1598. Id., 93 U.S.P.Q.2d (BNA) at 1783.
    1599. 597 F.3d 1288, 93 U.S.P.Q.2d (BNA) 1937 (Fed. Cir. 2010)
    1600. Id. at 1291, 93 U.S.P.Q.2d (BNA) at 1940.
    1601. Id., 93 U.S.P.Q.2d (BNA) at 1940.
[^148]:    1602. Id. at 1295, 93 U.S.P.Q.2d (BNA) at 1944.
    1603. Id., 93 U.S.P.Q.2d (BNA) at 1944.
    1604. 35 U.S.C. § 271 (a).
    1605. 617 F.3d 1296, 96 U.S.P.Q.2d (BNA) 1104 (Fed. Cir. 2010).
    1606. Id. at 1308, 1310, 96 U.W.P.Q.2d (BNA) at 1112-13.
    1607. Id. at 1301-02, 96 U.W.P.Q.2d (BNA) at 1106.
    1608. Id at 1308, 96 U.W.P.Q.2d (BNA) at 1111.
    1609. Id. at 1309, 96 U.W.P.Q.2d (BNA) at 1112.
    1610. Id.
    1611. Id. at 1308, 96 U.W.P.Q.2d (BNA) at 1111.
    1612. Id.
[^149]:    1613. Id. at 1309, 96 U.W.P.Q.2d (BNA) at 1112.
    1614. Id.
    1615. Id.
    1616. 629 F.3d 1311 (Fed. Cir. 2010), 97 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 2010).
    1617. Id., 97 U.S.P.Q.2d (BNA) at 1319.
    1618. Miniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1329 (Fed. Cir. 2008); see also BMC Resources, Inc. v. Paymentech, L.P., 498 F.3d 1373, 1380-81 (Fed. Cir. 2007).
    1619. BMC Resources, 498 F.3d at 1381.
    1620. 629 F.3d 1311, 1315, 97 U.S.P.Q.2d (BNA) 1321, 1325 (Fed. Cir. 2010).
    1621. Id. at 1316, 97 U.S.P.Q.2d (BNA) at 1323.
    1622. Id. at 1316-17, 97 U.S.P.Q.2d (BNA) at 1324.
    1623. Id. at 1318, 97 U.S.P.Q.2d (BNA) at 1325.
[^150]:    1624. Id.; Miniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1328-30 (Fed. Cir. 2008).
    1625. 629 F.3d at 1319, 97 U.S.P.Q.2d (BNA) at 1326.
    1626. Id. at 1320, 97 U.S.P.Q.2d (BNA) at 1326-27.
    1627. Id., 97 U.S.P.Q.2d (BNA) at 1327.
    1628. Id.
    1629. Warner-Jenkinson Co., 520 U.S. 17 (1997).
    1630. Graver Tank \& Mfg. Co. v. Linde Air Prods., 339 U. S. 605, 608 (1950).
[^151]:    1631. Intervet Inc. v. Merial Limited, 617 F.3d 1282, 1291 (Fed. Cir. 2010), 95 U.S.P.Q.2d (BNA) 1956, 1962 (Fed. Cir. 2010).
    1632. Southwall, 54 F.3d at 1579; see also Warner-Jenkinson, 520 U.S. at 30-34.
    1633. Id.
    1634. Intervet, 617 F.3d at 1291, 95 U.S.P.Q.2d (BNA) at 1962.
    1635. 595 F.3d 1340 (Fed. Cir. 2010).
    1636. Id. at $1345,1352$.
    1637. Id. at 1354.
    1638. Id.
    1639. Id. at 1355.
    1640. 620 F.3d 1305 (Fed. Cir. 2010), 96 U.S.P.Q.2d (BNA) 1640 (Fed. Cir. 2010).
[^152]:    1641. Id. at 1320, 96 U.S.P.Q.2d (BNA) at 1652.
    1642. Id. at 1310, 96 U.S.P.Q.2d (BNA) at 1644.
    1643. Id. at 1317, 96 U.S.P.Q.2d (BNA) at 1649.
    1644. Id.
    1645. Id.
    1646. 616 F.3d 1357 (Fed. Cir. 2010), 96 U.S.P.Q.2d (BNA) 1329 (Fed. Cir. 2010).
    1647. Id. at 1369, 96 U.S.P.Q.2d (BNA) at 1338.
    1648. Id. at $* 9$.
    1649. Id. at $* 8$.
    1650. Id. at *8 (citing Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 741 (2002)).
    1651. Festo, 535 U.S. at 741.
[^153]:    1652. Id. at $* 9$.
    1653. 595 F.3d 1340.
    1654. Id., 93 U.S.P.Q.2d (BNA) at 1818 (quoting Freedman Seating Co. v. Am. Seating Co., 420 F.3d 1350, 76 U.S.P.Q.2d (BNA) 1001 (Fed. Cir. 2005).
    1655. 616 F.3d 1283, 1291-92 (Fed. Cir. 2010).
    1656. Id. at 1284.
    1657. Id. at 1291.
    1658. Id.
    1659. Id.
    1660. Id.
    1661. Id.
[^154]:    1662. 594 F.3d 1360 (Fed. Cir. 2010).
    1663. Id.
    1664. Id. at 1376.
    1665. Id. at 1378.
    1666. 471 F.3d 1293, 1304 (Fed. Cir. 2006) (en banc in relevant part).
    1667. 594 F.3d at 1376.
    1668. Id.
    1669. Id. at 1377.
[^155]:    1670. Id. at 851, 93 U.S.P.Q.2d (BNA) at 1958 (citing DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1306, 81 U.S.P.Q.2d (BNA) 1238, 1247 (Fed. Cir. 2006) (en banc in relevant part)).
    1671. Id.
    1672. 633 F.3d 1042, 97 U.S.P.Q.2d (BNA) 1029 (Fed. Cir. 2010).
    1673. Id. at 1044, 97 U.S.P.Q.2d (BNA) at 1032.
[^156]:    1674. 35 U.S.C. § 271 (c).
    1675. 598 F.3d 831, 93 U.S.P.Q.2d 1943 (Fed. Cir. 2010).
    1676. Id., 93 U.S.P.Q.2d (BNA) at 1958.
    1677. Id., 93 U.S.P.Q.2d (BNA) at 1958.
    1678. Id., 93 U.S.P.Q.2d (BNA) at 1958.
    1679. 609 F.3d 1308 (Fed. Cir. 2010).
    1680. Id. at 1310.
    1681. Id. at 1311.
    1682. Id. at 1312.
    1683. Id. at 1312-18.
[^157]:    1684. Id. at 1313 (citing Wechsler v. Macke Int'l Trade, Inc., 486 F.3d 1286, 1295 (Fed. Cir. 2007)).
    1685. Id.
    1686. Id. at 1314.
    1687. Id. at 1315.
    1688. Id. at 1316 (quoting Orthokinetics, 806 F.2d at 1578-79). Notwithstanding this holding, the Federal Circuit ruled that a new trial on induced infringement may be necessary because the jury had not been properly instructed on the legal test for inducement. See id. at 1316.
    1689. Id. at 1316 (citing Hoover, 84 F.3d at 1411). Notwithstanding this holding, the Federal Circuit ruled that a new trial on contributory infringement may be necessary because the jury verdict on that issue was confusing and because the plaintiff could not point to evidence establishing proof of all of the elements of contributory infringement. See id. at 1317.
    1690. In re Seagate, LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc).
    1691. Id. (overruling Underwater Devices Inc. v. Morrison-Knudsen Co., 717 F.2d

    1380, 219 U.S.P.Q. (BNA) 569 (Fed. Cir. 1983)).
    1692. Id.
    1693. Id. at 1371.

[^158]:    1694. Robert M. Masters, Elizabeth L. Brann \& Jeffrey D. Comeau, That's Your Opinion Letter, Law 360 (April 6, 2011) http://www.law360.com/ip/articles/235173.
    1695. Id.
    1696. 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010) cert. granted sub nom. Global Tech. Appliances, Inc. v. SEB S.A., 131 S. Ct. 458 (2010).
    1697. Id., 93 U.S.P.Q.2d (BNA) at 1631.
    1698. Id.
    1699. Id. at 1380.
    1700. Id. at 1381.
    1701. 620 F.3d 1305 (Fed. Cir. 2010).
[^159]:    1717. Lucent Techs. Inc., v. Gateway, Inc., 580 F.3d 1301, 1327-28, 92 U.S.P.Q.2d (BNA) 1555, 1574. (Fed. Cir. 2009).
    1718. Id., 93 U.S.P.Q.2d (BNA) at 1560 (emphasis added) (quoting Ga.-Pac. Corp., 318 F. Supp. at 1120, 116 U.S.P.Q. (BNA) at 238).
    1719. 594 F.3d 860, 93 U.S.P.Q.2d (BNA) 1553 (Fed. Cir. 2010).
    1720. Id. at 864, 93 U.S.P.Q.2d (BNA) at 1556. Two of these patents, U.S. Patent No. 5,812,127 and U.S. Patent No. 5,792,659, were removed from the action via a consent judgment. Id., 93 U.S.P.Q.2d (BNA) at 1556 . The district court issued Rule 11 sanctions based on the ' 127 patent and U.S. Patent No. 5,831,608. Id., 93 U.S.P.Q.2d (BNA) at 1556. For a discussion of these sanctions, see supra notes 543-53 and accompanying text.
    1721. Id., 93 U.S.P.Q. 2d (BNA) at 1555.
    1722. Id. at 873, 93 U.S.P.Q.2d (BNA) at 1562 .
    1723. Id. at 868, 93 U.S.P.Q.2d (BNA) at 1559.
    1724. Id. at 869, 93 U.S.P.Q.2d (BNA) at 1560 (citation omitted) (citing Fromson v. W. Litho Plate \& Supply Co., 853 F.2d 1568, 1575, 7 U.S.P.Q.2d 1606, 1613 (Fed. Cir. 1988); Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 507 (1964)). 1725. Id. at 870, 93 U.S.P.Q.2d (BNA) at 1560 .
    1725. Id., 93 U.S.P.Q.2d (BNA) at 1560.
    1726. 580 F.9d at 1301, 92 U.S.P.Q.2d (BNA) 1555 (Fed. Cir. 2009).
    1727. ResQNet.com, 594 F.3d at 871, 93 U.S.P.Q.2d (BNA) at 1560.
[^160]:    1729. 912 F.2d 1443, 16 U.S.P.Q.2d (BNA) 1059 (Fed. Cir. 1990).
    1730. Id. at 1447, 16 U.S.P.Q.2d (BNA) at 1062.
    1731. ResQNet.com, 594 F.3d at 871, 93 U.S.P.Q.2d (BNA) at 1561.
    1732. Id., 93 U.S.P.Q.2d (BNA) at 1561 .
    1733. Id. at 872, 93 U.S.P.Q.2d (BNA) at 1562.
    1734. Id., 93 U.S.P.Q.2d (BNA) at 1562 (citing Lucent Techs. Inc., v. Gateway, Inc., 580 F.3d at 1301, 1329, 92 U.S.P.Q.2d at (BNA) 1555 , 1575 (Fed. Cir. 2009).
    1735. Id. at 876, 93 U.S.P.Q.2d (BNA) at 1565 (Newman, J., concurring in part and dissenting in part).
    1736. Id. at 876, 93 U.S.P.Q.2d (BNA) at 1565-66.
    1737. Id. at 877, 93 U.S.P.Q.2d (BNA) at 1566 .
    1738. 609 F.3d 1308, 95 U.S.P.Q.2d (BNA) 1619 (Fed. Cir. 2010).
    1739. Id. at 1310-11, 95 U.S.P.Q.2d (BNA) at 1622.
    1740. Id. at 1312, 95 U.S.P.Q.2d (BNA) at 1623.
    1741. Id. at 1318-19, 95 U.S.P.Q.2d (BNA) at 1628 (quoting Del Monte Dunes at Monterey, Ltd. v. City of Monterey, 95 F.3d 1422, 1435 (9th Cir. 1996)).
    1742. Id. at 1322, 95 U.S.P.Q.2d (BNA) at 1631.
[^161]:    1743. Id. at 1319, 95 U.S.P.Q.2d (BNA) at 1629.
    1744. 594 F.3d 860, 93 U.S.P.Q.2d (BNA) 1553 (Fed. Cir. 2010).
    1745. Wordtech, 609 F.3d at 1319-20, 95 U.S.P.Q.2d (BNA) at 1629 (quoting ResQNet.com, Inc. v. Lansa, Inc., 594 F.3d at 860, 873, 93 U.S.P.Q.2d (BNA) at 1553, 1563). (Fed. Cir. 2010)).
    1746. Id. at 1320, 95 U.S.P.Q.2d (BNA) at 1629-30.
    1747. Id., 95 U.S.P.Q.2d (BNA) at 1629-30.
    1748. Id., 95 U.S.P.Q.2d (BNA) at 1630 (citing Lucent, 580 F.3d at 1330, 92 U.S.P.Q.2d (BNA) at 1575).
    1749. 626 F.3d 1197, 97 U.S.P.Q.2d (BNA) 1161 (Fed. Cir. 2010).
    1750. Id. at 1212, 97 U.S.P.Q.2d (BNA) at 1173.
    1751. Id., 97 U.S.P.Q.2d (BNA) at 1164.
    1752. Id. at 1200, 97 U.S.P.Q.2d (BNA) at 1164.
    1753. Id., 97 U.S.P.Q.2d (BNA) at 1170 (quoting 28 U.S.C. § 1498(a) (2006)).
    1754. Id. at 1208-09, 97 U.S.P.Q.2d (BNA) at 1170 (quoting Jones v. United States, 527 U.S. 373, 394 (1999)).
    1755. Id., 97 U.S.P.Q.2d (BNA) at 1171.
    1756. The Georgia-Pacific factors evaluated by the court are as follows: "(1) The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty . . . (10) The nature of the patented
[^162]:    invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention ... (11) The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use . . (13) The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer." Ga.-Pac. Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120, 166 U.S.P.Q. (BNA) 235, 238 (S.D.N.Y. 1971).
    1757. Id. at 1211-12, 97 U.S.P.Q.2d (BNA) at 1172-73.
    1758. Id., 97 U.S.P.Q.2d (BNA) at 1172.
    1759. Id., 97 U.S.P.Q.2d (BNA) at 1172.
    1760. Id., 97 U.S.P.Q.2d (BNA) at 1172-73.
    1761. 594 F.3d 860, 870-73, 93 U.S.P.Q.2d (BNA) 1553, 1560-63 (Fed. Cir. 2010) (per curium).
    1762. Finjan, 626 F.3d at 1211-12 97 U.S.P.Q.2d (BNA) at 1173.
    1763. Id. at 1212, 97 U.S.P.Q.2d (BNA) at 1173.
    1764. Id., 97 U.S.P.Q.2d (BNA) at 1173 (quoting i4i L.P.Ltd P'ship v. Microsoft Corp., 598 F.3d 831, 856, 93 U.S.P.Q.2d (BNA) 1943, 1962 (Fed. Cir. 2010)).
    1765. Id., 97 U.S.P.Q.2d (BNA) at 1173 (quoting Motter v. Everest \& Jennings, Inc., 883 F.2d 1223, 1230 (3d Cir. 1989)).
    1766. 598 F.3d 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010).
    1767. Id. at 839, 93 U.S.P.Q.2d (BNA) at 1949.

[^163]:    1768. Id. at 852, 93 U.S.P.Q.2d at 1962.
    1769. $I d$. at 857, 93 U.S.P.Q.2d (BNA) at 1962 (citing Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1309, 92 U.S.P.Q.2d (BNA) 1555, 1559 (Fed. Cir. 2009)).
    1770. Id., 93 U.S.P.Q.2d (BNA) at 1962-63 (citing Duff v. Werner Enters., Inc., 489 F.3d 727, 730 (5th Cir. 2007); Carlton v. H.C. Price Co., 640 F.2d 573, 579 (5th Cir. 1981)).
    1771. Id., 93 U.S.P.Q.2d (BNA) at 1963.
    1772. Id. at 857-58, 93 U.S.P.Q.2d (BNA) at 1963 (citing Lucent, 580 F.3d at 1325; Unisplay, S.A. v. Am. Elec. Sign Co., 69 F.3d 512, 517 (Fed. Cir. 1995)).
    1773. 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010), cert. granted sub nom. Global Tech. Appliances, Inc. v. SEB S.A., 131 S. Ct. 458 (2010).
    1774. Id. at 1368, 93 U.S.P.Q.2d (BNA) at 1622 . Of the $\$ 4.65$ million, $\$ 3.6$ million was attributed to Sunbeam's sales of Pentalpha fryers, $\$ 540,000$ to Fingerhut's sales of Pentalpha's fryers, and $\$ 510,000$ to Montgomery Ward's sales. Id., 93 U.S.P.Q.2d (BNA) at 1622.
    1775. Id., 93 U.S.P.Q.2d (BNA) at 1622.
    1776. Id., 93 U.S.P.Q.2d (BNA) at 1630.
    1777. Id., 93 U.S.P.Q.2d (BNA) at 1630.
[^164]:    1778. Id., 93 U.S.P.Q.2d (BNA) at 1630 .
    1779. Id., 93 U.S.P.Q.2d (BNA) at 1630.
    1780. Id. at 1380, 93 U.S.P.Q.2d (BNA) at 1630 (emphasis omitted) (citation omitted).
    1781. Id., 93 U.S.P.Q.2d (BNA) at 1630.
    1782. Id., 93 U.S.P.Q.2d (BNA) at 1631.
    1783. 605 F.3d 1366, 95 U.S.P.Q.2d (BNA) 1985 (Fed. Cir. 2010) (per curiam).
    1784. Id. at 1368, 1372-73, 95 U.S.P.Q.2d (BNA) 1986, 1989-90.
    1785. Id., 95 U.S.P.Q.2d (BNA) at 1989.
    1786. Id., 95 U.S.P.Q.2d (BNA) at 1989.
    1787. Id., 95 U.S.P.Q.2d (BNA) at 1989.
    1788. Id. at 1373, 95 U.S.P.Q.2d (BNA) at 1989.
[^165]:    1799. Id. at 1372-73, 96 U.S.P.Q.2d (BNA) at 1340-41.
    1800. Id. at 1373, 96 U.S.P.Q.2d (BNA) at 1341 (citation omitted).
    1801. Id., 96 U.S.P.Q.2d (BNA) at 1341.
    1802. See id., 96 U.S.P.Q.2d (BNA) at 1341 (affirming the notice instructions given to the jury).
    1803. Id. at 1373, 96 U.S.P.Q.2d (BNA) at 1341 (citing Gart v. Logitech, Inc., 254 F.3d 1334, 1346, 59 U.S.P.Q.2d (BNA) 1290, 1298 (Fed. Cir. 2001).
    1804. Id., 96 U.S.P.Q.2d (BNA) at 1341 (citing Amsted Indus., Inc. v. Buckeye Steel Castings Co., 24 F.3d 178, 187, 30 U.S.P.Q.2d (BNA) 1462, 1469 (Fed. Cir. 1994)).
    1805. Id., 96 U.S.P.Q.2d (BNA) at 1341.
    1806. Id., 96 U.S.P.Q.2d (BNA) at 1341.
    1807. Id. at 1374, 96 U.S.P.Q.2d (BNA) at 1342.
    1808. Id. at 1374, 96 U.S.P.Q.2d (BNA) at 1342 (citing 35 U.S.C. § 287(a) (2006)).
[^166]:    1809. Id., 96 U.S.P.Q.2d (BNA) at 1342.
    1810. Id. at 1375,96 U.S.P.Q.2d (BNA) at 1342 (quoting Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1111-12, 39 U.S.P.Q.2d (BNA) 1001, 1010 (Fed. Cir. 1996)).
    1811. Id., 96 U.S.P.Q.2d (BNA) at 1342-43.
    1812. Id. at 1382, 96 U.S.P.Q.2d (BNA) at 1348 (Linn, J., concurring).
    1813. Id., 96 U.S.P.Q.2d (BNA) at 1348.
    1814. Id. at 1383, 96 U.S.P.Q.2d (BNA) at 1349.
    1815. 616 F.3d 1357, 96 U.S.P.Q.2d (BNA) 1329 (Fed. Cir. 2010).
    1816. Id. at 1375, 96 U.S.P.Q.2d (BNA) at 1343.
    1817. Id., 96 U.S.P.Q.2d (BNA) at 1343.
    1818. Id., 96 U.S.P.Q.2d (BNA) at 1343.
    1819. Id., 96 U.S.P.Q.2d (BNA) at 1343.
[^167]:    1820. Id. at 1376, 96 U.S.P.Q.2d (BNA) at 1343.
    1821. 626 F.3d 1197, 97 U.S.P.Q.2d (BNA) 1161 (Fed. Cir. 2010).
    1822. Id. at 1212-13, 97 U.S.P.Q.2d (BNA) at 1173-74.
    1823. Id. at 1212, 97 U.S.P.Q.2d (BNA) at 1173.
    1824. Id., 97 U.S.P.Q.2d (BNA) at 1173 (alteration in original) (internal quotation marks omitted).
    1825. Id. at 1213, 97 U.S.P.Q.2d (BNA) at 1174 (quoting Carborundum Co. v. Molten Metal Equip. Innovations, Inc., 72 F.3d 872, 882, 37 U.S.P.Q.2d 1169, 1175 (Fed. Cir. 1995) ).
    1826. Id., 97 U.S.P.Q.2d (BNA) at 1174.
    1827. Id., 97 U.S.P.Q.2d (BNA) at 1174 (alteration in original) (internal quotation marks omitted).
    1828. 598 F. $3 d$ 831, 93 U.S.P.Q.2d (BNA) 1943 (Fed. Cir. 2010).
    1829. 598 F.3d at 858 , 93 U.S.P.Q.2d (BNA) at 1963 (internal quotation marks omitted).
[^168]:    1830. Id., 93 U.S.P.Q.2d (BNA) at 1963 (internal quotation marks omitted). 1831. Id., 93 U.S.P.Q.2d (BNA) at 1963.
    1831. See Read Corp. v. Portec, Inc., 970 F.2d 816, 826-27, 23 U.S.P.Q.2d (BNA) 1426, 1435 (Fed. Cir. 1992) (articulating a nine-factor balancing test to assist in established enhanced damages), abrogated in part on other grounds by Markman v. Westview Instruments, Inc., 52 F.3d 967, 34 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370, 38 U.S.P.Q.2d (BNA) 1461 (1996).
    1832. Id., 93 U.S.P.Q.2d (BNA) at 1964. With respect to its Read factor analysis, the district court concluded that factors two, four, six, seven, and eight all supported enhancing the damages award, while factors one and nine weighed against enhancement. $i 4 i$, 598 F.3d at 858, 93 U.S.P.Q.2d (BNA) at 1963-64. The district court determined that no evidence supported factor one - "whether the infringer deliberately copied the ideas or design of another." Id., 93 U.S.P.Q.2d (BNA) at 1963. On the other hand, the evidence surrounding factor two, which pertains to the infringer's knowledge of the patent scope and good faith belief of noninfringement, weighed heavily in favor of enhancement. Id., 93 U.S.P.Q.2d (BNA) at 1963-64. The district court found that Microsoft's size and financial condition, factor four, weighed in favor of enhancement because the jury award was "only a small fraction of Microsoft's profits from the sale of Word products." Id., 93 U.S.P.Q.2d (BNA) at 1964. With regard to factors six, seven, and eight, "the district court found that Microsoft had started using the infringing products more than five years ago (in 2002), failed to conduct an infringement analysis after being notified of the '449 patent again in 2003, and implemented the infringing custom XML editor with the purpose of rendering i4i's products obsolete. " Id., 93 U.S.P.Q.2d (BNA) at 1964.
    1833. Id., 93 U.S.P.Q.2d (BNA) at 1964.
    1834. Id., 93 U.S.P.Q.2d (BNA) at 1964.
    1835. Id. at 859, 93 U.S.P.Q.2d (BNA) at 1964 (citations omitted).
    1836. Id., 93 U.S.P.Q.2d (BNA) at 1964.
    1837. Id., 93 U.S.P.Q.2d (BNA) at 1964.
[^169]:    1839. Id., 93 U.S.P.Q.2d (BNA) at 1964.
    1840. 616 F.3d 1357, 96 U.S.P.Q.2d (BNA) 1329 (Fed. Cir. 2010).
    1841. Id. at 1376, 96 U.S.P.Q.2d (BNA) at 1333.
    1842. Id., 96 U.S.P.Q.2d (BNA) at 1333-34 (internal quotation marks omitted).
    1843. Id., 96 U.S.P.Q.2d (BNA) at 1334 (internal quotation marks omitted).
    1844. Id. at 1377, 96 U.S.P.Q.2d (BNA) at 1344.
    1845. Id. at 1376, 96 U.S.P.Q.2d (BNA) at 1334 (internal quotation marks omitted).
    1846. Id., 96 U.S.P.Q.2d (BNA) at 1334 (quoting Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1274, 51 U.S.P.Q.2d (BNA) 1225, 1235 (Fed. Cir. 1999)).
    1847. Id. at 1377, 96 U.S.P.Q.2d (BNA) at 1344.
    1848. Advanced Magnetic Closures, Inc. v. Rome Fastener Corp., 607 F.3d 817, 95 U.S.P.Q.2d (BNA) 1513 (Fed. Cir. 2010); Leviton Mfg. Co. v. Universal Sec. Instruments, Inc., 606 F.3d 1353, 95 U.S.P.Q.2d (BNA) 1432 (Fed. Cir. 2010); Medtronic Navigation, Inc. v. BrainLAB Medizinische ComputerSysteme GMBH, 603 F.3d 943, 95 U.S.P.Q.2d (BNA) 1065 (Fed. Cir. 2010); Lazare Kaplan International, Inc. v. Photoscribe Technologies, Inc, 628 F.3d 1329, 97 U.S.P.Q.2d (BNA) 1437 (Fed. Cir. 2010).
[^170]:    1849. 35 U.S.C. § 285 (2006).
    1850. Leviton, 606 F.3d at 1358, 95 U.S.P.Q.2d (BNA) at 1436 (quoting Epcon Gas Sys. Inc. v. Bauer Compressors, Inc., 279 F.3d 1022, 1034, 61 U.S.P.Q.2d (BNA) 1470, 1479 (Fed. Cir. 2002)).
    1851. Advanced Magnetic Closures, 607 F.3d at 833, 95 U.S.P.Q.2d (BNA) at 1523
    (quoting 28 U.S.C. § 1927 (2006)).
    1852. Leviton, 606 F.3d at 1358, 95 U.S.P.Q.2d (BNA) at 1436.
    1853. See id. at 1363-65, 95 U.S.P.Q.2d (BNA) at 1440-42 (detailing the inadequacy
    of the district court's action based on the record).
    1854. 603 F.3d 943, 95 U.S.P.Q.2d (BNA) 1065 (Fed. Cir. 2010).
    1855. Id. at 950-51, 95 U.S.P.Q.2d (BNA) at 1070 .
    1856. Id., 95 U.S.P.Q.2d (BNA) at 1070 (internal quotation marks omitted).
    1857. Id. at 952, 95 U.S.P.Q.2d (BNA) at 1070-71.
[^171]:    1858. Id. at 948, 952, 95 U.S.P.Q.2d (BNA) at 1067, 1071.
    1859. Id. at 952, 95 U.S.P.Q.2d (BNA) at 1071.
    1860. Id., 95 U.S.P.Q.2d (BNA) at 1071 (alteration in original) (internal quotation marks omitted).
    1861. See id., 95 U.S.P.Q.2d (BNA) at 1071 (noting that litigation misconduct included misleading the jury by drawing attention away from the issue at trial and incorrectly suggesting that a statement made by the FDA demonstrated admission of infringement).
    1862. Id. at 948, U.S.P.Q.2d (BNA) at 1068.
    1863. Id. at 953, 95 U.S.P.Q.2d (BNA) at 1072.
    1864. Id. at 954, 95 U.S.P.Q. 2 d (BNA) at 1072.
    1865. Id., 95 U.S.P.Q.2d (BNA) at 1072.
    1866. See id., 95 U.S.P.Q.2d (BNA) at 1072 ("[A] party is entitled to rely on a court's denial of summary judgment and JMOL, as well as the jury's favorable verdict, as an indication that the party's claims were objectively reasonable and suitable for resolution at trial.").
[^172]:    1867. Id., 95 U.S.P.Q.2d (BNA) at 1073.
    1868. Id. at 955, 95 U.S.P.Q.2d (BNA) at 1073.
    1869. Id., 95 U.S.P.Q.2d (BNA) at 1076.
    1870. Id. at 964, 95 U.S.P.Q.2d (BNA) at 1080.
    1871. Id. at 965-66, 95 U.S.P.Q.2d (BNA) at 1081.
    1872. Id., 95 U.S.P.Q.2d (BNA) at 1081 (quoting Amsted Indus. Inc. v. Buckeye Steel Castings Co., 23 F.3d 374, 378-79, 30 U.S.P.Q.2d (BNA) 1470, 1474 (Fed. Cir. 1994)) (alteration in original).
    1873. Id. at 1358, 95 U.S.P.Q.2d (BNA) at 1436.
    1874. Id. at 1363, 95 U.S.P.Q.2d (BNA) at 1440. See supra notes 510-23 \& 1271-77
    and accompanying text for discussion of the facts of Leviton and the Federal Circuit's reversal of the district court's inequitable conduct finding.
    1875. 604 F.3d 1324, 95 U.S.P.Q.2d (BNA) 1257 (Fed. Cir. 2010).
[^173]:    1876. Id. at 1327-28, 95 U.S.P.Q.2d (BNA) at 1259.
    1877. Id. at 1328, 95 U.S.P.Q.2d (BNA) at 1259.
    1878. Id., 95 U.S.P.Q.2d (BNA) at 1259.
    1879. Id., 95 U.S.P.Q.2d (BNA) at 1259.
    1880. Id., 95 U.S.P.Q.2d (BNA) at 1259.
    1881. Id. at 1327, 95 U.S.P.Q. $2 d$ at 1258-59.
    1882. See id. at 1329-34, 95 U.S.P.Q.2d (BNA) at 1259-64 (affirming that the case was exceptional based on inequitable conduct in failing to disclose the URS and in misconstruing the double top-stitch seam). For further analysis of these inequitable conduct findings, see supra notes $1250-55$ and accompanying text. Judge Gajarsa dissented based on the majority's inequitable conduct conclusions. Taltech, 604 F.3d at 1335, 95 U.S.P.Q.2d (BNA) at 1265 (Gajarsa, J., dissenting).
    1883. Id. at 1334, 95 U.S.P.Q.2d (BNA) at 1264 (majority opinion).
    1884. Id., 95 U.S.P.Q.2d (BNA) at 1264 (internal quotation marks omitted).
    1885. 605 F.3d 1305, 94 U.S.P.Q.2d (BNA) 1856 (Fed. Cir. 2010).
    1886. Id. at 1308, 94 U.S.P.Q.2d (BNA) at 1858.
[^174]:    1887. Id. at 1309-10, 94 U.S.P.Q.2d (BNA) at 1859.
    1888. Id. at 1316, 94 U.S.P.Q.2d (BNA) at 1864. Judge Rader dissented based on the majority's affirmance of the district court's equitable estoppel finding. Id., 94 U.S.P.Q.2d (BNA) at 1864 (Rader, J., dissenting). For an analysis of that issue, see supra notes 432-55 and accompanying text.
    1889. Id. at 1314, 94 U.S.P.Q.2d (BNA) at 1862 (majority opinion).
    1890. Id., 94 U.S.P.Q.2d (BNA) at 1862 (internal quotation marks omitted).
    1891. Id. at 1315, 94 U.S.P.Q.2d (BNA) at 1863.
    1892. Id., 94 U.S.P.Q.2d (BNA) at 1863.
    1893. Id. at 1316, 94 U.S.P.Q.2d (BNA) at 1864.
    1894. Id., 94 U.S.P.Q.2d (BNA) at 1864.
    1895. Id., 94 U.S.P.Q.2d (BNA) at 1864.
    1896. 594 F.3d 1360, 93 U.S.P.Q.2d (BNA) 1617 (Fed. Cir. 2010) cert. granted sub nom. Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 458 (2010).
    1897. Id. at 1381, 93 U.S.P.Q.2d (BNA) at 1631.
    1898. Id. at 1380, 93 U.S.P.Q.2d (BNA) at 1631 (citing In re Seagate Tech., LLC, 497 F.3d 1360, 83 U.S.P.Q.2d (BNA) 1865 (Fed. Cir. 2007)).
[^175]:    1899. Id. at 1381, 93 U.S.P.Q.2d (BNA) at 1631.
    1900. Id., 93 U.S.P.Q.2d (BNA) at 1631.
    1901. 628 F.3d 1329, 97 U.S.P.Q.2d (BNA) 1437 (Fed. Cir. 2010).
    1902. Id. at 1381, 97 U.S.P.Q.2d (BNA) at 1454.
    1903. Id., 97 U.S.P.Q.2d (BNA) at 1454.
    1904. Id., 97 U.S.P.Q.2d (BNA) at 1454
    1905. Id., 97 U.S.P.Q.2d (BNA) at 1454.
    1906. 607 F.3d 817, 95 U.S.P.Q.2d (BNA) 1513 (Fed. Cir. 2010).
    1907. Id. at 833, 95 U.S.P.Q.2d (BNA) at 1523.
    1908. Id. at 832, 95 U.S.P.Q.2d (BNA) at 1523.
    1909. Id. at 833, 95 U.S.P.Q.2d (BNA) at 1523 .
    1910. Id. at 833, 95 U.S.P.Q.2d (BNA) at 1523.
[^176]:    1911. Id., 95 U.S.P.Q.2d (BNA) at 1523.
    1912. Id., 95 U.S.P.Q.2d (BNA) at 1523.
    1913. Id. at 833-34, 95 U.S.P.Q.2d (BNA) at 1523-24.
    1914. Id. at 833 , 95 U.S.P.Q.2d (BNA) at 1523 (quoting Eisemann v. Greene, 204 F.3d 393, 396 (2d Cir. 2000)) .
    1915. Id. at 833-34, 95 U.S.P.Q.2d (BNA) at 1523-24 (quoting Dow Chem. Pac. Ltd. v. Rascator Maritime S.A., 782 F.2d 329, 344 (2d Cir. 1986)).
    1916. Id., 95 U.S.P.Q.2d (BNA) at 1523-24.
    1917. Nos. 2009-1381, 2009-1424, 2010 WL 4286284, 97 U.S.P.Q.2d (BNA) 1029
    (Fed. Cir. Nov. 1, 2010).
    1918. Id. at $* 1,97$ U.S.P.Q.2d (BNA) at 1031.
    1919. Id. at *3, 97 U.S.P.Q.2d (BNA) at 1033.
    1920. Id., 97 U.S.P.Q.2d (BNA) at 1033.
    1921. Id., 97 U.S.P.Q.2d (BNA) at 1033.
    1922. Id., 97 U.S.P.Q.2d (BNA) at 1033.
[^177]:    1923. Id. at *3-5, 97 U.S.P.Q.2d (BNA) at 1033-35.
    1924. Id. at *4, 97 U.S.P.Q.2d (BNA) at 1034.
    1925. Id. at *5, 97 U.S.P.Q.2d (BNA) at 1034.
    1926. Id., 97 U.S.P.Q.2d (BNA) at 1035.
    1927. Id. at *21, 97 U.S.P.Q.2d (BNA) at 1047.
    1928. Id. at *6-17, 97 U.S.P.Q.2d (BNA) at 1035-44. Judge Bryson disagreed with the majority's determination regarding validity, and dissented on this ground. Id. at *21-23, 97 U.S.P.Q.2d (BNA) at 1047-48 (Bryson, J., dissenting in part).
    1929. Apotex, 2010 WL 4286284, at $* 17-19$, 97 U.S.P.Q.2d (BNA) at 1044-45. (majority opinion).
    1930. Id., 97 U.S.P.Q. 2d (BNA) at 1044 (internal quotation marks omitted).
    1931. Id., 97 U.S.P.Q.2d (BNA) at 1045.
    1932. Id. at $* 19,97$ U.S.P.Q.2d (BNA) at 1045.
    1933. Id., 97 U.S.P.Q.2d (BNA) at 1045.
[^178]:    1934. 603 F.3d 1377, 95 U.S.P.Q.2d (BNA) 1246 (Fed. Cir. 2010).
    1935. Id. at 1378-79, 95 U.S.P.Q.2d (BNA) at 1247-48.
    1936. Id. at 1381, 95 U.S.P.Q.2d (BNA) at 1249.
    1937. Id. at 1382, 95 U.S.P.Q.2d at 1250.
    1938. Id., 95 U.S.P.Q.2d (BNA) at 1250.
    1939. Id. at 1382, 95 U.S.P.Q.2d (BNA) at 1250.
    1940. Id., 95 U.S.P.Q.2d (BNA) at 1250.
    1941. 620 F.3d 1305, 96 U.S.P.Q.2d (BNA) 1640 (Fed. Cir. 2010).
    1942. Id. at 1320, 96 U.S.P.Q.2d (BNA) at 1651 (internal quotation marks omitted).
    1943. Id., 96 U.S.P.Q.2d (BNA) at 1652.
    1944. Id., 96 U.S.P.Q.2d (BNA) at 1652.
    1945. Id., 96 U.S.P.Q.2d (BNA) at 1652.
    1946. Id., 96 U.S.P.Q.2d (BNA) at 1652.
[^179]:    1947. 629 F.3d 1331, 97 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 2010).
    1948. Id. at 1357, 97 U.S.P.Q.2d (BNA) at 1435.
    1949. Id., 97 U.S.P.Q.2d (BNA) at 1435.
    1950. Id. at 1358, 97 U.S.P.Q.2d (BNA) at 1436.
    1951. Id., 97 U.S.P.Q.2d (BNA) at 1436.
    1952. Id. at 1359, 97 U.S.P.Q.2d (BNA) at 1436 (internal quotation marks omitted). 1953. Id., 97 U.S.P.Q.2d (BNA) at 1436 (citing eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 78 U.S.P.Q.2d (BNA) 1577 (2006)).
    1953. Id., 97 U.S.P.Q.2d (BNA) at 1436. 19 U.S.C. § 1337 (2006).
    1954. 19 U.S.C. § 1337 (2006).
[^180]:    1956. 19 U.S.C. § 1337 (2006). Cf. eBay, 547 U.S. at 396-97, 78 U.S.P.Q.2d (BNA)

    1577 (Kennedy, J., concurring).
    1957. 598 F.3d 831, 93 U.S.P.P.2d (BNA) 1943 (Fed. Cir. 2010).
    1958. Id. at 840, 861, 93 U.S.P.Q.2d (BNA) at 1950, 1965-66.
    1959. Id. at 861, 93 U.S.P.Q.2d (BNA) at 1966.
    1960. Id., 93 U.S.P.Q.2d (BNA) at 1966 (internal quotation marks omitted).
    1961. Id. at 862, 93 U.S.P.Q.2d (BNA) at 1966.
    1962. Id. at 862, 93 U.S.P.Q.2d (BNA) at 1967.
    1963. Id., 93 U.S.P.Q.2d (BNA) at 1967.
    1964. Id. at 862-63, 93 U.S.P.Q.2d (BNA) at 1967.
    1965. Id. at 863, 93 U.S.P.Q.2d (BNA) at 1967-68.

[^181]:    1979. Princo Corp. v. ITC, 616 F.3d 1318, 1321, 96 U.S.P.Q.2d (BNA) 1233 (Fed. Cir. 2010) (en banc).
    1980. Id. at 1327.
    1981. Id. at 1328.
    1982. Id. at 1321.
    1983. 601 F.3d 1359, 95 U.S.P.Q.2d (BNA) 1031 (Fed. Cir. 2010).
    1984. Id. at 1367, 95 U.S.P.Q. 2 d (BNA) 1038.
    1985. Id., 95 U.S.P.Q.2d (BNA) 1038.
    1986. 616 F.3d 1318, 96 U.S.P.Q.2d (BNA) 1233 (Fed. Cir. 2010) (en banc).
    1987. Id. at 1322, 96 U.S.P.Q.2d (BNA) at 1234. This is, of course, unrelated to the FDA "Orange Book" that lists pharmaceutical patents. See supra notes 383-84 and accompanying text.
    1988. Id., 96 U.S.P.Q.2d (BNA) at 1234.
[^182]:    2002. Id. at 1331, 96 U.S.P.Q.2d (BNA) at 1241.
    2003. Id., 96 U.S.P.Q.2d (BNA) at 1241.
    2004. Id., 96 U.S.P.Q.2d (BNA) at 1242.
    2005. Id., 96 U.S.P.Q.2d (BNA) at 1242.
    2006. Id. at 1341, 96 U.S.P.Q.2d (BNA) at 1249 (Dyk, J., dissenting).
    2007. Ill. Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28,42 (2006)
    2008. Princo, 616 F.3d at 1342, 96 U.S.P.Q.2d (BNA) at 1249 (Dyk, J., dissenting).
    2009. Id., 96 U.S.P.Q.2d (BNA) at 1249.
    2010. Id. at 1346, 96 U.S.P.Q.2d (BNA) at 1252.
    2011. Id., 96 U.S.P.Q.2d (BNA) at 1252.
[^183]:    2012. Id., 96 U.S.P.Q.2d (BNA) at 1252 (internal quotation marks omitted).
    2013. Id. at 1349, 96 U.S.P.Q.2d (BNA) at 1254.
    2014. Id. at 1340, 96 U.S.P.Q.2d (BNA) at 1248 (Prost, J., concurring).
    2015. Id., 96 U.S.P.Q.2d (BNA) at 1248.
    2016. Jazz Photo Corp. v. ITC, 264 F.3d 1094, 1104, 59 U.S.P.Q.2d (BNA) 1907
    (Fed. Cir. 2001).
    2017. Id.
    2018. 605 F.3d 1366, 95 U.S.P.Q.2d (BNA) 1985 (Fed. Cir. 2010).
    2019. 264 F.3d 1094, 59 U.S.P.Q.2d (BNA) 1907 (Fed. Cir. 2001).
    2020. 553 U.S. 617, 86 U.S.P.Q.2d (BNA) at 167 (2008).
    2021. Fujifilm, 605 F.3d at 1369, 95 U.S.P.Q.2d (BNA) 1985.
[^184]:    2022. Id.
    2023. Jazz Products LLC bought the LFFPs in question from Jazz Photo Corporation, a former company of defendant Jack Benun, in bankruptcy. Id., 95 U.S.P.Q.2d (BNA) at 1986.
    2024. Id., 95 U.S.P.Q.2d (BNA) at 1987.
    2025. Id., 95 U.S.P.Q. $2 d$ (BNA) at 1988.
    2026. Id., 95 U.S.P.Q.2d (BNA) at 1988-89.
    2027. Id., 95 U.S.P.Q.2d (BNA) at 1988.
    2028. Id., 95 U.S.P.Q.2d (BNA) at 1988.
    2029. Id. at 1372, 95 U.S.P.Q.2d (BNA) at 1989.
    2030. 609 F.3d 1292, 95 U.S.P.Q.2d (BNA) 1193 (Fed. Cir. 2010). The Federal Circuit initially released an opinion in this case on February 18, 2010. Honeywell $I$, 596 F.3d 800, 93 U.S.P.Q.2d (BNA) 1740 (Fed. Cir. 2010). That opinion was superseded by a new opinion on May 25, 2010. Honeywell, 609 F.3d at 1292, 95 U.S.P.Q.2d (BNA) at 1193. The two versions of the opinion are identical with regard to first sale analysis.
    2031. The purpose of the Invention Secrecy Act of 1951, codified at 35 U.S.C. $\S \S 181-188$, is to prevent disclosure of inventions and/or technologies that could threaten the security of the United States.
[^185]:    2032. Honeywell, 609 F.3d. at 1295, 1303 n.3, 95 U.S.P.Q.2d (BNA) at 1196, 1202 n.3.
    2033. Id., 95 U.S.P.Q.2d (BNA) at 1196, 1202 n.3.
    2034. Section 1498(a) provides that "[w]henever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for recovery of his reasonable and entire compensation for such use and manufacture."
    2035. Honeywell, 609 F.3d at 1296, 95 U.S.P.Q.2d (BNA) at 1196-97.
    2036. Id. at 1303-04, 95 U.S.P.Q.2d (BNA) at 1202-03.
    2037. Honeywell Int'l, Inc. v. United States, 66 Fed. Cl. 400 (2005), rev'd, 596 F.3d

    800, 93 U.S.P.Q.2d (BNA) 1740 (Fed. Cir. 2010), superseded by 609 F.3d 1292, 95 U.S.P.Q.2d (BNA) 1193 (Fed. Cir. 2010).
    2038. Honeywell, 609 F.3d at 1293, 95 U.S.P.Q.2d (BNA) at 1194.
    2039. Id. at 1304, 95 U.S.P.Q.2d (BNA) at 1202-03.
    2040. Id., 95 U.S.P.Q.2d (BNA) at 1203.
    2041. Id., 95 U.S.P.Q.2d (BNA) at 1206.

[^186]:    2043. 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); Gregory A. Castanias, Lawrence D. Rosenberg, Michael S. Fried \& Todd R. Geremia, Survey of the Federal Circuit's Patent Law Decisions in 2006: A New Chapter in the Ongoing Dialogue With the Supreme Court, 56 Am. U. L. Rev. 793, 975-85 (2007).
    2044. Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd., 599 F.3d 1308, 94 U.S.P.Q.2d (BNA) 1261 (Fed. Cir. 2010).
[^187]:    2045. Includes one opinion counted twice, because that case generated one separate opinion from each of the other panel members.
    2046. Ordinarily, 116 panel opinions should require 348 panel members ( $116 \times 3$ ), but the statistics for 2010 also include one case decided by a five-judge panel. See supra note 2073 and accompanying text.
[^188]:    2047. See, e.g., Jon O. Newman, Decretal Language: Last Words of an Appellate Opinion, 70 Brook. L. Rev. 727, 727 (2005) ("'Decretal language' is the portion of a court's judgment or order that officially states ('decrees') what the court is ordering.").
    2048. Fed. Cir. R. 47.6(b).
