Summaries of All Supreme Court and Precedential Federal Circuit Patent Cases Decided Since Jun. 1, 2016

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Civil Procedure

Arbitration Clauses

Verinata Health, Inc. and Illumina, Inc. v. Ariosa Diagnostics, Inc., 830 F.3d 1335 (Fed. Cir. 2016)

In what seems to be a fairly obvious result, the Circuit affirms the district court in ruling that a patent infringement issue does not need to be arbitrated since the arbitration clause excludes disputes relating to intellectual property rights. The parties entered into a supply agreement in which they stated that certain disputes would be subject to compulsory arbitration. The arbitration clause came into dispute when Illumina sued Ariosa for patent infringement and Ariosa counterclaimed for breach of contract on that grounds that, under the terms of the supply agreement, Ariosa had a license to the patent-in-suit. Illumina moved to compel arbitration and the panel now affirms the district court ruling that this dispute falls squarely within the exclusion-from-arbitration clause, which provides: "[A]ny dispute relating to the breach ... of this Agreement, shall be determined by arbitration [but that this section] ... shall not apply to, and no arbitration shall resolve, disputes relating to issues of scope, infringement, validity and/or enforceability of any Intellectual Property Rights."

Default Judgment

United Construction Products, Inc. v. Tile Tech, Inc., 843 F.3d 1363 (Fed. Cir. 2016)

The Circuit affirms a default judgment and injunction against a defendant who missed deadlines, misrepresented matters to the court, and destroyed evidence. To illustrate how egregious Tile Tech's conduct was, the "Read More" excerpt from the opinion describes the behavior that supported these harsh sanctions.

In evaluating the appropriateness of default judgment, the panel applies the factors from the Ninth Circuit's *Malone v. USPS* case: (1) the public's interest in expeditious resolution of litigation; (2) the court's need to manage its docket; (3) the risk of prejudice to the other party; (4) the public policy favoring disposition of cases on their merits; and (5) the availability of less drastic sanctions. Finding that all but factor (4) support default judgment, the panel has little trouble affirming the dismissal.

The panel also affirms the permanent injunction, rejecting Tile Tech's three arguments. An order enjoining infringing and "substantially similar" products is well within the court's discretion. The requirement that Tile Tech turn over a mold that itself was not infringing but was critical in fabricating the infringing product was entirely appropriate. And finally, given Tile Tech's inappropriate use of images of United's products, projects, and drawings on its website and in other marketing materials, an injunction prohibiting such use was appropriate even though such use may not lead to a likelihood of confusion.

Discovery

Drone Technologies, Inc. v. Parrot S.A., 838 F.3d 1283 (Fed. Cir. 2016)

Parrot appeals from a final judgment that awarded Drone damages for Parrot's infringement of two patents and awarded Drone attorney fees pursuant to § 285 and Rule 37 of the Federal Rules. These awards came after the district court entered a default judgment against Parrot as a sanction for Parrot's failure to comply with two discovery orders requiring production of, among other things, the source code used in its products.

The panel holds that the court abused its discretion in issuing the two discovery orders and in entering the "drastic" sanction of default against Parrot for its failure to comply with the orders. While the panel determines that Parrot's in-house and litigation counsel both handled discovery matters inappropriately, this did not justify default judgment, which should be used in only the most egregious cases.

The panel affirms the denial of Parrot's motion to dismiss for lack of standing based on Parrot's contention that the assignments to Drone were invalid because the person named on the patents and who assigned the patents to Drone was not the true inventor. Parrot also raised the affirmative defense of improper inventorship under 35 U.S.C. § 102(f), which the district court struck as part of its default judgment. On remand, Parrot will have the opportunity to reassert this invalidity defense.

Disqualification of Counsel

Dynamic 3D Geosolutions LLC v. Schlumberger Ltd., 837 F.3d 1280 (Fed. Cir. 2016)

The Circuit affirms the disqualification of counsel and dismissal without prejudice of a patent infringement suit. Dynamic sued Schlumberger for infringement, alleging that its '319 patent was infringed by the use and sale of Petrel, a software platform used in the three dimensional visualization, mapping, and reservoir modeling of oil wells. Dynamic depended on Acacia's legal department for the litigation of the case. Attorney Charlotte Rutherford worked for Schlumberger before she joined Acacia's legal group. At Schlumberger, Rutherford managed a copyright lawsuit involving Petrel, was involved in efforts to license Petrel to other companies, evaluated patentable aspects of Petrel, analyzed a competitor's software that was the commercial embodiment of the '319 patent, and assessed the risk of lawsuits against Petrel. While working for Acacia, Rutherford was not involved in the current lawsuit and she did not disclose confidential information about Schlumberger or Petrel to other Acacia attorneys. However, she attended meetings with the inventors of the '319 patent, other in house counsel, and outside counsel regarding the acquisition of the '319 patent, and Schlumberger's Petrel product was a topic of discussion at those meetings. Rutherford was also involved in the selection of outside counsel.

The Circuit affirms the disqualification of Rutherford because she is irrebuttably presumed to have possessed Schlumberger's relevant confidential information, and Rutherford's work at Schlumberger was substantially related to her current work at Acacia. Other in house counsel were also disqualified by imputation but even without imputation, in attending meetings and making decisions such as retaining the outside counsel, Rutherford communicated to the other in house counsel that she supported the litigation strategy and in doing so, disclosed confidential information to the other Acacia attorneys. Furthermore, Rutherford's involvement in the selection of the outside counsel for the litigation against Schlumberger supports a finding of communication by conduct to the outside counsel.

JMOL Motions

Apple Inc. v. Samsung Elecs. Co., 839 F.3d 1034 (Fed. Cir. 2016)

Apple alleged infringement of five of its smartphone patents, and Samsung countersued for infringement of two of its patents. After a jury trial, the district court entered a judgment awarding Apple \$119,625,000 in damages and ongoing royalties. In a February decision, a panel of the Circuit reversed the denial of Samsung's motion for JMOL of non-infringement as to the principal patent in suit, determining that Apple failed to prove that the accused Samsung products use a so-called "quick links" feature that permits users to quickly click on phone numbers and other links, rather than having to copy and paste. The Circuit also reversed the denial of JMOL of invalidity of two of Apple's patents, directed to the iPhone's "slide to unlock" and "autocorrect" features, rejecting Apple's arguments as to secondary considerations such as commercial success and praise from Apple users.

In an en banc decision, with one dissent, the Circuit reinstates the district court judgments as to the three patents in suit, holding that the jury verdict on each issue is supported by substantial evidence and the district court did not err when denying Samsung's JMOLs. The Circuit notes that it granted Apple's en banc petition to affirm its understanding of the appellate function as limited to deciding issues raised on appeal by the parties, "deciding these issues only on the basis of the record made below, and as requiring appropriate deference be applied to the review of factual findings." According to the majority, the Supreme Court made it clear in *Teva v. Sandoz* that findings of fact [there relating to claim construction] "are indisputably the province of the district court."

The majority notes that the panel reversed nearly a dozen jury fact findings including infringement, motivation to combine, the teachings of prior art references, commercial success, industry praise, copying, and long-felt need across three different patents. It did so despite the fact that some of these findings were not appealed and without ever mentioning the applicable substantial evidence standard of review. And with regard to objective indicia, it did so in ways that departed from existing law.

In dissent, Judge Dyk raises questions about how aspects of the obviousness doctrine ought to operate, but the majority notes that no party—at the panel or the petition for rehearing en banc stage—invited the Circuit to consider changing the existing law of obviousness. The case was taken en banc to affirm the Circuit's understanding of its appellate function, to apply the governing law, and to maintain its fidelity to the Supreme Court's *Teva* decision.

Given the length of the opinion, we have not attempted to edit it down to our normal two or three pages, but the full opinion does make for interesting reading.

Wi-Lan – Wi-Lan sued Apple, Dell, Hewlett-Packard and HPC for infringement of its patent directed to a wireless data communication technique called "MultiCode Direct-Sequence Spread Spectrum" (MC-DSSS), arguing that the patented technique is embodied in several modern wireless communications standards, including the technique in Apple's iPhones and iPads. All of the defendants other than Apple settled with Wi-Lan, an NPE, but Apple proceeded to trial. A jury found that Apple did not infringe and that the claims are invalid, but the E.D. of Texas granted Wi-Lan's JMOL of no invalidity, issuing a clarifying claim construction and thus concluding that there was no substantial evidence supporting the jury's verdict of anticipation. The panel reverses the granting of the motion, ruling that, while a court may adjust constructions post-trial if the court merely elaborates on a meaning inherent in the previous construction, that is not what happened here. According to the panel, this "clarification" was in fact an impermissible post-verdict reconstruction. Because the JMOL was based on this re-construction, the grant of the JMOL must be reversed. The panel also affirms the denial of JMOL based upon infringement under the doctrine of equivalents.

Patent Infringement Complaint

Edwin Lyda v. CBS Corporation, 838 F.3d 1331 (Fed. Cir. 2016)

The panel affirms the dismissal of an infringement action, without leave to replead, because the Amended Complaint for joint infringement does not meet the pleading requirements of *Twombly* and *Iqbal*. Lyda sued CBS for infringement of the patents directed to systems for obtaining real time responses to TV programming by allowing persons viewing a broadcast to respond in real time. After CBS notified Lyda of deficiencies in the original complaint, Lyda filed an Amended Complaint, which Defendants moved to dismiss for failure to state a claim. The judge informed Lyda that Lyda could either amend the complaint a second time, or oppose the motion and forfeit his ability to further amend the complaint. Lyda elected to oppose the motion, which was granted by the district court.

The panel holds that the Amended Complaint sets forth allegations of joint infringement, which the panel then rules are measured by the pleading requirements of *Twombly* and *Iqbal* and not the minimal pleading requirements of Form 18. To survive such a motion, a complaint must allege sufficient facts, taken as true, to state a plausible claim for relief. Thus, under *Twombly*, *Iqbal* and *Akamai*, a claim of joint infringement requires pleading facts sufficient to allow a reasonable inference that all steps of the claimed method are performed and either (1) one party exercises the requisite "direction or control" over the others' performance or (2) the actors form a joint enterprise such that performance of every step is attributable to the controlling party.

The panel holds that the Amended Complaint fails to meet the pleading requirements of *Iqbal/Twombly*. Moreover, because Lyda amended the complaint once, the panel holds that the district court did not abuse its discretion in denying Lyda leave to amend the complaint one more time.

Personal Jurisdiction

Xilinx, Inc. v. Papst Licensing GMBH & Co. KG, 848 F.3d 1346 (Fed. Cir. 2017)

In a ruling that will be welcomed by parties filing declaratory actions against non-practicing entities, particularly those based overseas, the Circuit reverses the dismissal of a DJ action based on lack of personal jurisdiction, ruling that specific jurisdiction exists over a German NPE. This holding was based on the fact that the forum is close to plaintiff's office, Papst personnel traveled into the forum in an unsuccessful attempt to negotiate a license with Xilinx, Papst litigated seven other patent infringement cases in California, and Papst would have to litigate the infringement somewhere in the U.S.

Immediately following the unsuccessful meeting in California, Xilinx filed a DJ action in the Northern District of California. On the same day, Papst filed an infringement suit in the District of Delaware. Papst successfully moved to dismiss the California DJ action for lack of personal jurisdiction, the court holding that specific jurisdiction did not exist as to Papst.

In prior cases the Circuit has summarized the Supreme Court's due process jurisprudence for specific jurisdiction in a three-factor test: (1) whether the defendant "purposefully directed" its activities at residents of the forum; (2) whether the claim "arises out of or relates to" the defendant's activities with the forum; and (3) whether assertion of personal jurisdiction complies with the Fourteenth Amendment's due process clause. The first two factors correspond with the "minimum contacts" prong of *International Shoe*, and the third factor corresponds with the "fair play and substantial justice" prong of the analysis.

Papst makes no argument that its activities directed to Xilinx do not satisfy the minimum contacts prong. Papst purposefully directed its activities to California when it sent multiple notice letters to Xilinx and traveled there to discuss Xilinx's alleged patent infringement and potential licensing arrangements. Xilinx's declaratory judgment action of noninfringement certainly relates to these contacts. Therefore, the minimum contacts prong is satisfied.

The Supreme Court has repeatedly said that the reasonableness prong is typically satisfied by a showing of minimum contacts. Where a defendant who purposefully has directed his activities at forum residents seeks to defeat jurisdiction, he must present a compelling case that the presence of some other considerations would render jurisdiction unreasonable. In its 1985 *Burger King* case, the Supreme Court identified five considerations relevant to the reasonableness analysis: (1) the burden on the defendant, (2) the forum State's interest in adjudicating the dispute, (3) the plaintiff's interest in obtaining convenient and effective relief, (4) the interstate judicial system's interest in obtaining the most efficient resolution of controversies, and (5) the shared interest of the several States in furthering fundamental substantive social policies.

Papst makes no argument that factors 2–5 weigh against a finding of personal jurisdiction, nor could it. Xilinx, which is headquartered in California, indisputably has an interest in protecting itself from patent infringement by obtaining relief "from a nearby federal court." Jurisdiction over Xilinx's DJ claims in California would also result in an efficient resolution of the controversy. Finally, there is no conflict between the interests of California and any other state, since the same body of federal patent law would govern the patent invalidity claim irrespective of the forum.

With respect to the burden on the defendant, Papst sent letters into the forum and its representatives traveled there to meet with Xilinx. Also, the burden on Papst is mitigated by Papst's status as an NPE residing outside of the U.S. By the very nature of its business, Papst must litigate its patents in the U.S., thus falling right into the fourth factor: the interstate judicial system's interest in obtaining the most efficient resolution of controversies. The lack of significant burden on Papst is also evidenced by Papst's prior seven patent litigations in California. Finally, Papst has not demonstrated that it would be unduly burdensome to litigate in California rather than elsewhere in the U.S.

In light of the totality of circumstances, the panel holds that this is not one of the rare situations in which sufficient minimum contacts exist but where the exercise of jurisdiction would be unreasonable. In other words, there is simply no compelling case here that personal jurisdiction over Papst is unreasonable.

Polar Electro Oy v. Suunto Oy, 829 F.3d 1343 (Fed. Cir. 2016)

The Circuit vacates and remands a decision dismissing Suunto, a Finnish company, based upon lack of personal jurisdiction. In examining whether Suunto had sufficient minimum contacts with Delaware, the forum state, the panel looks to see if specific jurisdiction exists. The panel disagrees with the district court and holds that Suunto purposefully availed itself of the Delaware market. The case is somewhat unusual in that ASWO, Suunto's U.S. distributor, took title to the goods in Finland and not in the U.S. The panel found it significant that under its distribution agreement with ASWO, Suunto provided outbound logistic services, including preparing export documents, packing the ordered goods and coordinating the freight to the destination specified by ASWO. Suunto shipped at least ninety-four accused products to Delaware retailers via that standard ordering process.

In addition to purposeful minimum contacts, due process requires that the assertion of personal jurisdiction be reasonable and fair. The district court did not decide the reasonableness prong because it dismissed the case against Suunto for lack of minimum contacts. Therefore, the Circuit remands for the district court to determine whether exercising jurisdiction over Suunto would be reasonable and fair.

The panel then looks to whether the district court correctly determined that exercising jurisdiction over Suunto would be proper under the Delaware long arm statute. The district court determined that personal jurisdiction exists over Suunto under a so-called dual jurisdiction theory expressed in a Delaware appellate court opinion in which two alternative sections of the Delaware long arm statute are at least partially satisfied. Because Suunto's activities demonstrate an intent to serve the U.S. market generally and the Delaware market specifically, the panel determines that the district court correctly determined that personal jurisdiction over Suunto is proper under the Delaware long arm statute.

Sanctions

Andre Walker v. Health Int'l. Corp., 845 F.3d 1148 (Fed. Cir. 2017)

The Circuit affirms over \$20,000 in sanctions awarded by the district court because the patentee continued to litigate after the parties settled all claims. The panel adds over \$50,000 in additional attorney fees and double costs as a result of Walker's frivolous appeal, groundless attacks on the conduct of opposing counsel, and repeated distortion of controlling case law.

Walker filed suit for patent infringement against Health International ("HSN"). Walker and HSN, both represented by counsel, engaged in mediation and, that same day, entered into a hand-written Mediated Settlement Agreement. The Agreement required that HSN pay \$200,000 to Walker within thirty days. Following payment of the \$200,000, Walker became obligated to deliver a release to HSN and by joint stipulation the parties were to dismiss all claims with prejudice.

HSN filed a motion to stay all deadlines but Walker opposed the motion, stating that HSN's allegation that the Agreement resolved all claims was incorrect, contending that there were significant issues yet to be resolved. Walker filed motions to amend the complaint and set a Markman hearing. HSN filed a motion to enforce the Agreement, appending correspondence from Walker's counsel acknowledging that the case was settled, and a motion for sanctions. The district court granted HSN's motions and awarded HSN attorneys' fees and costs amounting to over \$20,000 resulting from Walker's vexatious actions after settlement.

Walker first argues on appeal that the district court erred in awarding fees without findings of subjective bad faith, but the panel rules that Walker mischaracterizes clear authority. Federal courts may award damages under their equitable powers when litigants have acted in bad faith, vexatiously, wantonly, or for oppressive reasons. The district court's detailed findings provide ample support for its conclusion of vexatiousness.

Walker argues that HSN's counsel violated Colorado Rule of Professional Conduct 1.3 by failing to immediately notify him that HSN had tendered the settlement payment to its counsel. The panel holds that Walker's argument is contrary to the rule's explicit language and leads to illogical conclusions. As such, the positions taken by Walker on appeal in the briefs and at oral argument were frivolous.

The record lacks any support for Walker's attempts to frustrate the comprehensive settlement by prolonging litigation. Walker's numerous mischaracterizations of clear authority in arguing the appeal also makes this case frivolous as argued. Particularly troubling are Walker's baseless assertions of misconduct against his opposing counsel and continued misrepresentation of clear, binding Supreme Court precedent even after the distortion was pointed out by opposing counsel. The continued misrepresentation standing alone is a very serious matter that could warrant sanctions.

The panel rules: "In keeping with this court's longstanding policy of enforcing Rule 38 vigorously, we exercise our discretion to impose sanctions in the full amount of HSN's request." The panel also considers the attorney who wrote and signed the briefs to be equally responsible and therefore holds counsel jointly and severally liable for the assessed damages.

Standing

Phigenix, Inc. v. ImmunoGen, Inc., 845 F.3d 1168 (Fed. Cir. 2017)

The panel rules that Phigenix has no standing to appeal its unsuccessful IPR, challenging an ImmunoGen patent even though Phigenix contends it would have additional licensing opportunities if the patent is invalidated. Phigenix is a research and licensing entity that does not manufacture any products.

According to the Circuit's 2014 *Consumer Watchdog* case involving an appeal from a reexamination proceeding, although Article III standing is not necessary to appear before an administrative agency, an appellant must nevertheless have standing if it seeks review of the agency's action in federal court. Citing the Supreme Court's recent *Spokeo* decision, the panel states that the test to determine appellate standing is that an appellant must have (1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the appellee, and (3) that is likely to be redressed by a favorable judicial decision.

ImmunoGen exclusively licensed its '856 patent to Genentech, which markets the breast cancer drug Kadcyla. Phigenix owns the '534 patent, which, according to Phigenix, covers Kadcyla and, thus, the subject matter claimed in the '856 patent. Phigenix asserted that it has suffered an actual injury because at least a portion of the licensing revenue that ImmunoGen receives would inure to Phigenix if the '856 patent were invalidated. The panel rules that Phigenix's declarations are not adequate because there is no allegation that Phigenix ever licensed the '534 patent to anyone, much less to entities that have obtained licenses to the '856 patent. Moreover, Phigenix is not engaged in any activity that would give rise to a possible infringement suit.

The panel also rejects Phigenix's argument that 35 U.S.C. § 141(c) gives it the right to appeal a final Board decision since Congress cannot erase Article III's standing requirements. Finally, while 35 U.S.C. § 315(e)(1) does create an estoppel, in *Consumer Watchdog* the Circuit held that a similar estoppel provision in the patent reexamination statute does not constitute an injury in fact. The panel sees no reason to depart from the holding of that case here.

Comment: This case should give pause to a party considering filing an IPR unless it is arguably infringing the patent. This might not only concern public interest organizations like Consumer Watchdog, but also investors in competitive companies whose investments might appreciate if a blocking patent is invalidated. Even a company considering entering a field has to be concerned since it may not have the right to appeal an adverse ruling, even though it would be estopped from challenging the patent in the future.

Stay Pending PTO Proceedings

Murata Mach. USA v. Daifuku Co., Ltd., 830 F.3d 1357 (Fed. Cir. 2016)

This case presents an unusual evaluation of whether a case should be stayed pending an IPR. Because the decision to grant or deny a stay is not appealable, this issue has not yet come to the Circuit and is not likely to be decided by the court very often. The Circuit considered the issue in this case because it arose as part of an interlocutory appeal of a denial of a motion for preliminary injunction, which was decided at the same time as the stay issue. In this case, the panel deferred to the broad discretion of the district court in managing its cases and in deciding whether a stay was appropriate. However, because the court had summarily denied the motion for preliminary injunction without evaluating the appropriate considerations, the denial of the motion for preliminary injunction was vacated and remanded.

The district court granted the stay after defendant Daifuku had initiated IPRs as to the two patents in suit. Murata then added two more patents to the case and moved to lift the stay as to the patents that had been added. The district court applied the four part test used in deciding whether a stay should be granted in Covered Business Method reviews, and declined to lift the stay. Murata had also moved for preliminary injunction as to the two new patents and the district court denied the motion, with a cursory one paragraph ruling concluding with the statement: "Because the court has now declined to lift the stay, the Motion for Preliminary Injunction is denied without prejudice to renew at a later date, if appropriate."

As noted above, the panel affirms the denial of the motion to lift the stay but rules that the district court should have fully addressed the preliminary injunction motion, and not treated it as part of the motion to lift the stay. Rule 52(a) of the Federal Rules requires the district court to perform a complete analysis of the issues to be considered on a motion for injunction, and must issue findings of fact and conclusions of law that can be properly considered on appeal.

Subject Matter Jurisdiction for Declaratory Judgments

Asia Vital Components Co. v. Asetek Danmark A/S, 837 F.3d 1249 (Fed. Cir. 2016)

The Circuit reverses the dismissal of a declaratory judgment action even though the accused product had not yet been sold by the plaintiff AVC. According to the decision, although the Supreme Court's 2007 *MedImmune* decision relaxed the test for jurisdiction, it did not change the rule that a case or controversy must be based on a real and immediate injury or threat of future injury that is caused by the defendants. In several post-*MedImmune* decisions, the Circuit held that jurisdiction generally will not arise merely on the basis that a party learns of the existence of a patent owned by another or even perceives such a patent to pose a risk of infringement, without some affirmative act by the patentee. Instead, the Circuit requires conduct that can be reasonably inferred as demonstrating intent to enforce a patent.

In an initial letter, Asetek incorrectly accused AVC of manufacturing the Liqmax 120s. However, it was a demand letter that referenced a product that is similar to Asetek's K7 and K9 products. AVC then contacted Asetek, saying that it did not manufacture the Liqmax 120s. Instead of simply responding that it had made a mistake with respect to the Liqmax 120s, Asetek responded with a number of statements that indicate that an actual controversy between the parties existed. For example, Asetek (1) rehashed the volatile relationship between the parties; (2) stated that it would not license the patents to AVC due to the previous conflicts between the parties; (3) accused AVC of likely selling other infringing products; and (4) warned AVC that it enforced its IP and noted its pending litigations against other infringers that sell products similar to the K7 and K9. According to the panel, such a response demonstrates intent to enforce a patent, and is thus sufficient to find a substantial controversy between the parties.

The panel holds that further interactions between the parties confirm its conclusion. For example, Asetek made threats to its customers regarding AVC's infringement of the asserted patents, telling customers that AVC has infringed Asetek's patents, and that if these customers used AVC's products, a lawsuit would follow.

Asetek relies heavily on the fact that it never referenced AVC's particular products as potentially infringing, and, in fact, did not even know of AVC's products at the time of the complaint. But the panel notes that the question of jurisdiction does not turn on Asetek's knowledge of the specific AVC products or whether Asetek specifically alleged that those products infringed; instead, the question is whether Asetek's actions can be inferred as demonstrating intent to enforce a patent. The panel concludes that Asetek's conduct demonstrates just that even though AVC had not yet introduced the accused product.

Venue

TC Heartland LLC v. Kraft Foods Group Brands LLC, Case No. 16-341 (May 22, 2017)

In an 8-0 opinion written by Justice Thomas (Justice Gorsuch did not participate), the Supreme Court rules that a defendant "resides" for purposes of the patent venue statute only where the defendant actually is incorporated or where the defendant has committed acts of infringement and has a regular and established place of business. This will prove devastating to Texas businesses that have taken advantage of the fact that 40% of all patent infringement actions over the past three years have been filed in the Eastern District of Texas. This could prove to be a boon to law firms in Delaware, which is a common state of incorporation, and to firms around the country based in technology-hot areas.

The Court rules that the 2011 amendments to the general venue statute, 28 U.S.C. § 1391, changed the law and effectively overruled *VE Holding*, which held that the definition of "corporate residence" in the general venue statute applies to the patent venue statute, 28 U.S.C. § 1400. The Court accepted Heartland's argument that the amendment to § 1391 that added "except as otherwise provided by law"

meant that the patent venue statute was intended to control the definition of "corporate residence" in patent actions, instead of the general venue statute.

The patent venue statute, 28 U.S.C. §1400(b), provides that "any civil action for patent infringement may be brought in the judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business." In *Fourco Glass Co. v. Transmirra Products Corp.*, this Court concluded that for purposes of §1400(b) a domestic corporation "resides" only in its State of incorporation, rejecting the argument that §1400(b) incorporates the broader definition of corporate "residence" contained in the general venue statute, 28 U.S.C. §1391(c). Congress has not amended §1400(b) since *Fourco*, but it has twice amended §1391, which now provides that, "except as otherwise provided by law" and "for all venue purposes," a corporation "shall be deemed to reside, if a defendant, in any judicial district in which such defendant is subject to the court's personal jurisdiction with respect to the civil action in question." §§1391(a), (c).

Respondent filed a patent infringement suit in the District Court for the District of Delaware against petitioner, a competitor that is organized under Indiana law and headquartered in Indiana but ships the allegedly infringing products into Delaware. Petitioner moved to transfer venue to a District Court in Indiana, claiming that venue was improper in Delaware. Citing *Fourco*, petitioner argued that it did not "reside" in Delaware and had no "regular and established place of business" in Delaware under §1400(b). The District Court rejected these arguments. The Federal Circuit denied a petition for a writ of mandamus, concluding that §1391(c) supplies the definition of "resides" in §1400(b). The Federal Circuit reasoned that because petitioner resided in Delaware under §1391(c), it also resided there under §1400(b).

Held: As applied to domestic corporations, "residence" in §1400(b) refers only to the State of incorporation. The amendments to §1391 did not modify the meaning of §1400(b) as interpreted by *Fourco*.

(a) The venue provision of the Judiciary Act of 1789 covered patent cases as well as other civil suits. *Stonite Products Co. v. Melvin Lloyd Co.* In 1897, Congress enacted a patent specific venue statute. This new statute (§1400(b)'s predecessor) permitted suit in the district of which the defendant was an "inhabitant" or in which the defendant both maintained a "regular and established place of business" and committed an act of infringement. A corporation at that time was understood to "inhabit" only the State of incorporation. This Court addressed the scope of §1400(b)'s predecessor in *Stonite*, concluding that it constituted "the exclusive provision controlling venue in patent infringement proceedings" and thus was not supplemented or modified by the general venue provisions. 315 U.S., at 563. In 1948, Congress recodified the patent venue statute as §1400(b). That provision, which remains unaltered today, uses "resides" instead of "inhabits." At the same time, Congress also enacted the general venue statute, §1391, which defined "residence" for corporate defendants. In *Fourco*, this Court reaffirmed *Stonite*'s holding, observing that Congress enacted §1400(b) as a standalone venue statute and that nothing in the 1948 recodification evidenced an intent to alter that status, even the fact that §1391(c) by "its terms" embraced "all actions," 353 U.S., at 228. The Court also concluded that "resides" in the recodified version bore the same meaning as "inhabits" in the pre-1948 version.

This landscape remained effectively unchanged until 1988, when Congress amended the general venue statute, §1391(c). The revised provision stated that it applied "[f]or purposes of venue under this chapter." In *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F. 2d 1574, 1578, the Federal Circuit held that, in light of this amendment, §1391(c) established the definition for all other venue statutes under the same "chapter," including §1400(b). In 2011, Congress adopted the current version of §1391, which provides that its general definition applies "for all venue purposes." The Federal Circuit reaffirmed *VE Holding* in the case below.

(b) In *Fourco*, this Court definitively and unambiguously held that the word "residence" in §1400(b), as applied to domestic corporations, refers only to the State of incorporation. Because Congress has not amended §1400(b) since *Fourco*, and neither party asks the Court to reconsider that decision, the only question here is whether Congress changed §1400(b)'s meaning when it amended §1391. When Congress intends to effect a change of that kind, it ordinarily provides a relatively clear indication of its

intent in the amended provision's text. No such indication appears in the current version of §1391. Respondent points out that the current §1391(c) provides a default rule that, on its face, applies without exception "[f]or all venue purposes." But the version at issue in *Fourco* similarly provided a default rule that applied "for venue purposes," and those phrasings are not materially different in this context. The addition of the word "all" to the already comprehensive provision does not suggest that Congress intended the Court to reconsider its decision in Fourco. Any argument based on this language is even weaker now than it was when the Court rejected it in *Fourco*. *Fourco* held that §1400(b) retained a meaning distinct from the default definition contained in §1391(c), even though the latter, by its terms, included no exceptions. The current version of §1391 includes a saving clause, which expressly states that the provision does not apply when "otherwise provided by law," thus making explicit the qualification that the *Fourco* Court found implicit in the statute. Finally, there is no indication that Congress in 2011 ratified the Federal Circuit's decision in *VE Holding*.

Defenses

Inventorship

Vapor Point LLC v. Elliott Moorhead, 832 F.3d 1343 (Fed. Cir. 2016)

In a case involving cross claims for correction of inventorship under 35 U.S.C. § 256, the panel affirms, as being supported by substantial evidence, the district court's determination that two additional inventors be added as inventors to a NanoVapor patent. The panel also holds that NanoVapor cannot now assert equitable defenses to claims that were voluntarily dismissed. Moreover, NanoVapor waived its right to pursue ownership under an obligation-to-assign theory by representing that resolution of the inventorship issue would resolve the infringement issue. Finally, the panel rules that the district court did not abuse its discretion in refusing to assess attorney fees against NanoVapor.

NanoVapor is a leader in the containment of volatile organic compounds. After working with Moorhead to help market this technology, Nathan became COO of NanoVapor and hired Matheson to help with the commercial embodiment of the technology. Moorhead filed a provisional application that is the subject of NanoVapor's patent. NanoVapor alleged that Nathan and Matheson plotted to steal NanoVapor's technology and destroy NanoVapor's business when Nathan and Matheson developed the commercial embodiment of NanoVapor's concept.

In contrast, Vapor Point alleges that the patent for which NanoVapor applied wrongfully claimed all of Nathan and Matheson's conceptual and inventive contributions. Another NanoVapor patent, according to Vapor Point, similarly misappropriated Nathan and Matheson's work. Vapor Point asked the district court to add Nathan and Matheson as inventors, or possibly even substitute their names for Moorhead's. For its part, NanoVapor asked the district court to alter the inventorship of Vapor Point's five patents to include Moorhead because "the Vapor Point patents are based on Defendant Moorhead's conceptions in the '310 patent."

Without much legal or factual analysis other than describing the complicated factual scenario summarized above, the panel, with Judge O'Malley concurring, affirms that decision.

Collateral Estoppel

Phil-Insul dba IntegraSpec v. Airlite Plastics, 2017 U.S. App. LEXIS 6503 (April 17, 2017)

The Circuit rules that collateral estoppel precludes IntegraSpec from relitigating claim construction previously litigated in a case with another defendant even though the previously-construed claim is not the one presently being litigated.

IntegraSpec's patent is directed to insulating concrete forms that are used in building construction. In a prior case against Reward Wall involving very similar concrete forms, the district court granted summary judgment of noninfringement, which was affirmed by the Circuit under Rule 36 (without a written opinion). In the present case, Airlite successfully moved for summary judgment of noninfringement based upon collateral estoppel and the narrow claim construction rendered by the district court in *Reward Wall*.

The opinion first lays out the test for collateral estoppel under Eighth Circuit law:

(1) the party sought to be precluded must have been a party, or in privity with a party, to the original lawsuit; (2) the issue sought to be precluded must be the same; (3) the issue sought to be precluded must have been actually litigated; (4) the issue sought to be precluded must have been determined by a valid and final judgment; and (5) the determination in the prior action must have been essential to the prior judgment.

IntegraSpec argued on appeal that there was no final judgment since the appeal was decided under Rule 36 and that the determination in the prior action was not essential to the prior judgment. Specifically, IntegraSpec argued that the Circuit's 2013 *TecSec* case created a rule that a Rule 36 affirmance cannot have preclusive effect because the court could have affirmed based on any number of grounds and not only claim construction. The Circuit rejects this argument and rules that the *TecSec* holding only applies where the appellate court affirmed, without explanation, the judgment of a trial court that determined two issues, either of which could independently support the result.

In the *Reward Wall* appeal, IntegraSpec raised issues as to the construction of two terms: "adjacent" and "substantially the same dimension." The Rule 36 affirmance in *Reward Wall* necessarily meant that the Circuit found no error in either of the district court's claim constructions. Therefore, the case is easily distinguished from *TecSec*.

The panel also dismisses IntegraSpec's argument that claim 1 and not claim 2 was construed in *Reward Wall*, noting that the same disputed claim terms in this case—"adjacent" and "substantially the same dimension"—were at issue in both claims. It is well-established that claim terms are to be construed consistently throughout a patent, so the fact that a different claim is now being asserted is not relevant, as both the district court and the Circuit previously considered and rejected IntegraSpec's arguments regarding the two terms.

Laches and Estoppel

SCA Hygiene Products Aktiebolag v. First Quality Baby Products, 137 S. Ct. 954 (2017)

In 2003, SCA notified respondents First Quality that their adult incontinence products infringed an SCA patent. First Quality responded that its own patent antedated SCA's patent and made it invalid. In 2004, SCA sought reexamination of its patent in light of First Quality's patent, and in 2007, the PTO confirmed the SCA patent's validity. SCA sued First Quality for patent infringement in 2010. The District Court granted summary judgment to First Quality on the grounds of equitable estoppel and laches. While SCA's appeal was pending, this Court held that laches could not preclude a claim for damages incurred within the Copyright Act's 3-year limitations period. Petrella v. Metro-Goldwyn-Mayer, Inc., 572 U. S. _____. A Federal Circuit panel nevertheless affirmed the District Court's laches holding based on Circuit precedent, which permitted laches to be asserted against a claim for damages incurred within the Patent Act's 6-year limitations period, 35 U.S.C. §286. The en banc court reheard the case in light of Petrella and reaffirmed the original panel's laches holding.

Held: Laches cannot be invoked as a defense against a claim for damages brought within §286's 6-year limitations period.

(a) Petrella's holding rested on both separation-of-powers principles and the traditional role of laches in equity. A statute of limitations reflects a congressional decision that timeliness is better judged by a hard and fast rule instead of a case-specific judicial determination. Applying laches within a limitations period specified by Congress would give judges a "legislation-overriding" role that exceeds the Judiciary's power. Petrella. Moreover, applying laches within a limitations period would clash with the gap-filling purpose for which the defense developed in the equity courts.

(b) Petrella's reasoning easily fits §286. There, the Court found in the Copyright Act's language a congressional judgment that a claim filed within three years of accrual cannot be dismissed on timeliness grounds. By that same logic, §286 of the Patent Act represents Congress's judgment that a patentee may recover damages for any infringement committed within six years of the filing of the claim.

First Quality contends that this case differs from Petrellabecause a true statute of limitations runs forward from the date a cause of action accrues, whereas §286's limitations period runs backward from the filing of the complaint. However, Petrella repeatedly characterized the Copyright Act's limitations period as running backward from the date the suit was filed. First Quality also contends that a true statute of limitations begins to run when the plaintiff discovers a cause of action, which is not the case with §286's limitations period, but ordinarily, a statute of limitations begins to run on the date that the claim accrues, not when the cause of action is discovered.

(c) The Federal Circuit based its decision on the idea that §282 of the Patent Act, which provides for "defenses in any action involving the validity or infringement of a patent," creates an exception to §286 by codifying laches as such a defense, and First Quality argues that laches is a defense within §282(b)(1) based on "unenforceability." Even assuming that §282(b)(1) incorporates a laches defense of some dimension, it does not necessarily follow that the defense may be invoked to bar a claim for damages incurred within the period set out in §286. Indeed, it would be exceedingly unusual, if not unprecedented, if Congress chose to include in the Patent Act both a statute of limitations for damages and a laches provision applicable to a damages claim. Neither the Federal Circuit, nor any party, has identified a single federal statute that provides such dual protection against untimely claims.

(d) The Federal Circuit and First Quality rely on lower court patent cases decided before the 1952 Patent Act to argue that §282 codified a pre-1952 practice of permitting laches to be asserted against damages claims. But the most prominent feature of the relevant legal landscape at that time was the well-established rule that laches cannot be invoked to bar a claim for damages incurred within a limitations period specified by Congress. In light of this rule, which Petrellaconfirmed and restated, nothing less than a broad and unambiguous consensus of lower court decisions could support the inference that § 282(b)(1) codifies a very different patent-law-specific rule. The Federal Circuit and First Quality rely on three types of cases: (1) pre-1938 equity cases; (2) pre-1938 claims at law; and (3) cases decided after the merger of law and equity in 1938. None of these establishes a broad, unambiguous consensus in favor of applying laches to damages claims in the patent context.

Infringement

Based on Actions Outside of the US

Life Technologies Corp v. Promega Corp., 137 S. Ct. 734 (2017)

Promega sublicensed the Tautz patent, which claims a toolkit for genetic testing, to petitioner Life Technologies for the manufacture and sale of the kits for use in certain licensed law enforcement fields worldwide. One of the kit's five components, an enzyme known as the Taq polymerase, was manufactured by Life Technologies in the U.S. and then shipped to the United Kingdom, where the four other components were made, for combination there. When Life Technologies began selling the kits

outside the licensed fields of use, Promega sued, claiming that patent infringement liability was triggered under §271(f)(1), which prohibits the supply from the U.S. of "all or a substantial portion of the components of a patented invention" for combination abroad.

The jury returned a verdict for Promega, but the District Court granted Life Technologies' motion for JMOL, holding that 271(f)(1)'s phrase "all or a substantial portion" did not encompass the supply of a single component of a multicomponent invention. The Federal Circuit reversed. It determined that a single important component could constitute a "substantial portion" of the components of an invention under 271(f)(1) and found the Taq polymerase to be such a component.

Held: The supply of a single component of a multicomponent invention for manufacture abroad does not give rise to $\frac{271(f)(1)}{10}$ liability.

(a) Section 271(f)(1)'s phrase "substantial portion" refers either to qualitative importance or to quantitatively large size, the statutory context points to a quantitative meaning. Neighboring words "all" and "portion" convey a quantitative meaning, and nothing in the neighboring text points to a qualitative interpretation. Moreover, a qualitative reading would render the modifying phrase "of the components" unnecessary the first time it is used in §271(f)(1). Only the quantitative approach thus gives meaning to each statutory provision.

Promega's proffered "case-specific approach," which would require a factfinder to decipher whether the components at issue are a "substantial portion" under either a qualitative or a quantitative test, is rejected. Tasking juries with interpreting the statute's meaning on an ad hoc basis would only compound, not resolve, the statute's ambiguity. And Promega's proposal to adopt an analytical framework that accounts for both the components' quantitative and qualitative aspects is likely to complicate rather than aid the factfinder's review.

(b) Under a quantitative approach, a single component cannot constitute a "substantial portion" triggering 271(f)(1) liability. This conclusion is reinforced by 271(f)'s text, context, and structure. Section 271(f)(1) consistently refers to the plural "components," indicating that multiple components make up the substantial portion.

Reading 271(f)(1) to cover any single component would also leave little room for 271(f)(2), which refers to "any component," and would undermine 271(f)(2)'s express reference to a single component "especially made or especially adapted for use in the invention." The better reading allows the two provisions to work in tandem and gives each provision its unique application.

(c) The history of §271(f) further bolsters this conclusion. Congress enacted §271(f) in response to *Deepsouth Packing Co. v. Laitram Corp.*, 406 U. S. 518, to fill a gap in the enforceability of patent rights by reaching components that are manufactured in the United States but assembled overseas. Consistent with Congress's intent, a supplier may be liable under §271(f)(1) for supplying from the United States all or a substantial portion of the components of the invention or under §271(f)(2) for supplying a single component if it is especially made or especially adapted for use in the invention and not a staple article or commodity. But, as here, when a product is made abroad and all components but a single commodity article are supplied from abroad, the activity is outside the statute's scope.

Claim Construction

Aylus Networks, Inc. v. Apple, Inc., Fed. Cir. Case 2016-1599 (May 11, 2017)

Aylus claimed that Apple's AirPlay system, which allows users to stream video and music between devices, infringed its patent. The panel affirms summary judgement that Apple's system does not infringe based upon a prosecution disclaimer by Aylus in its response to Apple's petitions for IPR.

Apple filed two separate petitions for IPR, and the Board instituted as to some but not all of the challenged claims. Following institution, Aylus filed a notice of voluntary dismissal in the district court, dismissing with prejudice its infringement contentions as to all of the asserted claims except claims 2 and 21, two of the claims that were denied institution in the IPR. Apple filed a motion for summary judgment of noninfringement as to these claims, which was granted based on the district court's construction of a limitation found in each of the two claims. In construing the critical limitations the district court relied on statements made by Aylus in its preliminary responses to Apple's petitions for IPR, finding the statements "akin to prosecution disclaimer." On appeal, Aylus argued that statements made during an IPR cannot be relied on to support a finding of prosecution disclaimer. Alternatively, Aylus argued that its statements did not constitute a clear and unmistakable disclaimer of claim scope.

The panel rejects both arguments, noting first that for prosecution disclaimer to attach, Circuit precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable. Such a disclaimer was present here.

According to the panel, the doctrine is rooted in the understanding that "competitors are entitled to rely on those representations when determining a course of lawful conduct, such as launching a new product or designing-around a patented invention." Ultimately, the doctrine of prosecution disclaimer ensures that claims are not "construed one way in order to obtain their allowance and in a different way against accused infringers." While normally found in pre-issuance prosecution, the doctrine has been applied by the Circuit in reissue and reexamination proceedings. It follows that we should apply the doctrine in IPR proceedings as well. This will ensure that claims are not argued one way in order to maintain their patentability, and in a different way against accused infringers.

Aylus argues that statements made during an IPR proceeding are unlike those made during a reissue or reexamination proceeding because an IPR proceeding is an adjudicative proceeding as opposed to an administrative proceeding. This argument is belied by the Supreme Court's recent decision in *Cuozzo*, where the Court recognized that, in some significant respects, inter partes review is less like a judicial proceeding and more like a specialized agency proceeding. As such, it follows that statements made by a patent owner during an IPR proceeding can be considered during claim construction and relied upon to support a finding of prosecution disclaimer.

The panel also rejects the Aylus argument that its statements were not part of an IPR proceeding because they were made in a preliminary response before the Board issued its institution decision. Regardless of when the statements are made during the proceeding, the panel holds that the public is entitled to rely on those representations when determining a course of lawful conduct, such as launching a new product or designing-around a patented invention. In its response, Aylus told the PTO that there were a number of substantial differences between the challenged claims and the asserted references. Third parties such as Apple should be allowed to rely on these responses when attempting to design around a patent.

Core Wireless Licensing v. Apple, Inc., 2017 U.S. App. LEXIS 6410 (April 14, 2017)

The Circuit affirms a judgment of non-infringement of a patent directed to a system for sending data from a cell phone to the network using a selected channel. The patent in suit is one of the 2,000 patents and applications that Core Wireless purchased from Nokia.

Cell phones can transmit data packets to a cellular network (known as an uplink) in one of two ways either by using a shared "common channel," which carries transmissions from multiple mobile stations, or by using a "dedicated channel," which carries transmissions from a single mobile station or cell phone. Dedicated channels permit faster and more reliable transmissions than common channels, but dedicated channels are at a premium, as there are not enough dedicated channels to carry all cellular transmissions. One aspect of this problem is whether the network or the cell phone should select the channel for the uplink. In the prior art, the phone would send the network information about the data packet to be sent so that the network could make the channel selection decision. But selection by the network wastes valuable system resources, because it requires the phone to send a message to the network regarding the data packet the phone wants to transmit, and then requires the network to make the channel selection decision.

The solution provided by the patent is to have the mobile station, not the network, make the uplink channel selection decision. Because the mobile station makes the channel selection decision, it does not use up traffic capacity by sending the message about the data packet to the network so that the network may select a channel.

The only claim that went to trial reads:

A mobile station connected with a cellular system, comprising means for sending uplink packet data to the system using a selected channel, wherein the selected channel is either a common channel (RACH) or dedicated channel (DCH), characterized in that it also comprises:

means for receiving a threshold value of the channel selection parameter from the system,

means for storing said threshold value of the channel selection parameter, and

means for comparing said threshold value of the channel selection parameter to a current value of the channel selection parameter for basis of said channel selection.

At trial, Apple showed that the network, not the cell phone, is responsible for selecting which channel to use for uplink transmissions, and that its cell phones lack the capability to select between common and dedicated channels for packet data transfer. Core Wireless contends that under the magistrate's claim construction, the cell phone need do no more than make a comparison, while Apple contends that the phone must have the capability to select a dedicated channel when the relevant threshold conditions are met. The problem with Core Wireless's argument is that the premise is incorrect: The magistrate did not clearly reject Apple's position and adopt Core Wireless's position. Instead, the magistrate focused primarily on whether Apple's control unit was a general purpose processor. Significantly, the magistrate included in his construction references to the patent specification that indicate that channel selection can be performed by the phone, consistent with the district court's discussion of the claim construction issue in its JMOL order.

Core Wireless argued that the district court erred in its JMOL order, where it explicitly construed the "means for comparing" limitation to require that the mobile station have the capability to make channel selections. The panel concludes that the court was correct that the claim requires a showing that the accused phones were capable of making channel selection decisions, and that the specification, prosecution history and extrinsic evidence all support this construction.

The panel therefore holds that a reasonable jury could find Apple's devices non-infringing based on that evidence, and that the district court correctly denied Core Wireless's motion for JMOL.

The Medicines Company v. Mylan, 853 F.3d 1296 (Fed. Cir. 2017)

The panel reverses a ruling that two Medicines patents directed to its ANGIOMAX® anti-clotting drug were infringed by a product proposed in Mylan's ANDA filing.

Medicines sued Mylan for patent infringement based on Mylan's seeking to market a generic version of ANGIOMAX. After construing the claims, the district court held on summary judgment that Mylan did not infringe the '343 patent because Mylan's process is more inefficient than the "inefficient mixing process" of Example 4. With respect to the '727 patent, however, the court held that "efficiently mixing" was not a claim limitation, so this precluded summary judgment. After a bench trial, the court held that Mylan's ANDA filing infringed the '727 patent.

On appeal, the panel agrees with Mylan that "efficient mixing" is required by the "batches" limitation and is therefore a limitation of both the '727 and '343 patents. Adopting Medicines' interpretation of the "batches" limitation would yield an unworkable claim construction. Under Medicines' interpretation, proof of infringement would necessitate forward-looking assessments of whether an accused infringer's production of future or "potential" batches would meet the claimed purity levels. If a defendant using the same process produced fifty batches, each reaching that purity level, each of those fifty batches would infringe. But the defendant would not know whether any of the batches infringed until all fifty batches had been produced. For an ongoing commercial compounding process, under Nautilus, this approach cannot provide "reasonable certainty" regarding the scope of the asserted claims.

As to the construction of "efficient mixing," Medicines extracts a verbatim statement from the specification that purports to define the term. However, according to the panel, this statement is not "definitional" because it does not accord with the linguistic formula used by the patentee to signal the designation of other defined terms. In defining terms, the patentee always used a similar format: the defined term in quotation marks, followed by the terms "refers to" or "as defined herein." Because the quoted language departs from this format, the statement Medicines relies on lacks the clear expression of intent necessary for a patentee to act as its own lexicographer.

Moreover, Medicines' construction of "efficient mixing" attempts to cover all methods of meeting this purity level, without describing the entire range of processes. The panel rejects this argument, noting that the compounding must be defined in terms of the particular processes identified in the specification, so Medicines' construction is not correct.

In the panel's view, Examples 4 and 5 in the specification clearly state what efficient mixing is and is not. Based on this, the panel construes the "efficient mixing" required by the patents in suit to require using the efficient mixing conditions of Example 5. Under this claim construction, Mylan's ANDA does not infringe the asserted claims since Mylan does not use the process required by Example 5.

Comment: Readers may recall that in an earlier appeal, a panel of the Circuit found these patents invalid because of a sale to Medicines from its supplier Ben Venue. An *en banc* Circuit disagreed, holding that Medicines' relationship with Ben Venue was such that Medicines was only purchasing services, and since title to the product never passed between the two entities, this was not a barring "sale." See *Medicines v. Hospira*, 827 F.3d 1363 (Fed. Cir. 2016)

TVIIM v. McAfee, 2017 U.S. App. LEXIS 4979 (March 21, 2017)

The Circuit affirms the district court's findings of non-infringement and invalidity under a uniform construction of disputed claim terms after finding that TVIIM waived its right to any new claim construction. The panel also holds that the district court did not abuse its discretion in denying a new trial.

TVIIM sued McAfee for infringement of a patented system that both identifies potential security threats to a computer and, under certain conditions, recommends action to a user to stop the threat. McAfee asked the district court to construe a single claim term: "vulnerability." The court ruled that "vulnerability" should have its plain and ordinary meaning, which is not limited to pre-existing security problems or vulnerabilities. The parties agreed that "vulnerability" is an "exploitable weakness in a computer system."

The jury returned a verdict finding that McAfee did not infringe and that the patent was invalid. TVIIM moved for JMOL, which the district court denied. TVIIM argued on appeal that the jury's findings are inconsistent since it could not have issued a verdict of non-infringement and invalidity because the disputed claim terms have more than one ordinary meaning. But the Circuit is quick to note that TVIIM did not seek the district court's construction of any of the disputed terms. Specifically, TVIIM never presented multiple ordinary meanings of the disputed claim terms or showed that the disputed claim terms are open to varying interpretations. The Circuit thus holds that TVIIM waived any new construction of the disputed claim terms by not requesting that these terms be construed by the district court. The Circuit also rules that substantial evidence supports the jury's verdict of non-infringement based on using the same

construction it used for its invalidity verdict. Finally, the panel holds that even if an error occurred in the jury's verdict of infringement, such an error was harmless.

Technology Properties Ltd. LLC v. Huawei Technologies Co., 849 F.3d 1349 (Fed. Cir. 2017)

TPL sued a number of device manufacturers, contending that products manufactured by Nintendo, Samsung and LG infringed its patent, which claims ways for processors to adjust their speeds for maximum performance. The panel vacates the construction of "entire oscillator," describing a clock (oscillator) in a microprocessor, and remands the case. Two disclaimers derived from the prosecution history were held to limit the "entire oscillator" term. In one case, the corresponding limitation was affirmed even though it was broader than necessary to overcome the rejection. In the other, the panel reverses and remands because the district court's construction applied the disclaimer too broadly in view of the context of applicant's remarks.

The claim at issue requires, among other things, "an entire oscillator disposed upon said integrated circuit substrate," which refers to the variable-frequency CPU clock. The district court construed the term to mean "an oscillator located entirely on the same semiconductor substrate as the central processing unit *that does not require a control signal and whose frequency is not fixed by any external crystal.*" Defendants contend the second half of the construction is proper because the patentee disclaimed certain claim scope during prosecution to overcome rejections based on patents to Magar and Sheets.

Magar discloses a microprocessor having a clock generator circuit that relies on an *external crystal*. TPL argues the district court erred by limiting the "entire oscillator" to one "whose frequency is not fixed by any external crystal." It distinguishes Magar by arguing (1) Magar requires an off-chip crystal oscillator, while the claim generates the CPU clock signal on-chip; (2) Magar's only oscillator is the off-chip crystal that is input to CLOCK GEN, which is located on the same silicon substrate as the CPU; and (3) CLOCK GEN itself is not an oscillator because it simply takes the output of the off-chip crystal and modifies it to produce four derivative signals.

The panel holds that the argument TPL raises on appeal may have been sufficient to traverse the Magar rejection, but this is not the argument TPL presented during prosecution. Had those same arguments been made to the Patent Office, our construction may have been different because TPL likely disclaimed more than was necessary to overcome the rejection. When this happens, we hold patentees to the actual arguments made, not the arguments that could have been made.

While the Circuit describes this change in construction as "minor," and "likely does not affect the outcome in this case," because the parties stipulated to non-infringement under the district court's construction, the proper course of action is for the panel to vacate and remand.

MPHJ Tech. Investments, LLC v. Ricoh Americas Corp., 847 F.3d 1363 (Fed. Cir. 2017)

MPHJ appealed an IPR decision by the PTAB that found the claims of MPHJ's patent directed to scan-toemail technology to be anticipated. In its opinion affirming the decision, the panel considers the fact that the related provisional application included a limiting description of disputed claim terms that was omitted in the non-provisional to be evidence that the inventor intended a broader definition of the disputed claim terms. The panel affirms the Board's decision of anticipation based on the broader definition of the disputed claim terms.

The patent is directed to a virtual copier that "extends the notion of copying from a process that involves paper going through a conventional copier device, to a process that involves paper being scanned from a device at one location and copied to a device at another location." Independent claim 1 recites that "in response to the selection of said Go button, an electronic document management system integrates at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations." Additionally, independent method

claim 4 recites "interfacing between at least one of said scanner, digital copier or other multifunction peripheral and email application software." MPHJ argued that the terms "seamlessly," "interfacing," and "Go button" represent a single-step operation that does not require any human intervention between the selection of the Go button and the replication at the external destination.

Under the broadest reasonable interpretation required by *Cuozzo*, the panel holds that the terms "seamlessly," "interfacing," and "Go button" do not limit the claims to a single-step operation either inherently or as informed by the specification. Additionally, the specification describes the one-step operation as "optional." MPHJ pointed to passages from the provisional application to which the patent claims priority, which described that "the IMAGinE Virtual Copier can copy paper from a physical device directly into a third-party software application in one step," and distinguished the virtual copier from prior art systems that required two or more steps. However, these passages were omitted from the non-provisional application. The panel states that "a person of skill in this field would deem the removal of these limiting clauses to be significant." Accordingly, the panel holds that the claims would encompass a multi-step operation, and are therefore anticipated.

Judge O'Malley concurs in part and dissents in part, saying that she agrees that claims 1-3 are anticipated but that she would uphold the patentability of claims 4-8. Judge O'Malley disagrees with the majority's interpretation of the effect of the omission of description that was included in the provisional application. She notes that the provisional application was incorporated by reference in the non-provisional application, so the "omitted" portions were actually effectively included in the non-provisional application. Because of this and further evidence in the specification, Judge O'Malley would hold that the terms "Go button" and "interfacing" require a one-step operation.

Comment: This case serves as a warning to all of us that when we make changes to the disclosure in preparing a non-provisional application based upon a previously-filed provisional, we need to make sure to be that lexicographer we hear so much about if we don't want those changes to be held against our client during claim construction.

John D'Agostino v. MasterCard International, Inc., 844 F.3d 945 (Fed. Cir. 2016)

The panel vacates an IPR determination of anticipation and obviousness of two patents being asserted against MasterCard, based on an unreasonable claim interpretation by the Board. The patents disclose processes for generating limited-use transaction codes to be given to a merchant by a customer, an objective being to enhance security by withholding the customer's credit card number from the merchant and instead using a transaction code to complete the transaction.

The claims recite a method for performing credit card purchases, including the step:

b) receiving a request from said account holder for a transaction code to make a purchase within a payment category that at least limits transactions *to a single merchant*, said single merchant limitation being included in said payment category *prior to any particular merchant being identified as said single merchant*

The Board found that Cohen meets the single-merchant limitation based on an embodiment that limits credit-card transactions to a particular *chain of stores*. The Board also found that Cohen discloses the step of defining and designating the "payment category" *before the transaction code is generated*.

The panel first construes the "single-merchant" limitation to require a separation in time between the communication of one piece of information and the communication of another. The panel finds that both the specification and prosecution history support this construction.

According to the opinion, the single-merchant limitation thus requires, simply, that, when the transaction code is requested, the request limits the number of authorized merchants to one but does not then identify the merchant, such identification occurring only later. The problem with the Board's conclusion is

that Cohen's teaching falls outside the single-merchant limitation. If Target is more than one merchant, then telling the authorizing entity to limit transactions to Target is not limiting the number of merchants to one. If Target instead is one merchant, then telling the authorizing entity to limit transactions to Target is not withholding the identity of the particular merchant—and the Target scenario is for that reason outside the second clause of the claim limitation.

Based upon this claim construction, the panel sets aside the Board's ruling that Cohen renders invalid the claims at issue.

Massachusetts Inst. of Tech. v. Shire Pharm., Inc., 839 F.3d 1111 (Fed. Cir. 2016)

MIT sued Shire Pharma for infringement of two patents directed to a system for growing artificial organ tissue, based on Shire's sale of its Dermagraft product for treating diabetic foot ulcers. The district court broadly construed the claims to cover skin that is grown using the claimed process. The panel affirms the broad construction and rejects Shire's argument that the claims are indefinite.

The panel first rejects Shire's argument that MIT disclaimed a construction of "vascular organ tissue" that included "skin." This ruling is based on the ordinary meaning of the term, that the specification supports the broad construction, and that the prosecution argument on which Shire relies did not constitute a "clear and unmistakable" disavowal of the broader construction. The portions of the prosecution history cited by Shire were in the course of MIT's arguments that it was entitled to coverage for "non-skin" cells. When MIT presented that argument to the Examiner, the claims did not include the term "vascularized organ tissue," so there was no clear and unmistakable disavowal.

The panel also affirms the construction of "cells derived from a vascularized tissue" to include both parenchymal and non-parenchymal (e.g., bone-forming) cells. Shire argued that the specification repeatedly refers to the cells of the invention as "parenchymal," but the panel holds that the specification's noting "an advantage of the present method" being "a means for selective transplantation of parenchymal cells" does not amount to a clear and unmistakable disclaimer.

Finally, even though the district court used non-technical and contemporaneous dictionaries, Shire does not explain how technical dictionaries contemporaneous with the filing date would define the term any differently. Given the foregoing, the panel also agrees with the district court that the claim language is sufficiently definite under *Nautilus*.

While conceding she is bound by the Circuit's 2013 en banc *Bosch* decision, Judge O'Malley writes in concurrence that she agrees with the panel's construction and ruling on definiteness, but believes the Circuit should not continue its practice of exercising jurisdiction in cases where the district court has yet to determine damages and/or willfulness.

Poly-America, L.P. v. API Industries, Inc., 839 F.3d 1131 (Fed. Cir. 2016)

The panel holds that the specification and prosecution history of Poly-America's patent contain clear and unequivocal statements that the inventor intended to limit the claimed invention to a trash bag with "short seals" at its upper corners that extend inwardly to narrow the bag's upper opening. In light of the inventor's disavowal, the panel affirms the district court's construction.

Specifically, the specification states: "In looking at both FIG. 1 and FIG 2, it is important to note that one of the characteristics of the present invention is a reduction in upper width . . . resulting from the extended short seals." According to the opinion, directing the reader to Figures 1 and 2 does not limit the import of this clear statement that describes a characteristic feature of the invention. The panel also holds that the inventor disavowed a broad construction because the specification disparages prior art based on the absence of that feature.

Poly-America's reply to the examiner's second rejection of all claims also contains a clear and unmistakable disavowal of short seals that do not extend inwardly: The argument was that the relaxed upper opening width of Schneider is the exact same as the bag proper width, not less than the bag proper width *as required by Applicant's independent claims*. According to the opinion: "It is irrelevant that the terms "bag proper width" and "relaxed upper opening width" are not present in claim 10 [an independent claim], which was being argued at the time, because when considered in light of the specification, it is clear that all of the claimed trash bags have a "relaxed upper opening width" and a "bag proper width." Ultimately, according to the opinion, the only meaning that matters in claim construction is the meaning in the context of the patent.

Finally, as the Circuit has done in several recent cases, it rejects Poly-America's argument based on claim differentiation, holding that claim differentiation cannot override clear statements of claim scope found in the specification and prosecution history.

Apple Inc. v. Samsung Elecs. Co., 839 F.3d 1034 (Fed. Cir. 2016)

Apple alleged infringement of five of its smartphone patents, and Samsung countersued for infringement of two of its patents. After a jury trial, the district court entered a judgment awarding Apple \$119,625,000 in damages and ongoing royalties. In a February decision, a panel of the Circuit reversed the denial of Samsung's motion for JMOL of non-infringement as to the principal patent in suit, determining that Apple failed to prove that the accused Samsung products use a so-called "quick links" feature that permits users to quickly click on phone numbers and other links, rather than having to copy and paste. The Circuit also reversed the denial of JMOL of invalidity of two of Apple's patents, directed to the iPhone's "slide to unlock" and "autocorrect" features, rejecting Apple's arguments as to secondary considerations such as commercial success and praise from Apple users.

In an en banc decision, with one dissent, the Circuit reinstates the district court judgments as to the three patents in suit, holding that the jury verdict on each issue is supported by substantial evidence and the district court did not err when denying Samsung's JMOLs. The Circuit notes that it granted Apple's en banc petition to affirm its understanding of the appellate function as limited to deciding issues raised on appeal by the parties, "deciding these issues only on the basis of the record made below, and as requiring appropriate deference be applied to the review of factual findings." According to the majority, the Supreme Court made it clear in *Teva v. Sandoz* that findings of fact [there relating to claim construction] "are indisputably the province of the district court."

The majority notes that the panel reversed nearly a dozen jury fact findings including infringement, motivation to combine, the teachings of prior art references, commercial success, industry praise, copying, and long-felt need across three different patents. It did so despite the fact that some of these findings were not appealed and without ever mentioning the applicable substantial evidence standard of review. And with regard to objective indicia, it did so in ways that departed from existing law.

In dissent, Judge Dyk raises questions about how aspects of the obviousness doctrine ought to operate, but the majority notes that no party—at the panel or the petition for rehearing en banc stage—invited the Circuit to consider changing the existing law of obviousness. The case was taken en banc to affirm the Circuit's understanding of its appellate function, to apply the governing law, and to maintain its fidelity to the Supreme Court's *Teva* decision.

Given the length of the opinion, we have not attempted to edit it down to our normal two or three pages, but the full opinion does make for interesting reading.

Cox Commc'n, Inc. v. Sprint Commc'n Co. LP, 838 F.3d 1224 (Fed. Cir. 2016)

The Circuit reverses a ruling that the asserted claims of a Sprint patent are invalid as indefinite under 35 U.S.C. § 112, ¶ 2. The patent in suit is directed to so-called voice-over-IP, which allows telephone calls to be transmitted over the Internet, instead of through traditional telephone lines. The majority opinion

initially notes that this case presents a peculiar scenario: the sole source of indefiniteness that Cox complains of, "processing system," plays no discernable role in defining the scope of the claims. All of the asserted claims are method claims, and the point of novelty resides with the steps of these methods, not with the machine that performs them. "Processing system" is merely the locus at which the steps are being performed. The plain language of the claims proves this point: if representative claim 1 is revised to remove the word "processing system," the meaning would not discernably change.

As *Nautilus* instructs, if a person of ordinary skill cannot discern the scope of a claim with reasonable certainty, it may be because one or several claim terms cannot be reliably construed. Nevertheless, indefiniteness under § 112, ¶ 2 must ultimately turn on the question set forth by *Nautilus*: whether the *"claims*, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." The Circuit concludes that, applied here, "processing system" does not prevent the claims from doing just that.

Cox contended that "processing system" is indefinite because the asserted claims only describe it in functional terms. The Circuit disagrees, pointing out that claims are not per se indefinite merely because they contain functional language.

In a concurring opinion, Judge Newman notes that she reads the majority opinion as providing "a new protocol of claim construction" with which she disagrees. She argues that, according to the majority's analysis, the adjudicator (1) first removes the challenged term from the claim, then (2) decides whether the claim has the same meaning without the challenged term, and (3) if the answer is "yes," rules that the claim is not indefinite as a matter of law. "This new style of claim construction will confound the already confused determination of patent rights."

GPNE Corp. v. Apple Inc., 830 F.3d 1365 (Fed. Cir. 2016)

The Circuit affirms a judgment of non-infringement that Apple's iPhone and iPad do not infringe two patents of GPNE because they do not operate like pagers, independent of phone networks.

First, the panel affirms the construction of "node" as "a pager with two-way data communications capability that transmits wireless data communications on a paging system that operates independently from a telephone network." GPNE conceded that the specification refers to "nodes" as "pagers," but argued that the specification also contains evidence that "node" should be construed more broadly. However, the panel notes that the specification and prosecution history repeatedly use "pager" in reference to the patented system.

GPNE also argues that claim differentiation supports its position but the panel notes, as it has in several recent decisions, that claim differentiation is not a hard and fast rule, but rather a presumption that can be overcome when the intrinsic evidence dictates a contrary construction. The claims that GPNE contrasts differ in more ways than just their use of "node" or "pager," so the inference that different phrases used in separate claims indicate that the claims have different meanings and scope is weak at best.

GPNE also argued that the limitation "operates independently of a telephone network" is inappropriate because it is based on what it contends is a "single summation sentence" from the specification. But according to the panel, when a patent and the prosecution history describes the features of the "present invention," this description limits the scope of the invention.

GPNE did not articulate an infringement position based on the district court's construction of "node" so the panel affirms the judgment of non-infringement. The Circuit also rules that the district court did not abuse its discretion in denying GPNE's motion for new trial based on Apple's arguments at trial distinguishing its devices from 1990s-era pagers, effectively using historic pagers to define the term "pager." According to GPNE, because the court allowed these arguments, the jury was left to determine the meaning of "pager," which violated the *02 Micro* rule that it is the duty of the court to resolve claim construction issues. However, according to the opinion, this duty to resolve claim construction is not without limits because

such an endeavor could proceed ad infinitum, as every word—whether a claim term itself, or the words a court uses to construe a claim term—is susceptible to further definition.

Wi-LAN USA, Inc. v. Apple Inc., 830 F.3d 1374 (Fed. Cir. 2016)

Wi-LAN contends that Apple's iPhone operating on a 4G network infringes two patents based on developments by Ensemble Communications in the late '90s. Wi-LAN appeals the claim construction of the term "specified connection" in its '040 patent and the term "UL connections" in its '640 patent. The panel first rejects Apple's argument that the district court abused its discretion in ruling that Wi-LAN did not waive its claim construction argument as to "UL connections," even though Wi-LAN made this claim construction argument for the first time in a motion for reconsideration of the district court's summary-judgment order. However, the panel affirms both of the district court's claim constructions, preventing Wi-LAN from using its older patents to encompass Apple's iPhone.

The '040 patent addresses an efficiency gain that a network with intermediary nodes can provide. Claim 1 focuses on the intermediary node—here claimed as a "node for a communications system"—and describes the process by which it converts non-uniform "service data units" that it receives from its user devices into uniform "protocol data units" for retransmission to the base station:

In affirming the district court's construction of the '040 patent, the panel credits the specification's consistent description of intermediary nodes maintaining multiple connections to user devices and the claims' and specification's descriptions of "allocating" bandwidth to a specified connection based on its "priority." The panel thus rules that "specified connection" excludes embodiments where an intermediary node can maintain only one specified connection, such as in the iPhone.

The '640 patent describes a process by which a network with an intermediary node can allocate uplink bandwidth—its data-carrying capacity in the direction from user devices to the base station—among its various user devices. Claim 1 describes a process where the intermediary node—claimed as a "wireless subscriber radio unit" here—registers itself with the base station, requests and receives uplink bandwidth from the base station in which to transmit a second bandwidth request, makes this second bandwidth request and receives bandwidth, and then allocates this bandwidth to its "UL connections."

The parties agree that "UL" in this term means "uplink." "Uplink" refers to a direction of data flow from user devices through intermediary nodes to the base station. The term "UL connections" thus refers to some set of connections in the uplink direction. Referring to the patent as a whole as well as the prosecution history, the panel construes this term to refer to the intermediary node's connections with user devices, not the base station, thus rendering the iPhone non-infringing as to this patent as well.

Indacon, Inc. v. Facebook, Inc., 824 F.3d 1352 (Fed. Cir. 2016)

Indacon filed suit against Facebook, alleging that the software architecture for Facebook's social network infringes its patent. On appeal, Indacon disputes the construction of four claim terms: "alias," "custom link," "custom linking relationship," and "link term." The panel affirms the constructions of the district court.

The district court construed the claim term "alias" as a "*textual expression* that the user can define to serve as an alternative name or label." Indacon argued that this term encompasses a "textual or graphical hyperlink," and not just "textual expression." In reaching its construction, the district court first construed "term" as "textual expression, such as words," finding an express definition of "term" in the specification as "words, numbers, spaces, etc." Then, finding that the specification described an alias as a term, the court looked to this construction of "term" to determine that "alias" is similarly limited to textual expression. The panel agrees with the district court that the use of "etc." in this definition implies additional, but similar forms of expression and does not reasonably encompass graphical expression. Neither the specification nor the prosecution history supports a broader construction.

The panel also agrees with Facebook that the link claim terms have no plain or established meaning to one of ordinary skill, and thus cannot be construed broader than the disclosure in the specification. The specification supports the district court's construction that the link terms are capable of being identified as a link. Indacon argues that claim differentiation precludes the district court's construction because certain claims recite linking *instances* while other claims recite linking *all instances* of the link terms. However, the panel rules that where the compared claims (here, independent claims) are not otherwise identical in scope, claim differentiation does not apply.

Ruckus Wireless, Inc. v. Innovative Wireless Solutions, LLC, 824 F.3d 999 (Fed. Cir. 2016)

Innovative Wireless Solutions wrote demand letters to dozens of hotels and coffee shops, contending that they were infringing patents issued to IWS by providing WiFi Internet access using routers sold by Ruckus and Cisco ("Ruckus"). Ruckus stepped in to defend their customers, filing a declaratory judgment action. As to non-infringement, Ruckus successfully argued that its wireless equipment does not infringe the patents because the patents are limited to wired rather than wireless communications. IWS appeals the non-infringement judgment but a majority of a divided panel affirms the claim construction in which the term "communications path" was construed to be limited to wired rather than wireless communications.

IWS's argued that "communications path" has an ordinary meaning which encompasses both wired and wireless communications, but the majority finds no intrinsic or extrinsic evidence to support IWS's position that this is the way the term would have been understood by a person of ordinary skill at the time of invention. First, the title of the patents indicates that they are directed to "Communicating Information Packets *Via Telephone Lines.*" Second, the specification describes "this invention" as one "particularly concerned" with "two wire lines such as telephone subscriber lines." Third, every embodiment described in the specification utilizes a telephone wire. According to the panel, though these descriptions in the specification do not expressly exclude wireless communications, they do not include them, and they discourage that understanding. Further, IWS did not present any extrinsic evidence showing that "communications path" was a term of art or otherwise understood to include wireless communications at the time of invention.

In dissent, Judge Stark of the Delaware District agrees there is no extrinsic evidence to support the IWS argument that the plain and ordinary meaning of "communications path" to a person of skill included wireless communications. However, rather than supporting affirmance, he feels the judgment should be vacated and remanded for the district court to decide whether to provide the parties an opportunity to present extrinsic evidence.

Comment: It is unfortunate for IWS that the prosecuting attorney wasn't as careful drafting the specification as he or she was in developing the claims. Moreover, once the attorney realized that claims were going to be allowed broadly claiming a "communications path," the specification should have been amended to delete the severely limiting language cited in the opinion. Addition of references to "wireless communications" would likely have been rejected as new matter but there is no reason why references to "communications path" could not have been substituted for references to "telephone lines," "wire lines," and "wired connections," particularly when reference is being made to "the invention." This would not have helped IWS respond to the inevitable enablement argument, but it would have strengthened IWS's infringement case. This case also demonstrates that we always should submit extrinsic evidence to support our constructions so as not to fall prey, as IWS did here, to the argument on appeal that no such evidence existed.

David Netzer Consulting Engineer LLC v. Shell Oil Company, 824 F.3d 989 (Fed. Cir. 2016)

The panel affirms the grant of summary judgment of noninfringement as to a patent directed to a process for coproduction of ethylene and purified benzene in a process designed to be less expensive than conventional processes. The panel rules that the specification clearly shows that the inventor contemplated the claimed invention to be different from conventional extraction, such as that practiced by Shell, which produces highly pure, nitration-grade 99.9% benzene. Therefore, there can be no infringement, either literally or under the doctrine of equivalents. The panel first affirms the district court's claim construction ruling, finding that the intrinsic record supports the narrower construction advocated by Shell in which the claim term "fractionating" was construed to mean separating compounds based on differences in boiling points, *i.e.*, distillation, which excludes extraction, such as in the Sulfolane process. The specification repeatedly and consistently uses "fractionating" or "fractionation" to describe separating petrochemicals based on boiling point differentials. Moreover, the specification includes clear and unmistakable statements distinguishing the claimed invention from and disclaiming conventional extraction methods that produce 99.9% pure benzene. The panel rejects Netzer's argument of claim differentiation and the argument he makes that the specification supports his position quotes a sentence that is taken out of context.

The panel then applies the properly construed claim language to the accused process and rules that the district court did not err in granting summary judgment of noninfringement. Shell relies on conventional extraction—more specifically, its own Sulfolane process—to refine a mixture containing about 57% benzene to a benzene product of greater than 80% purity. The early steps of the Shell process produce only a 57% pure benzene mixture, which does not satisfy the claim limitation "to form a purified benzene product comprising at least about 80 wt % benzene."

Means-Plus-Function

Advanced Ground Information Systems, Inc. v. Life360, 830 F.3d 1341 (Fed. Cir. 2016)

The Circuit affirms a determination of indefiniteness under § 112, \P 6 to the two patents-in-suit directed to systems for establishing a communication network for cellphone users.

The Circuit first considers whether the term "symbol generator" should be construed as a means plus function claim element. Under *Williamson v. Citrix*, there is a rebuttable presumption, but no longer a strong presumption, that unless the term "means" is used, claim elements should not be construed as means plus function elements. The test is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure. The panel holds that the term "symbol generator" invokes the application of § 112, ¶ 6 because it fails to describe a sufficient structure and otherwise recites abstract elements for causing actions, or elements that can perform functions. The panel therefore holds that the district court was correct to conclude that the asserted claims which recite the term "symbol generator" are subject to 35 U.S.C. § 112, ¶ 6.

In looking to see if there is corresponding structure in the specification to support means plus function language, the panel notes that in the case of computer-implemented functions, the Circuit requires that the specification disclose an algorithm for performing the claimed function. Here the specifications of the patents-in-suit do not disclose an operative algorithm for the claim elements reciting "symbol generator." Although the specification of the '728 patent suggests that these symbols are generated via "a map database and a database of geographically referenced fixed locations ... with a specified latitude and longitude,...and a database with the constantly updated GPS location," this only addresses the *medium* through which the symbols are generated. A patentee cannot claim a means for performing a specific function and subsequently disclose a general purpose computer as the structure designed to perform that function because this amounts to pure functional claiming. Accordingly, the panel affirms the district court judgment that the asserted claims are indefinite under 35 U.S.C. § 112, ¶ 2.

During this litigation, Life360 repeatedly referred to AGIS as a patent troll even though AGIS appears to be involved in a number of research and development projects for military and civilian uses. In fact, in response to an AGIS cease and desist letter, according to the complaint, Life360's CEO addressed AGIS as "Dear Piece of Shit." AGIS sued Life360 under 4 patents and the lower court granted Life360 almost \$700,000 in attorney fees, with the district court judge referring to the case as being exceptionally weak.

Divided Infringement

Eli Lilly and Company v. Teva Parenteral Medicines, Inc., 845 F.3d 1357 (Fed. Cir. 2017)

The Circuit finds that Teva, Barr and other generic drug manufacturers would infringe, either directly or by inducement, Eli Lilly's patent covering its Alimta® chemotherapy drug (comprised of pemetrexed disodium "pemtrexed") designed to treat lung cancer and mesothelioma, when used in combination with folic acid and vitamin B12. This case provides an interesting application of *Akamai* because no single actor would perform all of the steps of the method claims: physicians administer B12 and pemetrexed, while patients self-administer folic acid under the guidance of physicians. The history of *Akamai* was described in our recent discussion of the *Medgraph v. Medtronic* case, which wound its way through the courts during this litigation.

There were two bench trials in the present case, the first finding that the asserted claims were not invalid, and the second finding that defendants would induce infringement if they introduced their generics. In the second trial, the district court applied the rulings in the *Akamai V* en banc decision, which held that, in addition to an agency or contractual relationship, induced infringement may be found where an alleged infringer "conditions participation in an activity on receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner and timing of that performance."

The panel cites *Akamai V* for the proposition that where, as here, no single actor performs all steps of a method claim, direct infringement only occurs if "the acts of one are attributable to the other such that a single entity is responsible for the infringement." The performance of method steps is attributable to a single entity in two types of circumstances: when that entity "directs or controls" others' performance, or when the actors "form a joint enterprise," which is not alleged here. Therefore, the issue here is whether physicians direct or control their patients' administration of folic acid.

In *Akamai V*, the Circuit held that directing or controlling others' performance includes circumstances in which an actor: (1) "conditions participation in an activity or receipt of a benefit" upon others' performance of one or more steps of a patented method, and (2) "establishes the manner or timing of that performance." The district court's finding here that physicians "condition" pemetrexed treatment on the administration of folic acid is supported by the evidence. Defendants argue that mere guidance or instruction is insufficient to show "conditioning" under *Akamai V*, but the evidence regarding the critical nature of folic acid pretreatment and physicians' practices supports a finding that physicians cross the line from merely guiding or instructing patients to take folic acid to conditioning pemetrexed treatment on their administration of folic acid. The panel also rejects defendants' argument that an actor can only condition the performance of a step by imposing a legal obligation to do so, by interposing that step as an unavoidable technological prerequisite to participation, or, as in *Akamai V*, both.

With respect to the second prong—establishing the manner or timing of performance—the panel rejects defendants' argument that the product labeling "gives patients wide berth to select the dose, the dosage form, and the timing of folic acid self-administration." The product labeling demonstrates that physicians prescribe a dose of folic acid, specify that patients must ingest the folic acid daily during a particular span of days, and withhold pemetrexed if patients do not follow orders.

The panel concludes its 31 page opinion by rejecting defendants' arguments that the limitation "vitamin B12" is indefinite, and that the asserted claims are indefinite due to obviousness and obviousness-type double patenting.

Medgraph, Inc. v. Medtronic, Inc., 843 F.3d 942 (Fed. Cir. 2016)

The panel affirms the dismissal of Medgraph's case alleging infringement of two patents directed to methods of uploading patient data, such as the blood sugar levels of a diabetic patient, into a computer, which is accessed by medical staff treating the patient. The accused Medtronic product, called the CareLink System, allows diabetes patients to upload their blood glucose readings so that they can keep

an online record of their data and can share the information remotely with a healthcare provider. The appeal arises from the fact that the district court's rulings coincided with the Circuit and Supreme Court decisions in the *Akamai* cases dealing with divided and induced infringement.

In Akamai I, the Circuit held that direct infringement of a method patent requires a single party to perform every step of a claimed method and that there can only be joint infringement when the acts of another are attributable to the accused infringer through either an agency relationship or a contractual obligation. In Akamai II, an en banc Circuit left the direct infringement standard in place but provided an independent inducement basis for divided infringement. Following Akamai II, Medtronic filed a motion for summary judgment of noninfringement.

In Akamai III, the Supreme Court reversed Akamai II on induced infringement and remanded the case to the Circuit for deciding the standard for divided infringement. On remand, the Circuit panel issued Akamai IV, consistent with Akamai I, holding that the accused infringer did not "direct or control" its customers to perform the claimed steps, that its customers were not agents, contractually obligated or in a joint enterprise. Following Akamai IV, the district court granted Medtronic's summary judgment of no direct infringement because more than one person, i.e., the patient and the doctor, is required to perform all of the steps of the method claims.

Shortly thereafter, the Circuit issued its *en banc* decision in *Akamai V*, broadening the circumstances in which others' acts may be attributed to the accused infringer in cases of divided infringement, i.e., in addition to an agency or contractual relationship, attribution is proper where an alleged infringer "conditions participation in an activity on receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner and timing of that performance."

Medgraph argued in the present appeal that it did not have an opportunity to present to the district court the type of evidence needed under *Akamai V*. While acknowledging that a change in the law normally requires remand, the panel rules that Medgraph has not pointed to any evidence that would permit attribution of patient- and doctor-performed steps to Medtronic as required by *Akamai V*. A finding of direct infringement requires that "all steps of the claim [be] performed by or attributable to a single entity." That rule was unaffected by *Akamai V*. Medtronic does not condition participation on receipt of a benefit upon performance of all of the claimed method steps. In fact, Medtronic permits using CareLink in a manner that clearly skips some of the claimed steps. There is similarly no liability for indirect infringement because indirect infringement is predicated on direct infringement, which was unchanged by *Akamai V*.

The Circuit also affirms summary judgment of noninfringement of a system claim in one of the patents. That determination turns on whether the claim term "and" can be construed to mean "or." The claims require both computer (Internet) *and* telephone capability, even though the specification states that data can be conveyed over the Internet *or* by telephone. The panel distinguishes other Circuit cases which have construed "and" to mean "or," because Medgraph's specifications do not require "or"; instead they support either an "and" or an "or" construction.

LifeNet Health v. LifeCell Corp., 837 F.3d 1316 (Fed. Cir. 2016)

In a decision rejecting many arguments of noninfringement and invalidity, the Circuit affirms a ruling in which LifeNet Health was awarded \$34.7 million from LifeCell Corporation for infringement of a patent directed to plasticized soft tissue grafts suitable for transplantation into humans. First, as to claim construction, the panel rejects LifeCell's argument that *O2 Micro v. Beyond Innovation* required the district court to resolve a claim construction dispute, because of LifeCell's failure to sufficiently request further construction of the relevant limitation leading up to and during trial. The panel also rejects LifeCell's expert's trial testimony regarding the nonremoval of plasticizers from the internal matrix of the accused products deserves no weight. There was substantial evidence to support the jury's determination that plasticizer is not removed from the "internal matrix" of the accused tissue grafts before transplantation.

Based on the nonremoval limitation and under the law of divided infringement pursuant to *BMC* and the recent *Akamai v. Limelight en banc* decision, LifeCell also argued that it cannot be liable for direct infringement because the nonremoval limitation cannot be met until an independent third party, such as a surgeon, actually prepares and uses the accused products. The panel notes, however, that the preceding language in each asserted claim states that the relevant plasticizers are already part of the tissue graft. The nonremoval limitation simply provides a negative limitation that those plasticizers remain in the internal matrix prior to transplantation. This limitation is met without action by a third party so the nonremoval limitation does not relieve LifeCell of direct infringement.

Finally, the panel holds that the district court did not err in denying the JMOL or the motion for a new trial as to obviousness because there is substantial evidence to support the jury's finding that the pertinent prior art does not disclose a plasticized soft tissue graft.

Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015)

This case was returned to us by the Supreme Court, noting "the possibility that we erred by too narrowly circumscribing the scope of § 271(a)." Sitting en banc, we unanimously set forth the law of divided infringement, and conclude that substantial evidence supports the jury's finding that Limelight directly infringes under § 271(a).

I. Divided Infringement

Direct infringement under § 271(a) occurs where all steps of a claimed method are performed by or attributable to a single entity. *See BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373 (Fed. Cir. 2007). Where more than one actor is involved in practicing the steps, a court must determine whether the acts of one are attributable to the other such that a single entity is responsible for the infringement. We will hold an entity responsible for others' performance of method steps in two sets of circumstances: (1) where that entity directs or controls others' performance, and (2) where the actors form a joint enterprise.

To determine if a single entity directs or controls the acts of another, we continue to consider general principles of vicarious liability. In the past, we have held that an actor is liable for infringement under § 271(a) if it acts through an agent or contracts with another to perform one or more steps of a claimed method. See *BMC*. We conclude, on the facts of this case, that liability under § 271(a) can also be found when an alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance. In those instances, the third party's actions are attributed to the alleged infringer such that the alleged infringer becomes the single actor chargeable with direct infringement. Whether a single actor directed or controlled the acts of one or more third parties is a question of fact, reviewable on appeal for substantial evidence, when tried to a jury.

Alternatively, where two or more actors form a joint enterprise, all can be charged with the acts of the other, rendering each liable for the steps performed by the other as if each is a single actor. A joint enterprise requires proof of four elements:

- (1) an agreement, express or implied, among the members of the group;
- (2) a common purpose to be carried out by the group;
- (3) a community of pecuniary interest in that purpose, among the members; and
- (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control.

Restatement (Second) of Torts § 491 cmt. c. As with direction or control, whether actors entered into a joint enterprise is a question of fact, reviewable on appeal for substantial evidence. Section 271(a) is not

limited solely to principal-agent relationships, contractual arrangements, and joint enterprise, as the vacated panel decision held. Rather, to determine direct infringement, we consider whether all method steps can be attributed to a single entity.

II. Application to the Facts of This Case

Akamai filed an infringement action alleging infringement of several patents that claim methods for delivering content over the Internet. The parties agreed that Limelight's customers, not Limelight, perform the "tagging" and "serving" steps in the claimed methods. For example, Limelight performs every step save the "tagging" step, in which Limelight's customers tag the content to be hosted and delivered by Limelight's content delivery network. The district judge instructed the jury that Limelight directs or controls its customers' performance of the tagging and serving method steps if Limelight directs or controls its customers' activities. The jury found that Limelight infringed. The district court initially denied Limelight's JMOL for noninfringement, ruling that Akamai had presented evidence that Limelight directed or controlled its customers. Following our decision in *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008), the district court granted Limelight's motion for reconsideration, holding as a matter of law that there could be no liability.

We reviewed the evidence that Limelight directs or controls its customers' performance of each remaining method step. Specifically, we reviewed the evidence that Limelight conditions its customers' use of its content delivery network upon its customers' performance of the tagging and serving steps, and that Limelight establishes the manner or timing of its customers' performance.

First, the jury heard evidence that Limelight requires all of its customers to sign a contract delineating the steps customers must perform to use the Limelight service. As to tagging, Limelight's form contract provides: "Customer shall be responsible for identifying via the then current Limelight process all URLs of the Customer Content to enable such Customer Content to be delivered by the Limelight network." As for the serving step, the form contract states that Limelight is not responsible for failures in its content delivery network caused by its customers' failure to serve content. Thus, if Limelight's customers wish to use Limelight's product, they must tag and serve content. Accordingly, substantial evidence indicates that Limelight conditions customers' use of its content delivery network upon its customers' performance of the tagging and serving method steps.

Substantial evidence also supports finding that Limelight established the manner or timing of its customers' performance. Upon completing a deal with Limelight, Limelight sends its customer a welcome letter instructing the customer how to use Limelight's service. The welcome letter contains a hostname assigned by Limelight that the customer "integrates into its webpages." This integration process includes the tagging step. Moreover, Limelight provides step-by-step instructions to its customers telling them how to integrate Limelight's hostname into its webpages if the customer wants to act as the origin for content. If Limelight's customers do not follow these precise steps, Limelight's service will not be available. Lastly, the jury heard evidence that Limelight's engineers continuously engage with customers' activities. The engineers remain available if the customer experiences any problems. In sum, Limelight's customers do not merely take Limelight's guidance and act independently on their own. Rather, Limelight establishes the manner and timing of its customers' performance so that customers can only avail themselves of the service upon their performance of the method steps. Therefore, Limelight is liable for direct infringement.

Comment: This case has a long history that is important to understand in order to appreciate the significance of this ruling. Soon after a jury returned a \$45 million verdict for Akamai in 2006, the Circuit issued its *Muniauction* decision, which required that, for direct infringement, all the steps of a patent be performed by a single party or multiple parties in a formal relationship. The district court therefore issued JMOL, holding that Limelight could not have infringed. On appeal, the Circuit held that Limelight could be held liable for induced infringement but not direct infringement. The Supreme Court reversed that ruling, holding that there could be no induced infringement unless there is direct infringement, but instructed the Circuit to address the issue of direct infringement. The panel followed *Muniauction*, holding that there was no formal relationship and so there could be no direct infringement. In the present decision, the Circuit makes it considerably easier for direct infringement to be found based on something less than a formal
arrangement; for example, if the accused infringer conditions participation in an activity upon performance of steps of a patented method.

Contributory and Induced Infringement

Unwired Planet, LLC v. Apple, Inc., 829 F.3d 1353 (Fed. Cir. 2016)

Unwired, a nonpracticing entity owning several thousand patents, filed suit against Apple based on infringement of ten of its patents. After Unwired dismissed five of the ten patents from the case, the Northern District of California granted summary judgment of noninfringement as to four of the remaining patents. In this appeal the Circuit affirms one and vacates three of those rulings.

Summary Judgment of Non-Infringement as to Siri Is Vacated Because There Was No Disclaimer of a Broad Construction

The panel vacates summary judgment of noninfringement as to Apple's Siri voice recognition system because summary judgment was based on an erroneous construction of "voice input." In adopting Apple's proposed construction, the district court relied on the summary of the invention in the '446 specification, noting that the sentence describing "the present invention" limits the scope of the claims. But the panel rules that the plain meaning of "voice input" does not require any particular type of channel for its transmission. According to the opinion, the district court's narrower construction can be justified only if there exists a clear and unmistakable disclaimer in the specification or the prosecution history. The panel determines that this language from the specification was not a sufficiently clear disclaimer.

Summary Judgment of Non-Infringement Is Vacated Where the Jury Could Have Reasonably Disagreed

The '260 patent discloses an invention for providing new or updated features to a mobile phone through a process referred to as "provisioning." The patent explains that "a number of parameters must be provisioned into a mobile device in order to enable communication services and applications and in order to distinguish the device from others." To purchase an app from Apple's App Store or a song from Apple's iTunes Store, a user must first have an iTunes account. To establish an iTunes account, a user must select a password, which, according to Unwired, satisfies the claimed "user information required to establish a user account" limitation of the claim under dispute. When an iOS device user with an iTunes account wants to purchase an app or a song, the user first enters his Apple ID and password to the iOS device, which sends them to Apple's servers. Second, Apple's servers respond with an "X-token," which contains a hashed version of the user's password and a timestamp generated by the servers. Third, the iOS device sends a "buyProduct request," which includes the X-token and the user's selection of content. In vacating the summary judgment, the panel determines that a reasonable jury could find that a hashed password in the X-token contains the same information as in the user's unmodified password, albeit in a different form.

Summary Judgment of Non-Infringement Is Appropriate Where No Genuine Issues of Fact Remain

Unwired's '831 patent requires a wideband channel to first exchange security information, and a narrowband channel to then transmit encrypted data. The panel affirms summary judgment of noninfringement because Apple's accused Push Notification Service ("APNS") does not use a "narrowed channel."

APNS allows app providers to send push notifications to iOS devices via APNS servers. Unwired's infringement theory is that the "narrowband channel" extends from an app provider (i.e., a push notification sender) to an iOS device, whereas the "wideband channel" is the channel that carries the communications between the APNS and the iOS device. It argues that the channel that carries

communications between an app provider server and an iOS device is a narrowband channel because it is at a meaningfully lower data transfer rate.

However, the panel rules that the characteristics of the data being transmitted by APNS cannot transform the wideband channel based on TCP/IP into a narrowband channel. Under the agreed upon construction, Apple has met its burden of proving that there is no genuine issue of material fact.

The Strength of Apple's Non-Infringement Arguments Is Not an Appropriate Basis to Grant Summary Judgment of No Indirect Infringement

The '092 patent discloses an improved technology for identifying the location of a wireless station, such as a cell phone or pager. In order to more accurately locate a wireless station, the invention gathers inputs about the location of the wireless station from multiple location finding equipment such as handset global positioning system, time difference of arrival, and the use of cell/sector location. It then responds to a location request by providing the location information. Unwired alleged that the location-finding technology of iOS devices infringes a claim which recites, in relevant part, "receiving a plurality of device dependent *location inputs* provided by said location finding equipment."

The district court denied Apple's motion for summary judgment of no direct infringement, based on Apple's argument that the iOS devices only use a single "location input." However, the court granted Apple's motion for summary judgment of no induced or contributory infringement, reasoning that Apple's noninfringement argument was strong enough that no reasonable juror could conclude that Apple acted with actual knowledge or was willfully blind that it was inducing or contributing to infringement.

The panel vacates the summary judgment of no indirect infringement based on a conclusion that the district court's reliance on the objective strength of Apple's non-infringement arguments is not an appropriate basis on which to grant a motion for summary judgment of non-infringement.

Medgraph, Inc. v. Medtronic, Inc., 843 F.3d 942 (Fed. Cir. 2016)

The panel affirms the dismissal of Medgraph's case alleging infringement of two patents directed to methods of uploading patient data, such as the blood sugar levels of a diabetic patient, into a computer, which is accessed by medical staff treating the patient. The accused Medtronic product, called the CareLink System, allows diabetes patients to upload their blood glucose readings so that they can keep an online record of their data and can share the information remotely with a healthcare provider. The appeal arises from the fact that the district court's rulings coincided with the Circuit and Supreme Court decisions in the *Akamai* cases dealing with divided and induced infringement.

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In Akamai III, the Supreme Court reversed Akamai II on induced infringement and remanded the case to the Circuit for deciding the standard for divided infringement. On remand, the Circuit panel issued Akamai IV, consistent with Akamai I, holding that the accused infringer did not "direct or control" its customers to perform the claimed steps, that its customers were not agents, contractually obligated or in a joint enterprise. Following Akamai IV, the district court granted Medtronic's summary judgment of no direct infringement because more than one person, i.e., the patient and the doctor, is required to perform all of the steps of the method claims.

Shortly thereafter, the Circuit issued its *en banc* decision in *Akamai V*, broadening the circumstances in which others' acts may be attributed to the accused infringer in cases of divided infringement, i.e., in addition to an agency or contractual relationship, attribution is proper where an alleged infringer

"conditions participation in an activity on receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner and timing of that performance."

Medgraph argued in the present appeal that it did not have an opportunity to present to the district court the type of evidence needed under *Akamai V*. While acknowledging that a change in the law normally requires remand, the panel rules that Medgraph has not pointed to any evidence that would permit attribution of patient- and doctor-performed steps to Medtronic as required by *Akamai V*. A finding of direct infringement requires that "all steps of the claim [be] performed by or attributable to a single entity." That rule was unaffected by *Akamai V*. Medtronic does not condition participation on receipt of a benefit upon performance of all of the claimed method steps. In fact, Medtronic permits using CareLink in a manner that clearly skips some of the claimed steps. There is similarly no liability for indirect infringement because indirect infringement is predicated on direct infringement, which was unchanged by *Akamai V*.

The Circuit also affirms summary judgment of noninfringement of a system claim in one of the patents. That determination turns on whether the claim term "and" can be construed to mean "or." The claims require both computer (Internet) *and* telephone capability, even though the specification states that data can be conveyed over the Internet *or* by telephone. The panel distinguishes other Circuit cases which have construed "and" to mean "or," because Medgraph's specifications do not require "or"; instead they support either an "and" or an "or" construction.

Power Integrations, Inc. v. Fairchild Semiconductor International, Inc., 843 F.3d 1315 (Fed. Cir. 2016)

This appeal involves six patents—four Power Integrations patents and two belonging to Fairchild. The parties are competitors in the power supply controller chip market. Power supplies are used with cell phones, computers, televisions, and the like. The power supply is often integrated into the plug itself, as is the case with many cellular phones. In other configurations, the power supply resides in a stand-alone module, as with many laptop computers.

Each party had been held liable for infringement of the other's patent(s) but in the present decision the panel reverses two rulings. In the words of the panel: "We have significantly reduced the scope of Fairchild's infringement liability in this case. As a result of our above holdings, only the district court's judgment that Fairchild is liable for direct infringement of the '851 and '876 patents remains untouched." Specifically, the panel reverses a ruling that Power Integrations' '605 patent is not anticipated; vacates the judgment that Fairchild induced infringement of the '851 and '876 patents; and reverses a finding that Fairchild's '972 patent is infringed under the doctrine of equivalents.

Because the panel's rulings on induced infringement and the doctrine of equivalents are the most interesting part of the opinion, that is the focus of our much-shortened excerpt of the opinion, appended at "Read More." In its original form, the opinion was almost 50 pages long.

As to induced infringement, the panel concludes that the jury instruction misstated the law in a way that prejudiced Fairchild, which is primarily involved in selling chips to overseas distributors. However, because the panel does not find that the record requires a finding of non-infringement as a matter of law, it does not go further and, as Fairchild requests, enter judgment in its favor.

Induced infringement is defined in 35 U.S.C. § 271(b): "Whoever actively induces infringement of a patent shall be liable as an infringer." In order to establish active inducement of infringement, it is not sufficient that others directly infringe the claim. Nor is it sufficient that the party accused of infringement was aware of the acts by others that directly infringe. Rather, in order to find inducement, you must find that the party accused of infringement intended others to use its products in at least some ways that would infringe the asserted claims of the patent. However, that infringement need not have been actually caused by the party's actions. All that is required is that the party took steps to encourage or assist that infringement, regardless of whether that encouragement succeeded, or was even received. Intent to encourage or assist the acts that constitute direct infringement must be proven by evidence of active steps taken to

encourage direct infringement, such as providing products, advertising any infringing use, or instructing how to engage in any use that is infringing.

This instruction left the jury with the incorrect understanding that a party may be liable for induced infringement even where it does not successfully communicate with and induce a third-party direct infringer. The Supreme Court explained in *Global-Tech* that the term "induce" as it is used in § 271(b) "means to lean on; to influence; to prevail on; to move by persuasion. Each definition requires successful communication between the alleged inducer and the third-party direct infringer."

The jury found that Power Integrations infringed the claims under the doctrine of equivalents. Fairchild introduced evidence that the product contained the requisite two, distinct feedback signals. It identified "FB OUT" as the "first feedback signal associated with a voltage control loop" and the output of the constant current block, which it referred to as "I REDUCE," as the "second feedback signal associated with a current control loop." Power Integrations countered that the product contained a single feedback signal labeled "FEEDBACK (FB)"—and therefore could not infringe. The jury agreed with Power Integrations that its LinkSwitch-II products did not literally infringe the '972 patent. However, it found that the products infringed under the doctrine of equivalents.

Power Integrations argued on appeal that the jury's verdicts cannot be reconciled. It contends that, in finding no literal infringement, the jury necessarily found that Power Integrations products contain only a single feedback signal, not the two "distinct" feedback signals required by the claims. Pursuant to this understanding, Power Integrations argued that it is entitled to JMOL of no infringement. The panel agrees, noting that the jury necessarily found that the LinkSwitch-II products contain a single feedback signal when it rendered its verdict of no literal infringement.

Citing *Warner-Jenkinson v. Hilton Davis*, the panel notes that, under the doctrine of claim vitiation, if a court determines that a finding of infringement under the doctrine of equivalents would entirely vitiate a particular claimed element, then the court should rule that there is no infringement under the doctrine of equivalents. The panel agrees that a finding of infringement under the doctrine of equivalents would vitiate the requirement that the claimed feedback signals be "distinct."

Warsaw Orthopedic, Inc. v. NuVasive, Inc., 824 F.3d 1344 (Fed. Cir. 2016)

This case returns to the Circuit on vacatur and remand from the Supreme Court, for further consideration in light of *Commil v. Cisco*. The issue to be decided here was whether there was substantial evidence to support the jury verdict that Warsaw and a related Medtronic company (collectively "MSD") induced infringement of NuVasive's '236 patent directed to a method for detecting the presence of a nerve during surgery. MSD's knowledge of the '236 patent is undisputed. The panel concludes that MSD's infringement position was objectively unreasonable and that the jury, based on this evidence, could reasonably have concluded that MSD had knowledge (or was willfully blind to the fact) that its NIM-Eclipse device meets the limitations of the claims of the '236 patent. A reasonable jury could therefore have inferred that MSD must have known, or was willfully blind to the fact, that doctors using the device infringe those claims.

In its analysis, the panel first notes the holdings of *Commil USA, LLC v. Cisco Systems, Inc.*, 135 S. Ct. 1920 (2015) and *GlobalTech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754 (2011) that proof of induced infringement requires not only knowledge of the patent but also proof the defendant knew the induced acts were infringing. *Commil* reaffirmed the statement in *Global-Tech* that willful blindness can satisfy the knowledge requirement for active inducement, even in the absence of actual knowledge. *Global-Tech* also held that knowledge of infringement can be inferred from circumstantial evidence.

The opinion then reviews the claim construction of the district court and concludes that the jury was properly instructed as to the meaning of the claim language. The panel then reviews MSD's present arguments as to claim construction and concludes that they are inconsistent with the patent and the prosecution history. Moreover, the panel rules that MSD's present construction is inconsistent with the

construction that MSD itself propounded before the district court. According to the opinion, "MSD's effort at this late stage amounts to a request for a revised claim construction that it never sought."

Judge Reyna concurs, but disagrees with the analysis, stating, "The opinion's analysis suggests that any time a defendant's products are found to directly infringe, the plaintiff has sufficiently established the defendant's intent to induce infringement. This proposition conflicts with *Global-Tech*, *Commil*, and our caselaw."

Literal Infringement

Shire Development v. Watson, 848 F.3d 981 (Fed. Cir. 2017)

The panel reverses a determination of infringement of a patent directed to controlled-release oral composition of mesalamine used to treat inflammatory bowel diseases, concluding that Watson's ANDA product does not satisfy the Markush group requirements of the claims. In doing so, the Circuit rejects Shire's argument that its evidence overcomes the "strong presumption" that a claim element excludes ingredients not specified in the claim when the phrase "consisting of" or "consists of" is used in the claim.

When a matrix is hydrophilic, it readily dissolves in water. Conversely, when a matrix is lipophilic, it resists dissolving in water. The claims at issue recite in pertinent part:

Controlled release oral pharmaceutical compositions, containing as an active ingredient 5-aminosalicylic acid, comprising: a) an inner lipophilic matrix *consisting of* substances selected from the group *consisting of* [components listed], and wherein the active ingredient is dispersed both in the lipophilic matrix and in the hydrophilic matrix; (b) an outer hydrophilic matrix wherein the lipophilic matrix is dispersed, and said outer hydrophilic matrix *consists of* compounds selected from the group *consisting of* [components listed]. (emphasis added)

The district court determined that Watson's ANDA product satisfied the Markush limitations because the excipients falling outside the respective Markush groups were "unrelated" to the invention since they did not drive the water-affinity property of their respective matrices.

The panel first notes that claim limitations using the phrase "consisting of," or "consists of," to characterize the matrix, and "consisting of" to define the groups, "create a very strong presumption that that claim element is closed and therefore excludes any elements, steps, or ingredients not specified in the claim." Overcoming this presumption requires "the specification and prosecution history" to "unmistakably manifest an alternative meaning." The panel noted the 2004 *Norian* Circuit case that found the strong presumption to be overcome where a defendant added a spatula to a chemical kit to repair teeth and bones, because the spatula had no interaction with the claimed chemicals.

In the present case, Watson's ANDA product included additional compositions, some of which are hydrophilic and others of which are lipophilic. The district court found that Watson infringed because the component outside of the Markush group—i.e., the lipophilic magnesium stearate in the hydrophilic outer matrix—is unrelated to the invention. However, the panel disagrees. According to the opinion, the invention is a multimatrix system that relies on the hydrophilic and lipophilic characteristics of the matrices to release mesalamine in the colon in a sustained and uniform manner. When the outer, hydrophilic matrix interacts with a person's digestive fluids, the matrix creates a swollen barrier preventing aqueous solution from reaching the inner, lipophilic matrix. This delay permits the product to proceed through the digestive system until the water breaks apart the outer matrix, releasing the lipophilic granules. Here, the district court concluded that the magnesium stearate is overwhelmed by the hydrophilic properties of the sodium starch glycolate, and credited expert testimony that the hydrophilic sodium starch glycolate is more potent than the mag stearate when outside the granules.

The district court found that the magnesium stearate exerted lipophilic influence in the outer matrix. According to the opinion, no one has suggested that magnesium stearate, when in the outer matrix, is neither lipophilic nor hydrophilic. Thus, the panel concludes that the magnesium stearate retains its lipophilic character in the extragranular space. Accordingly, the magnesium stearate structurally and functionally relates to the invention, and its presence in the outer matrix violates the "consisting of" requirement of the claims.

Again according to the opinion, *Norian* did not restrict "related" components to only those that advance or are intended to advance a Markush group's allegedly inventive elements, which would in effect equate the scope of a Markush group's "consisting of" language with either "comprising" or "consisting essentially of."

Doctrine of Equivalents

Power Integrations, Inc. v. Fairchild Semiconductor International, Inc., 843 F.3d 1315 (Fed. Cir. 2016)

This appeal involves six patents—four Power Integrations patents and two belonging to Fairchild. The parties are competitors in the power supply controller chip market. Power supplies are used with cell phones, computers, televisions, and the like. The power supply is often integrated into the plug itself, as is the case with many cellular phones. In other configurations, the power supply resides in a stand-alone module, as with many laptop computers.

Each party had been held liable for infringement of the other's patent(s) but in the present decision the panel reverses two rulings. In the words of the panel: "We have significantly reduced the scope of Fairchild's infringement liability in this case. As a result of our above holdings, only the district court's judgment that Fairchild is liable for direct infringement of the '851 and '876 patents remains untouched." Specifically, the panel reverses a ruling that Power Integrations' '605 patent is not anticipated; vacates the judgment that Fairchild induced infringement of the '851 and '876 patents; and reverses a finding that Fairchild's '972 patent is infringed under the doctrine of equivalents.

Because the panel's rulings on induced infringement and the doctrine of equivalents are the most interesting part of the opinion, that is the focus of our much-shortened excerpt of the opinion, appended at "Read More." In its original form, the opinion was almost 50 pages long.

As to induced infringement, the panel concludes that the jury instruction misstated the law in a way that prejudiced Fairchild, which is primarily involved in selling chips to overseas distributors. However, because the panel does not find that the record requires a finding of non-infringement as a matter of law, it does not go further and, as Fairchild requests, enter judgment in its favor.

Induced infringement is defined in 35 U.S.C. § 271(b): "Whoever actively induces infringement of a patent shall be liable as an infringer." In order to establish active inducement of infringement, it is not sufficient that others directly infringe the claim. Nor is it sufficient that the party accused of infringement was aware of the acts by others that directly infringe. Rather, in order to find inducement, you must find that the party accused of infringement intended others to use its products in at least some ways that would infringe the asserted claims of the patent. However, that infringement need not have been actually caused by the party's actions. All that is required is that the party took steps to encourage or assist that infringement, regardless of whether that encouragement must be proven by evidence of active steps taken to encourage direct infringement, such as providing products, advertising any infringing use, or instructing how to engage in any use that is infringing.

This instruction left the jury with the incorrect understanding that a party may be liable for induced infringement even where it does not successfully communicate with and induce a third-party direct infringer. The Supreme Court explained in *Global-Tech* that the term "induce" as it is used in § 271(b) "means to lean on; to influence; to prevail on; to move by persuasion. Each definition requires successful communication between the alleged inducer and the third-party direct infringer."

The jury found that Power Integrations infringed the claims under the doctrine of equivalents. Fairchild introduced evidence that the product contained the requisite two, distinct feedback signals. It identified "FB OUT" as the "first feedback signal associated with a voltage control loop" and the output of the constant current block, which it referred to as "I REDUCE," as the "second feedback signal associated with a current control loop." Power Integrations countered that the product contained a single feedback signal labeled "FEEDBACK (FB)"—and therefore could not infringe. The jury agreed with Power Integrations that its LinkSwitch-II products did not literally infringe the '972 patent. However, it found that the products infringed under the doctrine of equivalents.

Power Integrations argued on appeal that the jury's verdicts cannot be reconciled. It contends that, in finding no literal infringement, the jury necessarily found that Power Integrations products contain only a single feedback signal, not the two "distinct" feedback signals required by the claims. Pursuant to this understanding, Power Integrations argued that it is entitled to JMOL of no infringement. The panel agrees, noting that the jury necessarily found that the LinkSwitch-II products contain a single feedback signal when it rendered its verdict of no literal infringement.

Citing *Warner-Jenkinson v. Hilton Davis*, the panel notes that, under the doctrine of claim vitiation, if a court determines that a finding of infringement under the doctrine of equivalents would entirely vitiate a particular claimed element, then the court should rule that there is no infringement under the doctrine of equivalents. The panel agrees that a finding of infringement under the doctrine of equivalents would vitiate the requirement that the claimed feedback signals be "distinct."

Prosecution History Estoppel

UCB, Inc. v. Yeda Research and Development Co. Ltd., 837 F.3d 1256 (Fed. Cir. 2016)

This decision case reaffirms the long-standing rule that prosecution history estoppel prevents a patent owner from recovering claim scope that was given up during prosecution. The Circuit affirms the ruling that UCB's Cimzia® antibody used to treat Crohn's disease and arthritis does not infringe Yeda's '923 patent. Yeda had argued the '923 patent claims to a monoclonal antibody that binds a defined human cytotoxin included chimeric or humanized antibodies even though the patent specification described only murine (mouse) monoclonal antibodies. Yeda further argued that since chimeric monoclonal antibodies were known at the time that the '923 priority application was filed in 1984, the claims should be construed to cover such chimeric antibodies, as well as humanized antibodies. The Circuit affirms the finding that Yeda's patent cannot cover chimeric and humanized antibodies because the prosecution history shows Yeda attempted to cover such subject matter during patent prosecution, but then withdrew the claims so the patent could proceed to allowance.

In this declaratory judgment action, UCB sued Yeda in the Eastern District of Virginia, requesting a declaration that UCB's Cimzia® antibody does not infringe Yeda's '923 patent and that the patent is invalid. Yeda counterclaimed for infringement. The district court granted summary judgment of non-infringement, holding that, based on the specification and prosecution history, the monoclonal antibodies claimed in the '923 patent are not infringed by the chimeric or humanized antibodies of the Cimzia® product. We affirm the district court's judgment.

Willful Infringement

Mentor Graphics Corp. v. EVE-USA, Inc., 851 F.3d 1275 (Fed. Cir. 2017)

Mentor achieves almost a clean sweep of many issues presented to the Circuit in an appeal from litigation in the District of Oregon between Mentor and various Synopsys companies, including its subsidiary EVE-USA. Mentor asserted patents directed to so-called simulation/emulation technology. Synopsys also asserted two of its patents against Mentor. Mentor's '376 patent, directed to a system for debugging source code after synthesis, was the only patent tried to the jury, and the panel affirms the denial of JMOL and the \$36 million jury verdict. The Circuit also vacates the motion in limine precluding Mentor from presenting evidence of willful infringement. The panel reverses summary judgment that Mentor's '882 patent lacks written description support and summary judgment that Mentor's infringement allegations regarding two of its patents are barred by claim preclusion.

The panel reverses summary judgment that a Synopsys patent is indefinite but affirms summary judgment that the other patent it asserted lacks patent-eligible subject matter.

Our summary is a little longer than usual, given the length of the opinion (42 pages), but the discussion on many of the points is very interesting.

Summary Judgment of Assignor Estoppel Is Affirmed

As to the determination of infringement of Mentor's '376 patent, the panel found substantial evidence that was well summarized by Mentor's expert witness. With respect to Synopsys's challenge of the grant of summary judgment that it was barred from challenging validity because of assignor estoppel, the panel rejects the argument that *Lear v. Adkins* "demolished the doctrinal underpinnings of assignor estoppel in the decision that abolished the comparable licensee estoppel. Citing its 1988 *Diamond Scientific* and its 2016 *MAG Aerospace* cases, the Circuit notes the continued vitality of the doctrine of assignor estoppel after *Lear*.

The \$36 Million Damage Award to Mentor Is Affirmed

Synopsys's challenge of the damage award is unsuccessful because the jury instructions properly guided the jury under the so-called *Panduit* factors as to lost profits because Mentor would have made additional Veloce sales but for Synopsys's infringing sales. Synopsys argued on appeal that the award should be vacated because it failed to apportion lost profits. The first *Panduit* factor—demand for the patented product—considers demand for the product as a whole. The second factor—the absence of non-infringing alternatives—considers demand for particular limitations or features of the claimed invention. Together, these factors tie lost profit damages to specific claim limitations and ensure that damages are commensurate with the value of the patented features.

The panel finds the facts of this case to be "remarkably simple" and Synopsys does not dispute any of them. Synopsys does not dispute that but for its infringement, Mentor would have made each of the infringing sales to Intel. Nor does it dispute how much Mentor would have earned, the precise numbers of sales Mentor would have made, whether there were any alternatives that Intel may have preferred over the purchase of Mentor's product, or whether Intel would have chosen to purchase fewer emulators.

On appeal, Synopsys argues that its products "outperform Mentor's in price, size, speed, and capacity." If the evidentiary record is as Synopsys claims, then it had recourse—it could have appealed the jury's *Panduit* fact findings as not supported by substantial evidence. This is a highly factual case, and Synopsys did not appeal any of the jury's fact findings relating to damages.

Summary Judgment of Indefiniteness of the Synopsys '109 Patent Is Affirmed

Definiteness requires clarity, although under *Nautilus*, "absolute precision is unattainable." Claims reciting terms of degree have long been found definite if they provide reasonable certainty to a skilled artisan when read in the context of the patent.

Claim 1 requires "displaying said characteristics associated with those said final circuit's nets and parts that correspond directly with said initial circuit's nets and parts *near* said portions of said synthesis source text file that created said corresponding initial circuit parts and nets." A goal of the '109 patent is to aid developers when debugging HDL. To accomplish this, the patent "relates" circuit analysis results with the HDL corresponding to a particular result, and then places the two pieces of information "near" each other on the display screen. This allows a developer to identify and fix problems with specific lines of HDL when debugging. In order for the patent's stated objective to occur, the system must display the related HDL and analysis results "near" enough to each other such that a developer would "relate" the two. Thus, the panel holds that a skilled artisan would understand "near" requires the HDL code and its corresponding circuit analysis to be displayed in a manner that physically associates the two.

Summary Judgment Is Affirmed that Synopsys's '526 Patent Is Invalid Under § 101

The panel affirms summary judgment that the asserted claims of Synopsys's '526 patent are invalid under § 101 because of the presence of the term "machine-readable medium" in every challenged claim. A patentee is free to be his own lexicographer, and the specification expressly defines the term: "The computer readable medium is any data storage device that can store data which can be thereafter be [sic] read by a computer system." Mentor argued that because the '526 patent defines a "machine-readable medium" as including "*carrier waves*," the claims are invalid under the 2008 Circuit case of In *re Nuijten*. The claimed signal in *Nuijten* was not limited to a particular medium or carrier but rather covered "any tangible means of information carriage." In that case, the Circuit held that a "transitory, propagating signal" did not fall within any statutory category of subject matter: process, machine, manufacture, or composition of matter. Therefore, because the claims covered "the signal itself," they were not eligible subject matter. Here, the panel holds that because the challenged claims are expressly defined by the specification to cover carrier waves, they are similar to the ineligible *Nuijten* claims in that the claims cover carrier signals themselves.

The challenged claims present a scenario where there are multiple covered embodiments, and some, but not all, of the covered embodiments are patent-eligible. For example, if the machine-readable medium used was a "random-access memory" or "optical data storage device," the claims would not run afoul of *Nuijten*. While not binding on the Circuit, it is instructive that MPEP § 2106 instructs that a claim covering both statutory and non-statutory embodiments is not eligible for patenting.

The Panel Reverses the Grant of a Motion in Limine Precluding Mentor from Presenting Evidence of Willful Infringement as to Its '376 Patent

The district court held that Mentor was precluded from presenting evidence of willfulness because it relied exclusively on post-suit willfulness conduct, and it had not first sought a preliminary injunction. The court stated, "I think Synopsys is right about what we will call the *Seagate* rule, which is if you don't seek an injunction, you can't seek willful infringement for post-filing conduct." In reaching this conclusion, the court made two errors. First, it erred in determining that the alleged conduct was post-suit conduct because it erred in determining the filing date of the relevant suit. Second, it erred in concluding that Synopsys could not present evidence of post-filing willful infringement because Synopsys did not seek a preliminary injunction.

The relevant date for determining which conduct is pre-suit is the date of the patentee's affirmative allegation of infringement, in this case the date of Mentor's counterclaim. Mentor relies on Synopsys's acquisition of EVE, which terminated the license and rendered all subsequent sales infringing. These events occurred after the declaratory judgment was filed but prior to Mentor's counterclaim for infringement. The alleged acts of infringement are thus pre-suit acts, and there is accordingly no basis for excluding Mentor's evidence of willfulness.

The panel also disagrees with the court's second decision—that Mentor could not assert willful infringement because it did not seek a preliminary injunction. As the Circuit noted in its 2014 *Aqua Shield* case, there is "no rigid rule" that a patentee must seek a preliminary injunction in order to seek enhanced damages. The opinion also cites to the language in *Halo* "eschew[ing] any rigid formula for awarding enhanced damages under § 284." The panel thus holds that the district court abused its discretion in precluding Mentor from presenting evidence of willful infringement, and remands for further proceedings consistent with *Halo*.

Summary Judgment of Indefiniteness of Synopsys's '882 Patent Is Reversed

The panel reverses the district court's grant of summary judgment of invalidity of the Synopsys '882 patent because the very language of claim 1 which the court held was not supported by the specification was present in the originally-filed claims. As noted in last year's *ScriptPro* case, original claims are part of the original specification and in many cases will themselves satisfy the written description requirement.

The Panel Reverses Summary Judgment of Claim Preclusion as to Synopsys's '176 and '531 Patents

The '176 and '531 patents are two of the three patents litigated in the 2006 lawsuit between Mentor and EVE, which was settled when EVE took a license to the patents, and Mentor dismissed its claims with prejudice. Synopsys's 2012 acquisition of EVE automatically terminated the Mentor/EVE license. Synopsys then filed a DJ action for noninfringement of the '176 and '531 patents, and Mentor counterclaimed for infringement. Citing the Supreme Court's *Lawlor* decision and the Circuit's 2012 and 2014 decisions in *Aspex Eyewear* and *Brain Life*, the panel accepts Mentor's argument that its infringement allegations were based exclusively on acts of infringement that occurred after the date Synopsys acquired EVE. Claim preclusion does not bar a patentee from bringing infringement claims for acts of infringement occurring after the final judgment in a previous case.

Stryker Corp. v. Zimmer, Inc., 837 F.3d 1268 (Fed. Cir. 2016)

This case returns to the Circuit from the Supreme Court's decision in *Halo v. Pulse*. Zimmer appealed from a final judgment that Stryker's three patents directed to pulsed lavage devices were valid and willfully infringed. These devices deliver pressurized irrigation for certain medical procedures. In a prior decision the Circuit affirmed the jury's findings and the jury's award of damages to Stryker. However, applying the then-controlling test for willful infringement and enhanced damages under *Seagate*, the Circuit reversed the jury's willfulness finding and vacated the associated award of treble damages and attorneys' fees. The Supreme Court subsequently determined that the *Seagate* test regarding willfulness and enhanced damages unduly confines the ability of district courts to exercise the discretion conferred on them. Because the Circuit decided the willfulness question under the *Seagate* framework, the Supreme Court vacated the Circuit's prior decision and remanded the case for further proceedings.

Because *Halo* was limited to the questions of willfulness and enhanced damages, the Supreme Court left the judgments on other issues undisturbed. In the present decision, the Circuit reaffirms the jury's findings that Stryker's patents were valid and infringed in light of the new willfulness standard articulated by the Supreme Court, and affirms the jury's finding of willful infringement. However, the panel vacates and remands to the district court the award of treble damages, attorney fees and the finding that this was an exceptional case.

Patent Office Matters

Cuozzo Speed Technologies, LLC v. Lee, 136 S. Ct. 2131 (2016)

The AIA creates an agency procedure called "inter partes review" or IPR that allows a third party to ask the PTO to reexamine the claims in an already-issued patent and to cancel any claim that the agency finds to be unpatentable in light of prior art. The Act, as relevant here, provides that the PTO's decision "whether to institute an inter partes review... shall be final and non-appealable," 35 U. S. C. §314(d), and grants the Patent Office authority to issue "regulations ... establishing and governing inter partes review," §316(a)(4). PTO regulation 37 CFR §42.100(b) provides that, during IPR, a patent claim "shall be given its broadest reasonable construction in light of the specification of the patent in which it appears."

In 2012, Garmin sought IPR of all 20 claims of a patent held by Cuozzo, asserting that claim 17 was obvious in light of three prior patents. The PTO agreed to review claim 17. It also decided to reexamine claims 10 and 14 on that same ground because it determined those claims to be logically linked to the obviousness challenge to claim 17. The Patent Trial and Appeal Board concluded that the claims were obvious in light of prior art, denied for reasons of futility Cuozzo's motion to amend the claims, and canceled all three claims.

Cuozzo appealed to the Federal Circuit, claiming that the PTO improperly instituted IPR with respect to claims 10 and 14, and alleged that the Board improperly used the "broadest reasonable construction" standard to interpret the claims rather than the standard used by courts, which gives claims their ordinary meaning as understood by a person of skill in the art under *Phillips v. AWH Corp.*, 415 F. 3d 1303. The Circuit rejected both arguments, reasoning that §314(d) made the PTO's decision to institute IPR "nonappealable," and it concluded that the regulation was a reasonable exercise of the agency's rulemaking authority.

Held:

1. Section 314(d) bars Cuozzo's challenge to the Patent Office's decision to institute inter partes review.

(a) The text of §314(d) expressly states that the Patent Office's determinations whether to institute inter partes review "shall be *final and nonappealable*." Moreover, construing §314(d) to permit judicial review of the PTO's decision to institute IPR undercuts the important congressional objective of giving the agency significant power to revisit and revise earlier patent grants. Past practice in respect to related proceedings, including the predecessor to IPR also supports the conclusion that Congress did not intend for courts to review these initial determinations. Finally, reading §314(d) as limited to interlocutory appeals would render the provision largely superfluous in light of the APA.

(b) The "strong presumption" favoring judicial review is overcome here by these" clear and convincing" indications that Congress intended to bar review. Given that presumption, however, the interpretation adopted here applies to cases in which the challenge is to the PTO's determination "to initiate an inter partes review *under this section*," or where the challenge consists of questions closely tied to the application and interpretation of statutes related to that determination. Cuozzo's claim does not implicate a constitutional question, nor does it present other questions of interpretation that reach well beyond "this section" in terms of scope and impact. Rather, Cuozzo's allegation that Garmin's petition did not plead "with particularity" the challenge to claims 10 and 14 as required by §312 is little more than a challenge to the PTO's conclusion under §314(a) that the "information presented in the petition" warranted review.

2. The PTO regulation requiring the Board to apply the broadest reasonable construction standard to interpret patent claims is a reasonable exercise of the rulemaking authority granted to the PTO by statute.

(a) Where a statute leaves a gap or is ambiguous, this Court typically interprets a congressional grant of rulemaking authority as giving the agency leeway to enact rules that are reasonable in light of the text,

nature, and purpose of the statute. Here, the statute grants the PTO the authority to issue regulations governing IPR, and no statutory provision unambiguously mandates a particular construction standard.

The nature and purpose of IPR does not unambiguously require the PTO to apply one particular claim construction standard. Cuozzo's contention that the purpose of IPR—to establish trial-like procedures for reviewing previously issued patents—supports the application of the ordinary meaning standard ignores the fact that in other significant respects, inter partes review is less like a judicial proceeding and more like a specialized agency proceeding. This indicates that Congress designed a hybrid proceeding. The purpose of IPR is not only to resolve patent-related disputes among parties, but also to protect the public's paramount interest in seeing that patent monopolies are kept within their legitimate scope. Neither the statute's language, nor its purpose, nor its legislative history suggests that Congress decided what standard should apply in inter partes review.

(b) The regulation is a reasonable exercise of the Patent Office's rulemaking authority. The broadest reasonable construction standard helps ensure precision in drafting claims and prevents a patent from tying up too much knowledge, which, in turn, helps members of the public draw useful information from the disclosed invention and understand the lawful limits of the claim. The PTO has used this standard for more than 100 years and has applied it in proceedings which, as here, resemble district court litigation.

Cuozzo's two arguments in response are unavailing. Applying the broadest reasonable construction standard in IPR is not, as Cuozzo suggests, unfair to a patent holder, who may move to amend at least once in the review process, and who has had several opportunities to amend in the original application process. And though the application of one standard in IPR and another in district court proceedings may produce inconsistent outcomes, that structure is inherent to Congress' regulatory design, and it is also consistent with past practice, as the patent system has long provided different tracks for the review and adjudication of patent claims. The PTO's regulation is reasonable, and this Court does not decide whether a better alternative exists as a matter of policy.

Continuation Applications

Immersion Corporation v. HTC Corporation, 826 F.3d 1357 (Fed. Cir. 2016)

Avoiding the invalidation of some ten thousand patents, the Circuit reverses the district of Delaware, ruling that a continuation application filed the same day as the issuance of the parent is filed "before" the patent issues. The Circuit notes that the Supreme Court approved same-day continuations in 1863, and the 1952 Patent Act, which introduced 35 U.S.C. section 120, was broadly a codification of existing continuation practices. Same-day continuations have been approved by a consistent, clearly articulated agency practice going back at least half a century. This practice has engendered large-scale reliance and reflects the agency's procedural authority to define when the legal acts of "filing" and "patenting" will be deemed to occur.

Covered Business Method Review

Secure Axcess v. PNC Bank, 848 F.3d 1370 (Fed. Cir. 2017)

The Circuit continues to further restrict what constitutes a Covered Business Method patent, ruling that a system for authenticating a web page does not constitute a CBM patent. Over the dissent of Judge Lourie, the majority rejects the patentee's argument and the Board's holding that its history of suing financial institutions for infringement should be considered in evaluating whether or not the patent qualifies as a CBM patent.

A representative claim states:

1. A method comprising: transforming, at an authentication host computer, received data by inserting an authenticity key to create formatted data; and returning, from the authentication host computer, the formatted data to enable the authenticity key to be retrieved from the formatted data and to locate a preferences file, wherein an authenticity stamp is retrieved from the preferences file.

The written description similarly discusses computer security with a focus on authenticating a web page. However, the written description does contain references that might be considered to concern "at least facially," according to the opinion, activities that are financial in nature.

The AIA § 18(a)(1)(E) defines a "covered business method patent" as: "a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service"

Secure Axcess first argued that the requirement that the "patent claims" applies only to the first clause—*a* method or corresponding apparatus for performing data processing or other operations—and not to that clause <u>and</u> the second clause—*used in the practice, etc., of a financial product or service.* On that issue, the majority rules construing the claim as argued by Secure Axcess would be radically out of keeping with the statute and congressional intent, considered in the context of other provisions in the statute.

The majority then turns to the more interesting issue as to whether this is properly considered "a financial product or service." The patent owner argued to the Board that the '191 patent was ineligible for CBM review because covered financial products and services were limited to products and services such as credit, loans, real estate transactions, securities and investment products, and similar financial products and services. The Board correctly pointed out that both the PTO in its rulemaking, and the Circuit in its then-recent *Versata* opinion, rejected that narrow view.

Moreover, in its *Unwired Planet* decision, the Circuit was called upon to determine if it had to limit itself to the express language of the statutory definition of a CBM patent, or could incorporate comments from the legislative history. The Circuit concluded that the additional phrases are not part of the statutory definition, and when used "as the legal standard to determine whether a patent is a CBM patent, that standard was not in accordance with law." The majority also holds that *Blue Calypso v. Groupon* is not to the contrary. There, the phrase used by the Board was "financial in nature," which does not involve the statutory broadening at issue in *Unwired Planet*.

In deciding the issue of whether or not these claims qualify under the CBM statute, the Board took into consideration the litigation history of Secure Axcess suing Bank of America, GE Capital and 40 other financial institutions. The majority holds that the litigation history should not be considered because a patent owner's choice of litigation targets could be influenced by a number of considerations, such as the volume of a particular target's infringement; the financial condition of the target; which targets are most likely to be willing to settle; available and friendly venues; and so on. The opinion might have added that those other factors are particularly significant here, given that Secure Axcess is an NPE.

The majority concludes that a remand to the Board for further consideration of the issues would be a wasteful act, since an affirmative finding that this patent so qualifies would be, in terms of the APA standard, arbitrary or capricious. The Board's conclusion that this is a CBM patent is therefore reversed.

Unwired Planet, LLC v. Google, Inc., 841 F.3d 1376 (Fed. Cir. 2016)

The Circuit reverses and remands a determination of patent invalidity by the Board in a covered business method (CBM) patent proceeding because the Board used on overly broad definition of what constitutes a CBM patent. According to the panel, the Board's application of the "incidental to" and "complementary to" language from the legislative history and from comments by the PTO during legislative consideration of

the AIA, instead of the statutory definition, renders superfluous the limits Congress placed on the definition of a CBM patent. Therefore, according to the panel, the patent should never have been accepted for CBM patent review.

The '752 patent describes a system that allows users of cell phones to set "privacy preferences" that determine whether "client applications" are allowed to access their device's location information. The privacy preferences used to determine whether client applications are granted access may include, for example, "the time of day of the request, the device's current location at the time the request is made, the accuracy of the provided information and/or the party who is seeking such information." The Board determined that the '752 patent was a CBM patent because the location service could involve an eventual sale of services.

The panel applies the statutory definition of a CBM patent: "a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service." The panel instructs the Board that a patent directed to an invention that is merely "incidental to a financial activity, or complementary to a financial activity" is not a covered business method patent. This "incidental" or "complementary" language was found in one legislator's comments during consideration of the bill that became the AIA, and the PTO's contemporaneous "general policy statement" regarding those comments, but that language never made it into the statute. Nor did the PTO adopt this statement in its rule-making procedures.

According to the panel, it is not enough that a sale has occurred or may occur, or even that the specification speculates such a potential sale might occur, for a patent to be deemed a CBM patent. The panel asks: "Does the sale of the dirt that results from use of the ditch digger render the patent a CBM patent? No, because the claims of the ditch-digging method or apparatus are not directed to 'performing data processing or other operations' or 'used in the practice, administration, or management of a financial product or service,' as required by the statute." Neither the delivery of advertising, as claimed by Unwired, nor the sale of dirt obtained by operation of a ditch digger, "claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service."

Blue Calypso, LLC v. Groupon, Inc., 815 F.3d 1331 (Fed. Cir. 2016)

The Circuit affirms in part and reverses in part an appeal from five covered business method reviews of Blue Calypso patents directed to a peer-to-peer advertising system that uses mobile communication devices. The opinion first broadly defines what is a "financial product" as it relates to a CBM patent and narrowly defines the "technological invention" exception, holding that the patents at issue are properly involved in a CBM review. A majority of the panel affirms the Board's determination that many of the claims of the five patents were invalid as anticipated. The panel reverses the Board's decision that other claims are invalid for violating the written description requirement, ruling that the Board focused too much on the fact that the precise terms used in the claims were not used in the specification rather than looking to see what would have been understood by one with ordinary skill making reference to the figures, specification and claim language.

In an interesting discussion as to whether papers that are theoretically available on the Internet in fact qualify as printed publications, the panel agrees with the Board in rejecting Groupon's argument that a paper that was posted on the personal webpage of a graduate student was reasonably accessible to one interested in the art. Thus, the panel affirms the Board's refusal to find obvious many of the claims based on the paper.

Reexaminations

In Re: Affinity Labs of Texas, LLC, Fed. Cir. Case 2016-1092, -1172 (May 5, 2017)

The issues were somewhat different in this second case involving an Affinity patent directed to connecting an MP3 player to a car's sound system. Affinity asserted the patent against Volkswagen and Apple, and the defendants requested inter partes reexaminations. Apple settled prior to trial but VW proceeded to trial and lost, the jury ruling that the patent was both infringed and valid. Affinity moved to dismiss the reexamination, citing section 317(b). Unlike the prior case, the post-trial judgment was with prejudice but the issue before the Circuit was whether the inter partes reexamination should be dismissed as to all claims or only those at issue in the Affinity/VW litigation.

Independent claims 28 and 35 were found infringed and valid, so claims that depended from those claims were also determined to fall within the estoppel provision of 317(b). However, the panel rules that "the inter partes reexamination statutory scheme consistently reflects a careful, express focus on implementation on a claim-by-claim basis." In support of its position, the panel references section 311 (requiring a reexam requester to apply the prior art to every claim for which reexamination is requested) and section 315 (prohibiting a challenge to a patent claim which is determined to be valid).

As noted in the above *Affinity* case, Apple settled with Affinity as to its counterclaim for invalidity without prejudice, so Affinity's motion to dismiss as to the claims it challenged is also denied. An individual, Richard King, filed an ex parte reexamination, which was merged into the Apple/Affinity inter partes reexaminations, but because his reexamination was ex parte and not inter partes, section 317(b) is also, by the terms of the statute, inapplicable.

The panel then proceeds to the Board's determination of anticipation and obviousness and holds that substantial evidence supports the decisions as to all of the challenged claims.

In Re: Affinity Labs of Texas, LLC, Fed. Cir. Case 2016-1173 (May 5, 2017)

The Circuit affirms the invalidity of all of the challenged claims in an appeal of an inter partes reexamination. But before getting to this ultimate issue, the panel evaluates a determination by the Board that the estoppel provision of section 317(b) did not required dismissal of the reexamination. That section requires that the PTO dismiss pre-AIA reexaminations after the party who requested the reexamination receives a final decision against it. Affinity had sued Apple, which petitioned for inter partes reexamination. The parties settled, with Apple's invalidity counterclaims being dismissed *without prejudice*. The Board ruled and the Circuit affirms that the dismissal without prejudice does not meet section 317(b)'s required condition for terminating the reexamination.

When Congress enacted the AIA, it specified that the pre-AIA provisions of the inter partes reexamination statute were to remain applicable to inter partes reexaminations. Therefore, while inter partes reviews are governed by the AIA, inter partes reexaminations are not. Here, the dismissal without prejudice of Apple's invalidity counterclaims does not reflect a final decision that Apple "failed to sustain the burden of proving the asserted claims' invalidity." Nor does the dismissal without prejudice prevent Apple from again challenging the validity of the patent in subsequent litigation. The estoppel provision of pre-AIA section 317(b) therefore does not serve as a bar to the inter partes reexamination of the patent.

The patent at issue relates to an audio download method in which content, such as a music file, is made available for download to different devices such as an MP3 player or a computer. The panel reviews the Board's claim construction under the broadest reasonable interpretation test and concurs with the Board. Since Affinity concedes that with this construction, the challenged claims are unpatentable, the panel affirms the Board's decision.

Inter Partes Review

In Re AT&T Intellectual Property II, LLC, Fed. Cir. Case 2016-1830 (May 10, 2017)

In *AT&T*, the Circuit determines that the Board did not exceed its statutory authority when instituting an inter partes reexamination despite the reexamination requester later filing a petition requesting that the PTO deny its reexamination request, and affirms the Board's finding of anticipation.

AT&T's patent is directed to digital video data compression. LG petitioned for IPR based on a Yang patent but then determined that Yang did not support its anticipation contention, and filed a petition requesting that the PTO deny its reexamination request. However, it did not withdraw from the reexamination nor did it withdraw its reexamination request. Subsequently, the PTO granted reexamination and both AT&T and LG sought reconsideration, urging withdrawal based on deficiencies in Yang. The PTO denied the reconsideration request, stating that the examiner is required to make a "thorough study of the patent...and investigation of the available prior art...upon a reexamination proceeding" and the reexamination continued. LG subsequently withdrew from the proceedings.

The Circuit holds that because there was a reexamination request and a requester (LG), and that the Board found "a substantial new question of patentability affecting any claim of the patent raised by the request," the Board acted within its statutory authority by instituting reexamination.

As a result of the reexamination, the Board found that the AT&T patent was anticipated by a patent to Krause, which discloses the claim element "mapping a square block of transform coefficients into a onedimensional list." AT&T contends that Krause's disclosure of "dividing a block of coefficients into regions" and its assertion that "vector coding an entire block at once is difficult" limits the scope of the Krause reference. The Board disagreed and found that Krause generally discloses vector coding of an entire pixel block, that the reference to dividing the block into regions was only a preferred embodiment that did not limit the full disclosure. The Circuit holds that the Board's finding of anticipation is supported by substantial evidence

Novartis AG v. Torrent Pharmaceuticals Limited, 853 F.3d 1316 (Fed. Cir. 2017)

The panel rejects the Novartis contention that the Board should not have relied on an additional reference (Sakai) in the Final Written Decision invalidating a patent covering its billion dollar Gilenya® drug used to treat multiple sclerosis. Thus, the Circuit dismisses Novartis's argument that it had been denied adequate notice, that it would have submitted a "vastly different" record than it did if it had known Sakai was still a live issue, and that the Board's final decision therefore violated the APA.

The panel affirms PTAB findings that the claims are invalid as obvious, holding that the PTAB can rely on references which were not the grounds for institution of an IPR for supporting a finding of obviousness. Moreover, if trying to establish nonobviousness by presenting *objective indicia*, specific arguments for each relevant claim (independent and/or dependent) should be made to help establish nexus. If particular arguments for each claim are not made during the PTAB proceedings, such are waived and can't be made on appeal.

In its IPR petition, Torrent alleged that the claims were obvious due to a combination of references identified as Chiba and Aulton. However, Torrent also contended that some of the claims were anticipated by Sakai, and that other claims were obvious in view of a combination of Sakai and Chiba. The Board instituted the IPR based on the obviousness of Chiba and Aulton, and noted that Sakai provided the motivation to combine these two references.

The panel points out that the Board did not rule out Sakai in the Institution Decision, and the Board's discussion of Sakai in the Final Written Decision is not inconsistent with its review in the Institution Decision. The panel also rejects Novartis's complaints of "surprise" and its contention that, following the Institution Decision, the parties "paid Sakai scant attention in subsequent proceedings." In fact, the parties

debated Sakai at length throughout the proceeding and in the same context that it was discussed by the Board in the Final Written Decision. Both parties' experts went into significant detail in their post-institution declarations discussing Sakai and its applicability to the motivation to combine inquiry.

The panel also rejects Novartis's characterization of Sakai as the "missing link" in the Board's obviousness analysis. Contrary to Novartis's contention, Sakai was discussed by the Board as one of several independent grounds supporting the motivation to combine. This is not a case where Sakai provided the linchpin of the Board's analysis, as Novartis contends. Moreover, had Novartis believed the Board eliminated Sakai from the proceeding, it had various procedural mechanisms at its disposal to respond to any perceived impropriety with Petitioners' continued reliance on the reference. For all these reasons, the panel finds no violation of the APA.

Wasica Finance v. Continental Automotive, 853 F.3d 1272 (Fed. Cir. 2017)

In a consolidated appeal of IPR proceedings involving two Wasica patents, the panel affirms all of the invalidity determinations and affirms all but one of the validity rulings. The patents are directed to systems for monitoring tire pressure, with each tire including a pressure measuring device and a transmitter that sends pressure data to a corresponding receiver.

The panel affirms the claim constructions by the Board. This doomed Wasica, because it did not contest the invalidity rulings if the constructions were affirmed. Because the patents had expired, the claims were construed under *Phillips* and not based on the broadest reasonable interpretation. The panel first rejects Wasica's argument that the claimed signals must contain numerical values of pressure, since claim 1 recites displaying data "as numbers *or* symbols." Second, the panel disagrees with Wasica's argument that "emittance of a predetermined switching signal" should include both wired and wireless transmissions. The plain and ordinary meaning of "emit" is simply "to send out," and electrical signals can be "sent out" over wired connections. Moreover, the specification is rife with examples where the switching signal propagates in both wireless and wired form, and claims are normally not construed to exclude disclosed embodiments.

The panel rejects Schrader's argument that Oselin's prior art transmitters must use a constant frequency. The Board found, based on expert testimony, that one of ordinary skill would not have read Oselin to disclose what Schrader's counsel urges. The decision also rejects Schrader's argument that claim 6 is not anticipated since Oselin is at best "unclear" as to its teaching that allegedly anticipates. The panel holds that ambiguous references do not anticipate a claim.

The panel finds that substantial evidence supports the Board's ruling that Oselin's broad invocation of "any modulation scheme" (a genus) does not disclose the constant-frequency modulation scheme of claim 6 (a species). Therefore, the Board's determination that claim 6 is not anticipated is affirmed.

The panel rejects Continental's attempts to cure its IPR petition that offered only "conclusory and sweeping" obviousness allegations, noting that petitioners in IPR proceedings must adhere to the requirement that the initial petition identify with particularity the evidence that supports the grounds for the challenge to each claim. Unlike district court litigation—where parties have greater freedom to revise and develop their arguments over time—the expedited nature of IPRs bring with it an obligation for petitioners to make their case in their initial petition. After Wasica pointed out the flaws in Continental's petition, rather than explaining how the original petition was correct Continental effectively abandoned its petition in favor of a new argument. The panel sees no error in the Board declining to engage this new theory of *prima facie* obviousness.

Claim 9 requires the transmitter to send data to the receiver through "at least a 4-bit sequence" having four smaller "bit sequences" of information. Under the Board's construction, the transmitted signal must include at least eight bits—two for each component bit sequence. Not only does this approach rewrite "at least 4" to mean "at least 8," it also excludes signals comprising four, five, six, or seven bits that are expressly covered by the claim. Moreover, the context of the words surrounding "bit sequence" and the

disclosure of a single-bit embodiment requires that the claim encompasses single-bit sequences. Therefore, claim 9 is invalid.

PersonalWeb Tech., LLC v. Apple, Inc., 848 F.3d 987 (Fed. Cir. 2017)

In yet another example of the Circuit demanding more detailed findings from the PTAB, the panel vacates an IPR obviousness determination in favor of Apple, instructing the Board to support its findings that the prior art disclosed all of the elements of the challenged claims and explain why a skilled artisan would have been motivated to combine prior art teachings with a reasonable expectation of success.

This matter arose when PersonalWeb sued Apple, alleging infringement of seven of its patents by iTunes and iCloud. PersonalWeb also sued EMC, Google and Facebook, and all but the '310 patent were successfully challenged by EMC in other IPR proceedings. The present appeal is from Apple's successful IPR against the '310 patent, based on prior art patents to Woodhill and Stefik.

The panel first affirms claim construction as being plain from the face of the claims, and then turns to obviousness. Under the theory presented by Apple and adopted by the Board, the panel rules that the Board had to make findings, supported by evidence and explanation, on two points. First, the Board had to find in Woodhill and Stefik all of the elements of the claims at issue. Citing the 2016 *NuVasive*, *Warsaw Orthopedic* and *Ariosa Diagnostics* cases, the panel holds that the Board also had to find that a person of ordinary skill in the art would have been motivated to combine the prior art as claimed and had a reasonable expectation of success in doing so. *KSR* explained that it is important to identify a reason that would have prompted a person of ordinary skill to combine the elements in the way the claimed new invention does. According to the Supreme Court: "To facilitate review, this analysis should be made explicit."

The panel finds the Board's opinion to be inadequate. For example, claim 24 requires "causing the content-dependent name of the particular data item to be compared to a plurality of values." The Board found this element satisfied but the Board discussion mentions only Stefik, not Woodhill. The Board's opinion does not explicitly say, let alone explain, how Woodhill shows that determination to involve a comparison between the content-based identifier and a plurality of values.

The panel also finds the Board's reasoning to be deficient in its finding that a relevant skilled artisan would have had a motivation to combine Woodhill and Stefik in the way claimed or that this combination would have had a reasonable expectation of success. The Board merely agrees with Apple's contention that a person of ordinary skill reading Woodhill and Stefik would have understood that the combination *would have allowed for* the selective access features of Stefik to be used with Woodhill's content-dependent identifiers feature. But that reasoning seems to say no more than that a skilled artisan, once presented with the two references, would have understood that they could be combined.

The panel concludes that its remand is not simply for the Board to explain what it meant or what it considered in reaching its decision. That is what the Circuit advised the Board in the *NuVasive*, *Warsaw Orthopedic* and *Ariosa Diagnostics* cases. Here, the Board is told that the remand is for the Board to go beyond that and reconsider the merits of the obviousness challenge.

Phigenix, Inc. v. ImmunoGen, Inc., 845 F.3d 1168 (Fed. Cir. 2017)

The panel rules that Phigenix has no standing to appeal its unsuccessful IPR, challenging an ImmunoGen patent even though Phigenix contends it would have additional licensing opportunities if the patent is invalidated. Phigenix is a research and licensing entity that does not manufacture any products.

According to the Circuit's 2014 *Consumer Watchdog* case involving an appeal from a reexamination proceeding, although Article III standing is not necessary to appear before an administrative agency, an appellant must nevertheless have standing if it seeks review of the agency's action in federal court. Citing the Supreme Court's recent *Spokeo* decision, the panel states that the test to determine appellate

standing is that an appellant must have (1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the appellee, and (3) that is likely to be redressed by a favorable judicial decision.

ImmunoGen exclusively licensed its '856 patent to Genentech, which markets the breast cancer drug Kadcyla. Phigenix owns the '534 patent, which, according to Phigenix, covers Kadcyla and, thus, the subject matter claimed in the '856 patent. Phigenix asserted that it has suffered an actual injury because at least a portion of the licensing revenue that ImmunoGen receives would inure to Phigenix if the '856 patent were invalidated. The panel rules that Phigenix's declarations are not adequate because there is no allegation that Phigenix ever licensed the '534 patent to anyone, much less to entities that have obtained licenses to the '856 patent. Moreover, Phigenix is not engaged in any activity that would give rise to a possible infringement suit.

The panel also rejects Phigenix's argument that 35 U.S.C. § 141(c) gives it the right to appeal a final Board decision since Congress cannot erase Article III's standing requirements. Finally, while 35 U.S.C. § 315(e)(1) does create an estoppel, in *Consumer Watchdog* the Circuit held that a similar estoppel provision in the patent reexamination statute does not constitute an injury in fact. The panel sees no reason to depart from the holding of that case here.

Comment: This case should give pause to a party considering filing an IPR unless it is arguably infringing the patent. This might not only concern public interest organizations like Consumer Watchdog, but also investors in competitive companies whose investments might appreciate if a blocking patent is invalidated. Even a company considering entering a field has to be concerned since it may not have the right to appeal an adverse ruling, even though it would be estopped from challenging the patent in the future.

In re NuVasive, Inc., 841 F.3d 966 (Fed. Cir. 2016)

The Circuit affirms a determination of obviousness in a first of two IPRs but vacates and remands the determination in a second IPR, holding that the patent owner NuVasive did not have an adequate opportunity to respond to assertions on which the Board relied.

Medtronic filed two petitions for IPR of NuVasive's patent directed to implants for spinal fusion surgery. The relevant part of claim 1 recites that the implant has a length greater than 40 mm and that the length is at least two and a half times greater than the width of the implant.

In its first IPR, Medtronic argued that a first prior art reference (Frey) taught an implant whose length is at least 2.5 times the width, and that it would have been obvious to modify the Frey implant to have a length greater than 40 mm based on a second reference (Michelson). Medtronic's second IPR alleged obviousness in view of a different primary reference in combination with Michelson, and did not include an assertion about or citation to material encompassing Michelson's Figure 18.

In its replies, Medtronic pointed to Michelson's Figure 18, and argued that it disclosed an implant whose length was greater than 40 mm and at least 2.5 times its width. NuVasive objected to the argument regarding Figure 18, contending that it was a new ground of invalidity asserted for the first time on reply, and requested leave to file motions to strike or, alternatively, sur-replies, which the Board denied. The Board ultimately held that all but one of the challenged claims were obvious in both IPRs, relying heavily on its findings that Michelson, by itself, discloses an implant whose length is both greater than 40 mm and at least 2.5 times its width.

The panel rules that in the first IPR, NuVasive had at least "a minimally sufficient" opportunity to address Medtronic's contention. Medtronic's petition put NuVasive on notice that Medtronic was relying on particular portions of Michelson to teach the '334 patent's claimed long-and-narrow implants, and NuVasive's response presented an adequate opportunity to respond.

The panel says that the second IPR was different, since in that proceeding, Medtronic did not include in its petition the same citations to or assertions about the Michelson passage that it included in the first petition. Thus, there was no notice as to the Figure 18 point before NuVasive filed its response, and the Board relied on Figure 18 in its determination of invalidity. Thus, NuVasive's rights were violated under the Administrative Procedure Act.

REG Synthetic Fuels, LLC v. Neste Oil Oyj, 841 F.3d 954 (Fed. Cir. 2016)

This appeal arises from a petition for IPR filed by Neste against a patent owned by REG. The panel affirms the determination that some of the claims of the patent are anticipated by a patent to Craig. REG argued that Craig does not anticipate because Craig discloses "area" percentages rather than weight percentages. The Board noted that the area percentages do not by themselves establish weight percentages within the claimed ranges of the claims. The panel agrees with the Board, however, that Dr. Klein converted the area percentages of Craig into the weight percentages recited in the '804 patent using several different relative response factors from prior art that REG's own expert cited in his expert declaration. Therefore, substantial evidence supports the Board's factual finding that the area percent disclosed in Craig could be reliably translated to the claimed weight percent.

Other claims of the patent were found by the Board to be anticipated by a published application by Dindi. REG argued before the Board that Dindi was not prior art to the '804 patent because Mr. Abhari invented the subject matter of the patent before the June 13, 2008 filing date of Dindi. The panel agrees with REG that it has proven conception prior to the filing date of Dindi based on Exhibits 2011 and 2058, both already admitted in evidence, and the content of Exhibit 2061, which the Board incorrectly excluded from evidence based on hearsay.

As to the excluded exhibit, the panel holds that the Board erred to the extent that it excluded the content of Exhibit 2061 because REG offered the Exhibit 2061 for the non-hearsay purpose to show that Mr. Abhari thought he had achieved 80 wt% purity C18 product. The act of writing and sending the email is, by itself, probative evidence on whether Mr. Abhari recognized—at the time that he had written the email—that the sum of the weight percentages of even-carbon-number paraffins in his compositions was at least 80 wt% and communicated this to a third party. However, because the Board did not make factual findings on diligence or reduction to practice in the first instance, the panel remands to the Board to make these findings.

Medtronic, Inc. v. Robert Bosch Healthcare Systems, Inc., 839 F.3d 1382 (Fed. Cir. 2016)

Medtronic petitioned the Circuit for rehearing of a panel decision which ruled that a determination by the Board to discontinue IPR proceedings was not reviewable on appeal under 35 U.S.C. § 314(d). The question presented on this petition is whether that decision is correct in light of the Supreme Court's *Cuozzo* decision, which issued after the original panel decision. Here the panel reaffirms its earlier order, ruling that nothing in *Cuozzo* is to the contrary, and the Board's vacatur of its institution decisions and termination of the proceedings constitute decisions whether to institute IPR and are therefore "final and nonappealable" under § 314(d).

This case started with Bosch bringing suit against Cardiocom, a subsidiary of Medtronic, alleging infringement of two Bosch patents. Cardiocom's petitions for IPR were denied because Cardiocom failed to show a reasonable likelihood that any of the challenged claims was unpatentable. Medtronic then filed petitions seeking IPR of the same two patents, listing Medtronic as the sole real party in interest. Bosch argued that the petitions should be denied because Medtronic had failed to name Cardiocom as a real party in interest as required by 35 U.S.C. § 312(a)(2). The Board instituted IPR, but permitted Bosch to take discovery regarding Cardiocom's status as a real party in interest. Based on that discovery, the Board granted Bosch's motion to terminate the proceedings because of Medtronic's failure to comply with the requirement that all real parties in interest be disclosed, persuaded by the collective evidence that Medtronic was acting as a proxy for Cardiocom.

Medtronic appealed, and Bosch moved to dismiss for lack of jurisdiction, asserting that the Board's decisions were not appealable under § 314(d). The panel dismissed Medtronic's appeals for lack of jurisdiction and denied mandamus relief. *Cuozzo* was then decided, leading to the present request for reconsideration.

Husky Injection Molding Sys. Ltd. v. Athena Automation Ltd., 838 F.3d 1236 (Fed. Cir. 2016)

In a divided opinion, the Circuit rules that it lacks jurisdiction to hear Husky's appeal as to whether assignor estoppel bars Athena from filing for IPR. After discussing the Supreme Court's and the Circuit's decisions in *Cuozzo*, as well as the Circuit's decision in *Achates*, the majority ultimately relies on 35 U.S.C. § 314(d), which provides that the decision of the Board whether to institute IPR "shall be final and nonappealable," and that assignor estoppel is not within one of the limited exceptions to such finality. Readers will recall that both *Cuozzo* decisions held that the exception to appealability in § 314(d) was broad. In the present case, the majority concludes that the assignor estoppel defense is analogous to the time-barred defense raised in *Achates*, which the panel held was not appealable.

The doctrine of assignor estopple prevents one who formerly owned a patent from subsequently challenging the validity of the patent. In the present case, Husky's former owner and president, Schad, was also a co-inventor on the patent being challenged in this IPR. Schad assigned his invention to Husky, sold Husky, and then formed Athena. Athena filed this IPR, and Husky argued that assignor estoppel barred Athena from filing the petition. The Board rejected the argument that assignor estoppel bars Athena from filing the petition because the IPR statute provides that only patent owners are barred. The Board went on to decide that many but not all of the challenged claims were anticipated.

Judge Plager dissents from the ruling on appealability, arguing that assignor estoppel is a common law doctrine, and an administrative agency such as the Board should not be able to reject the application of the doctrine. He concludes his dissent: "Regrettably, the majority's view may contribute to the already existing confusion regarding which matters this court can review on appeal from a final decision by the Board."

Wi-Fi One, LLC v. Broadcom Corp., 837 F.3d 1329 (Fed. Cir. 2016)

In an appeal of an IPR decision invalidating Wi-Fi's patent claims, the panel rules that a Board's decision that an IPR is not time-barred cannot be appealed. The Circuit already ruled on this issue in its 2015 *Achates* decision, but Wi-Fi argued that the Supreme Court's subsequent decision in *Cuozzo* implicitly overruled *Achates*. Specifically, Wi-Fi argued that Broadcom was in privity with certain entities that were involved in parallel district court litigation involving the '215 patent more than one year prior to the filing of Broadcom's petition, and that because those entities would be time-barred from seeking IPR of the '215 patent, Broadcom was time-barred as well pursuant to § 315(b). Wi-Fi then cited to the language in *Cuozzo* noting that the Supreme Court was not precluding review of a final Board decision where there was a "due process problem with the entire proceeding," and that such "shenanigans" may be properly reviewable under the Administrative Procedure Act.

The panel rejects the premise that this case involves the type of "shenanigans" being referenced in *Cuozzo*, noting that this case is more like what the Supreme Court described as "questions that are closely tied to the application and interpretation of statutes related to the Patent Office's decision to initiate inter partes review."

In his concurring opinion, Judge Reyna notes that he agrees with the majority that Wi-Fi One has neither shown Broadcom to be in privity with the Texas Defendants nor a real party in interest in the Texas litigation. However, he writes separately to convey his sense that this Court has jurisdiction to address the time bar question despite the statutory requirement that the Board's institution decisions "shall be final and nonappealable." He thinks that a final decision concerning the time bar set forth by 35 U.S.C. § 315(b) should be subject to review, and in any event, should be reconsidered by an en banc Circuit.

Veritas Technologies LLC v. Veeam Software Corp., 835 F.3d 1406 (Fed. Cir. 2016)

Dealing yet again with the Board's harsh application of its rules in denying claim amendments in IPR proceedings, the Circuit holds that the patentee's disclosure was "so clear as to be beyond dispute" despite the Board's conclusion that the support for the amended claims was inadequate. This decision does not bode well for the PTO in the Aqua Products case, recently accepted for en banc review by the Circuit to consider the Board's application of its rules relating to claim amendments.

Veritas sued Veeam for infringement of four patents directed to its network backup products. In response to Veeam's petition for IPR on all four patents, the Board cancelled all of the challenged claims based upon obviousness. Veritas moved to amend claims in two of the IPRs and its motions were denied.

On appeal here, the Circuit affirms the obviousness rejection of the asserted claims but takes the Board to task for the way it applied the PTO rule regarding claim amendments. According to the opinion, Veritas specifically described how the prior art did not disclose the invention set forth in the amended claims. The Board denied the motion based on its insistence that the patent owner discuss whether each newly added feature was separately known in the prior art. The Board concluded that the motion and the declaration of Veritas's expert do not discuss the features separately but discuss only the newly added feature in combination with other known features, and therefore is inadequate. According to the panel, that conclusion, the sole basis for denying the motion to amend, is unreasonable and hence must be set aside as arbitrary and capricious.

Interestingly, the opinion also stated that the Board's decision on the motion to amend was in error regardless of how the Aqua Products case is decided by the full court.

In re CSB-Sys. Int'l, Inc., 832 F.3d 1335 (Fed. Cir. 2016)

CSB appeals a Board decision in an *ex parte* reexamination upholding an examiner's rejection of all claims of CSB's patent as unpatentable over the prior art. CSB argued that the Board construed the claims applying the wrong legal standard, namely the broadest reasonable interpretation standard that is normally applied during PTO examination and reexamination. The Circuit agrees with CSB that the Board should have applied the *Phillips* standard because the patent expired during the reexamination, and thus the patentee lost the opportunity to amend the claims. In doing so, the panel rejects the argument that BRI should be used because the claims could have been amended when they were before the examiner during the reexam.

The Circuit concludes, however, that the Board's claim construction was correct even under the *Phillips* standard, and therefore *affirms* its rejection of all claims as unpatentable over the prior art.

Comment: In a recent presentation, PTAB Chief Judge Michael Tierney opined: "In 9 out of 10 cases, actually, [using BRI or *Phillips* claim construction is] not going to make a difference." Also see *SAS Inst., Inc. v. ComplementSoft, LLC*, 2016 U.S. App. LEXIS 10508 (Fed. Cir. June 10, 2016), decided ten days before *Cuozzo*. In *SAS* the Circuit applied BRI in the appeal of an IPR, but in doing so cited to *Phillips* six different times, as well as to other cases that applied *Phillips*. On August 3 my colleague Nika Aldrich made a presentation to the IP Section of the Oregon State Bar in which he explained that he thought the BRI and *Phillips* tests are merging. See his PowerPoint.

This opinion was written by Judge O'Malley but it has Judge Newman's hand all over it. Judge Newman has repeatedly dissented from affirmations of IPR rulings invalidating patents because the IPR process does not sufficiently replicate patent litigation, even though its stated purpose is to be a substitute for litigating validity in court. Her argument that "broadest reasonable interpretation" is an inappropriate standard for claim construction in IPRs was soundly rejected by the Supreme Court in *Cuozzo*, but if you are a patentee appealing an invalidation ruling in an IPR, you should hope Judge Newman is on the panel. The language in this opinion is noticeably strong in ruling that the PTO needs to change its thinking and practices regarding the burden of proof in IPRs.

In re Magnum Oil Tools Int'l, Ltd., 829 F.3d 1364 (Fed. Cir. 2016)

McClinton Energy Group, LLC filed a petition for IPR of a '413 patent owned by Magnum. The PTAB instituted review and issued a final written decision holding all challenged claims of the patent obvious. Subsequently, McClinton and Magnum settled their dispute over the '413 patent and other patents not at issue here, but Magnum appeals the Board's judgment regarding the '413 patent and the PTO intervened.

The '413 patent is directed to technology in the field of oil drilling through use of hydraulic fracturing, commonly known as "fracking." The patent teaches the use of an insert having a "lower shear or shearable mechanism" for releasing a setting tool. The patent also teaches that the insert is placed within the plug body and contains both shearable and nonshearable threads.

McClinton filed this IPR challenging all claims of the '413 patent. In its Petition, McClinton argued that the claims would have been obvious over Alpha as a base reference, in combination with Cockrell and Kristiansen. While McClinton also noted that the claims would have been obvious over the combination of Lehr as a base reference (in view of Cockrell and Kristiansen), McClinton largely "incorporated by reference" its arguments on Lehr from its earlier arguments based on Alpha (incorporating by reference arguments with respect to Lehr "as discussed above with respect to Alpha," and noting that "the same analysis applies to combinations using Lehr as a base reference").

Finding that McClinton had established a reasonable likelihood of success in its Petition, the Board instituted IPR of all challenged claims based on Lehr in view of Cockrell and Kristiansen, but not on the basis of Alpha. The Board ultimately issued a final written decision holding all challenged claims unpatentable under 35 U.S.C. § 103.

The Board Improperly Shifted the Burden of Proof from the Petitioner to the Patentee

As an initial matter . . . there are two distinct burdens of proof: a burden of persuasion and a burden of production. In an *inter partes* review, the burden of persuasion is on the petitioner to prove "unpatentability by a preponderance of the evidence," 35 U.S.C. § 316(e), and that burden never shifts to the patentee. Indeed, the Supreme Court has never imposed nor even contemplated a formal burdenshifting framework in the patent litigation context.

Additionally, the PTO incorrectly contends that "the burden of production—or the burden of going forward with evidence, shifts between the petitioner and the patent owner," as soon as the Board institutes an IPR. Where, as here, the only question presented is whether due consideration of the four *Graham* factors renders a claim or claims obvious, no burden shifts from the patent challenger to the patentee. This is especially true where the only issues to be considered are what the prior art discloses, whether there would have been a motivation to combine the prior art, and whether that combination would render the patented claims obvious. Furthermore, because of the "significant difference" between the standards of proof at institution and trial during an IPR, it is inappropriate to shift the burden to the patentee after institution to prove that the patent is patentable. Instead, the petitioner continues to bear the burden of proving unpatentability after institution, and must do so by a preponderance of the evidence at trial.

Magnum points out that McClinton attempted to establish obviousness in its petition by arguing from Alpha as the primary base reference. The Board did not initiate the IPR based on Alpha, however. But, contends Magnum, the Board in its final written decision improperly incorporated by reference McClinton's arguments based on Alpha into the Board's conclusion that the claimed invention would have been obvious in light of the primary reference Lehr.

Magnum cites to several examples in the Board's decision where the Board required Magnum to rebut Petitioner McClinton's assertions that a skilled artisan would have been motivated to combine the prior art

references, without first requiring McClinton to provide evidence to support its assertions. We agree with Magnum that the Board improperly shifted the burden to it, as the patentee, to prove nonobviousness. Because McClinton failed to separately meet its burden of establishing obviousness in view of Lehr, Cockrell, and Kristiansen, we reverse.

Incorporating by Reference Arguments Made with Respect to Alpha Was Insufficient to Show Obviousness Over Lehr

The record reveals that McClinton failed to articulate a motivation to combine the specific teachings of Lehr, Cockrell, and Kristiansen to achieve the claimed invention. Indeed, McClinton merely attempted to incorporate its arguments based on Alpha to its obviousness analysis based on Lehr, without presenting particularized arguments explaining why those arguments from Alpha would be cross-applicable to the Lehr reference.

The Board Cannot Adopt Arguments on Behalf of Petitioners that Were Not Raised by Petitioners

Finally, we address the PTO's assertion that the Board did not err in making an obviousness argument on behalf of McClinton based on the primary reference Lehr because this argument "could have been included in a properly-drafted petition." It is the petitioner that bears the burden of proof in IPRs, however. It is true that the entire IPR process is one designed as an "efficient system for challenging patents that should not have issued." But it is still a system that is predicated on a petition followed by a trial in which the petitioner bears the burden of proof. Given that framework, we find no support for the PTO's position that the Board is free to adopt arguments on behalf of petitioners that could have been, but were not, raised by the petitioner during an IPR. Instead, the Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.

Conclusion

As explained above, the Board erred in shifting the burden of proof on obviousness in this IPR from the petitioner, McClinton, to the patent owner, Magnum. The Board further failed to articulate a sufficient rationale for why a skilled artisan would have sought to combine the asserted prior art to achieve the claimed invention. The Board's decision was premised on a legally incorrect standard for assessing obviousness, and the Board's factual findings regarding the alleged motivation to combine lacked substantial evidence. Accordingly, we reverse the Board's decision.

SkyHawke Techs., LLC v. DECA Int'l Corp., 828 F.3d 1373 (Fed. Cir. 2016)

Taking guidance from the Supreme Court that appellate courts "review judgments, not opinions," the Circuit dismisses an appeal over claim construction by the prevailing patent owner in an *inter partes* reexamination. SkyHawke sued Deca for patent infringement on a patent directed to golf course range finders. In response, Deca filed a request for *inter partes* reexamination, where patentability was confirmed. Deca appealed to the Board, which affirmed the Examiner's rulings.

In its decision the Board performed a lengthy analysis of the meaning of "means" for determining the distance to the pin. The Board identified particular algorithms in the patent as providing the corresponding structure, as required for a means-plus-function claim under § 112 ¶ 6. Based on this claim construction, the Board concluded that none of the prior art references disclosed the algorithmic structure corresponding to the means-plus-function element, and thus affirmed patentability.

SkyHawke, <u>the prevailing party</u>, appealed, requesting correction of the claim construction but affirmance of the Board's ultimate decision upholding the examiner's validity determination. The panel notes that courts of appeals employ a prudential rule that the prevailing party cannot ordinarily seek relief in the appellate court, and that SkyHawke's appeal fits cleanly into this prudential prohibition. SkyHawke alleges a generalized concern that the Board made an erroneous, overly-narrow claim construction, impacting

SkyHawke's patent rights and its right to exclude others from practicing its invention, but does not seek to alter the judgment of the Board. Therefore, the appeal must be dismissed.

SkyHawke's SKY CADDIE

Deca's GOLF BUDDY





Cuozzo Speed Technologies, LLC v. Lee, 136 S. Ct. 2131 (2016)

The AIA creates an agency procedure called "inter partes review" or IPR that allows a third party to ask the PTO to reexamine the claims in an already-issued patent and to cancel any claim that the agency finds to be unpatentable in light of prior art. The Act, as relevant here, provides that the PTO's decision "whether to institute an inter partes review... shall be final and non-appealable," 35 U. S. C. §314(d), and grants the Patent Office authority to issue "regulations ... establishing and governing inter partes review," §316(a)(4). PTO regulation 37 CFR §42.100(b) provides that, during IPR, a patent claim "shall be given its broadest reasonable construction in light of the specification of the patent in which it appears."

In 2012, Garmin sought IPR of all 20 claims of a patent held by Cuozzo, asserting that claim 17 was obvious in light of three prior patents. The PTO agreed to review claim 17. It also decided to reexamine claims 10 and 14 on that same ground because it determined those claims to be logically linked to the obviousness challenge to claim 17. The Patent Trial and Appeal Board concluded that the claims were obvious in light of prior art, denied for reasons of futility Cuozzo's motion to amend the claims, and canceled all three claims.

Cuozzo appealed to the Federal Circuit, claiming that the PTO improperly instituted IPR with respect to claims 10 and 14, and alleged that the Board improperly used the "broadest reasonable construction" standard to interpret the claims rather than the standard used by courts, which gives claims their ordinary meaning as understood by a person of skill in the art under *Phillips v. AWH Corp.*, 415 F. 3d 1303. The Circuit rejected both arguments, reasoning that §314(d) made the PTO's decision to institute IPR "nonappealable," and it concluded that the regulation was a reasonable exercise of the agency's rulemaking authority.

Held:

1. Section 314(d) bars Cuozzo's challenge to the Patent Office's decision to institute inter partes review.

(a) The text of §314(d) expressly states that the Patent Office's determinations whether to institute inter partes review "shall be *final and nonappealable*." Moreover, construing §314(d) to permit judicial review of the PTO's decision to institute IPR undercuts the important congressional objective of giving the agency significant power to revisit and revise earlier patent grants. Past practice in respect to related proceedings, including the predecessor to IPR also supports the conclusion that Congress did not intend for courts to review these initial determinations. Finally, reading §314(d) as limited to interlocutory appeals would render the provision largely superfluous in light of the APA.

(b) The "strong presumption" favoring judicial review is overcome here by these" clear and convincing" indications that Congress intended to bar review. Given that presumption, however, the interpretation adopted here applies to cases in which the challenge is to the PTO's determination "to initiate an inter partes review *under this section*," or where the challenge consists of questions closely tied to the application and interpretation of statutes related to that determination. Cuozzo's claim does not implicate a constitutional question, nor does it present other questions of interpretation that reach well beyond "this section" in terms of scope and impact. Rather, Cuozzo's allegation that Garmin's petition did not plead "with particularity" the challenge to claims 10 and 14 as required by §312 is little more than a challenge to the PTO's conclusion under §314(a) that the "information presented in the petition" warranted review.

2. The PTO regulation requiring the Board to apply the broadest reasonable construction standard to interpret patent claims is a reasonable exercise of the rulemaking authority granted to the PTO by statute.

(a) Where a statute leaves a gap or is ambiguous, this Court typically interprets a congressional grant of rulemaking authority as giving the agency leeway to enact rules that are reasonable in light of the text, nature, and purpose of the statute. Here, the statute grants the PTO the authority to issue regulations governing IPR, and no statutory provision unambiguously mandates a particular construction standard.

The nature and purpose of IPR does not unambiguously require the PTO to apply one particular claim construction standard. Cuozzo's contention that the purpose of IPR—to establish trial-like procedures for reviewing previously issued patents—supports the application of the ordinary meaning standard ignores the fact that in other significant respects, inter partes review is less like a judicial proceeding and more like a specialized agency proceeding. This indicates that Congress designed a hybrid proceeding. The purpose of IPR is not only to resolve patent-related disputes among parties, but also to protect the public's paramount interest in seeing that patent monopolies are kept within their legitimate scope. Neither the statute's language, nor its purpose, nor its legislative history suggests that Congress decided what standard should apply in inter partes review.

(b) The regulation is a reasonable exercise of the Patent Office's rulemaking authority. The broadest reasonable construction standard helps ensure precision in drafting claims and prevents a patent from tying up too much knowledge, which, in turn, helps members of the public draw useful information from the disclosed invention and understand the lawful limits of the claim. The PTO has used this standard for more than 100 years and has applied it in proceedings which, as here, resemble district court litigation.

Cuozzo's two arguments in response are unavailing. Applying the broadest reasonable construction standard in IPR is not, as Cuozzo suggests, unfair to a patent holder, who may move to amend at least once in the review process, and who has had several opportunities to amend in the original application process. And though the application of one standard in IPR and another in district court proceedings may produce inconsistent outcomes, that structure is inherent to Congress' regulatory design, and it is also consistent with past practice, as the patent system has long provided different tracks for the review and adjudication of patent claims. The PTO's regulation is reasonable, and this Court does not decide whether a better alternative exists as a matter of policy.

Genzyme Therapeutic Prods. L.P. v. Biomarin Pharm. Inc., 825 F.3d 1360 (Fed. Cir. 2016)

The Circuit affirms IPR obviousness rulings holding that two of Genzyme's patents were invalid as obvious. Genzyme argued that the PTAB erred in its construction of whereby clauses in the patents at issue by construing these clauses to encompass a reduction of accumulated glycogen anywhere in a patient, rather than construing these clauses to require that the reduction of glycogen occur in the patient's skeletal muscles. The panel rules that the Board's construction was correct because the claims were not restricted during prosecution. Genzyme also argued that the Board violated the Administrative Procedure Act ("APA") by relying on cited references in its final written decisions that were not specifically used to institute the IPR. However, because Genzyme had notice of the references, the panel holds that the PTAB did not err in relying on these references.

Comment: On June 10 the Circuit reversed and remanded a Board decision in SAS v. ComplementSoft because the Board adopted a new claim construction in its final written decision without giving the parties an opportunity to address that new construction. In that case, the panel held that this was a violation of the APA. However, in *Genzyme* the panel determined that Genzyme was already aware of the prior art and could have addressed it in its earlier filings.

Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC, 825 F.3d 1373 (Fed. Cir. 2016)

The panel affirms the IPR invalidation of claims directed to a universal attachment for mounting a variety of construction and demolition tools that can easily and quickly convert between different tools. Allied argued that two prior art pieces of equipment disclosed in patents to Caterpillar and Ogawa could not be physically combined in the manner proposed by the Board. However, the panel rules that the test is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, but rather whether a skilled artisan would have been motivated to combine the teachings to achieve the claimed invention.

Allied also argued that Caterpillar teaches away from Ogawa because in Ogawa the main pivot pin functions as *both* the pivot point for the jaws and the means for attaching the jaws to the frame. According to Allied, because Ogawa encourages one in the art to do exactly what Caterpillar says they should not do—have the main pivot pin for both jaws also mount the jaws to the frame—Caterpillar teaches away from the combination with Ogawa. However, the panel rules that the disadvantage underscored by Caterpillar does not militate against finding the combination proper. Caterpillar expresses doubt as to whether an *optimal* design feature may have the main pivot pin for both jaws also mount the jaws also mount the jaws to the frame in order to effect the quick change functionality. There is no teaching away from the combination of Caterpillar and Ogawa because the combination does not utilize the pivot pin attachment mechanism of Ogawa. There is no teaching away in Caterpillar from using the Ogawa feature of two movable jaws.

In any event, the PTAB grounded its modification of Caterpillar on Ogawa's teaching of two movable blades and wide range of angular movement. Thus, Ogawa's disclosure of the need for two separate cylinders is extraneous to the PTAB's decision. According to the PTAB, the claims of the '489 patent would have been obvious whether only a single or two cylinders are used.

SAS Inst., Inc. v. ComplementSoft, LLC, 825 F.3d 1341 (Fed. Cir. 2016)

SAS filed an IPR to review the patentability of a ComplementSoft patent directed to an integrated development environment for generating and maintaining source code, programmed in data manipulation languages. The Board determined that all of the instituted claims, except for claim 4, were unpatentable in view of the prior art. The panel affirms the construction of claim 1 challenged on appeal by ComplementSoft. However, the panel vacates the Board's determination that claim 4 is patentable and remands so that the parties may address a new construction that the Board adopted in its final written decision after interpreting the claim differently before.

Specifically, the Board's final written decision concluded that dependent claim 4 was patentable because the prior art did not satisfy the "graphical representations of data flows" limitation in claim 4, which it construed in its final written decision in a manner that was different than it provided in its institution decision. The Board then denied SAS's request for rehearing in view of the new claim construction.

The panel notes that § 554(b)(3) of the APA provides that persons entitled to notice of an agency hearing shall be timely informed of the matters asserted. SAS, as the petitioner, was deprived this opportunity when the Board revised its claim construction and then denied SAS's request for rehearing. Accordingly, the panel vacates the Board's determination that claim 4 is patentable and remands so that the parties may address the new construction that the Board adopted in its final written decision.

Judge Newman concurs as to all aspects of the opinion but dissents from the majority's rejection of the argument by SAS that the Board should have addressed all of the claims challenged in its IPR petition.

She contends, as she has in other cases, that the Board's practice of deciding the validity of only some of the patent claims challenged in an IPR petition does not conform to the America Invents Act.

In re Aqua Products, Inc., 823 F.3d 1369 (Fed. Cir. 2016)

The panel affirms a decision of the PTAB in an IPR, denying Aqua's motion to amend the claims. Under the IPR rules, a patentee has an opportunity to amend the claims or submit new claims, but only if they also demonstrate that the new claims would be patentable over the prior art of record. The panel upholds the Board's denial of Aqua's motion to substitute new claims because Aqua failed to meet its burden of demonstrating patentability of the new claims.

This case is another example of the Circuit giving broad discretion to the Board in affirming the denial of motions to amend claims. See also Synopsys, Inc. v. Mentor Graphics Corp., 814 F.3d 1309 (Fed. Cir. 2016); Prolitec, Inc. v. ScentAir Techs, Inc., 807 F.3d 1353 (Fed. Cir. 2015); and Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292 (Fed. Cir. 2015).

Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd., 821 F.3d 1359 (Fed. Cir. 2016)

The panel affirms the PTAB *inter partes* review finding of non-obviousness as to a patent directed to a method of labeling nucleotides in a DNA strand. In addition to finding that the Board's factual findings are supported by substantial evidence, the panel also affirmed the Board's decision to not consider arguments in petitioner appellant's reply brief because those arguments, including support by expert witnesses, were not in the initial petition. Unlike district court litigation—where parties have greater freedom to revise and develop their arguments over time and in response to newly discovered material—the expedited nature of IPRs bring with it an obligation for petitioners to make their case in their petition to institute an *inter partes* review.

This ruling is similar to that in *Redline Detection, LLC v. Star Envirotech, Inc.,* 811 F.3d 435 (Fed. Cir. 2015), decided in December. While the 60 page limit restricts the arguments that can be made, expert declarations can and should be used. However, overly long expert witness declarations have been rejected on occasion where petitioner's arguments have been found not to be contained "within the petition." 35 U.S.C. § 312(a)(3). If necessary, a second IPR needs to be filed because we should not assume that additional evidence can be submitted under Rule 42.123(a), which permits the record to be supplemented within 30 days of institution.

Cuozzo Speed Technologies, LLC v. Lee, 136 S. Ct. 2131 (2016)

The AIA creates an agency procedure called "inter partes review" or IPR that allows a third party to ask the PTO to reexamine the claims in an already-issued patent and to cancel any claim that the agency finds to be unpatentable in light of prior art. The Act, as relevant here, provides that the PTO's decision "whether to institute an inter partes review... shall be final and non-appealable," 35 U. S. C. §314(d), and grants the Patent Office authority to issue "regulations ... establishing and governing inter partes review," §316(a)(4). PTO regulation 37 CFR §42.100(b) provides that, during IPR, a patent claim "shall be given its broadest reasonable construction in light of the specification of the patent in which it appears."

In 2012, Garmin sought IPR of all 20 claims of a patent held by Cuozzo, asserting that claim 17 was obvious in light of three prior patents. The PTO agreed to review claim 17. It also decided to reexamine claims 10 and 14 on that same ground because it determined those claims to be logically linked to the obviousness challenge to claim 17. The Patent Trial and Appeal Board concluded that the claims were obvious in light of prior art, denied for reasons of futility Cuozzo's motion to amend the claims, and canceled all three claims.

Cuozzo appealed to the Federal Circuit, claiming that the PTO improperly instituted IPR with respect to claims 10 and 14, and alleged that the Board improperly used the "broadest reasonable construction" standard to interpret the claims rather than the standard used by courts, which gives claims their ordinary

meaning as understood by a person of skill in the art under *Phillips v. AWH Corp.*, 415 F. 3d 1303. The Circuit rejected both arguments, reasoning that §314(d) made the PTO's decision to institute IPR "nonappealable," and it concluded that the regulation was a reasonable exercise of the agency's rulemaking authority.

Held:

1. Section 314(d) bars Cuozzo's challenge to the Patent Office's decision to institute inter partes review.

(a) The text of §314(d) expressly states that the Patent Office's determinations whether to institute inter partes review "shall be *final and nonappealable*." Moreover, construing §314(d) to permit judicial review of the PTO's decision to institute IPR undercuts the important congressional objective of giving the agency significant power to revisit and revise earlier patent grants. Past practice in respect to related proceedings, including the predecessor to IPR also supports the conclusion that Congress did not intend for courts to review these initial determinations. Finally, reading §314(d) as limited to interlocutory appeals would render the provision largely superfluous in light of the APA.

(b) The "strong presumption" favoring judicial review is overcome here by these" clear and convincing" indications that Congress intended to bar review. Given that presumption, however, the interpretation adopted here applies to cases in which the challenge is to the PTO's determination "to initiate an inter partes review *under this section*," or where the challenge consists of questions closely tied to the application and interpretation of statutes related to that determination. Cuozzo's claim does not implicate a constitutional question, nor does it present other questions of interpretation that reach well beyond "this section" in terms of scope and impact. Rather, Cuozzo's allegation that Garmin's petition did not plead "with particularity" the challenge to claims 10 and 14 as required by §312 is little more than a challenge to the PTO's conclusion under §314(a) that the "information presented in the petition" warranted review.

2. The PTO regulation requiring the Board to apply the broadest reasonable construction standard to interpret patent claims is a reasonable exercise of the rulemaking authority granted to the PTO by statute.

(a) Where a statute leaves a gap or is ambiguous, this Court typically interprets a congressional grant of rulemaking authority as giving the agency leeway to enact rules that are reasonable in light of the text, nature, and purpose of the statute. Here, the statute grants the PTO the authority to issue regulations governing IPR, and no statutory provision unambiguously mandates a particular construction standard.

The nature and purpose of IPR does not unambiguously require the PTO to apply one particular claim construction standard. Cuozzo's contention that the purpose of IPR—to establish trial-like procedures for reviewing previously issued patents—supports the application of the ordinary meaning standard ignores the fact that in other significant respects, inter partes review is less like a judicial proceeding and more like a specialized agency proceeding. This indicates that Congress designed a hybrid proceeding. The purpose of IPR is not only to resolve patent-related disputes among parties, but also to protect the public's paramount interest in seeing that patent monopolies are kept within their legitimate scope. Neither the statute's language, nor its purpose, nor its legislative history suggests that Congress decided what standard should apply in inter partes review.

(b) The regulation is a reasonable exercise of the Patent Office's rulemaking authority. The broadest reasonable construction standard helps ensure precision in drafting claims and prevents a patent from tying up too much knowledge, which, in turn, helps members of the public draw useful information from the disclosed invention and understand the lawful limits of the claim. The PTO has used this standard for more than 100 years and has applied it in proceedings which, as here, resemble district court litigation.

Cuozzo's two arguments in response are unavailing. Applying the broadest reasonable construction standard in IPR is not, as Cuozzo suggests, unfair to a patent holder, who may move to amend at least once in the review process, and who has had several opportunities to amend in the original application process. And though the application of one standard in IPR and another in district court proceedings may

produce inconsistent outcomes, that structure is inherent to Congress' regulatory design, and it is also consistent with past practice, as the patent system has long provided different tracks for the review and adjudication of patent claims. The PTO's regulation is reasonable, and this Court does not decide whether a better alternative exists as a matter of policy.

Remedies

Damages, Lost Profits, Prejudgment Interest

<u>Rembrandt Wireless Technologies v. Samsung Electronics, 2017 U.S. App. LEXIS 6502 (April 17, 2017)</u>

The Circuit agrees with Rembrandt and the district court that the per-unit royalty award is appropriate as to Samsung's infringing Bluetooth-compatible phone and television products, but is troubled by the court's application of the patent marking statute. Rembrandt did not require its licensee to mark products covered by one claim of the patent, which Rembrandt subsequently disclaimed to attempt to avoid the damages limitation of 35 U.S.C. § 287. The Circuit reverses the ruling that such a disclaimer is an effective means to avoid § 287 but remands on the issue of whether the patent marking requirement is on a claim-by-claim or entire patent basis.

Samsung unsuccessfully argued for a broader interpretation of the claims that would include prior art it asserted in support of its obviousness argument. The panel also affirms a determination of what constitutes a reasonable royalty, first agreeing that it was correct to consider the difference between what Samsung paid Texas Instruments for two different Bluetooth chips, one including Bluetooth Enhanced Data Rate functionality such as claimed in the patents-in-suit, and without. The Circuit also agrees it was appropriate for the district court to consider a settlement between Rembrandt and BlackBerry involving the same patents.

As an NPE, Rembrandt would normally not have had a problem with § 287, which provides that if a patentee fails to mark patented products with the patent number, damages are limited to those incurred after an infringer receives notice of the infringement (such as upon the filing of the suit in the present case). However, patentees must require licensees to mark their products, and Rembrandt failed to require its licensee Zhone to do that here. Rembrandt subsequently disclaimed claim 40 and argued that the obligation to mark the product embodying claim 40 had therefore vanished. The district court relied on Circuit precedence holding that a disclaimed patent claim is treated as if it had never existed, and denied a motion by Samsung that damages should exclude pre-notice damages. The Circuit rejects that holding, noting that while a disclaimer may relinquish rights of the patent holder, "we have never held that the patent owner's disclaimer relinquishes the rights of the public" and the provision requiring marking in order to collect pre-notice damages.

However, the Circuit has never ruled on whether the marking requirement applies on a "claim-by-claim" basis (as argued by Rembrandt) or a "patent-by-patent" basis (as argued by Samsung). Applying Rembrandt's claim-by-claim approach would permit Rembrandt to recover pre-notice damages for infringement of claims other than claim 40, which is the only claim that Samsung alleges the unmarked Zhone product embodied. The case is remanded for the district court to consider whether claim-by-claim or patent-by-patent is the correct approach.

Comcast IP Holdings v. Sprint Communications Co., 850 F.3d 1302 (Fed. Cir. 2017)

The Circuit affirms a \$7.5 million award to Comcast for the infringement by Sprint and Nextel (collectively, Sprint) of three patents directed to the use of computer network technology to facilitate a telephone call.

Sprint contests the construction of two of the terms of the patents but in each case the panel finds Sprint's arguments unpersuasive. Moreover, Sprint's arguments as to each of the terms are irrelevant because Sprint failed to show how its construction would have made any difference.

Sprint next complains that there was insufficient evidence for the jury to find two of the claim limitations which the jury was instructed to apply its plain and ordinary meaning because neither party asked for a construction—were met by the accused systems. The panel disagrees, holding that there was substantial evidence to support the jury's findings.

In the panel's mind, Sprint was essentially proffering claim construction arguments in the guise of a challenge to the sufficiency of the evidence of infringement. But if Sprint desired such a narrow definition, it could (and should) have sought a construction to that effect. In light of this, the jury reasonably relied on Comcast's expert testimony that the relevant accused call flows were routed in a manner that infringes the patents.

Sprint also argued that the district court erroneously charged Comcast prejudgment interest from 2006 forward even though two of the three patents did not issue until later. In other words, Sprint contends the district court should have apportioned the prejudgment interest calculations based on the issue dates of the individual patents. Instead, the jury was told that the lump sum royalty payment should run from the date of the earliest relevant hypothetical negotiation.

The panel responds that the jury was also told that the hypothetical negotiators would have employed the "book of wisdom," looking forward in time from the date of the first hypothetical negotiation to account for "all information that would have been relevant to the parties in coming to and arriving at a deal." The experts agreed that this information would have included the issuance of any later patent relating to the same technology. Therefore, a lump sum royalty in the amount of \$7.5 million was appropriate and apportionment was not necessary. The panel therefore finds no abuse of discretion in the assessment of prejudgment interest against Sprint.

Prism Technologies LLC v. Sprint Spectrum L.P., 849 F.3d 1360 (Fed. Cir. 2017)

The Circuit affirms a reasonable royalty damage award of \$30 million for infringement of two Prism patents directed to network security systems, and affirms the denial of Prism's motion for an ongoing royalty. This appeal largely concerns Sprint's argument that a settlement agreement in which AT&T took a license under the same patents should not have been admitted into evidence.

On the same day that Prism sued Sprint, it sued AT&T for infringement of the same patents. The AT&T case went to trial first and on the last day of trial, just prior to closing arguments, the parties settled with AT&T taking a license. Sprint argued on appeal that the court should have excluded the license under Rule 403, which provides that relevant evidence may be excluded if its probative value is outweighed by its prejudicial effect. Weighing in favor of admission are: the patents are the same and the technology is very similar; one reason a litigation settlement would present distorted evidence is that litigation costs still to come may loom large in parties' decisions to settle, but here those costs were largely already incurred; and discovery and adversarial processes tend to move a legal inquiry toward improved answers, so the parties' agreement seems especially probative if reached toward the end of litigation. Weighing against admission are: the earlier suit's settlement figure may be too low if it was lowered by the patent owner's discounting of value by a possibility of losing on validity or infringement (the hypothetical negotiation assumes that the asserted patents are valid and infringed); and the royalty rate may have been too high since it included a risk to defendant of enhanced damages.

The panel has little trouble concluding that the court did not abuse its discretion in admitting the license agreement. What the court found particularly compelling was that Sprint itself had successfully sought the admission of several other Prism licenses on the same patents that resulted from prior litigation settlements (which of course set forth lower royalty rates). The panel also rejects two additional arguments Sprint presents: (1) litigation settlements on the issue of reasonable royalty rather than "established royalty" should be excluded; and (2) Rule 408 bars admission of evidence relating to

settlement. After criticizing the application of those arguments in the present case, the panel rules that the arguments were waived since neither was presented to the district court.

Sprint also argues that the court erred in admitting Prism's damages evidence based on an estimate of costs Sprint avoided by infringing. At trial, Prism presented evidence that a reasonable royalty would reflect Sprint's willingness, in a hypothetical negotiation, to pay an amount calculated by reference to the costs that Sprint would have incurred if it had chosen not to infringe—in this case, the costs of building a private backhaul network instead of leasing backhaul services from third-party providers. Sprint argued that Prism's approach was insufficiently tied to the "footprint" of the invention because Prism did not "invent" backhaul networks. The panel disagrees, ruling that a price for a hypothetical license may appropriately be based on consideration of the costs and availability of non-infringing alternatives and the potential infringer's cost savings.

In its cross-appeal, Prism argues that the district court erred in denying its motion for ongoing royalties. The panel notes that § 283 provides that a court may grant an injunction, and the Circuit has interpreted that provision to permit a court to award an ongoing royalty in lieu of an injunction. However, Prism's expert testified that the parties would have valued the patents based on Sprint's expected cost savings from avoiding the need to build its own backhaul network. Because those cost savings consisted, in large part, of Sprint's initial capital costs, the panel concludes that the jury could have reasonably found that the parties would have structured the agreement as a fully paid license.

Enhanced Damages

Halo v. Pulse and Stryker v. Zimmer, 136 S. Ct. 1923 (2016)

Section 284 of the Patent Act provides that, in a case of infringement, courts "may increase the damages up to three times the amount found or assessed." 35 U. S. C. §284. The Federal Circuit has adopted a two-part test for determining whether damages may be increased pursuant to §284. First, a patent owner must "show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent." *In re Seagate Technology, LLC*, 497 F.3d 1360. Second, the patentee must demonstrate, also by clear and convincing evidence, that the risk of infringement "was either known or so obvious that it should have been known to the accused infringer." *Ibid.* Under Federal Circuit precedent, an award of enhanced damages is subject to trifurcated appellate review. The first step of *Seagate* objective recklessness—is reviewed *de novo*; the second—subjective knowledge—for substantial evidence; and the ultimate decisionwhether to award enhanced damages—for abuse of discretion.

In each of these cases, petitioners were denied enhanced damages under the Seagate framework.

Held: The Seagate test is not consistent with §284.

(a) The pertinent language of §284 contains no explicit limit or condition on when enhanced damages are appropriate, and this Court has emphasized that the "word 'may' clearly connotes discretion." *Martin v. Franklin Capital Corp.*, 546 U. S. 132, 136. At the same time, however, "[d]iscretion is not whim." Id., at 139. Although there is "no precise rule or formula" for awarding damages under §284, a district court's "discretion should be exercised in light of the considerations" underlying the grant of that discretion. *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. _____. Here, 180 years of enhanced damage awards under the Patent Act establish that they are not to be meted out in a typical infringement case, but are instead designed as a sanction for egregious infringement behavior.

(b) In many respects, the *Seagate* test rightly reflects this historic guidance. It is, however, "unduly rigid, and . .. impermissibly encumbers the statutory grant of discretion to district courts." *Octane Fitness*, 572 U. S., at .

(1) By requiring an objective recklessness finding in every case, the Seagate test excludes from discretionary punishment many of the most culpable offenders, including the "wanton and malicious pirate" who intentionally infringes a patent—with no doubts about its validity or any notion of a defense for no purpose other than to steal the patentee's business. Seymour v. McCormick, 16 How, 480, 488. Under Seagate, a district court may not even consider enhanced damages for such a pirate, unless the court first determines that his infringement was "objectively" reckless. In the context of such deliberate wrongdoing, however, it is not clear why an independent showing of objective recklessness should be a prerequisite to enhanced damages. Octane Fitness arose in a different context but is instructive here. There, a two-part test for determining when a case was "exceptional"-and therefore eligible for an award of attorney's fees-was rejected because a claim of "subjective bad faith" alone could "warrant a fee award." So too here: A patent infringer's subjective willfulness, whether intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless. The Seagate test further errs by making dispositive the ability of the infringer to muster a reasonable defense at trial, even if he did not act on the basis of that defense or was even aware of it. Culpability, however, is generally measured against the actor's knowledge at the time of the challenged conduct. In sum, §284 allows district courts to punish the full range of culpable behavior. In so doing, they should take into account the particular circumstances of each case and reserve punishment for egregious cases typified by willful misconduct.

(2) Seagate's requirement that recklessness be proved by clear and convincing evidence is also inconsistent with §284. Once again, *Octane Fitness* is instructive. There, a clear and convincing standard for awards of attorney's fees was rejected because the statute at issue supplied no basis for imposing a heightened standard. Here, too, §284 "imposes no specific evidentiary burden, much less such a high one," 572 U. S., at _____. And the fact that Congress erected a higher standard of proof elsewhere in the Patent Act, but not in §284, is telling. "[P]atent-infringement litigation has always been governed by a preponderance of the evidence standard." *Id.*, at . Enhanced damages are no exception.

(3) Having eschewed any rigid formula for awarding enhanced damages under §284, this Court likewise rejects the Federal Circuit's tripartite appellate review framework. In *Highmark Inc. v. Allcare Health Management System, Inc.*, 572 U. S. the Court built on the *Octane Fitness* holding—which confirmed district court discretion to award attorney's fees—and rejected a similar multipart standard of review in favor of abuse of discretion review. The same conclusion follows naturally from the holding here: Because §284 "commits the determination" whether enhanced damages are appropriate to the district court's discretion, "that decision is to be reviewed on appeal for abuse of discretion." *Id.*, at _____. Nearly two centuries of enhanced damage awards have given substance to the notion that district courts' discretion is limited, and the Federal Circuit should review their exercise of that discretion in light of longstanding considerations that have guided both Congress and the courts.

(c) Respondents' additional arguments are unpersuasive. They claim that Congress ratified the Seagate test when it reenacted §284 in 2011 without pertinent change, but the reenacted language unambiguously confirmed discretion in the district courts. Neither isolated snippets of legislative history nor a reference to willfulness in another recently enacted section reflects an endorsement of *Seagate's* test. Respondents are also concerned that allowing district courts unlimited discretion to award enhanced damages could upset the balance between the protection of patent rights and the interest in technological innovation. That concern—while serious—cannot justify imposing an artificial construct such as the *Seagate* test on the limited discretion conferred under §284.

Stryker Corp. v. Zimmer, Inc., 837 F.3d 1268 (Fed. Cir. 2016)

Stryker began selling battery powered, handheld pulsed lavage devices in 1993. That same year, Stryker filed the application which eventually gave rise to the patents at issue. The three patents in suit issued in 2000, 2001 and 2006. In 1998, Zimmer began to develop its new design of a portable pulsed lavage device, which came to market as the Pulsavac Plus range of products. Zimmer's Pulsavac Plus products achieved a peak of \$55 million in annual sales in late 2007.

In 2010, Stryker sued Zimmer under its three patents. The district court granted partial summary judgment in favor of Stryker, finding infringement of the '807 and '383 patents. The question of whether Zimmer infringed the asserted claim of the '329 patent, as well as Zimmer's invalidity defenses against all of the asserted claims, went to trial. The jury found that the products infringed the '329 patent and that all of the asserted claims were valid. The jury awarded \$70 million in lost profits. It further found that Zimmer had willfully infringed all three patents. The jury also found that Stryker had marked substantially all of its products covered by the patents-in-suit during the period it sought damages. The district court denied Zimmer's JMOL motions, awarded trebled damages for willful infringement, found the case exceptional, awarded attorneys' fees to Stryker, and imposed a permanent injunction.

The '329 Patent

According to claim 2, the only asserted claim of the '329 patent, the handpiece comprises a "hollow housing," which includes a "handle," and, in relevant part in this case, "an electric motor spaced between the top and bottom of said *handle* and located *in said handle*" adjacent to an irrigation tube within the housing. Zimmer contends, as indicated by the arrows below, the motor in its accused device is not located in the handle—rather, it is located in the "nub" of the handpiece, the protrusion behind the barrel.



During claim construction, Zimmer took the position that no construction was necessary and that the claim term "handle" could be understood as having its plain and ordinary meaning. Stryker proposed to construe the term "handle" as "a portion of a device designed to be held by a hand or hands." The district court adopted Stryker's proposed construction.

On appeal, Zimmer also raises the prosecution history of the '133 application, the parent of the application that issued as the '329 patent. During the '133 application's prosecution, Stryker sought to overcome a rejection of claim 39 based on a prior art reference which described a pistol-shaped device with a barrel and a handle. Stryker traversed the rejection by arguing that the motor of the prior art handpiece was "not in the handle or at an angle to the barrel." Zimmer contends that claim 39 included the limitation "locating said motor in said handle," which is the same limitation at issue in the construction of "handle" in claim 2 of the '329 patent. Therefore, Zimmer argues, Stryker's statement disclaimed designs in which the motor is located in the barrel or nub of a pistol-shaped handpiece. The district court denied Zimmer's motion for summary judgment of noninfringement based on this argument, finding that the prosecution disclaimer was insufficiently "clear and unmistakable" because claim 39 of the '133 application had additional limitations that were absent in claim 2 of the '329 patent.

The district court's analysis was flawed, however, because this was not a case in which the purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications (rather than to the invention itself). There was no difference in the language describing the limitations as between the two claims at issue; rather, the limitation of claim 2 was included within claim 39. There is no reason why a disclaimer on a limitation within a narrower claim would not apply to the identical limitation within the broader claim, as the same concerns about the prior art would relate to both.

Infringement is a question of fact, and we must give a substantial degree of deference to the jury's verdict. At trial, Stryker presented evidence indicating that a medical professional could hold Zimmer's Pulsavac Plus by the nub behind the barrel, where the motor was located. In addition, Stryker presented evidence that the barrel of the Pulsavac Plus was called a "barrel grip" in an associated patent application, and the barrel included indentations that would allow the device to be used while held by the barrel. Stryker also persuaded the jury that it was reasonable to infer that if the nub behind the barrel was

also shaped such that it was at least *capable* of being held, then it would be "a portion of the device designed to be held by hand," in accordance with the district court's construction of "handle" in the claim at issue. In light of the evidence presented at trial as a whole, along with the prosecution history, we do not find that "reasonable minds could come to but one conclusion" that Zimmer did not infringe claim 2 of the '329 patent. Accordingly, we affirm.

Infringement of the '807 Patent

Zimmer argues that the district court erred in granting summary judgment of infringement of the '807 patent's asserted claims. Zimmer's argument on appeal centers on whether its products include, as required for all the asserted claims, "a front end for *receiving* the discharge tube and the suction tube." This limitation describes the interface between the nozzles at the front end of the handpiece and the nozzles of a removable tip that includes discharge and suction tubes. Zimmer argues that the claim language requires that there be male openings on the tip that fit into the female nozzles on the handpiece. Therefore, Zimmer contends that the accused devices do not infringe because they are designed with female openings on the tip that fit into tapered male nozzles on the handpiece. To support its position, Zimmer relies on various dictionary definitions of "receive," which it argues all have some variant of the verbs "to contain" or "to hold." Zimmer argues that this meaning is consistent with the specification, which discloses a single embodiment in which the neck of the suction tube "seats in" the drain tube—and, specifically, that this configuration is designed to avoid "leakage of the fluid and material as it flows in the drain tube."

The district court noted that, in its view, "Zimmer's reading of 'receive' is artificially narrow." Instead, the district court reasoned that "the word 'receives' in this context can only mean that one part of the device connects directly with another part of the device." Thus, the district court found that Zimmer infringed. While it is a close case, we do not find that the district court erred in granting summary judgment of infringement based on the record before it.

Validity of the '807 Patent

Zimmer also appeals the district court's holding that the asserted claims of the '807 patent were anticipated by its prior art Var-A-Pulse device, the predecessor of the Pulsavac Plus. Stryker argues that the Var-A-Pulse device does not anticipate because it is missing the "lock assembly" limitation of the asserted claims, which require that there be "a lock assembly mounted to the front end of said body for releasably securing the discharge tube and the suction tube to said body." The district court adopted Stryker's proposed construction of the term "lock assembly" as "components that work together to secure or fasten the tip to the handpiece." In the Var-A-Pulse device, the tip was attached to the handpiece in such a way that the tip nozzles fit into interior housing grooves at the front of the handpiece, which were then held together by friction. Zimmer argues that under the district court's construction, the limitation was present in the prior art because the nozzles were "secured or fastened" when they were fit in the interior housing groove.

At trial, Zimmer presented evidence that included the Var-A-Pulse's technical documentation, which indicated that the tip should be "secured" to the handpiece, as well as testimony from various Stryker witnesses admitting that the tip nozzles were fastened to the handpiece when they were inserted. However, the jury ultimately found that there was no clear and convincing evidence that the Var-A-Pulse device anticipated the '807 patent's asserted claims. In light of the evidence that was presented, we find that a reasonable jury could have reached this verdict. Accordingly, we affirm.

Validity of the '383 Patent

At trial, Zimmer argued that the asserted claims of the '383 patent were obvious at the time of the invention in light of U.S. patents to Grulke, Drews II, and Bales. Zimmer contends that all of the limitations of the '383 patent's asserted claims were collectively present in the prior art references. Stryker does not directly dispute this point. Instead, it principally argues that because the designs claimed by Grulke and Drews II each exclude certain components described in the claims, one of ordinary skill in the art would

not have been motivated to combine these references. In brief, Grulke disclosed a pulsed lavage system that uses a pneumatic, rather than an electric, motor. Drews II disclosed a pulsed irrigation system, powered by an electric motor, that is used as an eye wash.

On the basis of the record presented at trial, we agree with the district court that a reasonable jury could conclude that one of ordinary skill in the art would not have been motivated to combine the Grulke and Drews II references, even in light of the examiner's rejection of related claims on the basis of this combination. This is sufficient to affirm the district court's determination that Zimmer did not show, by clear and convincing evidence, that the '383 patent's claims were obvious. For this reason, we need not reach other issues, including the evidence of secondary considerations of nonobviousness.

Enhanced Damages

After taking into consideration the circumstances of a particular case, a court may exercise its discretion and award enhanced damages under 35 U.S.C. § 284. *Halo.* "However, such punishment should generally be reserved for egregious cases typified by willful misconduct." In making its willfulness determination, the district court applied the standard we had previously articulated in *Seagate*, which required a patentee to establish, by clear and convincing evidence, both that there was an objectively high likelihood that the accused infringer's actions constituted patent infringement, and that the risk was "either known or so obvious that it should have been known to the accused infringer." The Supreme Court rejected this approach and explained that "the subjective willfulness of a patent infringer, intentional or knowing, may warrant enhanced damages, without regard to whether his infringement was objectively reckless." The Supreme Court also rejected the use of a clear and convincing standard in favor of a preponderance of the evidence standard.

On appeal, Zimmer did not appeal the jury's finding of subjective willfulness under the *Seagate* test. On the record in this case, willful misconduct is sufficiently established by the jury's finding. The jury made its determination under the clear and convincing evidence standard, which is a higher standard than is now necessary. We therefore affirm the jury's finding of willful infringement.

In doing so, we think the best course is to vacate the award of enhanced damages and remand to the district court for consideration of this issue. As *Halo* makes clear, the decision to enhance damages is a discretionary one that the district court should make based on the circumstances of the case, "in light of the longstanding considerations . . . as having guided both Congress and the courts." Thus, it is for the district court to determine whether, in its discretion, enhancement is appropriate here.

Attorneys' Fees

The district court's award of attorneys' fees was based solely on its determination that Zimmer was liable of willful infringement. Though we uphold the district court's willfulness determination, it does not necessarily follow that the case is exceptional. As with the determination of whether enhanced damages are appropriate, "district courts may determine whether a case is 'exceptional' in the case-by-case exercise of their discretion, considering the totality of the circumstances." *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749 (2014). Because there exist further allegations of litigation misconduct in this case and because the standard for finding an exceptional case has changed since the district court issued its ruling regarding attorneys' fees, we remand this issue for further consideration.
Attorney Fees

Nova Chemicals Corp (Canada) v. Dow Chemical, Fed. Cir. Case 2016-1576 (May 11, 2017)

The Circuit affirms an award of \$2.5 million attorney fee award against Nova, holding that the district court did not abuse its discretion in finding the case exceptional because of Nova's filing of a lawsuit alleging that Dow defrauded the court in a prior case.

In 2005, Dow filed an infringement action in which it was successful in recovering over \$61 million in damages from Nova ("the 2010 judgment"). During a supplemental-damages phase of the infringement action, Nova became aware of evidence allegedly showing that Dow had committed fraud on the court in the course of obtaining the 2010 judgment. By then, however, Nova was time-barred from filing a motion under Rule 60(b)(3) to set aside that judgment for fraud or misrepresentation. Accordingly, Nova filed a separate action in equity against Dow ("the equity action") for relief from the 2010 judgment. Nova alleged two frauds on the court: First, that Dow had misrepresented its ownership of the asserted patents. Nova based this allegation on the testimony of a former Dow tax department employee in an unrelated Louisiana tax case ("the Louisiana action"). Second, Nova alleged that Dow's counsel knew of a "scheme to mislead the jury" with respect to infringement contending that Dow's expert had provided conflicting testimony about the accused product during a separate litigation in Canada (the "Canadian action").

The district court granted Dow's motion to dismiss the equity action, holding that "there was fundamentally no adequate allegation of the grave miscarriage of justice that is required under the extraordinary circumstances" for setting aside a prior judgment based on fraud. The court noted that the expert's testimony in the Louisiana action was "immaterial and irrelevant" to Dow's standing because the terms of the relevant patent transfer agreement were clear on their face. With respect to noninfringement, the district court held that Nova had merely identified arguably inconsistent statements by the expert that neither "plausibly alleged perjury" nor reached any fact that had been in material dispute at trial in the infringement action. Dow subsequently moved in the district court for sanctions, attorney fees, and costs. The court granted Dow's motion under § 285 and awarded \$2.5 million based on the weakness of Nova's litigating position and the manner in which NOVA pursued this case.

Nova argued that the district court committed legal error, and thus abused its discretion, by improperly viewing Nova's pursuit of the equity action to be an "extreme tactic." The panel agrees with Nova to the extent that the filing of an action to set aside a prior judgment, without more, does not render a case exceptional per se. Therefore, despite the extraordinary nature of relief that Nova sought, the district court erred to the extent it based its exceptional-case determination on Nova's filing of the equity action itself.

But, according to the panel, the district court did not base its analysis solely, or even primarily, on the fact that Nova filed an equity action. Rather, it expressly relied on alternative grounds, holding the case to be "exceptional, *both* in the substantive *strength* of Nova's litigating position and in the *manner* in which the case was litigated." At a minimum, the court did not abuse its discretion in concluding that the case was exceptional due to the substantive strength of Nova's litigating position.

Nova's allegations of fraud in this case mainly rested on purportedly conflicting testimony from the Louisiana action and the Canadian action. But, as explained by the district court, the arguable inconsistencies in those other actions, even if proven, were immaterial to the 2010 judgment because the relevant patent transfer agreement unambiguously supported Dow's standing. The panel holds that Nova's allegations of fraud regarding the infringement determination are just as baseless, if not more so, given that the expert's testimony in the Canadian action was not necessarily inconsistent with his prior infringement testimony and, in any event, did not directly relate to the limitation that had been the focus of the parties' underlying infringement dispute. The panel holds therefore that the district court did not abuse its discretion in holding that Nova's litigating position was objectively baseless, and therefore upholds the award of attorney fees.

Bayer Cropscience v. Dow Agrosciences, 851 F.3d 1302 (Fed. Cir. 2017)

The Circuit easily determines that, under Octane Fitness and Highmark, the district court did not abuse its discretion in awarding Dow attorney fees under section 285 because the case stands out from others both as to its lack of substantive strength and the unreasonable manner in which Bayer conducted the litigation.

Bayer sued Dow for patent infringement even though it had entered into a license agreement in which Dow was permitted to commercialize soybeans that were genetically engineered to tolerate herbicides. Bayer took the position that Dow's license was limited to non-commercial transactions. The district court disagreed, concluding that Bayer's reading of the contract was "contorted," and was even contradicted by Bayer's own witnesses.

The parties agreed that English law governed, so Bayer presented expert testimony from a former Justice of the Supreme Court of the United Kingdom that Bayer's interpretation was reasonable. However, there was no dispute that under U.K. law, the circumstances surrounding the execution of an agreement are admissible. Not only did all of the evidence of surrounding circumstances support Dow's position, but Lord Collins conceded that his opinion was "incomplete" because he had only considered the text of the agreement. The surrounding circumstances included contemporaneous correspondence between the parties confirming that the intent of the agreement was to convey all commercial rights to Dow.

The manner in which Bayer litigated the case included the fact that Bayer added this patent infringement claim to an ongoing case between the parties only a few days after Dow issued a press release announcing its plans to commercialize the covered soybean product. And then, eighteen months later, Bayer filed a motion for preliminary injunction, even though Dow had not yet introduced the product. The district court ruled that had Bayer fully investigated its position, even just the evidence in its own control, it would not have filed the action. Moreover, the filing of a preliminary injunction amid targeted discovery that would prove fatal to its case rendered the motion "frivolous," and unnecessarily increased the costs of the litigation.

The panel refuses to accept Bayer's invitation to reweigh the evidence, as under Highmark the appropriate review is simply to determine if the district court abused its discretion. After reviewing the foregoing evidence, the panel determines that the district court did not abuse its discretion in determining that, under the totality of the circumstances, this was an exceptional case.

University of Utah v. Max Planck Gesellschaft, 851 F.3d 1317 (Fed. Cir. 2017)

The Circuit affirms the denial of attorney fees under § 285, showing how deferential it will be in such "abuse of discretion" rulings. The underlying dispute concerns inventorship of the Tuschl II patents, which relate to RNA interference ("RNAi"), a process that may be useful in treating a variety of diseases associated with overactive or mutated genes. Dr. Thomas Tuschl published an article describing various discoveries in the field of RNAi. Less than a month later, Dr. Brenda Bass, of the University of Utah ("UUtah"), published a mini-review that summarized the state of RNAi research. Dr. Bass's mini-review included several of her own hypotheses about enzymatic processes that may be responsible for the RNAi activity reported in Dr. Tuschl's article.

After publishing his article, Dr. Tuschl transitioned to a new line of research that would result in the patented Tuschl II invention. Dr. Tuschl read Dr. Bass's mini-review, recognized her hypothesis that 3' overhangs may be relevant to RNAi, and successfully tested that hypothesis. Data from cloning and sequencing revealed that species with 3' overhangs were prevalent in active RNAi systems. Based on these data, the Tuschl II inventors chemically synthesized candidate molecules with and without 3' overhangs and tested for RNAi activity. Max Planck filed a patent application for the discovery.

UUtah sued Max Planck for correction of ownership, claiming that Dr. Bass should be named as a sole or joint inventor of the Tuschl II patents. UUtah's claim of sole inventorship turned on allegations that Dr. Bass reduced to practice the concept that molecules with 3' overhangs would be integral to RNAi, focusing primarily on Dr. Bass's mini-review. Its claim of joint inventorship turned on alleged collaboration between Dr. Bass and the Tuschl II inventors that occurred over several conversations at various academic conferences.

During her deposition, Dr. Bass made several admissions undermining UUtah's allegation that Dr. Bass reduced the Tuschl II invention to practice. When asked if she ever did any of the experiments included in the Tuschl II patents," she responded: "Not that I know of." When asked if her lab ever studied how to put siRNAs on cells, she responded: "No." When asked if she ever tested siRNAs as agents for targeting messenger RNAs, she responded: "No."

On the eve of the deadline for dispositive motions, UUtah withdrew its sole inventorship claims, but declined to withdraw its joint inventorship claim. The district court then granted Max Planck's motion for summary judgment as to that claim.

Max Planck sought eight million dollars in attorney fees pursuant to 35 U.S.C. § 285, which the district court denied. Max Planck argued on appeal that the court disregarded the Supreme Court's direction in Octane Fitness by failing to consider the substantive weakness of UUtah's litigation position in light of Dr. Bass's deposition testimony, but the panel disagrees. District courts have discretion to make exceptional case determinations on a case-by-case basis, considering the totality of the circumstances. A "case presenting either subjective bad faith or exceptionally meritless claims may sufficiently set itself apart from mine-run cases to warrant a fee award." Other factors that may support a finding of exceptional case include frivolousness, motivation, objective unreasonableness of a case's factual or legal components, and the need in particular circumstances to advance considerations of compensation and deterrence. The district court made no finding that any of these factors applied here, but according to the panel, she had no obligation to write an opinion that reveals her assessment of every consideration. The opinion concludes with the statement that the Circuit will not second guess her determination.

Injunctive Relief

Nichia Corp. v. Everlight Americas, 2017 U.S. App. LEXIS 7527 (April 28, 2017)

Despite the defendant's failure to invalidate any of the three patents in suit and its unsuccessful noninfringement arguments, the Circuit affirms the denial of a permanent injunction requested by LED maker Nichia due to its dominant share of the market, its failure to identify a single lost sale to Everlight, and its widespread licensing of the patents to other low cost competitors. This affirmance is based solely on the lack of a showing of irreparable injury, without consideration of the other three *eBay* factors.

The panel first reviews the district court's bench-trial findings as to claim construction, infringement and obviousness, and holds that the evidence supports the district court's findings. However, the most interesting part of the opinion relates to Nichia's motion for permanent injunction. After setting forth the four-factor *eBay* test, the panel notes *eBay*'s statement that, historically, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases. The opinion then points out that the Circuit has similarly observed that "while a patentee is not entitled to an injunction in every case, 'it does not follow that courts should entirely ignore the fundamental nature of patents as property rights granting the owner the right to exclude."

Nichia challenges the district court's finding that it failed to establish that it will suffer irreparable harm absent an injunction. The court's conclusion relied on several findings, each weighing against Nichia. Specifically, the court found that (1) there is an absence of meaningful competition; (2) Nichia had failed to establish past irreparable harm, or the likelihood of irreparable harm in the future based on lost sales or

price erosion; and (3) Nichia's licensing of the patents to major competitors suggested that harm from infringement of the patents-in-suit is not irreparable.

The panel finds that there is abundant support for these factual findings. As to the absence of meaningful competition, the district court found that Everlight generally sells to distributors rather than directly to customers, as Nichia does. The court explained that Everlight's competition accounted for "the proverbial 'drop in the bucket'" when compared to Nichia's total sales. Nichia identified 516 sales opportunities, with Everlight as a competitor in only 3. As to the one and only alleged instance of a lost sale, the evidence showed several other lower-priced, licensed competitors for the same opportunity.

Nichia also had alleged that it suffered price erosion because of Everlight's infringement in a sale to General Electric. While Nichia eventually won the GE contract at a price lower than it originally offered, Nichia's lower-price sale had been required by GE, so Nichia was going to have to lower its prices regardless of Everlight's competition. Further, the court found that several licensed competitors had offered products at lower prices, which drove down prices. There was therefore no clear error in the finding that Nichia failed to establish price erosion.

Nichia argues that the court wrongly found that its licensing activities precluded a finding of irreparable harm. To the extent the district court adopted a categorical rule, the panel agrees with Nichia. But the panel agrees that Nichia's prior licenses weigh against a finding of irreparable harm.

Because the panel finds no clear error in the district court's finding that Nichia failed to prove that it would suffer irreparable harm absent the injunction, and this is one of the four equitable factors, the court did not abuse its discretion in denying Nichia's request for an injunction.

This refusal of the panel to see a need to evaluate the other three *eBay* factors is consistent with some and inconsistent with other Circuit and district court decisions, which often have evaluated all four factors and then decided whether injunctive relief is appropriate.

Asetek Danmark A/S v. CMI USA Inc., 2017 U.S. App. LEXIS 5920 (April 3, 2017)

In an unusual, but well-justified, revision of a December, 2016 decision, the panel rehears the issue of the breadth of an injunction granted by the district court. In the original opinion, written by Judge Taranto, the panel determined that the injunction was over-broad but, over the vehement dissent of Chief Judge Prost, the majority refused to vacate even the erroneous part of the injunction.

Specifically, the entire panel originally agreed that the injunction was over-broad in that it covered Cooler Master, a Taiwanese company who was not a party to the case at the time of the district court decision. Despite this, in its original decision the majority was reluctant to disturb the status quo, which had existed for a year. Therefore, the injunction was kept in place, although the case was remanded for the district court to reconsider this part of the injunction. In dissent, Judge Prost wondered how an admittedly inappropriate injunction was not vacated or at least revised.

On rehearing, the entire panel revises the ruling to vacate the injunction as it applies to Cooler Master, and remands the case for further consideration as to whether an injunction against Cooler Master is appropriate. The earlier decision, discussed in my <u>December 9 report</u>, remains in effect in other respects.

Metalcraft of Mayville, Inc. v. The Toro Company, 848 F.3d 1358 (Fed. Cir. 2017)

The Circuit affirms the grant of a preliminary injunction precluding Toro from selling infringing lawnmowers, with a showing of irreparable harm based on plaintiff's proof that it would be impossible to quantify damages caused by loss of potentially-lifelong customers who prefer to purchase an entire line of products from the same manufacturer.

Metalcraft dba Scag ("Scag") is owner of a patent directed to a platform for a ride-on lawnmower that includes a suspended operator platform that isolates an operator from vibration. Following introduction of Scag's patented mower, Toro introduced its own line of mowers with a similar suspended platform. In granting Scag's motion for preliminary injunction, the district court found that Scag had shown infringement, that Toro failed to raise a substantial question of validity, that the balance of hardships tipped in Scag's favor, and that the public interest supported the injunction.

The Circuit's opinion first looks to infringement to determine if Toro established that the district court committed clear error. The asserted claims all state: "an operator platform that supports the seat and an entire body of an operator." Toro argued the accused mowers do not meet the limitation "an entire body of an operator" because the steering controls of the accused mowers are mounted to the chassis, not the operator platform, and therefore the operator's hands and arms are not supported by the platform. The panel disagrees, noting that while some of the dependent claims not at issue require that the steering controls be connected to the operator platform, the claims at issue include no such limitation. Moreover, the specification supports the court's construction.

As to validity, Toro argued that a person of ordinary skill in the art would have been motivated to combine patents to a motorcycle shock absorber and to a suspended truck cab. The panel rules that the district court was not clearly erroneous in holding that Toro presented no proof of motivation to combine such teachings. "With no motivation to combine, we are left with only hindsight bias that *KSR* warns against." The panel thus concludes that Toro did not raise a substantial question of validity.

As to irreparable harm, Toro argues the district court abused its discretion by ignoring evidence of at least twelve other companies that sell mowers designed to decrease shock loads to the operator. However, the panel rules that the fact that other infringers may be in the marketplace does not negate irreparable harm. Furthermore, the district court determined the damage to Scag is irreparable because it is impossible to quantify the damages caused by the loss of a potentially lifelong customer. The fact that Toro's own Senior Marketing Manager declared that some customers "prefer to purchase an entire line of products from the same manufacturer for consistency" supports the court's determination. Citing the 2015 *Apple v. Samsung* Circuit ruling, the opinion notes that the loss of Scag customers may have far-reaching, long-term impact on its future revenues, and such sales are difficult to quantify.

As to the balance of equities and the public interest, the panel agrees with the district court that Scag's harm in the absence of an injunction outweighs Toro's harm if enjoined. It also concluded that in light of the importance of encouraging innovation and the fact that the public can continue to obtain the patented suspension system from Scag or other non-infringing mowers from Toro, the public interest favors the issuance of an injunction.

Comments: In addition to being supported by *Apple v. Samsung*, 801 F. 3d 1352 (Fed. Cir. 2015), this decision brings to mind *WBIP*, *LLC. v. Kohler Co.*, 829 F.3d 1317 (Fed. Cir. 2016), in which the Circuit rejected the argument that permitting an injunction would leave the plaintiff, a much smaller company, as the sole supplier of patented equipment. In all three decisions, the Circuit stressed the public's interest in the enforcement of patent rights, especially where the parties are competitors. This is the kind of language we heard from the Circuit pre-*eBay*.

Tinnus Enter., LLC v. Telebrands Corp., 846 F.3d 1190 (Fed. Cir. 2017)

The Circuit affirms the grant of a preliminary injunction in favor of a small company that pursued a larger "as seen on TV" infringer selling its product at Bed Bath and Beyond. The patented toy attaches to a hose to simultaneously fill multiple balloons by directing water through a plurality of hollow tubes. The Tinnus product is called BUNCH O BALLOONS. Telebrands' product is called BALLOON BONANZA.



Operating in parallel with the district court proceeding was Telebrands' Post Grant Review seeking to invalidate the Tinnus patent. The PTAB found that claim 1 was likely indefinite because the specification and the prior art both fail to provide any objective standard for measuring the scope of "filled" or "substantially filled," and the specification sets forth no limit on the amount of shaking needed to detach a filled container from the tube. The PTAB also found that a combination of prior art patents would likely render claim 1 obvious.

The magistrate concluded that the accused product infringed because he found that Telebrands' claim construction argument hinged on the contention that shaking is not required to detach the balloons from the tubes. The Balloon Bonanza instruction manual tells users to "turn off water and give balloons a shake to release." The panel finds that these instructions are at least circumstantial evidence of infringement for any claim elements taught by those materials, and a patentee is entitled to rely on circumstantial evidence to establish infringement.

Regarding invalidity, the Circuit holds that the burden on the accused infringer to show a substantial question of invalidity at the preliminary injunction stage is lower than what is required to prove invalidity at trial. According to the opinion, "vulnerability" is the issue at the preliminary injunction stage, while validity is the issue at trial. The § 282 presumption is sufficient to establish a likelihood of success on the validity issue, the burden being on the challenger to come forward with evidence of invalidity, which the patentee must then rebut. If the trial court concludes there is a substantial question concerning validity, it necessarily follows that the patentee has not succeeded in showing it is likely to succeed at trial on the merits of the validity issue.

As to indefiniteness, Telebrands presented the same arguments it did in the PGR, but because Telebrands did not object to the magistrate's indefiniteness determination, the panel follows 5th Circuit law and reviews the district court's determination for plain error. With this degree of deference, the panel rejects Telebrands' argument, concluding that it is difficult to believe that a person of ordinary skill in the art (with an associate's degree in a science or engineering discipline) who had read the specification and relevant prosecution history would be unable to determine with reasonable certainty when a water balloon is "substantially filled."

As to obviousness, Telebrands advances several arguments on appeal but, again, because Telebrands did not object to the magistrate's findings relating to obviousness, the panel reviews the district court's analysis for plain error. The particular problem confronting the inventor here was how to rapidly fill multiple containers with fluid. This is far removed from the problems associated with an endoscopic balloon insertion device for treating obesity, and Telebrands has not demonstrated that the cited art is reasonably pertinent to the problem addressed in the patent.

Finally, Telebrands alleges that it was clear error for the district court to rely on evidence pre-dating the '066 patent's issuance in support of its finding of irreparable harm. Evidence of consumer confusion, harm to reputation, loss of goodwill and a 40% price reduction pre-dating the patent is, at the very least, circumstantial evidence demonstrating the possibility of identical harms once the patent issues. Nonetheless, the record contains additional evidence of harm after the patent's issuance that is sufficient to support a finding of irreparable harm. For example, the Amazon website states that a customer liked the "off brand" Bunch O Balloons product better than the "name brand" Balloon Bonanza. This establishes persisting harm to Tinnus's reputation and tarnishes its status as the innovator in this market.

The magistrate also concluded that the balance of hardships and public interest factors weighed in Tinnus's favor due to the relative size of the parties and the strong public interest in enforcing valid patents. Telebrands did not appeal these findings so the grant of preliminary injunction is affirmed.

Comment: This case shows the importance of filing objections to all of the magistrate's findings and recommendations. Because Telebrands did not do so here, it faced the higher "plain error" standard of review as to indefiniteness and obviousness.

United Construction Products, Inc. v. Tile Tech, Inc., 843 F.3d 1363 (Fed. Cir. 2016)

The Circuit affirms a default judgment and injunction against a defendant who missed deadlines, misrepresented matters to the court, and destroyed evidence. To illustrate how egregious Tile Tech's conduct was, the "Read More" excerpt from the opinion describes the behavior that supported these harsh sanctions.

In evaluating the appropriateness of default judgment, the panel applies the factors from the Ninth Circuit's *Malone v. USPS* case: (1) the public's interest in expeditious resolution of litigation; (2) the court's need to manage its docket; (3) the risk of prejudice to the other party; (4) the public policy favoring disposition of cases on their merits; and (5) the availability of less drastic sanctions. Finding that all but factor (4) support default judgment, the panel has little trouble affirming the dismissal.

The panel also affirms the permanent injunction, rejecting Tile Tech's three arguments. An order enjoining infringing and "substantially similar" products is well within the court's discretion. The requirement that Tile Tech turn over a mold that itself was not infringing but was critical in fabricating the infringing product was entirely appropriate. And finally, given Tile Tech's inappropriate use of images of United's products, projects, and drawings on its website and in other marketing materials, an injunction prohibiting such use was appropriate even though such use may not lead to a likelihood of confusion.

Asetek Danmark A/S v. CMI USA Inc., fka Cooler Master USA, Inc., Cooler Master Co., Ltd., 842 F.3d 1350 (Fed. Cir. 2016)

In this action involving computer cooling systems, the full panel affirms determinations of non-invalidity, infringement and damages. The majority remands the injunction so the district court can evaluate whether the injunction is overly broad as to products provided by the supplier Cooler Master to its customer CMI that do not abet an infringement by CMI. Chief Judge Prost dissents as to the remand, arguing that that portion of the injunction should be vacated.

Appellants argued that there can be no infringement because the alleged "heat exchanging interfaces" in the accused products are not "removably attached" or "removably coupled" to reservoirs. This follows, according to appellants, because removing the heat exchanging interfaces would render the products nonfunctional. But because the parties elected to provide the jury only with the claim language itself, without any claim construction, the only issue is whether there is substantial evidence to support the jury's application of the jury instruction. The panel finds such substantial evidence here.

The panel also rejects appellants' argument that the asserted claims would have been obvious over Koga and Ryu because Koga's "sucking channel" is a "thermal exchange chamber." The panel rules that the

district court's rejection of this argument was not clear error since, even though Koga's "sucking channel" exchanges some heat, it is not necessarily a "thermal exchange chamber."

Appellants argued that, in calculating a 14.5% royalty award, Asetek's damages expert improperly relied on Asetek's per-unit profit margin. According to the argument, the expert's approach circumvented the requirement, applicable when lost-profits damages are sought, that a patent owner prove that it would have made the infringer's sales "but for" the infringement—a requirement not applicable to reasonableroyalty damages. The panel rejects the argument, noting that a patent owner would be unlikely to be interested in accepting a royalty rate lower than its profit margin. Negotiating for a per-unit payment equal to its per-unit profit can be a logical approach for a patent owner that is uncertain of how many sales might be lost by granting the license at issue.

The panel also rejects appellants' argument that Cooler Master's earlier dismissal from the case with prejudice precludes an injunction against Cooler Master. The panel bases this ruling on the fact that a party who sues a tortfeasor is ordinarily not barred by a prior judgment from seeking relief for tortious action by the same tortfeasor that occurs subsequent to the original action. The rationale is simple: claim preclusion requires a party to assert all claims that the party could have asserted in the earlier lawsuit; and a party cannot assert claims based on tortious conduct that had not occurred at that time.

Finally, the panel indicates that the injunction appears to be overly broad insofar as the injunction reaches Cooler Master's sale, importation, etc., other than conduct that abets a new violation by CMI, the only party adjudicated liable for infringement. However, the majority is reluctant to disturb the status quo, which has existed for a year, so does not think it is appropriate to vacate the injunction. As noted above, Judge Prost disagrees with that part of the decision.

Murata Mach. USA v. Daifuku Co., Ltd., 830 F.3d 1357 (Fed. Cir. 2016)

This case presents an unusual evaluation of whether a case should be stayed pending an IPR. Because the decision to grant or deny a stay is not appealable, this issue has not yet come to the Circuit and is not likely to be decided by the court very often. The Circuit considered the issue in this case because it arose as part of an interlocutory appeal of a denial of a motion for preliminary injunction, which was decided at the same time as the stay issue. In this case, the panel deferred to the broad discretion of the district court in managing its cases and in deciding whether a stay was appropriate. However, because the court had summarily denied the motion for preliminary injunction without evaluating the appropriate considerations, the denial of the motion for preliminary injunction was vacated and remanded.

The district court granted the stay after defendant Daifuku had initiated IPRs as to the two patents in suit. Murata then added two more patents to the case and moved to lift the stay as to the patents that had been added. The district court applied the four part test used in deciding whether a stay should be granted in Covered Business Method reviews, and declined to lift the stay. Murata had also moved for preliminary injunction as to the two new patents and the district court denied the motion, with a cursory one paragraph ruling concluding with the statement: "Because the court has now declined to lift the stay, the Motion for Preliminary Injunction is denied without prejudice to renew at a later date, if appropriate."

As noted above, the panel affirms the denial of the motion to lift the stay but rules that the district court should have fully addressed the preliminary injunction motion, and not treated it as part of the motion to lift the stay. Rule 52(a) of the Federal Rules requires the district court to perform a complete analysis of the issues to be considered on a motion for injunction, and must issue findings of fact and conclusions of law that can be properly considered on appeal.

WBIP, LLC v. Kohler Co., 829 F.3d 1317 (Fed. Cir. 2016)

In a thorough discussion of the objective considerations supporting nonobviousness, the panel affirms the denial of JMOL that the asserted claims directed to low–carbon monoxide-emitting electrical generators would have been obvious. The panel also affirms a determination of willful infringement that was based

on instructions under Seagate. Halo was decided following the trial so the panel contrasts the test for willfulness under Seagate and Halo. Finally, in perhaps the most interesting ruling in the case, the panel determines that the district court abused its discretion in denying a motion for permanent injunction just because WBIP, a smaller company, would otherwise have been the sole supplier of a product designed to ensure the safety of the public.

The panel rejects Kohler's first argument on appeal that there was no nexus demonstrated between the claimed invention and the objective indicia. Where the patentee shows that the asserted objective evidence is tied to a specific product and that product is the invention disclosed and claimed in the patent, there is a presumption of nexus. The presumption may be rebutted by a patent challenger that can present evidence showing the objective evidence was due to extraneous factors, such as improvements in marketing. The Circuit determines that Kohler failed to present evidence to rebut the presumption, and rejects Kohler's argument that evidence of nexus must be limited to the supposedly "new" features recited in the claims.

The opinion then points to the substantial evidence supporting the jury's presumed factual findings as to long felt need (third-party product liability suits against Kohler involving prior generators), industry praise (trade association and other awards received for patented generator), skepticism (an industry workshop audience expressed "shock" when the inventor announced that he would have a commercial product as claimed within two years), copying (when the inventor explained to Kohler engineers at a trade show how his product achieved the claimed benefits, Kohler documents show that funding was requested to develop a product following the same techniques), and commercial success (evidence of immediate success of the Kohler unit). The panel stresses that it will not substitute its judgment for the jury verdict on any of these preliminary *Graham v. Deere* factual inquires.

Kohler also argues that the patents are invalid based on violation of the written description requirement, but the panel refuses to consider this argument since it was not presented to the district court.

As to willful infringement, the panel rejects Kohler's argument that its invalidity position was reasonable, noting that *Halo* rejected this test from *Seagate. Halo* tells us to assess the infringer's culpability by looking at its knowledge at the time the infringement was initiated. Kohler then argues that even though it admitted in its Statement of Undisputed Facts that it knew of the patents at an early date, that evidence was not submitted to or considered by the jury. The panel reviews the evidence that the jury did consider, including that WBIP marked the number on its product, and finds this evidence sufficient to support the presumed jury finding that Kohler knew of the patent.

WBIP cross-appealed the district court's denial of a permanent injunction, which was based on the fact that WBIP was a much smaller producer of these low–carbon monoxide generators, so depriving the consuming public of access to a potentially lifesaving product showed that it was not in the public interest to grant the injunction. The panel notes that the district court did not explain how the public interest in enforcing patent rights was outweighed by the public interest of having more than one manufacturer of such generators, especially if WBIP has the manufacturing capacity to meet the industry's needs. The district court's decision was based on its reasoning that having more manufacturers of a lifesaving good in the market is better for the public interest, but this reasoning is true in nearly every situation involving such goods. Congress expressly indicated in 35 U.S.C. § 271(e)(4)(B) that injunctions may be granted in cases involving lifesaving goods, such as pharmaceutical drugs. The panel therefore vacates the judgment and remands the case for a more thorough analysis of the *eBay* factors.

Comments: We think you'll find the Circuit's opinion of interest, particularly the discussions of willful infringement and permanent injunction, where the Circuit appears to laud the grant of injunctions in pharmaceutical cases even though the injunction might jeopardize the supply to patients. The original 41-page opinion is wordy, but our much-condensed version includes, we think, the most pertinent analysis.

Amgen Inc. v. Apotex Inc., 827 F.3d 1052 (Fed. Cir. 2016)

The Circuit affirms the issuance of a preliminary injunction ordering that Apotex may not commercially market its product that is "biosimilar" to Amgen's FDA-approved Neulasta® until 180 days after FDA notice of a license. The drug is used by patients undergoing chemotherapy, and can stimulate the production of neutrophils (a type of white blood cell) and thereby decrease the incidence of infection. Amgen received a biologics license from the FDA for Neulasta® in 2002 pursuant to 42 U.S.C. § 262(a). In 2014, Apotex filed an application for an FDA license to market a biosimilar version of Neulasta®.

The Biologics Act lays out a step-by-step process for exchanging information and channeling litigation about patents relevant to the application. Apotex and Amgen proceeded several steps into that process, leading to the present suit in which Amgen alleges that Apotex's proposed marketing would infringe an Amgen patent.

In *Amgen v. Sandoz*, the Circuit held that the commercial-marketing provision is mandatory, with the 180day period beginning only upon FDA notice that it has been granted a license to introduce the biosimilar product, and that an injunction was proper to enforce the provision against Sandoz. But in that case Sandoz had entirely skipped the statutory process of information exchange and patent-litigation channeling. In the present case, the panel rejects the Apotex argument that a different result is required here—that the commercial-marketing provision is not mandatory and may not be enforced by an injunction—because it, unlike Sandoz, did launch the statutory process for exchanging patent information and channeling patent litigation.

Validity

Anticipation

Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd., 851 F.3d 1270 (Fed. Cir. 2017)

The Circuit reverses an IPR determination of anticipation as to a patent directed to a system for controlling the torque of an electromagnetic motor, ruling that the Board's decision is not supported by substantial evidence.

Motor control values can be expressed in either a stationary frame of reference (relative to the stator) or a rotating frame of reference (relative to the rotor). The Board found that a Toyota patent (Kusaka) anticipates the claim at issue. However, the panel holds that Kusaka discloses three separate phase currents in the stationary frame of reference, while the claim requires that the signals be in the rotating frame of reference. Therefore, there is no substantial evidence to support the Board's anticipation ruling.

Citing the Circuit's 2015 Kennametal case, the Board held that anticipation can be found even when a prior art reference fails to disclose a claim element so long as a skilled artisan reading the reference would "at once envisage" the claimed arrangement. In Kennametal, the challenged claim required a ruthenium binding agent and a PVD coating to be used together. The prior art reference disclosed five binding agents (one of which was ruthenium) and three coating techniques (one of which was PVD). The reference never disclosed the specific combination of ruthenium and PVD, but it taught that any of the five binding agents could be used with any of the three coating techniques. The Circuit held that substantial evidence supported the Board's finding that the reference effectively taught fifteen combinations, one of which anticipated the challenged claim.

According to the panel, Kennametal does not stand for the proposition that a reference missing a limitation can anticipate a claim if a skilled artisan viewing the reference would "at once envisage" the missing limitation. Rather, Kennametal addresses whether the disclosure of a limited number of

combination possibilities discloses one of the possible combinations. The relevant question was "whether the number of categories and components disclosed in the prior art reference is so large that the combination of ruthenium and PVD coatings would not be immediately apparent to one of ordinary skill in the art." Kennametal does not permit the Board to fill in missing limitations simply because a skilled artisan would immediately envision them.

In re Chudik, 851 F.3d 1365 (Fed. Cir. 2017)

The Circuit rules that substantial evidence does not support the Board's determination that the claims at issue, directed to an implant used in rotator cuff surgery, are anticipated by two separate references. Specifically, the panel holds that prior art that must be distorted from its obvious design does not anticipate.

The surgery described in Chudik's application involves two main steps. First, the surgeon removes "a minimal amount of bone from the peripheral surface of the glenoid." Second, the surgeon places an implant in the formed cavity. The first reference (Rambert) discloses a glenoid implant with a so-called shell element 27b in contact with an anchoring element 27a, which in turn contacts the glenoid cavity 6.



The second reference (Bouttens) shows a protruding surface 11 facing away from the glenoid cavity and toward the humerus, with screws on the opposite side of the protruding surface attaching the implant to the glenoid region.



According to the Board, claim 1 requires only that the recited surfaces be "arranged" for engagement, not that they actually do engage. As Rambert's surfaces can be arranged to engage the specified glenoid regions, claim 1 is anticipated. As for claim 40, Bouttens's surface 11 is structurally capable of engaging a glenoid cavity.

The panel disagrees, noting that the "arranged to engage" language could imply that the protruding surface on the flat side need not always actually engage the glenoid cavity surface. However, it must be at least capable of doing so. Here, Rambert's element 27b cannot be "arranged to engage" the glenoid cavity surface without "tearing the invention apart" by removing element 27a. Prior art that "must be distorted from its obvious design" does not anticipate a new invention. Therefore, substantial evidence does not support the Board's finding of anticipation of claim 1 based on Rambert.

Claim 40 requires "a protruding surface on a first side arranged to engage the surface of a cavity formed in a glenoid extending between peripheral glenoid surfaces." Mr. Chudik asks: "If the Bouttens implant's 'protruding surface' is faced about, turned 180 degrees, where does the Board propose to fasten it in a person's shoulder?" The Board's reasoning only makes sense if the user rotates Bouttens 180 degrees, thereby rendering the protruding surface 11 capable of engaging the glenoid cavity. Rotating Bouttens so that the protruding surface faces the glenoid cavity would require relocating the screws for Bouttens to remain operable. This endeavor would constitute a significant and impermissible modification.

This ruling, in combination with its ruling two weeks ago in *Nidec Motor v. Zhongshan Broad Ocean Motor*, shows that the Circuit is not reluctant to reverse Board determinations of anticipation, even under the deferential "substantial evidence to support" standard of review.

U.S. Water Services, Inc. v. Novozymes A/S, 843 F.3d 1345 (Fed. Cir. 2016)

The Circuit reverses summary judgment of anticipation because of genuine issues of material fact relating to a finding that prior art references "inherently" disclosed the claimed method for preventing fouling during the production of ethanol from milled grain. However, the panel affirms the grant of summary judgment of no inequitable conduct because the documents and disclosures were not material.

As to anticipation, the panel finds that the District Court correctly identified that "the issue on which this case ultimately turns is whether Veit or Antrim inherently disclose using phytase to reduce deposits in ethanol production machinery." However, according to the panel, it erred in finding no genuine dispute of material fact as to whether the Patents-in-Suit are inherently anticipated because "the prior art discloses the conditions that will necessarily result in phytase reducing deposits." The District Court erred in deeming irrelevant the fact that U.S. Water presented expert testimony that practicing Veit and Antrim will not always result in deposit reduction. By disregarding this evidence, the District Court improperly made credibility determinations and weighed conflicting evidence, and improperly granted summary judgment on inherent anticipation.

With respect to inequitable conduct, Novozymes bases its charge on representations made by U.S. Water about the parent application of which the '137 and '399 Patents-in-Suit were continuations in part. The parent application matured into the '244 patent, which U.S. Water asserted against another party in a separate action. During that other litigation, U.S. Water was arguing that the Veit patent was distinguishable from the claimed invention. The judge in that case suggested that the position that U.S. Water was now taking was different from the position it had taken during prosecution of the '244 patent. Following that exchange, U.S. Water amended the claims in the prosecution of what became the '137 Patent-in-Suit. U.S. Water never disclosed to the PTO examiner handling the '137 patent that the judge had questioned it about taking inconsistent positions as to Veit and patentability. A third party later identified this purported distinction to the PTO during the prosecution of what became the '399 Patent-in-Suit. The examiner noted in the file history that she reviewed the third party's submission along with Veit and other prior art references.

Novozymes contends that the Patents-in-Suit would not have issued had the examiner been aware of these documents and disclosures. However, the panel rules that the record contains no suggestion that,

but-for the disclosures made during the ChemTreat litigation, the examiner would not have issued the Patents-in-Suit. Instead, the record shows that the examiner was aware of the differences between the pending claims of the Patents-in-Suit and the '244 patent. Accordingly, the panel affirms the District Court's ruling that U.S. Water did not withhold or misrepresent information to the PTO.

Yeda Research and Development Co. v. Abbott GmbH & Co. KG, 837 F.3d 1341 (Fed. Cir. 2016)

Yeda appeals two decisions by the District Court for the District of Columbia—one decided in 2008 and the other in 2015. Both court decisions reviewed determinations by the Board of Patent Appeals and Interferences regarding Yeda's assertion that the '915 patent is invalid as anticipated. The '915 patent's invalidity turns on whether it benefits from the filing dates from either of two German patent applications— the '072 application and the '089 application. If it does, then the field of prior art narrows to exclude the anticipating reference. Whether the '915 patent is entitled to benefit from the '072 application's filing date depends on whether the '072 application provides adequate written description support for the invention claimed in the '915 patent.

Under the doctrine of inherent disclosure, when a specification describes an invention that has certain undisclosed yet inherent properties, that specification serves as adequate written description to support a subsequent patent application that explicitly recites the invention's inherent properties. The Circuit concluded that the '072 application provides an adequate written description of the protein claimed in Abbott's '915 patent, and as such, the '915 patent benefits from the priority date of the '072 application. The Circuit affirmed the district court's 2015 decision and dismissed Yeda's appeal from the district court's 2008 decision for lack of jurisdiction.

Experimental Use Exception to On-Sale Bar

Helsinn Healthcare v. Teva, 2017 U.S. App. LEXIS 7650 (May 1, 2017)

The Circuit reverses the district court and finds that four patents directed to a drug for reducing chemotherapy-induced nausea and vomiting are invalid as being on sale prior to the critical date, thus permitting Teva to introduce a generic substitute for Helsinn's popular Aloxi® product. In doing so, the Circuit refuses to accept the argument that the AIA changed on-sale law to require that the details of an invention be made public prior to the critical date by the addition of the language "or otherwise available to the public."

The panel first addresses whether the invention of the '724, '725, and '424 patents was subject to a sale or offer for sale prior to the critical date. Helsinn admits that the Supply and Purchase Agreement was binding as of its effective date, April 6, 2001, and that, if the FDA approved the 0.25 mg dose and/or the 0.75 mg dose of palonosetron, the agreement obligated Helsinn to sell and MGI to purchase those products. The fact that an agreement covered one party's requirements as opposed to a specified quantity does not prevent application of the on-sale bar.

The panel also rejects Helsinn's argument that at the critical date it was uncertain whether the FDA would approve the 0.25 mg dose, pointing out that absence of FDA approval before the critical date does not prevent a sale or offer for sale from triggering the on-sale bar.

Helsinn also argues that, even if the agreement of sale for the 0.25 mg dose could be an invalidating sale, the agreement was uncertain because it covered the 0.25 mg dose, the 0.75 mg dose, and both doses. However, the panel rules that even if the agreement had given the purchaser the option of choosing between the two doses, there would still be a binding agreement.

The panel next turns to the issue of whether the AIA changed the meaning of the on-sale bar under § 102 so that there was no qualifying sale as to the '219 patent. Before the AIA, § 102(b) barred the patentability of an invention that 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 date of the application for patent." By enacting the AIA, Congress amended § 102 to bar the patentability of an "invention that was patented, described in a printed publication, or in public use, on sale, *or otherwise available to the public* before the effective filing date of the claimed invention." 35 U.S.C. § 102(a)(1). Helsinn argued that the "otherwise available to the public" phrase changed the law, which now does not encompass secret sales and requires that a sale make the invention available to the public in order to trigger application of the on-sale bar.

Apart from the additional statutory language, this argument primarily relies on floor statements made by individual members of Congress that dealt more with public use, which is not now before the Circuit. The panel notes that as to offers for sale, requiring public disclosure of the details of the claimed invention as a condition of the on-sale bar "would work a foundational change in the theory of the statutory on-sale bar." It is sufficient that, if the existence of the sale is public, the details of the invention need not be publicly disclosed.

Finally, the panel addresses the issue of whether, under the Supreme Court's *Pfaff v. Wells* case, the invention was ready for patenting as of the critical date. The panel rejects the holding of the district court and the argument of Helsinn that in order for the invention to be ready for patenting, it had to meet the FDA standard, which requires finalized reports with fully analyzed results from successful Phase III trials. The panel finds that before the critical date of January 30, 2002, it was established that the patented invention would work for its intended purpose.

The Medicines Co. v. Hospira, Inc., 827 F.3d 1363 (Fed. Cir. 2016)

A unanimous en banc Circuit reverses the panel decision, ruling that two product-by-process patents directed to bivalirudin drug products used as anticoagulants to prevent blood from clotting during coronary surgery are not invalid despite an alleged on-sale bar under § 102(b). In an instructive analysis of the Supreme Court's 1998 *Pfaff v. Wells* case and other on-sale cases, the Circuit rules that in order to be an invalidating sale, title must have passed from the seller to the buyer for a price pursuant to UCC § 2-106(1). Here there was no title transfer, and this underscores that the sale was only of a third party's manufacturing services and not of the patented products.

Ben Venue Laboratories was paid by MedCo to manufacture what became MedCo's Angiomax product in order to make sure that the drug met USDA requirements. According to the opinion, for there to be a sale, the product must be commercially marketed, and that did not happen here until after the bar date. The opinion notes that it should not make a difference that the patentee contracted to have the product manufactured by a third party instead of having it manufactured in-house, which clearly would not have established a bar.

The district court had found that the patent was not invalid and that Hospira's generic version of Angiomax did not infringe. Both parties appealed, but this opinion deals only with the validity issue. MedCo had sold almost \$600 million of Angiomax in 2014, so the case is a significant one for MedCo and Pfizer, which acquired Hospira in 2015.

Applying § 102(b) in light of *Pfaff*, the Circuit concludes that the transactions between MedCo and Ben Venue in 2006 and 2007 did not constitute commercial sales of the patented product. The opinion holds that the mere sale of manufacturing services by a contract manufacturer to create embodiments of a patented product does not constitute a "commercial sale." The commercial benefit—even to both parties in a transaction—is not enough to trigger the on-sale bar of § 102(b); the transaction must be one in which the product is "on sale" in the sense that it is "commercially marketed." The invention was not commercially marketed in this case because: (1) only manufacturing services were sold to the inventor the invention was not; (2) the inventor maintained control of the invention, as shown by the retention of title to the embodiments and the absence of any authorization to Ben Venue to sell the product to others; and (3) "stockpiling" by the purchaser of manufacturing services, standing alone, does not trigger the onsale bar. **Comments:** This ruling could prove to be quite helpful to pharmaceutical companies, which sometimes have early versions of drugs manufactured by outside suppliers. Readers will recall that on July 5 in the *Rapid v. Cellzdirect* case, the Circuit upheld a patent on medical diagnostics that had been ruled by the district court as not being directed to patentable subject matter. These recent Federal Circuit decisions are a breath of fresh air to an industry that has seen a series of negative rulings ever since the Supreme Court's broad patentable subject matter decisions in *Myriad* and *Mayo*.

In deciding that the patents were invalid under § 102(b), the panel decision also ruled that the experimental use exception does not apply here because experimental use cannot occur after a reduction to practice. The en banc opinion did not review this experimental use ruling by the panel since it held that this was not a commercial sale.

Indefiniteness and Section 112

Cisco Systems, Inc. v. Cirrex Systems, LLC, Fed. Cir. Case 2016-1143, -1144 (May 10, 2017)

Cisco's IPR of Cirrex's patent resulted in some of the claims being found patentable but a number of the claims being held invalid for lack of written description support. Both parties appealed and the Circuit affirms in part and reverses in part, revising the construction of some of the claims but finding all of the challenged claims invalid under section 112.

The Cirrex patent is directed to fiber optic communication signals. The parties separated the claims into three different groups: the equalization claims, the discrete attenuation claims, and the diverting element claims. All three groups contain claims that depend from claim 1, reproduced below:

1. A cross-connect waveguide system comprising:

- a planar lightguide circuit having one or more optical paths;
- a plurality of optical waveguides coupled to said planar lightguide circuit;

a *plurality of filtering devices* for feeding light energy into said optical paths of said planar lightguide circuit or receiving light energy from said optical paths of said planar lightguide circuit; and

a *diverting element* for feeding first light energy at a predetermined wavelength having first information content away from said *planar lightguide circuit*, and for feeding second light energy at said predetermined wavelength having second information content into said *planar lightguide circuit*, wherein said *diverting element* is remotely configurable and is controlled with optically encoded information.

The Circuit's 2010 en banc *Ariad v. Lilly* case states that the written description requirement provides that a patentee must clearly allow persons of ordinary skill in the art to recognize that he invented what is claimed. The level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology. The panel agrees with Cisco that the claims are directed to subject matter that is indisputably missing from the specification, i.e., the claims "cover a mechanism for acting on individual channels of light within the planar lightguide circuit ("PLC") to discretely attenuate one of several channels" or "a mechanism for acting on individual channels of light within the PLC to make their several intensities equal." The specification does not meet the quid pro quo required by the written description requirement for the disputed claims because demultiplexing light to manipulate separately the intensities of individual wavelengths of light while the light is still inside the PLC is a technically difficult solution that the specification does not solve, let alone contemplate or suggest as a goal or desired result. Under the correct claim construction for the equalization and discrete attenuation claims, there is no substantial

evidence in the record to support the Board's finding that the pertinent claims have sufficient written description support.

Substantial evidence supports the Board's finding of lack of written description support for the diverting element claims. Because the panel affirms the Board's finding of lack of written description support, it does not reach the Board's alternate grounds for unpatentability of the diverting element claims.

Sonix Tech. Co. v. Publications Int'l. Ltd., 844 F.3d 1370 (Fed. Cir. 2017)

The Circuit reverses a district court determination that the term "visually negligible" renders the asserted claims indefinite under 35 U.S.C. § 112 ¶ 2. Sonix's '845 patent describes a system for using a graphical indicator (e.g., a matrix of small dots) to encode information on the surface of an object. The surface may feature additional information as well; for example, illustrations or icons in a children's book.

Encoding information, such as bar codes, on the surface of an object is not new. The '845 patent purports to improve on conventional methods by rendering the graphical indicator "visually negligible." By way of example, the graphical indicator stores the same information as the bar code, but in a manner that does not "interfere with the other main information on the surface." In one embodiment the micro-units are dots, arranged in a matrix. The written description discloses differentiability, brightness, and homogeneity requirements for the graphical indicators being negligible to human eyes. For best results, the graphical micro-unit must be so tiny that only a microscope apparatus can detect it.

Sonix alleged that children's books using dot pattern technology produced by GeneralPlus infringed. In response, GeneralPlus and its parent company requested two separate ex parte reexaminations, but the PTO found that the claimed invention was patentable over the cited art. Appellees did not contend that the claims were indefinite until fairly late in the litigation, but the district court granted their motion for summary judgment of invalidity based on indefiniteness.

On appeal, the panel agrees with Sonix that under the *Nautilus* test, a skilled artisan would understand, with reasonable certainty, what it means for an indicator in the claimed invention to be "visually negligible." According to the opinion, the intrinsic evidence supports, and the extrinsic evidence is consistent with, this conclusion. Moreover, until the filing of the summary judgment motion, no one, including the experts, had any difficulty determining the scope of "visually negligible."

The Circuit has rejected the proposition that claims involving terms of degree are inherently indefinite. For example, in *Enzo* the clause "not interfering substantially" was found acceptable, the Circuit reasoning that the intrinsic evidence provided guidance as to the scope of the claims, including examples of noninterfering structures and criteria for their selection. Terms of degree have been found indefinite, however, when such guidance is lacking. *Datamize* involved claims to an "aesthetically pleasing" look and feel for interface screens. Such language rendered the claim indefinite because, although the written description did detail various elements that might affect whether a screen was aesthetically pleasing, it provided no guidance to a person making aesthetic choices such that their choices will result in an "aesthetically pleasing" look and feel of an interface screen.

Similarly, in *Interval Licensing*, the Circuit found indefinite a claim that recited the display of content "in an unobtrusive manner that does not distract a user." The phrase was found to be a term of degree, purely subjective, and the claim language offered no objective indication of the manner in which content images are to be displayed to the user.

The panel agrees with the district court that the claim language itself does not unmistakably make clear the scope of "visually negligible"; however, it disagrees that the language is "purely subjective," as was the language in *Datamize* and *Interval Licensing*.

The opinion then turns to the "written description" requirement to determine whether there is some standard for measuring visual negligibility. The '845 patent contains considerably more detail than

Datamize or *Interval Licensing*, including: (1) an exemplary design for a visually-negligible indicator; (2) requirements for the graphical indicators being negligible to humans; and (3) two specific examples of visually-negligible indicators. The panel concludes that the level of detail provided in the written description is closer to that provided in *Enzo* than it is to Datamize or *Interval Licensing*.

Cox Commc'n, Inc. v. Sprint Commc'n Co. LP, 838 F.3d 1224 (Fed. Cir. 2016)

The Circuit reverses a ruling that the asserted claims of a Sprint patent are invalid as indefinite under 35 U.S.C. § 112, ¶ 2. The patent in suit is directed to so-called voice-over-IP, which allows telephone calls to be transmitted over the Internet, instead of through traditional telephone lines. The majority opinion initially notes that this case presents a peculiar scenario: the sole source of indefiniteness that Cox complains of, "processing system," plays no discernable role in defining the scope of the claims. All of the asserted claims are method claims, and the point of novelty resides with the steps of these methods, not with the machine that performs them. "Processing system" is merely the locus at which the steps are being performed. The plain language of the claims proves this point: if representative claim 1 is revised to remove the word "processing system," the meaning would not discernably change.

As *Nautilus* instructs, if a person of ordinary skill cannot discern the scope of a claim with reasonable certainty, it may be because one or several claim terms cannot be reliably construed. Nevertheless, indefiniteness under § 112, ¶ 2 must ultimately turn on the question set forth by *Nautilus*: whether the *"claims*, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." The Circuit concludes that, applied here, "processing system" does not prevent the claims from doing just that.

Cox contended that "processing system" is indefinite because the asserted claims only describe it in functional terms. The Circuit disagrees, pointing out that claims are not per se indefinite merely because they contain functional language.

In a concurring opinion, Judge Newman notes that she reads the majority opinion as providing "a new protocol of claim construction" with which she disagrees. She argues that, according to the majority's analysis, the adjudicator (1) first removes the challenged term from the claim, then (2) decides whether the claim has the same meaning without the challenged term, and (3) if the answer is "yes," rules that the claim is not indefinite as a matter of law. "This new style of claim construction will confound the already confused determination of patent rights."

ScriptPro LLC v. Innovation Associates, Inc., 833 F.3d 1336 (Fed. Cir. 2016)

For the second time, the Circuit reverses summary judgment of invalidity of a patent directed to an automated pill dispensing system. The district court determined that the specification was limiting and that the asserted claims, which are not so limited, were invalid for lack of written description. The panel disagrees, ruling that the specification does not "limit the sorting and storing of prescription containers by patient-identifying information alone—any predetermined storage scheme will do." Multiple purposes are described in the specification, including storing multiple prescription containers together according to some storage scheme and creating a collating unit that is easy to install with existing dispensing systems. Because the specification does not limit the scope of the invention in the manner the district court described, the asserted claims are not invalid for lacking such a limitation.

Advanced Ground Information Systems, Inc. v. Life360, 830 F.3d 1341 (Fed. Cir. 2016)

The Circuit affirms a determination of indefiniteness under § 112, ¶ 6 to the two patents-in-suit directed to systems for establishing a communication network for cellphone users.

The Circuit first considers whether the term "symbol generator" should be construed as a means plus function claim element. Under *Williamson v. Citrix*, there is a rebuttable presumption, but no longer a strong presumption, that unless the term "means" is used, claim elements should not be construed as means plus function elements. The test is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure. The panel holds that the term "symbol generator" invokes the application of § 112, ¶ 6 because it fails to describe a sufficient structure and otherwise recites abstract elements for causing actions, or elements that can perform functions. The panel therefore holds that the district court was correct to conclude that the asserted claims which recite the term "symbol generator" are subject to 35 U.S.C. § 112, ¶ 6.

In looking to see if there is corresponding structure in the specification to support means plus function language, the panel notes that in the case of computer-implemented functions, the Circuit requires that the specification disclose an algorithm for performing the claimed function. Here the specifications of the patents-in-suit do not disclose an operative algorithm for the claim elements reciting "symbol generator." Although the specification of the '728 patent suggests that these symbols are generated via "a map database and a database of geographically referenced fixed locations ... with a specified latitude and longitude,...and a database with the constantly updated GPS location," this only addresses the *medium* through which the symbols are generated. A patentee cannot claim a means for performing a specific function and subsequently disclose a general purpose computer as the structure designed to perform that function because this amounts to pure functional claiming. Accordingly, the panel affirms the district court judgment that the asserted claims are indefinite under 35 U.S.C. § 112, ¶ 2.

Inequitable Conduct

U.S. Water Services, Inc. v. Novozymes A/S, 843 F.3d 1345 (Fed. Cir. 2016)

The Circuit reverses summary judgment of anticipation because of genuine issues of material fact relating to a finding that prior art references "inherently" disclosed the claimed method for preventing fouling during the production of ethanol from milled grain. However, the panel affirms the grant of summary judgment of no inequitable conduct because the documents and disclosures were not material.

As to anticipation, the panel finds that the District Court correctly identified that "the issue on which this case ultimately turns is whether Veit or Antrim inherently disclose using phytase to reduce deposits in ethanol production machinery." However, according to the panel, it erred in finding no genuine dispute of material fact as to whether the Patents-in-Suit are inherently anticipated because "the prior art discloses the conditions that will necessarily result in phytase reducing deposits." The District Court erred in deeming irrelevant the fact that U.S. Water presented expert testimony that practicing Veit and Antrim will not always result in deposit reduction. By disregarding this evidence, the District Court improperly made credibility determinations and weighed conflicting evidence, and improperly granted summary judgment on inherent anticipation.

With respect to inequitable conduct, Novozymes bases its charge on representations made by U.S. Water about the parent application of which the '137 and '399 Patents-in-Suit were continuations in part. The parent application matured into the '244 patent, which U.S. Water asserted against another party in a separate action. During that other litigation, U.S. Water was arguing that the Veit patent was distinguishable from the claimed invention. The judge in that case suggested that the position that U.S. Water was now taking was different from the position it had taken during prosecution of the '244 patent. Following that exchange, U.S. Water amended the claims in the prosecution of what became the '137 Patent-in-Suit. U.S. Water never disclosed to the PTO examiner handling the '137 patent that the judge had questioned it about taking inconsistent positions as to Veit and patentability. A third party later identified this purported distinction to the PTO during the prosecution of what became the '399 Patent-in-Suit. The examiner noted in the file history that she reviewed the third party's submission along with Veit and other prior art references.

Novozymes contends that the Patents-in-Suit would not have issued had the examiner been aware of these documents and disclosures. However, the panel rules that the record contains no suggestion that, but-for the disclosures made during the ChemTreat litigation, the examiner would not have issued the Patents-in-Suit. Instead, the record shows that the examiner was aware of the differences between the pending claims of the Patents-in-Suit and the '244 patent. Accordingly, the panel affirms the District Court's ruling that U.S. Water did not withhold or misrepresent information to the PTO.

The Ohio Willow Wood Co. v. Alps South, LLC, 813 F.3d 1350 (Fed. Cir. 2016)

In the latest chapter of a long-running dispute between two manufacturers of prosthetic limbs, the Circuit rules that Ohio Willow Wood must pay Alps the attorney fees it incurred from the time it engaged in inequitable conduct during the second of two ex parte reexaminations. This determination is based on the panel's holding that the district court was not clearly erroneous in ruling that OWW's patent liaison was guilty of inequitable conduct by failing to disclose letters to the PTO that provided corroboration to testimony that OWW repeatedly contended was uncorroborated. Pursuant to *Therasense*, the panel agrees that deceptive intent is the single most reasonable inference to be drawn from the evidence. The PTO had withdrawn its rejection because the testimony about alleged prior art was uncorroborated, so the panel also found that the district court's ruling of "but for" materiality was not clearly erroneous.

While the panel finds that the district court did not abuse its discretion in its ultimate conclusion that the patent was unenforceable, the panel finds that Alps had not demonstrated by clear and convincing evidence that deceptive intent was the single most reasonable inference to draw from the liaison's failure to disclose "confidential" declarations from the litigation. Finally, the panel rejects Alps' cross appeal contending that other related patents should also be held to be unenforceable, as those patents had never been in the litigation and Alps had not requested such relief in its counterclaim.

Inventorship

Cumberland Pharm. Inc. v. Mylan Inst. LLC, 846 F.3d 1213 (Fed. Cir. 2017)

The Circuit affirms a determination by the district court that FDA personnel should not be named coinventors to a Cumberland patent covering a second generation of Acetadote®, an antidote for acetaminophen (Tylenol) overdoses. A determination that the invention was not obvious is also affirmed.

Mylan filed an ANDA, seeking to market its formulation for the drug, and Cumberland filed suit. Mylan admitted infringement but asserted invalidity on two grounds: derivation of the invention from someone at the FDA, and obviousness. According to the opinion, in order for Mylan to prevail on derivation, it had to prove, by clear and convincing evidence, a complete conception of the entire claimed invention that was communicated to Leo Pavliv, the named inventor on Cumberland's patent. The district court found that Mylan did not carry that burden.

The panel rules that the evidence supports this finding. In 2002, the FDA was considering Cumberland's application for permission to market the original EDTA-containing formulation of Acetadote®. The FDA requested justification for the inclusion of EDTA, a known stabilizer, in the product. According to the district court, this is not tantamount to suggesting that EDTA be deleted, which is part of the claimed invention, let alone replacing it with another agent, again, part of the claimed invention. Mylan argued that the request for data to support the inclusion of EDTA required Cumberland to undertake research that inevitably led it to the invention. According to the district court, and now the Circuit, that is not enough to prove derivation.

The panel also affirms the district court's rejection of Mylan's obviousness challenge. According to the opinion, a party seeking to invalidate a patent on the basis of obviousness must demonstrate that a skilled artisan would have been motivated to combine the teachings of the prior art to achieve the claimed

invention, and that the skilled artisan would have had a reasonable expectation of success in doing so. The district court found that a skilled artisan would not have reasonably expected the claimed formulation to succeed in being stable without a stabilizer like EDTA. The panel rules that that finding is not clearly erroneous.

Obviousness

Novartis v. Noven, 853 F.3d 1289 (Fed. Cir. 2017)

The panel affirms a determination of obviousness in IPR decisions relating to two Novartis patents directed to a pharmaceutical used in the treatment of Alzheimer's, even though the patents were previously found by the District of Delaware not to be invalid. This was based on there being additional evidence of obviousness submitted during the IPRs, and the fact that the preponderance of evidence burden of proof in the PTO is not nearly as exacting as the clear and convincing evidence standard in court.

In contending that the PTO erred in reaching a decision that is contrary to that reached by the Delaware District Court and the Federal Circuit, Novartis relies on a single sentence from the Circuit's 2012 *Baxter International* decision. There, the Circuit stated that the PTO "ideally should not arrive at a different conclusion" if it faces the same evidence and argument as a district court. Novartis treats "ideally" in that passage as a mandate. However, the context in which that passage appears demonstrates that the Circuit used "ideally" to connote aspiration and, in fact, recognized that Congress has provided a separate review mechanism before the PTO with its own standards. The panel refuses to "imbue *Baxter* with a meaning that the decision itself does not support."

Moreover, the record here differed from that in the prior litigation, because Noven has presented additional prior art and declaratory evidence that was not before the Delaware court. Nevertheless, even if the record were the same, Novartis's argument would fail as a matter of law because a petitioner in an IPR proves unpatentability by a preponderance of the evidence (see 35 U.S.C. § 316(e)) rather than by clear and convincing evidence as in district court litigation. This means that the PTAB properly may reach a different conclusion based on the same evidence. That position comports with the 2016 case of *Cuozzo Speed Techs v. Lee*, in which the Supreme Court held that a district court may find a patent claim to be valid, and the PTO may later cancel that claim in its own review. The opinion concludes its analysis by finding that substantial evidence supports the Board's determination of the teachings of the prior art and a motivation to combine. Novartis asks the panel to reweigh the evidence and give greater weight to its expert testimony, but the Circuit refuses to reweigh evidence presented to the PTO.

Comment: Note that the panel did not get into a discussion as to the finality of the district court decision as it did in *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 721 F.3d 1330 (Fed. Cir. 2013) and *ePlus, Inc.v. Lawson Software*, 760 F.3d 1350 (Fed. Cir. 2014). The panel must have felt that the intervening *Cuozzo* decision rendered that discussion unnecessary.

Michael Meiresonne v. Google, Inc., 849 F.3d 1379 (Fed. Cir. 2017)

Based primarily on a prior art book *World Wide Web Searching for Dummies*, the Circuit affirms a PTAB determination of obviousness of patent claims directed to searching the Internet.

In response to an accusation of infringement, Google filed an IPR, which the Board instituted based on the obviousness of all four of the challenged claims. In its final ruling the PTAB found the claims obvious based on the combined teachings of the *Dummies* book by Hill and a patent to Finseth. It found that Hill disclosed all of the limitations of the claims except for the "rollover viewing area" limitation, which it found disclosed by Finseth.

The issue before the panel was whether Hill and Finseth teach away from the claimed invention, which combines descriptive text with a rollover viewing area. Meiresonne argued that Hill and Finseth teach away because both references disparage the use of descriptive text. He argued that Finseth's solution to the "cursory, if not cryptic" descriptive text was abandoning and replacing textual descriptions with graphical previews. He also noted that Hill describes the abstract text as "gibberish" and advocates "visiting the actual site" instead of reading an unreliable abstract.

However, the panel holds that substantial evidence supports the Board's fact finding that the prior art does not teach away from the claimed combination. Although Finseth teaches graphical previews in a rollover window, it never implies that text and graphics are mutually exclusive or advocates abandoning text descriptions altogether. The panel concludes that the disparaging remarks in Finseth such as "often cursory, if not cryptic" do not automatically convert the reference to one that teaches away from combining text descriptions with a rollover window. This description implies only that text descriptions may be incomplete or insufficient to fully understand the content. Nor does Hill's description of website abstracts as "sometimes as informative as a paragraph of gibberish" amount to promoting abandonment of text descriptions.

The opinion distinguishes this case from a prior "teaching away" case, *DePuy Spine*, where the prior art taught that the addition of a rigid screw to the prior art spinal assembly would eliminate or reduce the device's desired "shock absorber" effect, thereby rendering the device inoperative for its intended purpose. The prior art depicted a "causal relationship between rigidity and screw failure," which supported the finding that it taught away from using rigid screws. Here, neither Hill nor Finseth indicates that inclusion of descriptive text would detract in any way from Finseth's goal of using a rollover viewing area to peruse data "much faster" than previous methods and "determining which web pages would be of most interest to the user."

Icon Health and Fitness, Inc. v. Strava, Inc., 849 F.3d 1034 (Fed. Cir. 2017)

The Circuit affirms the PTAB's IPR determination of obviousness as to most of the claims of a patent directed to a portable system for retrieving exercise programs used in an exercise machine, but reverses that determination as to a few of the claims.

In its opinion, the panel considers Icon's argument that the Examiner and the PTAB simply adopted the factual and legal conclusions reached by Strava's technical expert, and failed to provide their own detailed analysis of the reasoning behind their conclusions. The panel reviews the patent claims in groups, noting first that it needed to look first to see if there was substantial evidence to support factual findings. In some instances, even though the expert rendered an opinion on the ultimate issue of obviousness, the panel explains that that does not constitute reversible error as long as other aspects of the expert declaration contain statements relating to factual findings. The opinion then proceeds to review the findings of the Board on the merits, evaluating whether the PTAB made factual findings with the requisite evidentiary basis and adequately explained its findings.

As to some of the claims, the panel concludes that neither the PTAB nor the Examiner made the requisite factual findings or provided adequate explanation. Specifically, the PTAB rejected some of Icon's arguments by asserting only that Icon "merely restates previous arguments regarding contacts of the cradle *as discussed above*." But the PTAB had never actually addressed those arguments above. The PTAB's opinion thus contains no substantive discussion of the limitations at issue for those claims. Because the PTAB failed to comport with what these principles demand, the PTAB's rejection of these claims must be vacated and the case remanded for additional PTAB findings and explanation.

The panel distinguishes the handling of other claims because the Examiner made his own factual findings. The PTAB did incorporate sections of the Examiner's Right of Appeal Notice, but the Examiner's factual findings have an adequate evidentiary basis. As to the adequacy of the Board's explanation, the panel notes that it would be preferable for the PTAB to provide its own reasoned explanation, but the PTAB did incorporate the Examiner's findings, which provide an adequate basis for the mere

"combination of familiar elements." This is sufficient, if minimally, to explain the connection between the Examiner's factual findings and legal conclusion.

As to other claims, the PTAB merely stated that it was "not persuaded" by Icon's arguments and that "the Examiner's rejection was sufficiently supported by the record." However, the PTAB made only vague references to the prior art when summarizing Icon's arguments. At no point did the PTAB make explicit findings as to these elements or specify what aspects of the expert declarations it found persuasive. As with other claims, the PTAB never made factual findings with a basis in the record or provided the requisite explanation to support its findings for these claims. It merely summarized Icon's arguments and stated that the "Examiner's rejection was sufficiently supported by the record." Citing the recent *NuVasive* case, the panel notes that the PTAB cannot satisfactorily make a factual finding and explain itself by merely "summarizing and rejecting arguments without explaining why it accepts the prevailing argument."

Judge O'Malley concurs in part and dissents in part, writing separately because she believes that "remand is not the appropriate remedy in examination appeals in which the PTO has not carried its burden of establishing unpatentability." Rather than simply vacate the PTAB's findings with which the panel disagrees, she would reverse those findings.

Los Angeles Biomedical Research Institute v. Eli Lilly and Company, 849 F.3d 1049 (Fed. Cir. 2017)

In a split decision, the Circuit vacates and remands a determination by the PTAB that all of the claims of a patent asserted against Lilly's Cialis erectile dysfunction product are invalid as obvious. In dissent, Judge Newman says she would affirm the decision but because the majority disagrees, it should simply reverse the Board rather than remand the case since the record is fully developed, and a time-consuming remand will defeat the AIA's goal of a prompt determination of validity issues.

The majority first determines that the patent is not entitled to the earlier filing date of a provisional patent application. For a patent to be entitled to an earlier priority date, each previous application in the chain must comply with the written description requirement of § 112(a). It is not enough that a disclosure in a parent application merely renders the later-claimed invention obvious; the disclosure must describe the claimed invention with all its limitations. The provisional application does not explicitly disclose a dosage of "up to 1.5 mg/kg/day," so it does not provide an effective filing date.

Claim 1, the only independent claim, recites: A method comprising:

a) administering a cyclic guanosine 3', 5'-monophosphate (cGMP) type 5 phos-phodiesterase (PDE5) inhibitor according to a continuous long-term regimen to an individual with at least one of a penile tunical fibrosis and corporal tissue fibrosis; and

b) arresting or regressing the at least one of the penile tunical fibrosis and corporal tissue fibrosis, wherein the PDE-5 inhibitor is administered at a dosage up to 1.5 mg/kg/day for not less than 45 days.

The panel rules that the broadest reasonable interpretation of the phrase "an individual with at least one of penile tunical fibrosis and corporal tissue fibrosis" is its plain meaning. The Board's construction ("an individual having symptoms that may be associated with penile fibrosis, such as erectile dysfunction, but not that the patient be specifically diagnosed as having penile tunical fibrosis or corporal tissue fibrosis") reads that limitation out of the claim. Because erectile dysfunction is merely a symptom that may be, but is not necessarily, associated with penile fibrosis, erectile dysfunction cannot be equated with tunical fibrosis and corporal tissue fibrosis. In addition to plain meaning, there is no support in either the specification, the prosecution history or the expert witness testimony for the Board's construction.

The panel also disagrees with the Board's conclusion that the phrase "arresting or regressing the at least one of a penile tunical fibrosis and corporal tissue fibrosis" should have no limiting role, but merely stating the intended result of administering a PDE5 inhibitor at a dosage of up to 1.5 mg/kg/day for at least 45 days. While not dispositive, it is significant that the phrase "arresting or regressing the penile fibrosis" is

drafted as part of a separate step of the method, not as the preamble or introduction to a process carried out by the administration of the drug. The wherein clause sets forth the minimum duration supported by the disclosure (45 days) for the arrest or regression of fibrosis at a high dosage of the PDE-5 inhibitor. But the reference to a minimum duration period of 45 days says nothing about the efficacy of the method if a lower dosage of PDE5 inhibitor is administered. The majority therefore concludes that "arresting or regressing" the fibrosis adds an efficacy requirement that is not otherwise found in the claim.

The majority agrees with LAB that the Board's findings are insufficient to establish obviousness under the correct construction of the phrases at issue. The Board held that the references rendered obvious the treatment of erectile dysfunction via the claimed method, but it did not determine whether those references showed that it would have been obvious to use long-term continuous treatment with a PDE5 inhibitor to treat individuals with penile fibrosis and to achieve the arrest or regression of that condition. Specifically, the Board found that Montorsi and Whitaker taught the treatment of erectile dysfunction, and that the combination of Montorsi, Whitaker, and Porst gave rise to a reasonable expectation of success in treating erectile dysfunction. What the Board did not do, however, was to find that those references taught treating a patient with penile tunical fibrosis or corporal tissue fibrosis. Nor did the Board find that those references provided the basis for a reasonable expectation of success in treating those conditions. As indicated above, the correct construction of the pertinent claim language requires more than simply treating erectile dysfunction.

In a separate opinion, the Circuit affirms the Board's determination that there is no anticipation. According to the opinion: To anticipate, a reference must do more than "suggest" the claimed subject matter. Thus, the panel holds that substantial evidence supports the Board's finding that the reference does not disclose the claimed treatment regimen with sufficient clarity to satisfy "the demanding standard for anticipation."

In re Ethicon, Inc., 844 F.3d 1344 (Fed. Cir. 2017)

A divided panel affirms an IPR determination of obviousness involving a patent directed to Ethicon's drugeluting stents. The patent teaches that stent coatings delivering drugs locally can reduce restenosis that sometimes happens following angioplasty. Ethicon sued Boston Scientific and Abbott Labs, both of whom then filed petitions for IPR. The IPRs were instituted and merged. The Board rejected all of the claims based on prior art to Tuch, Tu and Lo, dismissing Ethicon's objective evidence of nonobviousness.

Tuch teaches that the polymer must be biocompatible, explaining that coating overlayers made with materials that have little elasticity can sustain significant cracking during stent deformation and that such cracking can result in more rapid elution of drugs. Tu and Lo teach using an 85:15 weight ratio of VDF:HFP. According to the majority, these teachings satisfy all of the limitations of the claims and support the Board's combination of the three references.

Ethicon contends first that Tuch never suggests that the elasticity of the polymer itself is an important characteristic, and asserts that it teaches away from using non-bioabsorbable coatings such as VDF:HFP by recommending bioabsorbable polymers. Second, Ethicon asserts that Tu is directed to medical devices other than stents and teaches away from allowing an elastomeric polymer such as VDF:HFP to be in contact with blood. Third, Ethicon argues that Lo is decades-old, nonanalogous art that provides no motivation to combine its teachings with medical devices. Finally, Ethicon asserts that Lo is directed to coatings for harsh, industrial applications, not implantable medical devices.

The majority rules that substantial evidence supports the challenged findings. Ethicon ignores the similar properties shared by coatings suitable for the devices disclosed by Tu and Ethicon's patent, and ignores embodiments in Tu that teach that the blood contacting layer can comprise VDF:HFP. Lo's age is irrelevant absent a showing of long-felt need or the failure of others. Ethicon also ignores that Lo discloses properties of VDF:HFP that would have been relevant to a skilled artisan considering a coating on a stent.

As to secondary considerations Ethicon relied solely on its expert's conclusory testimony to support its copying allegations. Regarding unexpected results, Ethicon's expert never even opined that the results pointed to would have been unexpected to a person of ordinary skill. Substantial evidence supports the Board's finding that the evidence of commercial success, industry praise, and unexpected results did not establish this was due to the 85:15 VDF:HFP coating, rather than to an unclaimed feature such as the drug or stent design.

Judge Newman dissents, arguing that the references recite thousands of polymer and copolymer components for stent coating materials, but not the copolymer of Ethicon's patent, although this copolymer was known for other uses. According to Judge Newman, there is no suggestion of its use as a drug-eluting coating in a vascular stent, nor were its advantages foreseen.

In re Marcel Van Os, 844 F.3d 1359 (Fed. Cir. 2017)

The Circuit vacates and remands a Board decision that affirmed an examiner's rejection of Apple's '470 application based upon obviousness because the Board failed to explain its reasoning, other than to say the invention was "intuitive." The application is directed to a user interface including a "first user touch" to open an application, a longer "second user touch" to initiate the interface reconfiguration mode, and a "subsequent user movement" to move an icon. The Board affirmed the rejection of some claims of the '470 application as being obvious in view of Hawkins and Gillespie. Hawkins discloses a personal communication device with a touch-sensitive screen in which a user can rearrange buttons by dragging a button from one location to another location. Gillespie discloses a computer interface that allows icons to be removed or rearranged when placed in an activated state. Gillespie also teaches that an individual icon could be "activated" by touching the icon with multiple fingers, with rapid double taps, hovering the finger over an icon without touching the touch screen, or holding the finger on an icon for a sustained duration.

The examiner determined that Hawkins discloses each limitation of the rejected claims except an interface reconfiguration mode that is initiated by a user touch having a longer duration than a user touch of a first duration used to initiate an application. The examiner relied on Gillespie's disclosure of a sustained touch and reasoned that adding this feature to Hawkins "would be an intuitive way for users of Hawkins' device to enter into the editing mode." The Board sustained the examiner's rejection, holding that the combination of Gillespie with Hawkins would have been "intuitive."

The panel holds that the Board erred in affirming the examiner's rejection because neither the Board nor the examiner provided any reasoning or analysis to support the finding of a motivation to add Gillespie's disclosure to Hawkins beyond stating it would have been intuitive. The Circuit vacates and remands for further proceedings because the Board's decision was "potentially lawful but insufficiently or inappropriately explained." Judge Newman writes separately in concurrence, agreeing with the majority's holding that the Board's rationale was insufficient to warrant an obviousness rejection. However, she dissents as to the remedy, arguing that the appropriate remedy should have been to instruct the Board to allow the application because the Board failed to meet its statutory burden.

Comment: This is the third Circuit decision in the recent past in which the Circuit has instructed the Board that it requires a full explanation of the reasons for a determination of obviousness. See *In re NuVasive, Inc.*, Case No. 2015-1670 (Dec. 7, 2016) and *In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327 (Fed. Cir. 2016). Hopefully the Board will get it this time and these expensive and time consuming remands will no longer be necessary.

In Re NuVasive, Inc., 842 F.3d 1376 (Fed. Cir. 2016)

The Circuit vacates and remands an IPR determination of obviousness as to a spinal fusion implant since the Board did not adequately explain the bases for its determination of obviousness.

Before getting to the merits of the appeal, the panel first rules that NuVasive waived its ability to raise on appeal the issue of whether the prior art product literature was publically accessible. NuVasive challenged the public accessibility of the literature during the preliminary proceedings of the IPR but failed to challenge public accessibility during the trial phase. In fact, during oral argument before the Board, NuVasive declined to argue public accessibility when asked by the Board if it was still disputing the public availability of the literature. NuVasive's attorney responded: "That is correct, we're leaving that issue aside. We're focusing entirely on the obviousness We're not abandoning the other arguments in our Patent Owner response, specifically with the dependent claims, we're just not addressing them right now because they're already addressed. So, we're going to assume that these are prior art"

The panel concludes that there was a waiver since, as a result of NuVasive failing to contest public accessibility, that issue was not addressed by the Board, and the Circuit did not have the benefit of the Board's informed judgment on the issue.

In addressing the issue of whether the Board had adequately explained its obviousness determination, the panel first notes that, according to *KSR*, the motivation to combine analysis should be made explicit. Although *KSR* noted that identifying a motivation to combine "need not become a rigid and mandatory formula," the Board must articulate a reason why a PHOSITA would combine the prior art references.

The Board determined that claim 1 would have been obvious over a combination of Baccelli and the product literature. But the Board failed to explain why a PHOSITA would have been motivated to modify either of the literature references in light of Baccelli. The majority of the Board's analysis was limited to summaries of the parties' arguments. The Board stated "we are not persuaded by NuVasive's argument, because the question is whether it would have been obvious to a PHOSITA to combine the cited references, and not whether any specific implants on the market contain a radiopaque marker in a central region." In addition, the Board invoked the high level of skill in the art when it agreed with Medtronic's assertion that NuVasive's argument "vastly underestimates the ordinary skill of surgeons in this field." However, the Board never actually made an explanation-supported finding that the evidence affirmatively proved that the PHOSITA would have sought this additional information from the other reference. Medtronic's arguments amount to nothing more than conclusory statements that a PHOSITA would have been motivated to combine the prior art references to obtain additional information.

In re Constantin Efthymiopoulos, 839 F.3d 1375 (Fed. Cir. 2016)

In a split decision, a majority of the panel affirms the rejection of the claims of a GlaxoSmithKline patent application directed to a method for treating influenza comprising administering an effective amount of zanamivir by inhalation, covering GSK's flu drug Relenza.

The majority holds that Von Itzstein I discloses the use of zanamivir to treat and prevent influenza. Von Itzstein II discloses different administration methods for an adjacent homologue of zanamivir to achieve the same result—treating or preventing influenza. In particular, Von Itzstein II expressly discloses administration through "oral," "nasal," or other forms "suitable for administration by inhalation," among other methodologies. The Board's finding that a skilled artisan would be motivated to use zanamivir in the methods disclosed by Von Itzstein II, is therefore, according to the majority, supported by substantial evidence.

The majority also holds that there is substantial evidence that Von Itzstein II's disclosure of administration through "inhalation" includes oral inhalation. Inhalation can only be carried out via the nose or the mouth. Since Von Itzstein II does not limit its disclosure to nasal inhalation, it is reasonably understood to disclose inhalation by either the nose alone, the mouth alone, or both.

Finally, the majority holds that the Board's conclusion is further supported by the fact that both Von Itzstein references teach that the compounds may be administered in many forms, including as a dry powder through an inhaler. The state of the art at the time of invention established that dry-powder compositions were often used specifically for oral inhalation. Moreover, substantial evidence supports the determination that a skilled artisan would have a reasonable expectation of success in combining the Von

Itzstein references. There is also substantial evidence that Efthymiopoulos's evidence of unexpected results is lacking.

Judge Newman dissents, arguing that the Board and the majority relies only on evidence in the application itself to find that oral inhalation would be effective.

ClassCo, Inc. v. Apple, Inc., 838 F.3d 1214 (Fed. Cir. 2016)

The Panel affirms the Board's determination of obviousness for a caller ID system included in Apple's iPhone despite the failure of the Board to give appropriate weight to the secondary considerations of nonobviousness. ClassCo first argued that the Board's combination of prior art was inconsistent with *KSR*, but the panel rules that KSR does not require that a combination only unite old elements without changing their respective functions. Instead, *KSR* teaches that "a person of ordinary skill is also a person of ordinary creativity, not an automaton."

The most interesting part of the opinion is the panel's determination that the Board erred in dismissing some of ClassCo's evidence of nonobviousness. The panel first notes that it agrees with the Board that much of ClassCo's evidence of praise deserved no weight because it did not have a nexus to the merits of the claimed invention. While much of ClassCo's evidence of praise focused on conventional features in the prior art, the Board improperly dismissed some evidence of praise related to features that were not available in the prior art. It also improperly dismissed evidence because it found that the claims were not commensurate in scope with the praised features. The opinion notes that the Circuit does not require a patentee to produce objective evidence of nonobviousness for every potential embodiment of the claim. As such, the Board should have afforded ClassCo's evidence some weight, taking into account the degree of the connection between the features presented in evidence and the elements recited in the claims.

The panel also considers the Board's analysis of ClassCo's evidence of commercial success as flawed. ClassCo presented testimony of its sales volumes and growth of market share. According to the opinion, if a patent owner shows that the marketed product embodies the claimed features, then a nexus is presumed and the burden shifts to the party asserting obviousness to present evidence to rebut the presumed nexus. ClassCo made that showing here, and that was unrebutted, so this evidence deserved some weight in the obviousness analysis, and the Board's blanket dismissal of it was in error.

Finally as to secondary considerations, the panel rejects ClassCo's argument that the Board improperly dismissed evidence of a successful licensing program of the patent because there was substantial evidence to support the Board's determination that there was no evidence demonstrating why Philips took a license from ClassCo and what specific claim features caused Philips to take the alleged licenses.

Despite the Board's failure to give appropriate weight to the secondary considerations, the panel affirms the ultimate determination of obviousness because the examiner and the Board correctly found that the combination of Fujioka and Gulick presents a strong showing that the claims at issue would have been obvious. In doing so, the opinion cites to *Graham v. Deere*, which also held that the alleged secondary considerations of commercial success and long felt need in that case did not "tip the scales of patentability" where the invention "rested upon exceedingly small and quite non-technical mechanical differences in a device which was old in the art."

In re Warsaw Orthopedic, Inc., 832 F.3d 1327 (Fed. Cir. 2016)

The panel affirms the IPR invalidation of all but one of the claims directed to a spinal surgery technique, but vacates and remands the Board ruling as to one claim because the Board failed to explain its reasoning.

On appeal, Warsaw presents a number of objections to the Board's findings as to the teachings of the prior art. As to each of those arguments, the panel concludes that there is substantial evidence to support

the Board's factual determinations. Warsaw also argues that there was no motivation shown to combine the prior art references, but the panel disagrees with that contention as well, concluding that there was no legal error and the Board provided the requisite explanation in support of its conclusions.

However, the panel concludes that it "cannot reasonably discern that the Board's decision as to the 'elongated portions' limitation in claim 17 followed the proper path." According to the Board's opinion, "Jacobson appears to disclose anchor wires (i.e., 'elongated portions') that are positioned over adjacent vertebrae." However, according to the panel, this conclusory assertion in support of its finding does not equate to the reasoned explanation needed to support its conclusion. Thus, the Circuit remands this issue to the PTAB for additional explanation.

Arendi S.A.R.L. v. Apple Inc., 832 F.3d 1355 (Fed. Cir. 2016)

The Circuit reverses an IPR determination of obviousness because the Board misapplied Circuit law on the use of common sense in an obviousness analysis. The litigation had been stayed pending IPR so defendants Apple, Google and Motorola Mobility will have to return to the district court for resolution of infringement and possible remedies.

The patent at issue is directed to a computer application designed to recognize specific words or data. The Board determined that the Pandit reference discloses each limitation of claim 1 except for performing a search for duplicate telephone numbers, names and addresses. However, the Board found it reasonable to presume, as a matter of common sense and common knowledge at the time of the invention, that Pandit would search for duplicate telephone numbers and, upon locating a duplicate entry, would display the name and/or address associated with the telephone number.

The panel notes that common sense has its proper place in the obviousness inquiry, but that there are caveats. First, common sense is typically invoked to provide a known motivation to combine, not to supply a missing claim limitation. Second, the limitation in question should be simple and the technology straightforward. Third, references to "common sense" cannot be used as a wholesale substitute for reasoned analysis and evidentiary support. The panel thus frames the issue as whether the Board accepted a conclusory assertion about general knowledge in the art without evidence on the record, particularly where it is an important limitation that is not indisputably within the common knowledge of those in the art.

The panel concludes that the Board's presumption that adding a search for phone numbers to Pandit would be "common sense" was conclusory and unsupported by substantial evidence. Also, the missing limitation is not a "peripheral" one, and there is nothing in the record to support the Board's conclusion that supplying the missing limitation would be obvious to one of skill in the art.

WBIP, LLC v. Kohler Co., 829 F.3d 1317 (Fed. Cir. 2016)

In a thorough discussion of the objective considerations supporting nonobviousness, the panel affirms the denial of JMOL that the asserted claims directed to low–carbon monoxide-emitting electrical generators would have been obvious. The panel also affirms a determination of willful infringement that was based on instructions under *Seagate*. *Halo* was decided following the trial so the panel contrasts the test for willfulness under *Seagate* and *Halo*. Finally, in perhaps the most interesting ruling in the case, the panel determines that the district court abused its discretion in denying a motion for permanent injunction just because WBIP, a smaller company, would otherwise have been the sole supplier of a product designed to ensure the safety of the public.

The panel rejects Kohler's first argument on appeal that there was no nexus demonstrated between the claimed invention and the objective indicia. Where the patentee shows that the asserted objective evidence is tied to a specific product and that product is the invention disclosed and claimed in the patent, there is a presumption of nexus. The presumption may be rebutted by a patent challenger that can present evidence showing the objective evidence was due to extraneous factors, such as improvements

in marketing. The Circuit determines that Kohler failed to present evidence to rebut the presumption, and rejects Kohler's argument that evidence of nexus must be limited to the supposedly "new" features recited in the claims.

The opinion then points to the substantial evidence supporting the jury's presumed factual findings as to long felt need (third-party product liability suits against Kohler involving prior generators), industry praise (trade association and other awards received for patented generator), skepticism (an industry workshop audience expressed "shock" when the inventor announced that he would have a commercial product as claimed within two years), copying (when the inventor explained to Kohler engineers at a trade show how his product achieved the claimed benefits, Kohler documents show that funding was requested to develop a product following the same techniques), and commercial success (evidence of immediate success of the Kohler unit). The panel stresses that it will not substitute its judgment for the jury verdict on any of these preliminary *Graham v. Deere* factual inquires.

Kohler also argues that the patents are invalid based on violation of the written description requirement, but the panel refuses to consider this argument since it was not presented to the district court.

As to willful infringement, the panel rejects Kohler's argument that its invalidity position was reasonable, noting that *Halo* rejected this test from *Seagate. Halo* tells us to assess the infringer's culpability by looking at its knowledge at the time the infringement was initiated. Kohler then argues that even though it admitted in its Statement of Undisputed Facts that it knew of the patents at an early date, that evidence was not submitted to or considered by the jury. The panel reviews the evidence that the jury did consider, including that WBIP marked the number on its product, and finds this evidence sufficient to support the presumed jury finding that Kohler knew of the patent.

WBIP cross-appealed the district court's denial of a permanent injunction, which was based on the fact that WBIP was a much smaller producer of these low–carbon monoxide generators, so depriving the consuming public of access to a potentially lifesaving product showed that it was not in the public interest to grant the injunction. The panel notes that the district court did not explain how the public interest in enforcing patent rights was outweighed by the public interest of having more than one manufacturer of such generators, especially if WBIP has the manufacturing capacity to meet the industry's needs. The district court's decision was based on its reasoning that having more manufacturers of a lifesaving good in the market is better for the public interest, but this reasoning is true in nearly every situation involving such goods. Congress expressly indicated in $35 \text{ U.S.C. } \S 271(e)(4)(B)$ that injunctions may be granted in cases involving lifesaving goods, such as pharmaceutical drugs. The panel therefore vacates the judgment and remands the case for a more thorough analysis of the *eBay* factors.

Comments: We think you'll find the Circuit's opinion of interest, particularly the discussions of willful infringement and permanent injunction, where the Circuit appears to laud the grant of injunctions in pharmaceutical cases even though the injunction might jeopardize the supply to patients. The original 41-page opinion is wordy, but our much-condensed version includes, we think, the most pertinent analysis.

Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC, 825 F.3d 1373 (Fed. Cir. 2016)

The panel affirms the IPR invalidation of claims directed to a universal attachment for mounting a variety of construction and demolition tools that can easily and quickly convert between different tools. Allied argued that two prior art pieces of equipment disclosed in patents to Caterpillar and Ogawa could not be physically combined in the manner proposed by the Board. However, the panel rules that the test is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, but rather whether a skilled artisan would have been motivated to combine the teachings to achieve the claimed invention.

Allied also argued that Caterpillar teaches away from Ogawa because in Ogawa the main pivot pin functions as *both* the pivot point for the jaws and the means for attaching the jaws to the frame. According to Allied, because Ogawa encourages one in the art to do exactly what Caterpillar says they should not do—have the main pivot pin for both jaws also mount the jaws to the frame—Caterpillar teaches away

from the combination with Ogawa. However, the panel rules that the disadvantage underscored by Caterpillar does not militate against finding the combination proper. Caterpillar expresses doubt as to whether an *optimal* design feature may have the main pivot pin for both jaws also mount the jaws to the frame in order to effect the quick change functionality. There is no teaching away from the combination of Caterpillar and Ogawa because the combination does not utilize the pivot pin attachment mechanism of Ogawa. There is no teaching away in Caterpillar from using the Ogawa feature of two movable jaws.

In any event, the PTAB grounded its modification of Caterpillar on Ogawa's teaching of two movable blades and wide range of angular movement. Thus, Ogawa's disclosure of the need for two separate cylinders is extraneous to the PTAB's decision. According to the PTAB, the claims of the '489 patent would have been obvious whether only a single or two cylinders are used.

"Printed Matter" Doctrine

Blue Calypso, LLC v. Groupon, Inc., 815 F.3d 1331 (Fed. Cir. 2016)

The Circuit affirms in part and reverses in part an appeal from five covered business method reviews of Blue Calypso patents directed to a peer-to-peer advertising system that uses mobile communication devices. The opinion first broadly defines what is a "financial product" as it relates to a CBM patent and narrowly defines the "technological invention" exception, holding that the patents at issue are properly involved in a CBM review. A majority of the panel affirms the Board's determination that many of the claims of the five patents were invalid as anticipated. The panel reverses the Board's decision that other claims are invalid for violating the written description requirement, ruling that the Board focused too much on the fact that the precise terms used in the claims were not used in the specification rather than looking to see what would have been understood by one with ordinary skill making reference to the figures, specification and claim language.

In an interesting discussion as to whether papers that are theoretically available on the Internet in fact qualify as printed publications, the panel agrees with the Board in rejecting Groupon's argument that a paper that was posted on the personal webpage of a graduate student was reasonably accessible to one interested in the art. Thus, the panel affirms the Board's refusal to find obvious many of the claims based on the paper.

Patentable Subject Matter

RecogniCorp, LLC v. Nintendo Co., Ltd., 2017 U.S. App. LEXIS 7528 (April 28, 2017)

RecogniCorp sued Nintendo for infringement of a patent directed to facial image transmission allegedly used in Nintendo's Wii video gaming system. The Circuit affirms a determination of invalidity by Judge Jones of the Western District of Washington under § 101, holding that the claims are directed to the abstract idea of encoding and decoding image data, and the claims do not contain an inventive concept sufficient to render the patent eligible.

Representative claim 1 recites:

1. A method for creating a composite image, comprising:

displaying facial feature images on a first area of a first display via a first device associated with the first display, wherein the facial feature images are associated with facial feature element codes; selecting a facial feature image from the first area of the first display via a user interface associated with the first device, wherein the first device incorporates the selected facial feature image into a composite image on a second area of the first display, wherein the composite image is associated with a composite facial image code having at least a facial feature element code and wherein the composite facial image code is derived by performing at least one multiplication operation on a facial code using one or more code factors as input parameters to the multiplication operation; and

reproducing the composite image on a second display based on the composite facial image code.

Under the first step of *Alice*, the panel holds that claim 1 is directed to the abstract idea of encoding and decoding image data. This method reflects standard encoding and decoding, an abstract concept long utilized to transmit information.

The panel rejects RecogniCorp's citation of *Diehr*, noting that *Diehr* is distinguishable because, outside of the math, claim 1 of the patent is not directed to otherwise eligible subject matter. Adding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim non-abstract. The panel also distinguishes *Enfish*. Unlike *Enfish*, claim 1 does not claim a software method that improves the functioning of a computer. The panel holds that this case is similar to *Digitech*, where the claims were directed to the abstract idea of organizing information through mathematical correlations.

Proceeding to the second step of *Alice*, the panel finds that these claim elements do not transform the nature of the patent claims into a patent-eligible application. Distinguishing *DDR Holdings*, the panel holds that claim 1 contains no inventive concept. Nor does the presence of a mathematical formula dictate otherwise. Claims that are directed to a non-abstract idea are not rendered abstract simply because they use a mathematical formula. But the converse is also true: A claim directed to an abstract idea does not automatically become eligible merely by adding a mathematical formula.

The opinion notes that in *BASCOM*, the patent owner alleged that an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea. That allegation was found to be sufficient to survive a motion to dismiss similar to the motion at issue here, where all facts had to be construed in the patent owner's favor. However, RecogniCorp has not alleged a particularized application of encoding and decoding image data. In fact, claim 1 does not even require a computer; the invention can be practiced verbally or with a telephone.

Thales Visionix Inc. v. U.S., 850 F.3d 1343 (Fed. Cir. 2017)

The Circuit reverses a Court of Federal Claims holding that all claims of Thales' patent are directed to the abstract idea of mathematical equations. Specifically, the Circuit finds that the claims utilize the mathematical equations for the determination, but are not directed to these mathematical equations. Because the claims survive *Alice* step one, there is no need to proceed to *Alice* step two.

The '159 patent discloses an internal tracking system for tracking the motion of an object relative to a moving reference frame. Inertial sensors (e.g., accelerometers and gyroscopes) measure the specific forces associated with changes in a sensor's position and orientation relative to a known starting position. The '159 patent recognized that systems using these inertial sensors to measure changes with respect to the earth produced inconsistent position information between inertial sensors of the object (e.g., the helmet) and inertial sensors of the platform (e.g., the vehicle) when the moving platform accelerated or turned. In the disclosed system, the platform inertial sensors directly measure the gravitational field in the platform frame, and the object inertial sensors then calculate position information relative to the frame of the moving platform. The two claims at issue recite:

1. A system for tracking the motion of an object relative to a moving reference frame, comprising:

a first inertial sensor mounted on the tracked object;

a second inertial sensor mounted on the moving reference frame; and

an element adapted to receive signals from said first and second inertial sensors and configured to determine an orientation of the object relative to the moving reference frame based on the signals received from the first and second inertial sensors.

22. A method comprising determining an orientation of an object relative to a moving reference frame based on signals from two inertial sensors mounted respectively on the object and on the moving reference frame.

In summarizing the critical question to be answered in step one, the panel cites to *Mayo*, stating: "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." The Circuit disagrees with the Claims Court, which held that the claims are directed to the abstract idea of using "mathematical equations for determining the relative position of a moving object to a moving reference frame."

Regarding step one, the opinion quotes the 2016 *Rapid Litigation* case: "it is not enough to merely identify a patent-ineligible concept underlying the claim: we must determine whether that patent-ineligible concept is what the claim is 'directed to." While the claims utilize mathematical equations to determine the orientation of a tracked object, the equations serve only to tabulate the position and orientation information in this configuration. The claims are directed to methods that use inertial sensors in a non-conventional manner to reduce errors in measuring the relative position and orientation of a moving object on a moving reference frame, which is not an abstract idea.

This ruling emphasizes the distinction made by the Supreme Court in *Diamond v. Diehr* and *Alice* between, on the one hand, claims that merely *involve* an abstract concept, and claims that are *directed to* the abstract concept, and on the other.

Mentor Graphics Corp. v. EVE-USA, Inc., 851 F.3d 1275 (Fed. Cir. 2017)

Mentor achieves almost a clean sweep of many issues presented to the Circuit in an appeal from litigation in the District of Oregon between Mentor and various Synopsys companies, including its subsidiary EVE-USA. Mentor asserted patents directed to so-called simulation/emulation technology. Synopsys also asserted two of its patents against Mentor. Mentor's '376 patent, directed to a system for debugging source code after synthesis, was the only patent tried to the jury, and the panel affirms the denial of JMOL and the \$36 million jury verdict. The Circuit also vacates the motion in limine precluding Mentor from presenting evidence of willful infringement. The panel reverses summary judgment that Mentor's '882 patent lacks written description support and summary judgment that Mentor's infringement allegations regarding two of its patents are barred by claim preclusion.

The panel reverses summary judgment that a Synopsys patent is indefinite but affirms summary judgment that the other patent it asserted lacks patent-eligible subject matter.

Our summary is a little longer than usual, given the length of the opinion (42 pages), but the discussion on many of the points is very interesting.

Summary Judgment of Assignor Estoppel Is Affirmed

As to the determination of infringement of Mentor's '376 patent, the panel found substantial evidence that was well summarized by Mentor's expert witness. With respect to Synopsys's challenge of the grant of summary judgment that it was barred from challenging validity because of assignor estoppel, the panel rejects the argument that *Lear v. Adkins* "demolished the doctrinal underpinnings of assignor estoppel in

the decision that abolished the comparable licensee estoppel. Citing its 1988 *Diamond Scientific* and its 2016 *MAG Aerospace* cases, the Circuit notes the continued vitality of the doctrine of assignor estoppel after *Lear*.

The \$36 Million Damage Award to Mentor Is Affirmed

Synopsys's challenge of the damage award is unsuccessful because the jury instructions properly guided the jury under the so-called *Panduit* factors as to lost profits because Mentor would have made additional Veloce sales but for Synopsys's infringing sales. Synopsys argued on appeal that the award should be vacated because it failed to apportion lost profits. The first *Panduit* factor—demand for the patented product—considers demand for the product as a whole. The second factor—the absence of non-infringing alternatives—considers demand for particular limitations or features of the claimed invention. Together, these factors tie lost profit damages to specific claim limitations and ensure that damages are commensurate with the value of the patented features.

The panel finds the facts of this case to be "remarkably simple" and Synopsys does not dispute any of them. Synopsys does not dispute that but for its infringement, Mentor would have made each of the infringing sales to Intel. Nor does it dispute how much Mentor would have earned, the precise numbers of sales Mentor would have made, whether there were any alternatives that Intel may have preferred over the purchase of Mentor's product, or whether Intel would have chosen to purchase fewer emulators.

On appeal, Synopsys argues that its products "outperform Mentor's in price, size, speed, and capacity." If the evidentiary record is as Synopsys claims, then it had recourse—it could have appealed the jury's *Panduit* fact findings as not supported by substantial evidence. This is a highly factual case, and Synopsys did not appeal any of the jury's fact findings relating to damages.

Summary Judgment of Indefiniteness of the Synopsys '109 Patent Is Affirmed

Definiteness requires clarity, although under *Nautilus*, "absolute precision is unattainable." Claims reciting terms of degree have long been found definite if they provide reasonable certainty to a skilled artisan when read in the context of the patent.

Claim 1 requires "displaying said characteristics associated with those said final circuit's nets and parts that correspond directly with said initial circuit's nets and parts *near* said portions of said synthesis source text file that created said corresponding initial circuit parts and nets." A goal of the '109 patent is to aid developers when debugging HDL. To accomplish this, the patent "relates" circuit analysis results with the HDL corresponding to a particular result, and then places the two pieces of information "near" each other on the display screen. This allows a developer to identify and fix problems with specific lines of HDL when debugging. In order for the patent's stated objective to occur, the system must display the related HDL and analysis results "near" enough to each other such that a developer would "relate" the two. Thus, the panel holds that a skilled artisan would understand "near" requires the HDL code and its corresponding circuit analysis to be displayed in a manner that physically associates the two.

Summary Judgment Is Affirmed that Synopsys's '526 Patent Is Invalid Under § 101

The panel affirms summary judgment that the asserted claims of Synopsys's '526 patent are invalid under § 101 because of the presence of the term "machine-readable medium" in every challenged claim. A patentee is free to be his own lexicographer, and the specification expressly defines the term: "The computer readable medium is any data storage device that can store data which can be thereafter be [sic] read by a computer system." Mentor argued that because the '526 patent defines a "machine-readable medium" as including "*carrier waves*," the claims are invalid under the 2008 Circuit case of In *re Nuijten*. The claimed signal in *Nuijten* was not limited to a particular medium or carrier but rather covered "any tangible means of information carriage." In that case, the Circuit held that a "transitory, propagating signal" did not fall within any statutory category of subject matter: process, machine, manufacture, or composition of matter. Therefore, because the claims covered "the signal itself," they were not eligible subject matter. Here, the panel holds that because the challenged claims are expressly defined by the

specification to cover carrier waves, they are similar to the ineligible *Nuijten* claims in that the claims cover carrier signals themselves.

The challenged claims present a scenario where there are multiple covered embodiments, and some, but not all, of the covered embodiments are patent-eligible. For example, if the machine-readable medium used was a "random-access memory" or "optical data storage device," the claims would not run afoul of *Nuijten*. While not binding on the Circuit, it is instructive that MPEP § 2106 instructs that a claim covering both statutory and non-statutory embodiments is not eligible for patenting.

The Panel Reverses the Grant of a Motion in Limine Precluding Mentor from Presenting Evidence of Willful Infringement as to Its '376 Patent

The district court held that Mentor was precluded from presenting evidence of willfulness because it relied exclusively on post-suit willfulness conduct, and it had not first sought a preliminary injunction. The court stated, "I think Synopsys is right about what we will call the *Seagate* rule, which is if you don't seek an injunction, you can't seek willful infringement for post-filing conduct." In reaching this conclusion, the court made two errors. First, it erred in determining that the alleged conduct was post-suit conduct because it erred in determining the filing date of the relevant suit. Second, it erred in concluding that Synopsys could not present evidence of post-filing willful infringement because Synopsys did not seek a preliminary injunction.

The relevant date for determining which conduct is pre-suit is the date of the patentee's affirmative allegation of infringement, in this case the date of Mentor's counterclaim. Mentor relies on Synopsys's acquisition of EVE, which terminated the license and rendered all subsequent sales infringing. These events occurred after the declaratory judgment was filed but prior to Mentor's counterclaim for infringement. The alleged acts of infringement are thus pre-suit acts, and there is accordingly no basis for excluding Mentor's evidence of willfulness.

The panel also disagrees with the court's second decision—that Mentor could not assert willful infringement because it did not seek a preliminary injunction. As the Circuit noted in its 2014 *Aqua Shield* case, there is "no rigid rule" that a patentee must seek a preliminary injunction in order to seek enhanced damages. The opinion also cites to the language in *Halo* "eschew[ing] any rigid formula for awarding enhanced damages under § 284." The panel thus holds that the district court abused its discretion in precluding Mentor from presenting evidence of willful infringement, and remands for further proceedings consistent with *Halo*.

Summary Judgment of Indefiniteness of Synopsys's '882 Patent Is Reversed

The panel reverses the district court's grant of summary judgment of invalidity of the Synopsys '882 patent because the very language of claim 1 which the court held was not supported by the specification was present in the originally-filed claims. As noted in last year's *ScriptPro* case, original claims are part of the original specification and in many cases will themselves satisfy the written description requirement.

The Panel Reverses Summary Judgment of Claim Preclusion as to Synopsys's '176 and '531 Patents

The '176 and '531 patents are two of the three patents litigated in the 2006 lawsuit between Mentor and EVE, which was settled when EVE took a license to the patents, and Mentor dismissed its claims with prejudice. Synopsys's 2012 acquisition of EVE automatically terminated the Mentor/EVE license. Synopsys then filed a DJ action for noninfringement of the '176 and '531 patents, and Mentor counterclaimed for infringement. Citing the Supreme Court's *Lawlor* decision and the Circuit's 2012 and 2014 decisions in *Aspex Eyewear* and *Brain Life*, the panel accepts Mentor's argument that its infringement allegations were based exclusively on acts of infringement that occurred after the date Synopsys acquired EVE. Claim preclusion does not bar a patentee from bringing infringement claims for acts of infringement occurring after the final judgment in a previous case.

Intellectual Ventures I LLC v. Capital One Financial Corp., 850 F.3d 1332 (Fed. Cir. 2017)

Intellectual Ventures I LLC v. Erie Indemnity Co., 850 F.3d 1315 (Fed. Cir. 2017)

The Circuit affirms a determination by the district court that the asserted claims of IV's '081 patent do not pass muster under § 101.

The panel quickly disposes of two secondary issues: the district court did not abuse its discretion in certifying the appeal because it expressly determined that there was no just reason for delay of proceedings; and the court correctly determined that IV was collaterally estopped from pursuing its patent infringement claims as to the '084 patent because the finality of judgement requirement was met.

The '081 patent concerns a system and method for editing XML documents. The patent claim creates the dynamic document based upon "management record types" ("MRTs") and "primary record types" ("PRTs"). The inventor coined these terms to describe the organizational structure of the data at issue.

Under step one of *Alice* eligibility analysis (whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea), the panel concludes that the claims of the '081 patent are directed to the idea of collecting, displaying, and manipulating data, and thus are abstract. Although the claimed data structures add a degree of particularity, the underlying concept embodied by the limitations merely encompasses the abstract idea itself of organizing, displaying, and manipulating data of particular documents.

Applying the second step of *Alice*, the panel perceives no "inventive concept" that transforms the abstract idea of collecting, displaying, and manipulating XML data into a patent-eligible application of that abstract idea. The claims recite two generic computer elements—a processor—and a series of generic computer "components" that merely restate their individual functions—i.e., organizing, mapping, identifying, defining, detecting, and modifying. They merely describe the functions of the abstract idea itself. MRT and PRT data structures do not sufficiently transform the abstract concept into a patentable invention. In particular, the MRTs and PRTs—although technical sounding—include generic data types for which the system can store the extracted data.

Although the patent purports to have met a need in the art to "allow the user to view and update XML documents in different formats, and manipulate the data and perform actions without programming skills," the claims recite nothing inventive or transformative to achieve this stated goal. Thus, taken individually or in combination, the recited limitations neither improve the functions of the computer itself, nor provide specific programming, tailored software, or meaningful guidance for implementing the abstract concept. Accordingly, they do not meaningfully limit the claims to provide the requisite inventive concept under step two.

Another decision, *IV v. Erie Indemnity*, decided the same day as *IV v. Capital One*, will not be separately discussed because its § 101 analysis and decision are essentially the same as those in the *Capital One* case. However, as to one of the patents in suit in *Erie*, the Circuit reverses the determination of invalidity because the chain of title was defective and, thus, IV did not have standing to sue.

Apple Inc. v. Ameranth, Inc., 842 F.3d 1229 (Fed. Cir. 2016)

Apple had succeeded in invalidating many of the claims in CBM review and in this appeal is successful in reversing the PTO's determination of patentability as to the remaining claims. The patents are directed to the use of handheld devices for permitting restaurant waiters to order and assign orders to customers at specific tables. Siri can apparently be used in a similar fashion.

The Board invalidated many of the claims as being unpatentable under § 101. The panel finds that these claims are directed to the abstract idea of "generating a second menu from a first menu and sending the second menu to another location." The claims do not recite a particular way of programming or designing

the software to create menus that have these features, but instead merely claim the resulting systems. Essentially, the claims are directed to certain functionality—here, the ability to generate menus with certain features. As to the second step under *Alice*, the panel agrees with the Board that the recited central processing unit, data storage device, and operating system components are "typical" hardware elements, reciting insignificant post-solution activities that do not support the invention having "an inventive concept."

With respect to the claims that were upheld by the Board under § 101, some of the claims require that a second menu, after being modified, can be "linked to a specific customer at a specific table directly from the graphical user interface of a hand-held device." The Board found that, while Apple had argued that the claimed linking is a "classic example of manual tasks that cannot be rendered patent eligible merely by performing them with a computer," Apple had not "provided sufficient evidence to support that statement." The panel has no trouble reversing the Board as to these claims, ruling that these linking limitations are routine and conventional, pointing out that the specification explains that the hardware needed was typical and that the programming steps were commonly known. The claimed linking of orders to customers is a classic example of manual tasks that cannot be rendered patent eligible merely by performing them with a computer.

Other claims upheld by the Board specify that the manual modification involves handwriting capture or voice capture, and some of the claims require that the captured inputs be recognized and converted to text. The panel notes that the specification refers to the use of handwriting and voice capture technologies without providing how these elements are to be technologically implemented. At oral argument, Ameranth conceded that it had not invented voice or handwriting capture technology, and that it was known at the time it filed its applications to use those technologies as ways of entering data into computer systems.

The opinion characterizes these claims as reciting no more than the use of existing handwriting and voice capture technologies using a computer system. Therefore, the panel concludes that appending preexisting technologies onto other claims that are directed to unpatentable subject matter does not make them patentable.

Amdocs (Israel) Limited v. Openet Telecom, Inc., 841 F.3d 1288 (Fed. Cir. 2016)

A divided panel reverses a determination of invalidity under § 101 of four patents directed to a system designed to solve an accounting and billing problem faced by network service providers. In an interesting discussion comparing the claims in the four patents to those in prior post-*Alice* Circuit cases, the majority holds that the claims recite technological solutions to problems that were presented in the prior art and therefore are patent-eligible.

The majority first lays out the *Alice/Mayo* two-step process but then notes that recent Circuit cases suggest "there is considerable overlap between step one and step two, and in some situations this analysis could be accomplished without going beyond step one" (citing *Enfish*, *Elec. Power*, and *BASCOM*, all decided this year). The majority then says that there is no easily understood definition or test for what an "abstract idea" encompasses. Instead of attempting to formulate such a definition, the majority looks to the most pertinent post-*Alice* Circuit decisions, but a sharply worded dissent by Judge Reyna criticizes the majority for not commenting on all of the post-*Alice* cases. However, it might be noted that, as written, the opinion and dissent are already 61 pages long. The majority responds: "Discussing in an opinion only the most relevant prior opinions, rather than every prior opinion in an actively-litigated field, is a necessary discipline if opinions are to be read, rather than just written." I'm not sure a 61 page opinion is really readable by many of us, but we have edited the opinion down to 10% of that, which we found quite interesting, so we hope you'll "Read More" of the opinion.

The majority finds the claims at issue much closer to those in *BASCOM* and *DDR Holdings* than those in *Digitech, Content Extraction*, and *In re TLI*. Even assuming that the claims are directed to an ineligible abstract idea under step one, the majority holds that the claims are eligible under step two because they contain a sufficient "inventive concept." Claim 1 of the '065 patent requires "computer code for using the

accounting information with which the first network accounting record is correlated to enhance the first network accounting record." "Enhance" was construed as being dependent upon the invention's distributed architecture. In other words, this claim entails an unconventional technological solution (enhancing data in a distributed fashion) to a technological problem (massive record flows which previously required massive databases). The solution requires arguably generic components, including network devices and "gatherers" which "gather" information. However, according to the majority, the claim's enhancing limitation necessarily requires that these generic components operate in an unconventional manner to achieve an improvement in computer functionality. The dissent argues that this is incorporating limitations from the specification instead of focusing on the claims to determine if they are patent-eligible.

The majority goes through much the same analysis as to the three other patents in suit. The dissent argues that the majority opinion contravenes *Alice* because it fails to determine whether the claims are directed to an abstract idea.

Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138 (Fed. Cir. 2016)

The panel affirms that the patents in suit are directed to the abstract idea of translating a functional description of a logic circuit into a hardware component description of the logic circuit, and therefore the patents are invalid under § 101. The patents claim detailed techniques for translating a functional description of a logic circuit into a hardware component description of the logic circuit. Though Synopsys argued the method was intended to be used in a computer-based design tool, the claims included no computer. The Circuit distinguishes this case from more typical 101 cases, noting that the patents include neither an abstract idea executed by a general purpose computer nor a concrete improvement in how a computer functions. The panel also notes that Synopsys admitted that idea could be and was performed mentally or by pencil and paper.

Synopsys did not argue that the claims must be construed as requiring a computer to perform the recited steps, so the panel did not have to decide whether a computer-implemented version of the invention would not be directed to an abstract idea. And, for the same reasons, the panel notes that Synopsys cannot rely on *Enfish* and *McRO* to support patentability.

With respect to the second part of the *Alice* analysis, in contrast to *DDR Holdings* and *BASCOM*, the claims contain no technical solution. To the extent they add anything to the abstract idea, it is the use of assignment conditions as an intermediate step in the translation process. But, given that the claims are for a mental process, assignment conditions, which merely aid in mental translation as opposed to computer efficacy, are not an inventive concept that takes the claims beyond their abstract idea.

FairWarning IP, LLC v. latric Systems, Inc., 839 F.3d 1089 (Fed. Cir. 2016)

This appeal is from a dismissal of a case under a Rule 12(b)(6) motion finding the claims to be patent ineligible under § 101. The claims are directed to generating and applying a rule for monitoring access of a patient's protected health information (PHI) for potential fraud or misuse, storing the result of applying the rule, and providing a notification if an event specified in the rule occurs. The Circuit affirms the judgment that the subject matter asserted in the claims fails the test for patent eligibility articulated in *Alice*. In particular, the asserted claims are directed to an abstract idea under step one of the test of patent eligibility because they are drawn to collecting and analyzing information to detect misuse and notifying a user when misuse is detected, which is analyzing information by steps people go through in their minds or by mathematical algorithms. The claims fail to add "something more" to "transform" the abstract idea of collecting and analyzing information to detect misuse into a "patent-eligible application" under step two of the test of patent eligibility. Mere use of generic computer elements like a microprocessor or user interface does not transform an abstract idea into patent-eligible subject matter.

While the claims recite use of rules as in *McRO*, in *McRO*, the traditional process and the claimed method are different from each other: while both produced similar results, that of realistic animations of facial movements accompanying speech, the two practices produced those results in fundamentally different

ways. By contrast, the rule of the asserted claims—whether accesses of PHI are by a specific user, during a pre-determined time interval, or in excess of a specific volume—are the same questions that humans in analogous situations detecting fraud have asked for decades, if not centuries. Thus, although the asserted claims require the use of a computer, it is the incorporation of a computer, not the claimed rule, that allows automation of the fraud or misuse detection.

The claims are also different from those found patent eligible in *Enfish*. While the claims in *Enfish*, directed to a self-referential table for a computer database, provide a specific improvement to the way computers operate, the claims presently at issue accelerate the process of analyzing audit log data, in which the speed increase comes from the capabilities of a general-purpose computer rather than the patented method itself.

Affinity Labs of Texas, LLC v. Directv, LLC, 838 F.3d 1253 (Fed. Cir. 2016)

In two cases involving related patents, the Circuit affirms rulings that the patents are directed to ineligible subject matter. In the first case, against Directv and the media affiliates of the NBA, MLB and NHL, the patent was directed to streaming regional broadcast signals to cellular telephones located outside the region served by the regional broadcaster.

The panel conceded that the patent claims the wireless delivery of regional broadcast content only to cellphones so in that sense, the claims are not as broad as the abstract idea underlying them. However, that restriction does not alter the result because all that limitation does is to confine the abstract idea to a particular technological environment—in this case, cellular telephones. The panel explains that the Supreme Court and the Circuit have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.

The panel rejects Affinity's reliance on *DDR* and *Enfish*, noting that in *DDR*, the challenge of retaining website visitors was a novel one particular to the Internet: the invention was "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." In *Enfish*, the focus of the claims was on "an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity." In the present case, the claims are directed not to an improvement in cellular telephones but simply to the use of cellular telephones as tools in the aid of a process focused on an abstract idea.

In applying step two of the *Mayo/Alice* analysis, the panel finds no "inventive concept" that transforms the abstract idea of out of region delivery of regional broadcasting into a patent eligible application of that abstract idea. The claim simply recites the use of generic features of cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea. That is not enough.

Affinity Labs of Texas, LLC v. Amazon.com Inc., 838 F.3d 1266 (Fed. Cir. 2016)

Although the patent at issue in this second *Affinity* case is different, the patents share a similar specification. Affinity sued Amazon, alleging that it infringed by marketing the Amazon Music system, which allows customers to stream music from its customized library. The district court granted Amazon's motion for judgment on the pleadings, holding that the asserted claims were not directed to patentable subject matter.

In first looking to see whether the patent was directed to an abstract idea, the panel agrees with the district court that the concept of delivering user-selected media content to portable devices is an abstract idea. The opinion compares the claim to that in *TLI Commc'ns*, which involved a patent on a method for uploading digital images from a cellular telephone to a server, which would then classify and store the images. Although the claim at issue in that case recited physical components such as a telephone unit and a server, "not every claim that recites concrete, tangible components escapes the reach of the

abstract idea inquiry." Similarly, in *Ultramercial*, the Circuit found the process of allowing a consumer to receive copyrighted media in exchange for watching a selected advertisement was an abstract idea. The panel determines that the idea in the present case is even broader and more abstract than the idea in *Ultramercial* since the patent in suit here covers streaming content generally, not even including an additional feature such as exchanging the consumer's access to the streaming content for the consumer's viewing of an advertisement.

Turning to the second step of the *Mayo/Alice* inquiry, the representative claim is written in largely functional terms, claiming "a collection of instructions" that perform the functions of displaying a selection of available content on a graphical user interface and allowing the user to request streaming of that content. The claim does not go beyond stating the relevant functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.

Intellectual Ventures I LLC v. Symantec Corp., 838 F.3d 1307 (Fed. Cir. 2016)

Intellectual Ventures sued Symantec Corp. and Trend Micro for infringement of various claims of three patents directed to anti-malware and anti-spam software: the '050, '142 and '610 patents. The district court held the asserted claims of the '050 and '142 patents to be ineligible under § 101, and the asserted claim of the '610 patent to be eligible. The panel affirms as to the asserted claims of the '050 and '142 patents, and reverses as to the asserted claim of the '610 patent, finding that patent invalid as well. Judge Stoll dissents as to the finding of the '610 patent.

In our longer report we have included the claims at issue, and have excerpted the panel's comments about the claim language. Given the variety of ways the inventions were claimed, the opinion provides good examples of claims that were found not to meet the § 101 bar when compared to the claims in the *Alice*, *Bilski* and *Diamond v*. *Diehr* Supreme Court cases as well as to claims in recent Circuit decisions like DDR, Content Extraction, Ultramercial, Enfish and BASCOM Global.

McRO, Inc. v. Bandai Namco Games America, 837 F.3d 1299 (Fed. Cir. 2016)

This appeal is from a grant of judgment on the pleadings that the asserted claims of two patents directed to lip synching in video games are invalid under § 101. The panel reverses, holding that the ordered combination of claimed steps, using unconventional rules that relate subsequences of phonemes, timings, and morph weight sets, is not directed to an abstract idea and is therefore patent-eligible under § 101. The patents at issue automate the process of animating the face of a character who is speaking, replacing a tedious and time consuming process previously used by animators. The panel reaches this decision under the first step of *Alice* and in doing so compares the case to the recent *Enfish v. Microsoft* and *Rapid v. CellzDirect* cases in which it reached the same result.

In its ruling, the opinion cites the Circuit's 2015 *Ariosa v. Sequenon* case and asks if the claims at issue would preempt anyone from practicing the invention whether or not their system followed the same "rules" set forth in the claims. According to the opinion, the limitations in claim 1 prevent preemption of all processes for achieving automated lip synchronization of 3-D characters. McRO has demonstrated that motion capture animation provides an alternative process for automatically animating lip synchronization and facial expressions. The specific structure of the claimed rules would prevent broad preemption of all rules-based means of automating lip synchronization, unless the limits of the rules themselves are broad enough to cover all possible approaches. According to the opinion, there has been no showing that any rules-based lip synchronization process must use rules with the specifically claimed characteristics. Concluding that the claims are not directed to an abstract idea, the panel rules that there is no reason to proceed to step two of the *Alice* analysis.

McRO is better known as Planet Blue, and is often retained by video game companies to assist with animations. The use of Planet Blue's technology by Bandai Namco, as well as other defendants Sega,

Disney, Sony, LucasArts and Warner Bros., resulted in the filing of these lawsuits, which were consolidated into a single action for pre-trial purposes.

This is the fourth such decision by the Circuit in the past four months, along with *Enfish v. Microsoft, Bascom Global v. AT&T*, and *Rapid v. CellzDirect*, all of which reversed district court invalidations based on unpatentable subject matter. Prior to these decisions, the only post-*Alice* precedential Circuit decision upholding claims under a section 101 challenge was *DDR Holdings v. Hotels.com*, decided in late 2014. These decisions provide us with several different examples of how to claim a wide variety of inventions to overcome section 101 attacks.

Electric Power Group, LLC v. Alstom S.A., 830 F.3d 1350 (Fed. Cir. 2016)

This case involves § 101 eligibility of claims of three patents directed to performing real-time monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results. The Circuit affirms the district court's summary judgment that the subject matter asserted in the claims fails the tests for patent eligibility. The claims, defining a desirable information-based result and not limited to inventive means of achieving the result, fail under § 101. Specifically, although the claims were lengthy and numerous, they do not go beyond the collection, analysis, and display of available information in a particular field, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.

In its analysis, the panel distinguishes the claims from those in *Enfish*. In that case, the Circuit relied on the distinction made in *Alice* between, on one hand, computer-functionality improvements and, on the other, uses of existing computers as tools in aid of processes focused on abstract ideas. That distinction has common-sense force even if it may present line-drawing challenges because of the programmable nature of ordinary existing computers. In *Enfish*, the Circuit applied the distinction to reject the § 101 challenge at stage one because the claims were focused not on asserted advances in uses to which existing computer capabilities could be put, but on a specific improvement in how computers could carry out one of their basic functions of storage and retrieval of data. The panel finds the present case to be different: the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools. The panel then turns to stage two of the analysis, and finds nothing sufficient to remove the claims from the class of subject matter ineligible for patenting.

This case is in line with the Circuit's continuing insistence that computer implemented claims impart a transformation to the manipulated data.

Rapid Litig. Mgmt. v. CellzDirect, Inc., 827 F.3d 1042 (Fed. Cir. 2016)

This decision provides hope that life science methods are patent eligible. The Circuit finds that the district court erred in its finding that the claimed methods in a patent for producing pure cultures of mature hepatocytes to be used for testing, diagnostic, and treating purposes were invalid under section 101. According to the opinion, the claims were not directed to a law of nature because the claims are simply not directed to the ability of hepatocytes to survive multiple freeze-thaw cycles; rather, the claims are directed to a new and useful laboratory technique for preserving hepatocytes. A claim that is interpreted as being a "constructive process" directed to achieving a new and useful end, the panel states, "is precisely the type of claim that is eligible for patenting." The panel recognizes that the inventors' discovery of the capacity for hepatocytes to undergo multiple cycles of freezing and thawing was just the beginning of their finding and was not where they stopped or what they patented, distinguishing this case from the recent decisions in *Genetic Techs., Ltd. v. Merial L.L.C.; Ariosa Diagnostics, Inc. v. Sequenom, Inc.* (cert. denied); and *In re BRCA1- & BRCA2.*

Comment – *Rapid* is the third Federal Circuit decision in as many weeks reversing decisions finding patents invalid as not being directed to patentable subject matter. *Enfish* and *Bascom Global* both involved computer-related claims, while *Rapid* related to life sciences. Until *Enfish* and *Bascom*, we have

had little guidance in claim drafting other than *DDR*, which was decided in late 2014. *Rapid* is encouraging as to the protection of technology in the life sciences and provides needed guidance since the Supreme Court denied cert in *Ariosa v. Diagnostics*. *Rapid* shows that claims that are drafted to methods for producing a tangible thing have a much better chance of being found patent eligible than methods of producing diagnostic information.

BASCOM Glob. Internet Servs. v. AT&T Mobility LLC, 827 F.3d 1341 (Fed. Cir. 2016)

The Circuit reverses and remands the grant of a motion to dismiss under Rule 12(b)(6), in which the Northern District of Texas held that Bascom failed to state a claim upon which relief can be granted because the claims of its patent are invalid as a matter of law under § 101. The Federal Circuit agrees that the invention covered an abstract idea. However, it found an inventive concept because the "particular arrangement of elements is a technical improvement over prior art ways of filtering such content."

The panel looks first to *Alice* and *Mayo* to set forth the tests for subject matter eligibility. (The court must first determine whether the claims at issue are directed to a patent-ineligible concept. If so, the court must then consider the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application.)

The panel then turns to the two post-*Alice* cases in which it found computer-related claims to meet the tests of *Alice* and *Mayo*: *Enfish* and *DDR*. In *Enfish*, decided a little over a month ago, the Circuit found claim language reciting the invention's specific improvements to help the determination in step one that the invention was directed to those specific improvements in computer technology. But in *Enfish*, the Circuit also recognized that, in other cases involving computer related claims, there may be close calls about how to characterize what the claims are directed to. In such cases, an analysis of whether there are arguably concrete improvements in the recited computer technology could take place under step two. That is, some inventions' basic thrust might more easily be understood as directed to an abstract idea, but under step two of the *Alice* analysis, it might become clear that the specific improvements in the recited computer technology go beyond well-understood, routine, conventional activities and render the invention patent-eligible. The panel notes that the Circuit took this step-two path in *DDR*. That is, when the limitations of the claims are taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the Internet.

The claims of Bascom's patent are directed to filtering content on the Internet. According to the panel, this case, unlike *Enfish*, presents a close call about how to characterize what the claims are directed to. Here, in contrast, the claims and their specific limitations do not readily lend themselves to a step-one finding that they are directed to a non-abstract idea. The panel therefore defers its consideration of the specific claim limitations' narrowing effect for step two.

Turning to step two, the panel notes that the "inventive concept" may arise in one or more of the individual claim limitations or in the ordered combination of the limitations. Under *Alice*, an inventive concept that transforms the abstract idea into a patent-eligible invention must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer.

In an interesting discussion of prior Federal Circuit section 101 cases, the panel contrasts the claims at issue in the present case with those involved in the post-*Alice* cases of *OIM*, *Content Extraction*, *Intellectual Ventures*, and *Ultramercial v. Hulu*.

The panel then turns to the patent at issue and concludes that an inventive concept is found in the nonconventional and non-generic arrangement of known, conventional pieces. The inventive concept described and claimed in the patent may be the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end-user. This design gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server. The panel rules that on this limited record, this specific method of filtering Internet content cannot be said, as a matter of law, to have been conventional or generic.

Comment: It is nice to see the Circuit provide further guidance as to patentable subject matter. Today, the Circuit issued another reversal on a ruling of patentable subject matter ineligibility in *Rapid Reversal v. Cellzdirect*. In that case, which will be included in next week's report, the Circuit held that a patent directed to a process for freezing hepatcytes (a type of liver cell) for use in research does in fact recite patentable subject matter.