Precedential Patent Case Decisions During October 2018

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I. Introduction

This paper abstracts what I believe to be the significant new points of law from the precedential decisions in patent cases this month. Cases captions relating to the PTAB are in **red** text. Case captions of extraordinary importance are in **blue** text.

II. Abstracts and New Points of Law

Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).

This is memorandum opinion by the D. Del. district court. Mylan moved to dismiss or transfer, alleging improper venue pursuant to 28 USC 1406(a). The district court granted the motion, and dismissed.

Legal Issue: 28 USC 1400(b), venue statute applicable to a patent infringement civil action filed pursuant to 35 USC 271(e)(2)(A)("It shall be an act of infringement to submit ... an [ANDA] ... .").

The district court held that 28 USC 1400(b), the patent specific venue statute, was applicable, and 28 USC 1391, the general venue statute was inapplicable, to ANDA patent infringement lawsuits.

> BMS alternatively contends that "the Court need not rely on §1400(b) to deny MPI's motion" because venue is proper under §1391. (C.A. No. 17-374 D.I. 192 at 16) According to BMS, Hatch-Waxman actions are not governed by §1400(b). (See id.) Instead, BMS insists, the text of §1400(b), uses of the term "civil action for patent infringement" elsewhere in the U.S. Code, the patent venue statute's legislative history, the structure of and policy behind the Hatch Waxman Act, and general policy considerations all "support treating Hatch-Waxman actions as different from traditional infringement actions for venue purposes." (*Id.* at 17-19) To BMS, then, "§ 13 91 , rather than § 1400(b), applies here." (*Id*. at 16-17) *** In any event, Plaintiffs' contention is also unavailing. In *TC Heartland*, 137 S. Ct. at 1518, the Supreme Court clearly articulated that "the patent venue statute alone should control venue in patent infringement proceedings" (internal quotation marks omitted). Here, after MPI filed an Abbreviated New Drug Application ("ANDA") with the U.S. Food and Drug Administration ("FDA"), Plaintiffs initiated a civil action for patent infringement, contending in their complaint that MPI's ANDA filing was an act of patent infringement. (C.A. No. 17-379 D.I. 1 at 11 ("This is an action for patent infringement .... ") (emphasis added); *see also* 35 U.S.C. § 271(e)(2)(A) ("It shall be an act of infringement to submit an [ANDA] application ... for a drug claimed in a patent or the use of which is claimed in a patent ... if the purpose of such

> submission is to obtain approval ... to engage in the commercial manufacture, use, or sale of a drug .. . claimed in a patent or the use of which is claimed in a patent before the expiration of such patent.") (emphasis added). By filing a Hatch-Waxman patent infringement action, Plaintiffs obtained the benefit of the automatic 30-month stay of FDA approval of MPI's ANDA, a benefit to which Plaintiffs would not have been entitled if their cause of action were anything other than a claim for patent infringement. See 21 U.S.C. § 355(c)(3)(C) (automatically staying FDA approval of ANDA where, among other conditions, "an action is brought for infringement of the patent" covering drug or use of drug). As this case is incontestably a "civil action for patent infringement," venue is governed solely and exclusively by§ 1400(b). Hence, again, MPI's motion will be granted. [Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).]

Yeda Research and Development Co., Ltd. v. Mylan Pharmaceuticals Inc., 2017-1594, 2017-1595, 2017-1596 (Fed. Cir. 10/12/2018).

This is a decision on appeals from PTAB cases IPR2015-00643; IPR2015-00644; IPR2015-00830; IPR2015-01976; IPR2015-01980; and IPR2015-01981. The PTAB found Yeda's claims obvious. Yeda appealed. The Federal Circuit affirmed.

Legal issue: 35 USC 311(b), whether the PTAB may consider non-prior art evidence, in considering the knowledge, motivations, and expectations of a PHOSITA.

The Federal Circuit concluded that the PTAB may consider non-prior art evidence, in considering the knowledge and motivations of a PHOSITA, but may not consider non-prior art evidence in determining the presence of an expectation of success.

The Federal Circuit first explained the relevant facts and identified the issue presented.

> In its final written decisions, the Board acknowledged that Khan 2009 does not qualify as statutory prior art, but because the study began two years before the priority date of the Copaxone patents, the Board concluded that Khan 2009 is "probative of the fact that those skilled in the art were motivated to investigate dosing regimens of GA with fewer injections to improve patient compliance." ' *** Section 311(b) provides that the Board may consider the patentability of challenged claims "only on the basis of prior art consisting of patents or printed publications." *** While Khan 2009 indisputably does not qualify as prior art, § 311(b) only addresses prior art and is silent on the question of other evidence. The question before us, therefore, is whether the Board may consider non-prior art evidence, such as Khan 2009, in considering the knowledge, motivations, and expectations of a POSITA regarding the prior art. [Yeda Research and Development Co., Ltd. v. Mylan Pharmaceuticals Inc., 2017-1594, 2017-1595, 2017-1596 (Fed. Cir. 10/12/2018).]

The Federal Circuit then concluded that the PTAB was permitted to consider non-prior art evidence, in considering the knowledge and motivations of a PHOSITA.

> Based on the statutory scheme, the PTO's own regulations, and prior Board decisions, the Board can rely on evidence other than just prior art. The statute permits IPR petitioners to rely on evidence beyond the asserted prior art. Section 312(a)(3) of Title 35 specifies that a petition should include both "copies of patents and printed publications that the petitioner relies upon," and "affidavits or declarations of supporting evidence and opinions." So do the regulations. See 37 C.F.R. § 42.104(b) (describing the content of the petition, including both "the patents or printed publications relied upon for each ground," and "supporting evidence relied upon to support the challenge"). The Board has recognized that non-prior art evidence of what was known "cannot be applied, independently, as teachings separately combinable" with other prior art, but "can be relied on for their proper supporting roles, e.g., indicating the level of ordinary skill in the art, what certain terms would mean to one with ordinary skill in the art, and how one with ordinary skill in the art would have understood a prior art disclosure." *Dominion Dealer Sols., LLC v. AutoAlert, Inc.*, IPR2014-00684, 2014 WL 5035359, at *5 (P.T.A.B. Oct. 6, 2014). In this regard, Dr. Green's reliance on Khan 2009 is permissible, as it supports and explains his position that a POSITA would have thought less frequent dosing worthy of investigation as of the priority date. We note that Dr. Green also relied on multiple prior art references—namely the SBOA, Flechter, Khan 2008, and Caon—in support of this opinion. J.A. 9532 ¶ 32. With one exception, the Board's use of Khan 2009 is in line with Dr. Green's narrow interpretation, and does not constitute error. See '250 patent FWD, at 15 ("Khan 2009 is probative of the fact that those skilled in the art were motivated to investigate dosing regimens of GA with fewer injections to improve patient compliance."); id. ("Khan 2009 concludes: 'This study provides further evidence that GA administered less frequently than daily may be as efficacious and better tolerated than GA administered daily.'" (emphasis added)); id. at 18 (mentioning Khan 2009 as one of many studies of less frequent dosing, undermining the opinion of Yeda's expert that a POSA would want to administer more than once daily)10; id. at 35 ("[Khan 2009] reflects that, before the '250 patent invention, those skilled in the art were motivated to investigate dosing regimens with less frequent than daily injections"); '413 patent FWD, at 16–17 (same as '250 patent FWD, at 15); '302 patent FWD, at 16 (same). [Yeda Research and Development Co., Ltd. v. Mylan Pharmaceuticals Inc., 2017-1594, 2017-1595, 2017-1596 (Fed. Cir. 10/12/2018).]

The Federal Circuit then concluded that it may have been error for the PTAB to consider non-prior art evidence, in considering whether PHOSITA had a reasonable expectation of success.

> ...With one exception, the Board's use of Khan 2009 is in line with Dr. Green's narrow interpretation, and does not constitute error. *** In one instance, the Board relied on Khan 2009 for a different purpose, namely, in deciding whether a POSITA would have had a reasonable expectation of success of a

thrice-weekly regimen. '250 patent FWD, at 21 ("[A]s discussed above, nearly two years before the priority date of the '250 patent, Khan 2009 commenced its study on 20 mg GA administered twice-a week, further evincing that an ordinary artisan would have had a reasonable expectation of success in pursuing a 40 mg, three-times-weekly GA dosing regimen."). To the extent that this reliance was error, we conclude that it was harmless error. Khan 2009 was the last piece of evidence in a lengthy analysis, in which the Board also relied on Flechter, Khan 2008, Caon, Pinchasi, and testimony from Dr. Green in finding a POSITA would have had a reasonable expectation of success in the claimed regimen. Even if the Board's reliance on Khan 2009 was improper, it is harmless error because substantial evidence otherwise supports the Board's conclusion. [Yeda Research and Development Co., Ltd. v. Mylan Pharmaceuticals Inc., 2017-1594, 2017-1595, 2017-1596 (Fed. Cir. 10/12/2018).]

Teva Pharmaceuticals USA, Inc. v. Sandoz Inc., 2017-1575 (Fed. Cir. 10/12/2018).

This is a decision on an appeal from the from the D. Del district court consolidated cases 1:14-cv-01171-GMS; 1:14-cv-01172-GMS; 1:14-cv-01278-GMS; 1:14-cv-01419-GMS; 1:15-cv-00124-GMS; and 1:15-cv-00306-GMS. The district court held all asserted claims of patents directed to COPAXONE® 40mg/mL (a product marketed for treatment of patients with relapsing forms of multiple sclerosis), to be invalid for obviousness. Teva appealed. The Federal Circuit affirmed.

Legal issue: 35 USC 103, obviousness, post-invention evidence establishing motivations and expectations of a PHOSITA reading the prior art at the time of the invention.

The Federal Circuit concluded that the district court did not err in relying upon post-invention documents, as evidence establishing motivations and expectations of a PHOSITA, at the time of the invention. The GALA reference was publication based upon Teva's own FDA Phase III clinical trial, and showed that Teva's FDA submissions stated that a "natural next step [was] to reduce the dosing regimen."

The Federal Circuit first provides the facts relating to the non prior art GALA reference.

> There are two additional references relevant to this appeal, a 2009 study by Omar Khan9 ("Khan 2009") and Teva's own Glatiramer Acetate Low-frequency Administration ("GALA") Phase III trial of 40mg GA administered three times per week. J.A. 23904–05, J.A. 8246– 8417. Khan 2009 and GALA were both published after August 20, 2009, the priority date of the asserted patents, and thus do not qualify as statutory prior art. *** Concerning GALA, the district court recognized that the GALA trial protocol does not qualify as prior art. *In re Copaxone*, 2017 WL 401943, at *20. Instead, the district court admitted GALA as an admission by Teva to inform on the motivations of those having ordinary skill in the art at the time of the invention. In its submission to FDA, Teva explained that, after the FORTE study demonstrated that the 40mg dose was equally effective as the 20mg dose, "the natural next step [was] to reduce the dosing regimen of GA and find the optimal regimen that [would]

improve the convenience of treatment and reduce the burden and adverse events associated with daily subcutaneous injections." J.A. 8266. Citing the small scale studies with 20mg GA in the prior art, such as Khan 2008, GALA noted that results "demonstrated effects in relapse rate reduction which were comparable to daily injections of GA 20mg, suggesting a lower injection frequency can be considered." J.A. 8266, 8352. The GALA protocol selected a dosing regimen of 40mg GA 3x/week, in part because "the subjects will receive approximately the same weekly dose, given by 3 subcutaneous injections instead of with a daily injection frequency of 7 injections." J.A. 8266. [Teva Pharmaceuticals USA, Inc. v. Sandoz Inc., 2017-1575 (Fed. Cir. 10/12/2018).]

The Federal Circuit then explained that Teva's statements in its GALA study were admissions that were relevant and probative of PHOSITA's motivation to modify prior art.

Teva also argues that the district court erred by relying on Teva's GALA protocol. The district court did not use GALA as invalidating prior art, but instead as evidence of a POSITA's motivations and expectations when reading the prior art at the time of the invention. *In re Copaxone*, 2017 WL 401943, at *20. With respect to the sufficiency limitations, the district court used GALA only for that limited purpose, noting Teva's statement to FDA that "one may certainly expect a reduction in the frequency of such reactions with this new dose regimen, further enhancing subject adherence to treatment." Id. at *18 (emphasis added) (quoting J.A. 8267). The district court's reliance on GALA merely as confirmation of how a POSITA would understand FORTE, which is prior art, is not erroneous. [Teva Pharmaceuticals USA, Inc. v. Sandoz Inc., 2017-1575 (Fed. Cir. 10/12/2018).]

Legal issue: 28 USC 1400(b), whether the residency of one entity may be imputed to another for purposes of satisfying 28 USC 1400(b).

The district court held that residency of one entity may be imputed to another for purposes of satisfying 28 USC 1400(b), but only by a clear and convincing showing of fraud, injustice, or unfairness.

The district court also addressed the challenge to venue

"[U]pon motion by the Defendant challenging venue in a patent case, the Plaintiff bears the burden of establishing proper venue." *In re ZTE (USA) Inc.*, 890 F.3d 1008, 1013 (Fed. Cir. 2018). If the Court grants a Rule 12(b)(3) motion based on improper venue, the Court "shall dismiss, or if it be in the interest of justice, transfer such case to any district or division in which it could have been brought." 28 U.S.C. § 1406(a). [Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).]

Generally, "it is not necessary for the plaintiff to include allegations in his complaint showing that venue is proper." *Great W Mining & Mineral Co. v. ADR*

Options, Inc., 434 F. App'x 83, 86-87 (3d Cir. 2011). Hence, when confronted with a motion to dismiss for improper venue, the Court may consider both the complaint and evidence outside the complaint. *See* 14D Wright & Miller, Federal Practice & Procedure§ 3826 (4th ed. 2017). The Court will accept any venue-related allegations in the complaint as true, unless those allegations are contradicted by the defendant's affidavits. *See Bockman v. First Arn. Mktg. Corp.* , 459 F. App'x 157, 158 n.1 (3d Cir. 2012); *In re First Solar, Inc. Derivative Litig.*, 2013 WL 817132, at *2 (D. Del. Mar. 4, 2013). In addition, the Court may consider affidavits submitted by the plaintiff. *See Bockman*, 459 F. App'x at 161 (affirming District Court's dismissal of complaint "because Defendants satisfied their burden of showing improper venue by offering evidence that the wrongful acts alleged in the Complaint did not occur in Pennsylvania, and Plaintiffs failed to rebut that evidence"). [Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).]

As an initial matter, the Court must address whether the residency of one entity may be imputed to another for purposes of satisfying § 1400(b). MPI contends that under *TC Heartland*, the venue statute may not be supplemented with other statutory or common-law doctrines. (C.A. No. 17-374 D.I. 179 at 12) BMS counters that under common law, which has not been abrogated by *TC Heartland*, the residency of one entity may be imputed to another when the entities are corporate affiliates that have freely disregarded their separateness. (C.A. No. 17-374 D.I. 192 at 7) The Court agrees with BMS that residency may be imputed under the first prong of the venue statute. *See Minn. Mining & Mfg. v. Eco Chem, Inc.* ("3M'), 757 F.2d 1256, 1265 (Fed. Cir. 1985) ("[P]iercing the corporate veil is appropriate in order to establish venue under the patent venue statutes."); *Leach Co. v. Gen. Sani-Can Mfg. Corp.*, 393 F.2d 183, 186 (7th Cir. 1968) (finding venue in patent infringement case proper as to corporation based on acts of its affiliate); *Xodus Med. , Inc. v. Allen Med. Sys., Inc.*, 2018 WL 2338763, at *1 (W.D. Pa. May 22, 2018) (piercing of corporate veil is available for establishing proper venue under second prong of § 1400(b)); *Unity Opto Tech. Co. v. Lowe's Home Centers, LLC*, 2018 WL 2087250, at *2 (W.D. Wis. May 4, 2018) (same). The Supreme Court's decision in *TC Heartland* did not overrule *3M* -which was decided in the context of§ 1400(b). See 757 F.2d at 1261 n.8. [Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).]

Having concluded that the residency of one entity may be imputed to another, the Court must next consider the showing necessary to impute venue under § 1400(b). The presumption of corporate separateness may only be overcome by a showing of fraud, injustice, or unfairness. *See Trustees of Nat. Elevator Indus. Pension, Health Benefit & Educ. Funds v. Lutyk*, 332 F.3d 188, 194 (3d Cir. 2003) ("[P]iercing of the corporate veil is an equitable remedy, and therefore the situation must present an element of injustice or fundamental

unfairness.") (internal citation and quotation marks omitted); *see also Blair v. Infineon Techs. AG*, 720 F. Supp. 2d 462,471 (D. Del. 2010) ("While the list of factors is not exhaustive and no single factor is dispositive, some combination is required, and an overall element of fraud, injustice, or unfairness must always be present."). [Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).]

The Third Circuit considers multiple non-exclusive factors in evaluating an alleged alter ego relationship, [footnote 5 omitted] including: ["]gross undercapitalization, failure to observe corporate formalities, nonpayment of dividends, insolvency of debtor corporation, siphoning of funds from the debtor corporation by the dominant stockholder, nonfunctioning of officers and directors, absence of corporate records, and whether the corporation is merely a facade for the operations of the dominant stockholder. ["] *Pearson*, 247 F.3d at 485. "The test, whether or not a particular version requires an element of fraudulent intent, ... is demonstrably an inquiry into whether the debtor corporation is little more than a legal fiction." *Id*. "Alter ego must be shown by clear and convincing evidence." *Lutyk*, 332 F.3d at 194 (internal quotation marks omitted). [Bristol-Myers Squibb Company v. Aurobindo Pharma USA Inc., 17-374-LPS and 17-379-LPS (D. Del. 10/18/2018).]

Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).

This is a decision on an appeal from the D. Del. district court case 1:14-cv-01115-LPS. The district court entered judgement on the pleadings that all claims were directed to patent ineligible subject matter. DET appealed. The Federal Circuit affirmed on some claims, reversed on other claims, and remanded.

I deviate from brevity in this abstract by including the Court's restatements and comparisons on the facts of this case to prior cases. This case is a good summary of the state of *Alice* step 1 eligibility of user interfaces.

Legal issue: 35 USC 101, patent eligibility, eligibility, at *Alice* step 1, of unconventional computer program user interface traceable to a real-world analogy, but which improves user's efficiency.

The Federal Circuit found that the claim to an unconventional user interface that improves user efficiency was not abstract (that it was patent eligible subject matter), at *Alice*, step 1.

The Tab Patents specifically identify problems with navigation through prior art three-dimensional or multipage electronic spreadsheets. The Tab Patents explain that the complex commands required to manipulate each additional spread of the three-dimensional spreadsheet diminished the utility and ease of use of this technology. The invention claimed in the Tab Patents provided a solution to this problem. Specifically, the Tab Patents are directed to and claim a method of implementing a notebook- tabbed interface, which allows users to easily navigate through three-dimensional electronic spreadsheets. When considered as a whole,

and in light of the specification, representative claim 12 of the '259 patent is not directed to an abstract idea. Rather, the claim is directed to a specific method for navigating through three dimensional electronic spreadsheets. The method provides a specific solution to then-existing technological problems in computers and prior art electronic spreadsheets. The specification teaches that prior art computer spreadsheets were not user friendly. *** The Tab Patents solved this known technological problem in computers in a particular way—by providing a highly intuitive, user-friendly interface with familiar notebook tabs for navigating the three-dimensional worksheet environment. *** Representative claim 12 recites precisely this technical solution and improvement in computer spreadsheet functionality. The claim recites specific steps detailing the method of navigating through spreadsheet pages within a three-dimensional spreadsheet environment using notebook tabs. The claim requires displaying on a screen display a row of spreadsheet page identifiers along one side of the first spreadsheet page, with each spreadsheet page identifier being a notebook tab. The claim requires at least one user-settable identifying character to label the notebook tab and describes navigating through the various spreadsheet pages through selection of the notebook tabs. The claim further requires a formula that uses the identifying character to operate on information spread between different spreadsheet pages that are identified by their tabs. The claimed method does not recite the idea of navigating through spreadsheet pages using buttons or a generic method of labeling and organizing spreadsheets. Rather, the claims require a specific interface and implementation for navigating complex three-dimensional spreadsheets using techniques unique to computers. [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

At *Alice* step one, "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.'" *Rapid Litig. Mgmt. Ltd. v.CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016). And that inquiry requires that the claims be read as a whole. *See Alice*, 134 S. Ct. at 2355 n.3. We conclude that, when read as a whole, in light of the specification, claim 12 is directed to more than a generic or abstract idea as it claims a particular manner of navigating three dimensional spreadsheets, implementing an improvement in electronic spreadsheet functionality. Google avers that humans have long used tabs to organize information. It cites tabbed notebooks, binder dividers, file folders, and sticky Post-it notes as well known examples of organizing information using tabs. We agree that tabs existed outside the context of electronic spreadsheets prior to the claimed invention. It is not enough, however, to merely trace the invention to some real-world analogy. The eligibility question is not whether anyone has ever used tabs to organize information. That question is reserved for §§ 102 and 103. The question of abstraction is whether the claim is "directed to" the abstract idea itself. *Id*. We must consider the claim as a whole to determine whether the claim is directed to an abstract idea or something more. Google fails to appreciate the

functional improvement achieved by the specifically recited notebook tabs in the claimed methods. The notebook appearance of the tabs was specifically chosen by the inventors because it is easily identified by users. The tabs are not merely labeled buttons or other generic icons. DET has disclaimed as much. See OralArg. at 11:03–47. Rather, the notebook tabs are specific structures within the three-dimensional spreadsheet environment that allow a user to avoid the burdensome task of navigating through spreadsheets in separate windows using arbitrary commands. [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

The Federal Circuit compared this case to the closest related cases.

First, the Federal Circuit compared this case to others in which the Federal Circuit found the claimed subject matter patent eligible.

> In this regard, claim 12 is similar to the claims we held patent eligible in *Core Wireless*. There, the claims were directed to an improved display interface that allowed users to more quickly access stored data and programs in small-screen electronics, thereby improving the efficient functioning of the computer. *Core Wireless*, 880 F.3d at 1359. The prior art taught that small-screen electronic interfaces required users to scroll through and switch views to find desired data and functions. *Id*. at 1363. *Core Wireless*'s invention, however, improved the efficiency of these display interfaces. By displaying only a limited list of common functions and data from which to choose, the invention spared users from time consuming operations of navigating to, opening up, and then navigating within, each separate application. *Id*. The invention thus increased the efficiency with which users could navigate through various views and windows. *Id*. We rejected the accused infringer's contention that the claims were merely directed to the abstract idea of indexing information because the claims were directed "to an improved user interface for computing devices" and "a particular manner of summarizing and presenting information in electronic devices." *Id*. at 1362 (emphasis added). We concluded that the claims were patent eligible because the claims "recite[d] a specific improvement over prior systems, resulting in an improved user interface for electronic devices," and thus were directed to "an improvement in the functioning of computers." *Id*. at 1363. [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]
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> Claim 12 of the '259 patent similarly recites a method that differs from prior art navigation methods and "provide[s] for rapidly accessing and processing information" in three-dimensional spreadsheets. '259 patent col. 3 ll. 53–54. "[I]nstead of finding information by scrolling different parts of a large spreadsheet" the invention "allows the user to simply and conveniently 'flip through' several pages of the notebook to rapidly locate information of interest." *Id*. at col. 8 ll. 51–57. Moreover, akin to the claims in Core Wireless, claim 12 recites a "specific" and "particular" manner of navigating a threedimensional

spreadsheet that improves the efficient functioning of computers. *See Core Wireless*, 880 F.3d at 1362, 1363. [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

Likewise, claim 12 comports with the claims we held patent eligible in *Trading Technologies International, Inc. v. CQG, Inc.*[,] 675 F. App'x 1001 (Fed. Cir. 2017). There, the claims recited a trading system in which a graphical user interface displayed dynamic bid and ask prices for a particular commodity traded in the market along with a static display of prices corresponding to the bids and asks. *Id*. at 1003. The system paired orders with the static display of prices to prevent entry of orders that had changed prices. *Id*. The patents explained that the invention solved an existing problem in the prior art by reducing the time it took to place and execute a trading order. We agreed with the district court that "the challenged patents 'solve[d] problems of prior graphical user interface devices . . . in the context of computerized trading[] relating to speed, accuracy and usability.'" *Id*. at 1004 (alterations in original) (quoting *Trading Techs. Int'l, Inc. v. CQG, Inc.*, No. 05-cv-4811, 2015 WL 774655, at *4 (N.D. Ill. Feb. 24, 2015)). As the district court had explained, the claims were not merely directed to displaying information on a graphical user interface, but rather "require[d] a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art." *Id*. We agreed and adopted the district court's articulated reasons to conclude that the claims were not abstract under *Alice* step one. *Id*. [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

Second, the Federal Circuit compared this case to others in which the Federal Circuit found the claimed subject matter patent ineligible.

In *Affinity Labs*, we held that claims directed to"streaming regional broadcast signals to cellular telephones located outside the region" were ineligible because"[t]he concept of providing out-of-region access to regional broadcast content is an abstract idea." 838 F.3d at 1255,1258. The claims were "entirely functional in nature,"and we found nothing in the claims "directed to how to implement out-of-region broadcasting." *Id*. at 1258. Although the representative claim also recited "a graphical user interface" for displaying a menu of available media options from which a user could select, the limitation was "conventional," insignificant extra-solution activity and thus insufficient to confer patent eligibility. *Id.* at 1261. In *Capital One*, the claims were directed to an apparatus for managing eXtensible Markup Language("XML") documents. 850 F.3d at 1338. The invention allowed users to make changes to data in a "dynamic document," which could then be dynamically propagated back into an original XML document. *Id*. at 1339. We held those claims were "directed to the abstract idea of collecting, displaying, and manipulating data." *Id*. at 1340. In *Erie*

Indemnity, we held that claims reciting a method for searching a database using an index of descriptive terms associated with "category" and "domain" tags were directed to the abstract idea of "creating an index and using that index to search for and retrieve data." 850 F.3d at 1326–27. The claims did not recite any specific structure or improvement of computer functionality sufficient to render the claims not abstract. *Id*. at 1328–29. [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

In contrast to *Affinity Labs*, *Capital One*, and *Erie Indemnity*, representative claim 12 is not simply directed to displaying a graphical user interface or collecting, manipulating, or organizing information to improve navigation through three-dimensional spreadsheets. [Footnote 3 omitted.] Instead, the claim recites a specific structure (i.e., notebook tabs) within a particular spreadsheet display that performs a specific function (i.e., navigating within a three dimensional spreadsheet). [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

Nor is representative claim 12 directed generally to displaying information on a screen, without "requir[ing] anew source or type of information, or new techniques for analyzing it," like the claims in *Electric Power Group, LLC v. Alstom S.A.*[,] 830 F.3d 1350, 1353–54 (Fed. Cir. 2016). And unlike ineligible claims that merely "collect[], organiz[e], and display . . . information on a generic display device," claim 12 recites "a specific improvement to the way computers . . . operate." *See Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018)(quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327,1336 (Fed Cir. 2016)). [Data Engine Technologies LLC v. Google LLC, 2017-1135 (Fed. Cir. 10/9/2018).]

Roche Molecular Systems, Inc. v. Cepheid, 2017-1690 (Fed. Cir. 10/9/2018).

This is a decision on an appeal from the N.D. Cal. district court case 14-cv-03228-EDL.

The district court granted summary judgement that the asserted claims were directed to patent ineligible subject matter. Roche appealed. The Federal Circuit affirmed.

Legal issue: 35 USC 101, patent eligibility, primer claims corresponding nucleotide sequences.

The Federal Circuit reiterated that primer claims that "are indistinguishable from their corresponding nucleotide sequences on the naturally occurring DNA," regardless of whether it is selectively hybridizable to certain positions of naturally occurring DNA.

In response to arguments, the Federal Circuit noted that the primer claims were patent ineligible because "Roche's primers are indistinguishable from their corresponding nucleotide sequences on the naturally occurring MTB rpoB gene; *** It was undisputed that the primers in BRCA1 contain 3-prime ends and 3-prime hydroxyl groups, exactly as Roche's primers in this case *** [and t]hus, except for the [specifics of the] nucleotide sequences, the primers before us are not chemically or structurally different from the primers that we held patent-ineligible in BRCA1; *** the subject matter eligibility inquiry of primer claims hinges on comparing a

claimed primer to its corresponding DNA segment on the chromosome—not the whole chromosome," concluding that "A primer that is otherwise patent-ineligible does not gain subject matter eligibility simply because it can selectively hybridize to a certain position of naturally occurring DNA, because a primer having an identical nucleotide sequence to naturally occurring DNA without further chemical modification is a natural phenomenon."

Legal issue: 35 USC 101, patent eligibility, *Alice* step 1, method of detection claims for detecting a "relationship between the signature nucleotides and [Mycobacterium tuberculosis] MTB."

The Federal Circuit, in *Alice* step 1, concluded that the method of detecting a relationship between signature nucleotides and bacteria were directed to a patent ineligible mental step (detecting) and a patent ineligible natural phenomena ("relationship between the signature nucleotides and MTB").

> ...The detecting step of claim 1 is a mental determination step: if a PCR amplification product is detected, MTB is present in the biological sample, and vice versa. Id. at col. 27 ll. 1–6. Claim 1 establishes that the method claims are directed to a relationship between the eleven naturally occurring position-specific signature nucleotides and the presence of MTB in a sample. In other words, the method claims assert that if an investigator detects a signature nucleotide from a sample, she knows the sample contains MTB. This relationship between the signature nucleotides and MTB is a phenomenon that exists in nature apart from any human action, meaning the method claims are directed to a natural phenomenon, which itself is ineligible for patenting. [Roche Molecular Systems, Inc. v. Cepheid, 2017-1690 (Fed. Cir. 10/9/2018).]

Legal issue: 35 USC 101, patent eligibility, *Alice* step 2, significantly new function sufficient to transform.

The Federal Circuit, in *Alice* step 2, concluded that the claimed method of detecting MTB did not define any "significantly new function," sufficient to transform the claim into patent eligible subject matter.

> We hold that the method claims do not contain an inventive concept that transforms the eleven position specific signature nucleotides of the MTB rpoB gene into patent-eligible subject matter. *** While it may be true that Roche inventors were the first to use PCR to detect MTB in a biological sample, being the first to discover a previously unknown naturally occurring phenomenon or a law of nature alone is not enough to confer patent eligibility. *** unlike a method of treating a disease with a new drug, Roche's method claims do not involve "a significantly new function" for the primers. *** Unlike the method claims of the '723 patent, the invention in *CellzDirect* went beyond applying a known laboratory technique to a newly discovered natural phenomenon, and instead created an entirely new laboratory technique that "is not simply an observation or detection" based on the natural phenomenon. *Id*. (emphasis added). In contrast, the '723 patent claims a method of detection based on a natural phenomenon and

employs only conventional, well-known laboratory techniques, which are the opposite of those at issue in *CellzDirect*. [Roche Molecular Systems, Inc. v. Cepheid, 2017-1690 (Fed. Cir. 10/9/2018).]

Natural Alternatives International, Inc. v. Iancu, 2017-1962 (Fed. Cir. 10/1/2018).

This is a decision on an appeal from PTAB case 95/002,001. The PTAB affirmed the examiner's rejections for anticipation and obviousness. NAI appealed. The Federal Circuit affirmed.

Legal issue: 35 USC 120, burden of proof of entitlement to benefit.

The Federal Circuit concluded that "claims in a patent or patent application are not entitled to priority under § 120 at least until the patent owner *proves* entitlement to the PTO, the Board, or a federal court."

> NAI's "vesting" argument conflates properly claiming priority and demonstrating entitlement to priority. Patent claims "are not entitled to an earlier priority date merely because the patentee claims priority." *In re NTP, Inc.*, 654 F.3d 1268, 1276 (Fed. Cir. 2011). Rather, "for a patent's claims to be entitled to an earlier priority date, the patentee must demonstrate that the claims meet the requirements of 35 U.S.C. § 120." *Id*. (emphasis added). Accordingly, claims in a patent or patent application are not entitled to priority under § 120 at least until the patent owner *proves* entitlement to the PTO, the Board, or a federal court. *See PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1305–06 (Fed. Cir. 2008) (explaining that "when neither the PTO nor the Board has previously considered priority, there is simply no reason to presume that claims in a [continuation-in-part] application are entitled to the effective filing date of an earlier filed application," so the district court may place the burden on the patent owner to "come forward with evidence to prove entitlement to claim priority to an earlier filing date"); *see also In re NTP, Inc.*, 654 F.3d at 1277 ("[W]hen a patentee argues that its claims are entitled to the priority date of an earlier filed application, the examiner must undertake a priority analysis to determine if the patentee meets the requirements of § 120."); Manual of Patent Examining Procedure ("MPEP") § 201.08 (providing that "[t]he [PTO] does not need to make a determination as to whether the [35 U.S.C. § 112(a)] requirement of 35 U.S.C. [§] 120" is met "unless the filing date of the earlier nonprovisional application is relied upon in a proceeding before the [PTO]"). [Natural Alternatives International, Inc. v. Iancu, 2017-1962 (Fed. Cir. 10/1/2018).]

Legal issue: 35 USC 120, effect of amending an intermediate application in a benefit claim chain by removing its claim to benefit claim to prior applications.

The Federal Circuit held that amending an intermediate application by removing its claim to benefit of an earlier application cut off entitlement to the earlier application in later filed applications claiming benefit through intermediate application to the earlier application.

The Federal Circuit states these relevant facts:

... On September 2, 2008, just four days after filing its sixth application, NAI amended the "Cross Reference of Related Applications" section of the fifth application to delete the benefit claim to the fourth through the first applications .... Thus, when the fifth application issued as U.S. Patent No. 7,504,376 ("the '376 patent") on March 17, 2009, it claimed the benefit of only the 2003 provisional application's filing date. The sixth through the eighth applications subsequently issued as patents, but with a statement seeking the benefit of the fifth through the first applications.... The '381 patent on appeal here issued from the eighth application on November 29, 2011. [Natural Alternatives International, Inc. v. Iancu, 2017-1962 (Fed. Cir. 10/1/2018).]

The Federal Circuit explained its reasoning, and held as follows.

In re Janssen Biotech, Inc. is instructive here. 880 F.3d 1315 (Fed. Cir. 2018). In *In re Janssen Biotech*, the patentee attempted during reexamination to amend its patent to delete a benefit claim to a parent application, among other proposed amendments. *Id*. at 1320. We noted that even though the patentee "had never received issued claims . . . on the subject matter originating from the [parent] application, more than thirty-two issued patents 'reached through the [reexamined] patent for benefit of a prior filing date' and 'the patentability of those claims . . . cannot be determined without reopening examination of those patents in view of the deletion of the subject matter in the [reexamined] patent." *Id*.; see id. at 1323; *see also Searle LLC v. Lupin Pharm., Inc.*, 790 F.3d 1349, 1355 (Fed. Cir. 2015) (observing that if a patent owner had obtained foreign patent protection based on a Patent Cooperation Treaty ("PCT") application, altering the scope of the PCT application could call into question the proper scope of those foreign patents). In short, we have previously acknowledged that amending an earlier filed parent application may affect the priority of its child applications. And we do so again here. The Board determined that when filed, the eighth application did not meet the "specific reference" requirement of § 120 as to the filing date of the first application. J.A. 11–12. That was so, according to the Board, because the eighth application claimed the benefit of the first application's filing date by way of the fifth application, and NAI had amended the fifth application to claim priority to only the 2003 provisional application. *See id.* In other words, because the fifth application lacked priority to the first application, the eighth application's priority claim to the first application (via the fifth application) did not satisfy all of § 120's requirements. The Board, therefore, did not err in determining that the '381 patent was not entitled to claim the benefit of the filing date of the first application under § 120, as the priority claim in the '381 patent was defective from the start. [Natural Alternatives International, Inc. v. Iancu, 2017-1962 (Fed. Cir. 10/1/2018).]

Legal issue: 35 USC 120, effect of disclaimer of benefit on patent term.
In dicta, the Federal Circuit concluded that disclaiming earlier benefit dates in order to

extend patent term, was permissible.

> An uncommon but permissible way for patent applicants to avoid losing term on claims that recite new matter is to disclaim the benefit of earlier filing dates. See MPEP §§ 211.02(a)(III). Thus, by deleting the benefit claim in a CIP application, the twenty-year patent term of the patent issuing from that CIP application would extend from the CIP application's filing date instead of the parent application's earlier filing date. *See id.* Of course, once the CIP application adopts the later filing date, the CIP application and its children become vulnerable to rejections based on a larger pool of prior art—including former parent applications in some cases. *See, e.g., Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1352 (Fed. Cir. 2012) (finding that "[d]ue to breaks in the chain of priority," the "[parent] patent [was] prior art for some of the asserted claims"). [Natural Alternatives International, Inc. v. Iancu, 2017-1962 (Fed. Cir. 10/1/2018).]