

Patent Law Year In Review 2021

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Foreword

This is my annual summary of Supreme Court and Federal Circuit patent decisions. Given the absence of a confirmed Director at the United States Patent and Trademark Office, this outline does not include any PTAB precedential decisions or noteworthy rulemakings for the simple reason that there were none. I've also included summaries of the two Supreme Court decisions on patent issues from 2021: *United States v. Arthrex, Inc.*, 141 S. Ct. 1970 (2021) and *Minerva Surgical, Inc. v Hologic, Inc.*, 141 S. Ct. 2298 (2021). In *Arthrex* the Supreme Court held that Patent Trial and Appeal Board (“PTAB”) Administrative Patent Judges are unconstitutionally appointed principal officers and provided for a path for Director review of adverse decisions in trials before the PTAB to cure the problem. *Minerva Surgical* affirmed the viability of assignor estoppel to preclude invalidity as a defense to patent infringement, though it narrows the reach of the doctrine.

I have elected to include a few non-precedential opinions in this outline. The summaries appear in all italics text.

I'd like to thank my colleague, Andy Halaby of GT's Phoenix office for reading this entire manuscript, providing helpful edits, and catching a number of my typographical errors.

Disclaimer: Many of the quotes and citations in the text are “cleaned up” to simplify for readability. Emphasis may have been added in the summaries. To be sure, check the decisions. This document is not a substitute for legal advice. Any typographical errors are most likely my own.

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I. SUPREME COURT DECISIONS

A. *United States v. Arthrex, Inc., 141 S. Ct. 1970 (2021)*

The Supreme Court granted certiorari after the Federal Circuit determined that Administrative Patent Judges (“APJs”) at the PTAB were unconstitutionally appointed principal officers. To remedy the constitutional infirmity, the Federal Circuit severed civil service protections for the more than two hundred APJs, thus giving the Director the ability to terminate their employment at will.

The Supreme Court agreed with the Federal Circuit’s conclusion that APJs were principal officers. The logic of the decision rests on the accountability of the President for the actions of the Executive Branch imposed by the Constitution. APJs are not appointed by the President with the advice and consent of the Senate. They are instead appointed by the Secretary of Commerce. In recounting the trial process before the PTAB, the Supreme Court explained that “[t]he chain of command runs not from the Director to his subordinates, but from the APJs to the Director.” And while the Supreme Court acknowledged the argument that the Director can stack panels to achieve specific desired results, it explained “[t]hat is not the solution. It is the problem,” because this arrangement “blur[s] the lines of accountability demanded by the Appointments Clause.”

Although it agreed with the Federal Circuit’s conclusion on the constitutional question, it disagreed with it on the remedial measure. Instead of removing civil service protections from the APJs, “the structure of the PTO and the governing constitutional principles chart a clear course: Decisions by ALJs must be subject to review by the Director.” This has caused the PTO to put in place a program to allow for final decisions by APJs of the PTAB to be reviewed by the Director upon submission of a request for rehearing.

One of the percolating issues from this year has been whether the Acting Director can hear rehearing requests because, since the Court’s decision in *Arthrex*, the Patent Office Director post has remained unfilled. This issue has been presented in appeals to the Federal Circuit and may well get resolved in 2022.

B. *Minerva Surgical, Inc. v Hologic, Inc., 141 S. Ct. 2298 (2021)*

This decision addresses the equitable doctrine of assignor estoppel—a doctrine that has been employed over the years to prevent an inventor or other assignee of patent rights from later challenging the validity of the assigned rights. In essence, it prevents an assignor from arguing it sold the assignee a pig in a poke.

Although the Supreme Court was presented with an opportunity to abrogate the doctrine, it refused to do so because it continued “to see value in the doctrine . . .” In this case, an inventor assigned patent rights in an invention to the company he founded. The company the inventor founded would get acquired, netting the inventor \$8 million. Hologic eventually purchased the acquiring company and sold a product practicing the patent. The inventor went on to found a new

company and further developed an improved surgical device. Hologic filed suit for patent infringement and asserted patents issued on continuations. Hologic contended that the inventor's company could not challenge the validity of these patents based on the doctrine of assignor estoppel. The Federal Circuit largely affirmed the district court's judgment and applied assignor estoppel to preclude a validity challenge to the asserted patents. In reaching its conclusion, the Federal Circuit determined that it was irrelevant that the patent application was pending at the time of the assignment or that claims would have been amended after the assignment without the inventor's input. It was this aspect of the Federal Circuit's application of assignor estoppel that drew the Supreme Court's attention.

After declining to limit assignor estoppel, the Supreme Court limited its applicability. "Assignor estoppel should apply only when its underlying principle of fair dealing comes into play." Specifically, courts must look to what creates the unfairness in the assignment of the patent.

When an assignor warrants that a patent is valid, his later denial of validity breaches norms of equitable dealing. . . . But when the assignor has made neither explicit nor implicit representations in conflict with an invalidity defense, then there is no unfairness in its assertion. And so there is no ground for applying assignor estoppel.

The Court gave examples falling into the latter category such as employment agreements that result in the assignment of patent rights even before an invention has been conceived of. "And so the employee's transfer of rights cannot stop him from alleging a patent's invalidity in later litigation." Another example was when later developments render a warranty of validity irrelevant, such as changes in the law. Finally—as applicable in this case—a development such as material changes to the patent claims may render assignor estoppel irrelevant. "Assuming that the new claims are materially broader than the old claims, the assignor did not warrant to the new claims' validity," and thus the inventor can challenge the validity of the claims in litigation.

This decision is cause for patent holders to reconsider how and when they receive assignments from inventors. For instance, as is common practice, obtaining an assignment of a specific patent application—apart from any assignment that may exist in an employment agreement—will help address this situation. For companies that deal with continuation practice often, it may be wise to get new assignments (or confirmatory assignments) for each continuation application filed if practical.

II. INTERPRETATION OF PATENT CLAIMS

A. *Preambles*

1. Eli Lilly & Co. v. Teva Pharmas. Int'l GmbH, 8 F.4th 1331 (Fed. Cir. 2021)

This was an appeal from the final written decision of the PTAB following inter partes review of three patents related to methods for treating headaches using monoclonal antibodies. The Board determined that the petitioner had not shown that the claims were unpatentable. The

Federal Circuit affirmed. Several issues were raised on appeal. One of them was whether the preambles of the claims were limiting. The Board held that they were limiting. The Federal Circuit agreed.

The preambles recited “[a] method for treating headache in an individual.” Another one of the preambles recited “[a] method for reducing incidence of or treating at least one vasomotor symptom in an individual.” The PTAB concluded that these preambles, which stated an intended purpose, were “limiting to the extent that they require that the recited method must be performed with the intentional purpose of ‘reducing incidence of or treating’ at least one vasomotor symptom . . . or headache.””

Lilly argued that “a preamble that contains only a statement of purpose cannot as a matter of law be a claim limitation.” The Federal Circuit disagreed: “our case law does not support Lilly’s proposed binary distinction between statements of mere intended purpose on the one hand and limiting preambles on the other.” The claims at issue “are directed to methods, and more specifically to methods of using a composition for a specific purpose.” The Federal Circuit concluded that the “claim format is particularly relevant in our consideration of the claim as a whole because, while there is no bright-line rule for determining whether a preamble is limiting, we have generally construed statements of intended purpose in such method claims as limiting.” This is at least partially because “[i]n contrast to apparatus and composition claims, claims to methods of using such apparatuses or compositions are not directed to what the method ‘is,’ but rather they typically rely entirely on what the method ‘does.’ And what a method does is usually recited in its preamble.” The preambles here reflect “statements of the intentional purpose for which the methods must be performed.” They thus provided limitations of the claims. The Federal Circuit then worked through the guideposts that it looks for to determine whether the preambles are limiting including the characterization of the invention in the specifications and other claim language to confirm its conclusion that the preambles here were limiting.

2. Data Engine Techs. LLC v. Google LLC, 10 F.4th 1375 (Fed. Cir. 2021)

This was the second time the dispute between Data Engine and Google had been before the Federal Circuit. As a result of the first appeal, Data Engine prevailed on obtaining a reversal of a district court judgment of patent invalidity under § 101. The focus of its argument was that the claims reflected an improvement of user interfaces by reimagining the three-dimensional spreadsheet using a notebook metaphor. During the remand proceedings, the parties disputed whether the preambles, which included the phrase “a three-dimensional spreadsheet” was limiting. The district court held it was and construed it based on the file history. The patentee appealed contending that the district court erred in concluding that the preamble was limiting and in its interpretation of the preamble. The Federal Circuit affirmed.

As to whether the preamble is limiting, the Federal Circuit held that it was based on the prior litigation position of the patentee. During the prior appeal, the Federal Circuit “considered the claims as a whole in light of the written description and agreed with DET that the asserted claims are directed to improvements in three-dimensional spreadsheets,” and thus ascribed patentable weight to the preamble. In effect, the patentee was seeking a different claim construction

for invalidity and infringement, which is impermissible. “Analogously, where, as here, the patentee relies on language found in the preamble to successfully argue that its claims are directed to eligible subject matter, it cannot later assert that the preamble term has no patentable weight for the purposes of showing infringement.”

With respect to the district court’s construction, the Federal Circuit found no guidance in the claims or specification about whether the term “three-dimensional spreadsheet” required a mathematical relationship between cells. But, the prosecution history provided a definition that did require such a relationship and the Federal Circuit concluded that the prosecution history limited the claim.

B. Claim Language

1. Edgewell Personal Care Brands, LLC v. Munchkin, Inc., 989 F.3d 1358 (Fed. Cir. 2021)

The two patents at issue in this case involved cassettes used in diaper pails. This appeal followed a district court claim construction which led to summary judgment of no infringement. Two questions were presented on appeal. The first was whether the word “clearance” was properly construed to exclude circumstances in which there was no space between a cassette and another structure—specifically the pail upon insertion. This section of the outline addresses this claim construction issue.

The district court concluded the word “clearance” excluded a structure in which there was a space between the cassette and the pail. The Federal Circuit disagreed with the district court’s claim construction, vacated the judgment of noninfringement and remanded.

The claim at issue read:

A cassette for packing at least one disposable object, comprising:

an annular receptacle including an annular wall delimiting a central opening of the annular receptacle, and a volume configured to receive an elongated tube of flexible material radially outward of the annular wall;

a length of the elongated tube of flexible material disposed in an accumulated condition in the volume of the annular receptacle; and

an annular opening at an upper end of the cassette for dispensing the elongated tube such that the elongated tube extends through the central opening of the annular receptacle to receive disposable objects in an end of the elongated tube,

wherein the annular receptacle includes a clearance in a bottom portion of the central opening, the clearance extending continuously from the annular wall and radially outward of a

downward projection of the annular wall, the clearance delimiting a portion of the volume having a reduced width relative to a portion of the volume above the clearance.

The district court erred in construing this claim based on its use with a pail. “An apparatus claim is generally to be construed according to what an apparatus is, not what an apparatus does.” Therefore, “it is usually improper to construe non-functional claim terms in apparatus claims in a way that makes infringement or validity turn on the way an apparatus is later put to use.” Here, the claim was directed only to the cassette. Because of this, “absent an express limitation to the contrary, the term ‘clearance’ should be construed as covering all uses of the claimed cassette.” Here, the district court erred when it construed the term “clearance” to preclude the situation in which the annular receptacle did not contact the pail. In “nearly all” embodiments, the cassette clearance was described as engaging the pail.

We thus conclude that the district court erred by adding this limitation into its construction. The clearance limitation is satisfied when the cassette itself is constructed with a clearance. The claim does not require a clearance after insertion; in fact, such a requirement would be at odds with many of the disclosed embodiments and is simply not required by the claims.

2. Traxcell Technologies, LLC v. Nokia Solutions and Networks OY, 15 F.4th 1136 (Fed. Cir. 2021)

This was an appeal from the district court’s grant of summary judgment of no infringement following claim construction. Two claim construction issues were appealed: the construction of the term “location” and the construction of the phrases “a computer” or “a first computer.” The Federal Circuit affirmed. This summary discusses the Federal Circuit’s discussion of the “computer” term.

Here, the various claims recited the terms “a computer” or “a first computer.” The claims further recited functions that needed to be performed by the computer such as “at the first computer, receiving and storing performance data,” or “storing updated performance data.” The central dispute was over whether all claimed functionality needed to be performed by a single computer. The Federal Circuit agreed with the district court and held that all claimed functions needed to be performed by one computer.

Starting with the claim language its language reflected a requirement that a single computer would perform the various claim functions. “[I]t would make little sense—indeed, it would defy the concept of antecedent basis—for the claims to recite ‘the computer’ or ‘said first computer’ being ‘further’ programmed to do a second set of tasks if a different computer were to do those tasks instead.”

The Federal Circuit also relied on the prosecution history. During prosecution the applicant distinguished a “single computer” system from a system that required multiple computers because, among other things, the multiple computer system was more expensive and required additional

hardware and software. Of note, this prosecution history also led to a surrender of equivalents in terms of multiple-computer systems. Finally, the Federal Circuit also concluded that the specification supported the interpretation suggested by the claim language and the prosecution history. In fact, Traxcell did not point to any embodiment that included multiple computers. Therefore, the Federal Circuit affirmed the district court's construction, and ultimately its judgment of non-infringement of the relevant claims.

C. *Intrinsic Evidence; Assessing Plain Meaning*

1. Uniloc 2017 LLC v. Apple Inc., 996 F.3d 1368 (Fed. Cir. 2021)

This was an appeal from a PTAB final written decision following inter partes review. The Board concluded that some, but not all, challenged claims were unpatentable. The patentee raised claim construction on appeal. The patent challenger cross-appealed and challenged the Board's finding about the sufficiency of the prior art's alleged disclosure of a claim element. The Federal Circuit affirmed. This summary only addresses claim construction.

The relevant claim language appears below:

A method for controlling a plurality of services in packet-based networks, the method comprising:

a network entity **intercepting** a signaling message associated with a call between a sender device of the message and an intended recipient device of the message, wherein the signaling message includes an indication of one type of the plurality of services which the signaling message is intended to invoke;

the network entity making a determination of whether either the sender device or the intended recipient device is authorized to invoke the type of service indicated in the signaling message based in part on a device profile maintained in part on a remote enforcement point, wherein the type of service comprises at least one of caller-ID, call waiting, multi-way calling, multi-line service, and codec specification; and

the network entity filtering the signaling message based on the determination such that the signaling message is transmitted to the intended recipient device if either the sender device or the intended recipient device is authorized to invoke the type of service indicated in the signaling message.

The Board construed the term "intercepting" as meaning "the signaling message is received by a network entity located between the endpoints of a call," as proposed by Apple. Under this construction, the Board determined that the prior art relied upon by Apple disclosed this limitation.

The patentee disagreed. It contended that an entity doing the intercepting could not be an intended recipient of the message. The patentee relied upon dictionary definitions and an analogy to (American) football to support this argument. The Federal Circuit rejected the patentee's position and agreed with the Board. In rejecting the patentee's proposed construction the Federal Circuit looked to the specification and identified embodiments in which a sending device sent data to a proxy server before it was sent to a receiving device. Such embodiments demonstrated that there can be intermediate devices between the sender and ultimate receiver of a message.

The prosecution history also supported the Board's construction. The claims had been amended to add the concept of "intercepting" to the claim. The word "intercepting" replaced "receiving" to clarify that the network entity intercepted messages associated with a call between two other entities. The applicants argued that the prior art did not disclose "an intermediate entity intercepting any communication" between user devices. The prosecution history thus confirmed that intercepting can involve an entity other than a client device acting on the signaling message before it reaches its ultimate destination. The Federal Circuit thus concluded that the intrinsic evidence outweighed the patentee's reliance on extrinsic evidence.

2. Intel Corporation v. Qualcomm Incorporated, 21 F.4th 784 (Fed. Cir. 2021)

This was an appeal from the PTAB after an inter partes review. The Board concluded that Intel had succeeded in challenging certain claims and not others. Intel was partially successful in opposing Qualcomm's motion to substitute claims. Intel appealed the Board's Final Written Decisions on the issues it lost on. The Court's opinion addresses several issues. One of those issues was the proper construction of the phrase "radio frequency input signal." This section of the outline addresses that issue.

Even without considering the surrounding claim language or the rest of the patent document, we note that it is not always appropriate to break down a phrase and give it an interpretation that is merely the sum of its parts. *See FCC v. AT&T Inc.*, 562 U.S. 397, 204 (2011) (rejecting interpretation of "personal privacy" as "simply the sum of its two words"). In any event, and decisively, our inquiry is not limited to an analysis of the phrase in isolation. *See, e.g., Hockerson-Halberstadt, Inc. v. Converse Inc.*, 183 F.3d 1369, 1374 (Fed. Cir. 1999) ("Proper claim construction . . . demands interpretation of the entire claim in context, not a single element in isolation.").

The Federal Circuit's observation here was an interesting one considering Intel's argument that the "Board's construction limits the ordinary meaning of the claims to the patent's embodiments, an approach [the Federal Circuit has] expressly rejected." As the Court explained, Intel's argument "presupposes the point it purports to prove" and "takes for granted that Intel has the ordinary meaning right. In this case, however, the question is what the contextually correct meaning *is*, not whether anything affirmatively limits an undisputed ordinary meaning."

Here, after examining the surrounding claim language, the Federal Circuit noted that omitting the word “input” from the claim would not change anything under Intel’s interpretation of the claim. The claim language included other “linguistic clues” about the proper meaning of the phrase. Additionally, the specification consistently referred to the claim term “radio frequency input signal” consistent with Qualcomm’s (and the Board’s) interpretation.

D. Specification; Disclosed Embodiments

1. SIMO Holdings Inc. v. Hong Kong UCloudlink Network Technology Ltd., 983 F.3d 1367 (Fed. Cir. 2021)

The patent asserted in this case claimed a “wireless communication client or extension unit” having several requirements. The core dispute was whether certain claim language was limiting such that a device needed to have a non-local calls database. The issue turned on whether the claim, as worded, was properly interpreted to exclude some disclosed embodiments. The relevant claim language is below in bold:

8. A wireless communication client or extension unit comprising **a plurality of memory, processors, programs, communication circuitry, authentication data stored on a subscribed identify module (SIM) card and/or in memory and non-local calls database, at least one of the plurality of programs stored in the memory comprises instructions executable by at least one of the plurality of processors**[¹] for:

enabling an initial setting of the wireless communication client or the extension unit and a remote administration system;

establishing a data communication link to transmit information among the wireless communication client or the extension unit, and the remote administration system;

establishing a local authentication information request in response to a local authentication request by a local cellular communication network, wherein the local authentication information request comprises information regarding the local authentication request for local authentication information received by the foreign wireless communication client or the extension unit from the local cellular

¹ The parties treated the bolded language as a preamble. The Federal Circuit observed that this was not necessarily correct since it followed the transitional word “comprising.” Even if the bolded language above was a preamble, the claim is an apparatus claim and this language reflects the only structural limitations in the claim. “[T]he listed structural requirements must be understood as part of the claimed invention.” Therefore, the language was limiting even if it was a preamble.

communication network, and wherein the data communication link is distinct from the local cellular communication network;

relaying the local authentication information request to the remote administration system via the data communication link and obtaining suitable local authentication information from the remote administration system via the data communication link;

establishing local wireless services provided by the local cellular communication network to the wireless communication client or the extension unit by sending the local authentication information obtained from the remote administration system to the local cellular communication network over signal link; and

providing a communication service to the wireless communication client or the extension unit according to the established local wireless services.

The district court held that the claim did not require a non-local calls database because any other interpretation of the claim would have excluded an amendment in which the non-local calls database was present. Summary judgment of infringement followed.

The claim's text controlled its interpretation. Thus, other canons of claim construction were subordinate to the words of the claim. To interpret the claim language, the Court found its decision in *SuperGuide Corporation v. DirectTV Enterprises, Inc.*, 358 F.3d 870 (Fed. Cir. 2004), to be particularly instructive. In *SuperGuide*, the Federal Circuit explained that the phrase "a plurality of" at the start of a list of items joined by the word "and" meant that each item in the list includes a "plurality of" items. The context of the use of the "plurality of" language cemented the canon that a modifier that comes before a series modifies all language following that modifier. "[W]hat in our view is decisive, the words that come immediately after the list make clear that the 'a plurality of' phrase applies to the individual items in the list, just as the *SuperGuide* canon indicates because the claim refers to "at least one of the plurality of programs" and "at least one of the plurality of processors," which lends strong support to the notion that the word "plurality" modifies each item in the list.

The claim language subordinated the canon of construction that claims should be construed to avoid excluding preferred embodiments. The district court erred in relying upon the Court's decision in *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1276-77 (Fed. Cir. 2008), to hold that it could not interpret the claim to require the presence of a non-local calls database because it would exclude embodiments that did not include such a database.

Oatey itself . . . recognizes that we should not infer that any particular embodiment is included in a claim when there is probative evidence that sufficiently indicates to the contrary. . . . In this case, the language of the claim itself makes clear that . . . claim 8 does not cover specification embodiments that lack a non-local calls

database. For the grammatical reasons we have discussed, the text points decisively against such coverage.

This was also not a case in which a “*preferred*” embodiment was being excluded because there was no indication in the specification of the patent that any particular embodiment was preferred over another. Instead, it reflected the notion that the non-local calls database was optional, but that does “not mean that the embodiment without the database is preferred.”

Because the non-local calls database was a requirement of the claim and there was no dispute that the accused products lacked a non-local calls database, the patentee could not prove infringement; summary judgment of infringement was reversed; the district court was ordered to enter judgment of noninfringement.

2. Seabed Geosolutions (US) Inc. v. Magseis FF LLC, 8 F.4th 1285 (Fed. Cir. 2021)

This decision vacated and remanded a final written decision of the PTAB following *inter partes* review. The Federal Circuit concluded that the Board erred in construing the phrase “geophone internally fixed within” either a “housing” or an “internal compartment” as being limited to a “non-gimbaled geophone” because the Board concluded that the word “fixed” modified the claimed geophone. The relevant claim is reproduced below:

1. A seismic data collection unit comprising:
 - a. a fully enclosed, single case formed of a housing, said case having a wall defining an internal compartment within said housing;
 - b. **at least one geophone internally fixed within said housing;**
 - c. a clock disposed within said housing;
 - d. a power source disposed within said housing; and
 - e. a seismic data recorder disposed within said housing;
 - f. wherein each of said elements b-e include an electrical connection and all electrical connections between any elements b-e are contained within said housing; and
 - g. wherein said geophone is coupled to said seismic data recorder to permit seismic signals detected by said geophones to be recorded on said seismic data recorder,
 - h. wherein the single case comprises a first plate having a first periphery and a second plate having a second periphery, wherein the plates are joined along their peripheries by a circular wall.

The core dispute was whether the word “fixed” modified the type of geophone or whether it modified its relationship to the housing. First, the Court explained that the word “fixed” reflects the “geophone’s relationship with the housing, not the type of geophone” based on the claim language. Second, the specification “describes mounting of the geophone inside the housing as a key feature of the invention,” but says nothing about the importance of the geophone as being a gimbaled or non-gimbaled geophone. Instead, the specification “touts its integrated approach” of placing the geophone in the housing and mentions eighteen times that the invention is “self-contained.” “These disclosures make clear that the crux of the invention is mounting a generic geophone inside the housing.” The prosecution history also supported the Court’s conclusion because it made clear that the applicant was equating the word “fixed” with “mounted.”

E. Role of the Prosecution History; Disclaimer

1. SpeedTrack, Inc. v. Amazon.com, Inc., 998 F.3d 1373 (Fed. Cir. 2021)

This appeal addressed claim construction, and specifically whether the district court properly determined that the applicants had disclaimed a method that included reliance on category descriptions based on hierarchical field-and-value systems to categorize computer files. The patent at issue related to a computer filing systems, and specifically filing systems that addressed problems that arose in larger file storage systems. The patent explained that hierarchical filing systems (like using Windows® folders) could result in ambiguous file organization (e.g., because a document could belong in many folders).

Claim 1 recited a “three-step method” that first requires the creation of a category description table; next requires creation of a file information directory as the categories are associated with files; and finally, a search filter is created to enable searching of files based on category descriptions. Claim 1 recited, with the key language in bold:

1. A method for accessing files in a data storage system of a computer system having means for reading and writing data from the data storage system, displaying information, and accepting user input, the method comprising the steps of:
 - (a) initially creating in the computer system a category description table containing a plurality of category descriptions, each category description comprising a descriptive name, **the category descriptions having no predefined hierarchical relationship with such list or each other;**
 - (b) thereafter creating in the computer system a file information directory comprising at least one entry corresponding to a file on the data storage system, each entry comprising at least a unique file identifier for the corresponding file, and a set of category descriptions selected from the category description table; and

(c) thereafter creating in the computer system a search filter comprising a set of category descriptions, wherein for each category description in the search filter there is guaranteed to be at least one entry in the file information directory having a set of category descriptions matching the set of category descriptions of the search filter.

The district court initially adopted a construction proposed by the patentee. But, in its opinion, the district court stated that it relied in part on “disclaimers made during prosecution.” The patentee asked the district court to clarify what it meant by this statement and the district court explained that it excluded field-and-value systems from its proposed construction based on prosecution disclaimer.

During prosecution, the applicants added the “hierarchical limitation” to distinguish prior art. An illustration was provided to explain the prior art system, in which a field—called “language”—was populated with values, such as “English” or “French.” An excerpt from the file history appears below.

For example, under Schwartz, one field may be "Language". Values corresponding to this field may be "English" and "French". A node record might look like this:

Field = "Language"

Record #1	FileID #1	{Location}	English	[other values ...]
Record #2	FileID #2	{Location}	French	[other values ...]

The invention allowed users to define categories that were not tethered to defined fields. The applicants provided the following illustration during prosecution:

Category Descriptions		
FileID #1	{Location}	English, Language, Letter, [N other values ...]
FileID #2	{Location}	French, Bread, [M other values ...]

The applicants characterized their invention as being “fieldless” and explained that “no pre-existing or pre-defined hierarchical relationship must exist between category descriptions and the list of category descriptions, or between each other.” Based on these statements the Federal Circuit held that “[i]n no on certain terms, the applicants argued that [the prior art] had a hierarchical relationship between fields and values that fell outside of the scope of the amended claims . . . Therefore, the claims exclude predefined field-and-value relationships as explained by the district court. They are disclaimed.”

The Court rejected the patentee’s arguments to the contrary. The Federal Circuit explained that if it agreed with the patentee, the prior art would disclose the claimed arrangement. The Federal Circuit also faulted the patentee for taking conflicting litigation positions. While these statements were not prosecution statements and therefore could not demonstrate prosecution

history disclaimer the Court was unmoved by the patentee’s arguments because of its inconsistent positions.

F. PTAB; Procedural Issues

1. Intel Corp. v. Qualcomm Inc., 21 F.4th 801 (Fed. Cir. 2021)

This appeal came to the Federal Circuit from a mixed decision of the Patent Trial and Appeal Board. The principal issues addressed in the decision were Intel’s standing to appeal and issues related to claim construction. This summary addresses the claim construction issues, of which there are two. The first was whether the Board adequately explained its construction of “hardware buffer.” That claim term was central to the Board’s determination that Intel had not carried its burden to prove unpatentability. The second related to the Board’s handling of the “means-plus-function” terms. There, the Board determined that because Intel took the position in its reply that the claim terms could not be construed because the specification lacked sufficient corresponding structure for the recited functions, Intel could not prevail in proving the claims unpatentable. The Court vacated the Board’s decision on both counts.

With respect to the term “hardware buffer,” the Court explained that “it is clear from the claim language that the claim term at issue has meaning, but it is unclear what that meaning is.” It was thus important to understand “what the intrinsic evidence makes clear is the substance of the invention.” An inquiry into what the substance of the invention is can be made clear by expert testimony that is consistent with the intrinsic record. But here, however, the Federal Circuit concluded that “the Board did not do enough to reach and articulate that understanding, and its claim construction is therefore wanting.”

The Court identified three guideposts. First, since all buffers have some aspect implemented in hardware, Intel’s proposed construction of “a buffer implemented in hardware” was insufficient because it would render the term “hardware” superfluous. Second, because the claim recited “system memory” independently of the “hardware buffer,” a hardware buffer is different than system memory. Third, the hardware buffer relates to moving a software image directly to the system memory of the second processor, and avoiding copying data between system memory locations. But, these three observations were not enough to allow for construction. The Federal Circuit explained that the Board’s analysis needed to consider the specification more deeply, and that the Board was in a better position to do this than the Court. “What is needed in this case is a more substance-focused analysis than is yet present, in the Board’s opinion or in the present record (at least in the excerpts drawn to our attention), of what the intrinsic evidence shows the asserted advance to be and how, concretely, the ‘hardware buffer’ relates to that advance.”

With respect to the questions related to the means-plus-function terms, the Federal Circuit explained that “the Board did not decide for itself whether required structure is present in the specification or whether, even if it is not, the absence of such structure precludes resolution of Intel’s prior art challenges.” The Court reiterated its explanation from *Prisua* and *Cochlear Bone* that there can be instances in which the Board cannot reach patentability determinations because

a claim is indefinite. However, the Federal Circuit explained that “[t]o avoid confusion going forward, the Board should, in IPRs where that principle applies, clearly state that the final written decision does not include a determination of patentability of any claim that falls within the impossibility category.” But, as the Court’s cases show, it is not always impossible to adjudicate a prior art challenge just because claims are indefinite.

Here, the Board accepted Intel’s concession regarding definiteness, but did not conclude that “the prior-art analysis task was impossible, and it could not so conclude here without determining for itself that such structure was missing, a legal question that is part of claim construction.” Moreover, the Board did not conclude that it was unable to resolve the patentability challenge notwithstanding the indefiniteness issues. Therefore, the Federal Circuit instructed the Board on remand to determine whether it can resolve the prior art challenge notwithstanding the potential indefiniteness, and second, whether those terms are actually indefinite. “If the Board determines both that there is indefiniteness and that such indefiniteness renders it impossible to adjudicate the prior-art challenge on its merits, then the Board should conclude that it is impossible to reach a decision on the merits of the challenge and so state in its decision.”

G. Interpreting Numerical Values

1. AstraZeneca AB v. Mylan Pharm. Inc., No. 2021-1729 (Fed. Cir. Dec. 8, 2021)

This case was on appeal from a judgment of no invalidity and infringement. The claims at issue related to a pharmaceutical composition comprising several ingredients, including PVP K25 “at a concentration of 0.001% w/w.” The district court construed this limitation as being expressed within one significant digit—meaning that it included 0.0005% to 0.0014%. Mylan then stipulated to infringement.

The Federal Circuit held that the district court’s construction was erroneous and that the claimed 0.001% w/w actually referred to something far narrower. Specifically, based on the specification and prosecution history, it meant 0.00095% to 0.00104%. First, the specification provided numerous examples of various PVP K25 compositions including one at 0.0005% and one at 0.001%. The example at 0.001% was deemed the most beneficial. Interpreting the claim—which limited the composition to 0.001% w/w to allow inclusion of the 0.0005% w/w value would thus be inconsistent with the specification.

With respect to the prosecution history, the applicant had originally claimed a range from about 0.0005 to about 0.05% w/w. This claim was rejected and ultimately replaced with a claim that required only 0.001% w/w—without using the word “about.” The applicant also relied upon the data included with the application about the benefits of the 0.001% w/w amount when compared with other amounts. The inventors thus narrowed their claims—without using the word “about”—and stressed the criticality and stability of the claimed formulation (and not one that included a little more or a little less than 0.001% w/w of PVP K25. “Indeed, the public should reasonably be able to rely on these amendments and arguments in the prosecution history to inform

the scope of the claimed invention.” The Federal Circuit appreciated that there needed to be “some room for experimental error in the PVP concentration” and that the construction that was adopted “reflects a margin of error that is best supported by the intrinsic record.”

III. PATENTABILITY / VALIDITY

A. Patent Eligibility

1. cxLoyalty, Inc. v. Maritz Holdings Inc., 986 F.3d 1367 (Fed. Cir. 2021)

This was an appeal from a final written decision in a covered business method patent (“CBM”) review. The PTAB determined that the challenged patent, U.S. Patent No. 7,134,087, was eligible for CBM review. It concluded that the original claims were patent ineligible under 35 U.S.C. § 101, but substitute claims that were presented during the CBM review were patent eligible. The petitioner challenged the PTAB’s determination as to the substitute claims. The patent owner challenged both the decision that the patent was a covered business method patent and the decision that the original claims were patent ineligible.

First, applying its decision in *SIPCO, LLC v. Emerson Elec. Co.*, 980 F.3d 865, 867 (Fed. Cir. 2020), the Federal Circuit determined that it could not entertain the patentee’s appeal of the Board’s determination that the patent is eligible for CBM review. Under *SIPCO*, which applied *Thryv*, the PTAB’s “threshold determination” that a patent is eligible for CBM review is “non-appealable under 35 U.S.C. § 324(e).”

Second, the Federal Circuit affirmed the Board’s determination that the original claims were patent ineligible. The patent at issue related to a way to eliminate human intervention needed to redeem rewards from rewards or loyalty programs. Through a GUI and an API, the system can allow a user to redeem points using a shadow credit card account that is not visible to the user. Claim 1 was representative and provided:

A computerized system for use by a participant of a program which awards points to the participant, wherein the awarded points are maintained in a point account for the participant, said system for permitting the participant to transact a purchase using the awarded points with a vendor system which transacts purchases in currency, said system comprising a processor including instructions for defining:

an application programming interface (API) for interfacing with the vendor system;

a program account hidden from the participant connected to the program for use in currency trans-actions;

a graphical user interface (GUI) for providing an interface between the participant and the API and for communicating with the program;

wherein said GUI includes instructions for receiving participant-related information from the participant and providing the received participant-related information to the API;

wherein said GUI includes instructions for receiving information regarding the program account hidden from the participant and for providing the received program account information to the API;

wherein said API is adapted to receive the participant-related information and the program account information from the GUI and adapted to provide the received participant-related information and the received program account information to the vendor system;

wherein said API is adapted to receive vendor-related information from the vendor system and adapted to provide the received vendor-related information to the GUI; and

wherein said GUI includes [i]nstructions for receiving vendor-related information from the API and for providing the received vendor-related information to the participant;

such that from the perspective of the participant, the participant uses the GUI to conduct a purchase transaction with the vendor system based in whole or in part on the points in the participant's point account; and

such that from the perspective of the vendor system, the vendor system conducts the purchase transaction with the participant as a currency transaction based on the program's program account hidden from the participant whereby the participant is not aware that the purchase transaction with the vendor system is being transacted using program account.

With respect to *Alice* step 1, the Federal Circuit explained that “[h]umans have long intermediated these very transactions by collecting and relaying the very same information” called for by the claims. “Because representative claim one is directed to transfers of information relating to a longstanding commercial practice, the claim is directed to an abstract idea.”

With respect to *Alice* step 2, the Federal Circuit explained that “[t]he claims amount to nothing more than applying the above-identified abstract idea using techniques that are, whether considered individually or as an ordered combination, well-understood, routine, and conventional. The claims apply the abstract idea on a computer by replacing the human intermediary with a GUI and an API, but as the Board concluded, representative claim one merely recites generic and

conventional computer components . . . and functionality for carrying out the abstract idea.” Even if the claims required the dollar amount of the transaction to be hidden from the user—which the Federal Circuit did not agree it did—that “requirement would also constitute part of the abstract idea. Indeed, loyalty program intermediaries have long brokered loyalty program transactions in a manner where, from the participants perspective, the actual price paid by the loyalty program is withheld from the participant.”

The Federal Circuit also rejected the argument that expert testimony established the patent eligibility of the claims. The expert “testimony merely labels, in conclusory fashion, the invention as a technological solution to a technological problem. We do not accord weight to conclusory expert testimony.”

Third, the Federal Circuit reversed the PTAB’s determination that the substitute claims were patent eligible. The substitute claims added a requirement that the GUI includes instructions for converting the vendor-related information from the format of the vendor system into a format of the GUI. The claims were also amended to require receiving a program database for storing information about the program including a list of the point accounts the participants. When a transaction is completed, the database is updated and an order message is displayed to the user indicating a completion of the transaction. Substitute claim 22 also added a requirement that the GUI be able to communicate with multiple different APIs from different third party vendor systems. The Board faulted the petitioner for relying upon the same evidence it submitted with the original petition in opposing the motion to amend, while the patentee submitted new expert testimony in support of the motion to amend.

Even with the claim amendments, the claims still recited an abstract idea. The claims failed to “provide any guidance as to how” the function of converting vendor related information into information formatted for a GUI was performed. The Federal Circuit refused to credit the expert testimony relied on by the patentee because it did not establish that the claims reflected something more than applying the abstract idea using well-understood, routine, and conventional techniques. “At most, the testimony describes the claimed subject matter as not conventional only in the sense that the subject matter as a whole was novel.” Novelty alone does not establish patent eligibility. Therefore, the Federal Circuit reversed the Board’s determination that the proposed substitute claims were patent eligible.

2. In re Board of Trustees of the Leland Stanford Junior University, 989 F.3d 1367 (Fed. Cir. 2021)

This case came to the Federal Circuit from a PTAB determination affirming an examiner’s final rejection of the claims under § 101. The Federal Circuit affirmed because the claims were drawn to “mathematical calculations and statistical modeling,” and thus were patent ineligible.

The claim at issue recited:

1. A method for resolving haplotype phase, comprising:

receiving allele data describing allele information regarding genotypes for a family comprising at least a mother, a father, and at least two children of the mother and the father, where the genotypes for the family contain single nucleotide variants and storing the allele data on a computer system comprising a processor and a memory;

receiving pedigree data for the family describing information regarding a pedigree for the family and storing the pedigree data on a computer system comprising a processor and a memory;

determining an inheritance state for the allele information described in the allele data based on identity between single nucleotide variants contained in the genotypes for the family using a Hidden Markov Model having hidden states implemented on a computer system comprising a processor and a memory,

wherein the hidden states comprise inheritance states, a compression fixed error state, and a [Mendelian inheritance error]-rich fixed error state,

wherein the inheritance states are maternal identical, paternal identical, identical, and non-identical;

receiving transition probability data describing transition probabilities for inheritance states and storing the transition probability data on a computer system comprising a processor and a memory;

receiving population linkage disequilibrium data and storing the population disequilibrium data on a computer system comprising a processor and a memory;

determining a haplotype phase for at least one member of the family based on the pedigree data for the family, the inheritance state for the information described in the allele data, the transition probability data, and the population linkage disequilibrium data using a computer system comprising a processor and a memory;

storing the haplotype phase for at least one member of the family using a computer system comprising a processor and a memory; and

providing the stored haplotype phase for at least one member of the family in response to a request using a computer system comprising a processor and a memory.

The claimed “method for resolving haplotype phase” requires first “receiving” allele data and pedigree data and “determining an inheritance state” based on the data using a Hidden Markov

Model (“HMM”). Then, additional data including transition probability data and population linkage data is received. Based on that received data and the earlier-calculated inheritance state, a haplotype phase is determined using a computer and memory. The haplotype phase is then stored and provided in response to a request. The claim did not require “concrete application for the haplotype phase.”

The appellant argued that

claim 1 it is not directed to an abstract idea because the specific application of the steps is novel and enables scientists to ascertain more haplotype information than was previously possible. . . even accepting the argument that the claimed process results in improved data, we are not persuaded that claim 1 is not directed to an abstract mathematical calculation.

The Federal Circuit disagreed. “The claimed advance proffered by Stanford, that the process yields a greater number of haplotype phase predictions, may constitute a new or different use of a mathematical process, we are not persuaded that the process is an improved technological process.”

Under *Alice* step 2, the Federal Circuit concluded that the claim does not pass muster under this inquiry either. The claim does not recite any steps that practically apply the claimed algorithm. “Notably, claim 1 neither requires, nor results in, a specialized computer or a computer with a specialized memory or processor. Indeed, it is hard to imagine a patent claim that recites hardware limitations in more generic terms than the terms employed by claim 1.”

3. In re Board of Trustees of the Leland Stanford Junior University, 991 F.3d 1245 (Fed. Cir. 2021)

This case was consolidated for oral argument with *In re Board of Trustees of the Leland Stanford Junior University*, No. 2020-1012, which also sought to overturn a PTO determination that claims directed to methods of haplotype determination were patent ineligible mathematical algorithms. Like the companion case the representative claim was directed to an improved technique to use a Hidden Markov Model (“HMM”) to achieve higher accuracy. Specifically, the increased accuracy is purportedly accomplished by using imputed haplotypes as hidden states in the HMM. One representative claim from the rejected application provided:

1. A computerized method for inferring haplotype phase in a collection of unrelated individuals, comprising:

receiving genotype data describing human genotypes for a plurality of individuals and storing the genotype data on a memory of a computer system;

imputing an initial haplotype phase for each individual in the plurality of individuals based on a statistical model and storing the

initial haplotype phase for each individual in the plurality of individuals on a computer system comprising a processor a memory [sic];

building a data structure describing a Hidden Markov Model, where the data structure contains:

a set of imputed haplotype phases comprising the imputed initial haplotype phases for each individual in the plurality of individuals;

a set of parameters comprising local recombination rates and mutation rates;

wherein any change to the set of imputed haplotype phases contained within the data structure automatically results in re-computation of the set of parameters comprising local recombination rates and mutation rates contained within the data structure;

repeatedly randomly modifying at least one of the imputed initial haplotype phases in the set of imputed haplotype phases to automatically re-compute a new set of parameters comprising local recombination rates and mutation rates that are stored within the data structure;

automatically replacing an imputed haplotype phase for an individual with a randomly modified haplotype phase within the data structure, when the new set of parameters indicate that the randomly modified haplotype phase is more likely than an existing imputed haplotype phase;

extracting at least one final predicted haplotype phase from the data structure as a phased haplotype for an individual; and

storing the at least one final predicted haplotype phase for the individual on a memory of a computer system.

Like the companion case, the Federal Circuit concluded that under *Alice* step 1, “the reviewed claims . . . are directed to patent ineligible abstract ideas,” and specifically “the claims are directed to the use of mathematical calculations and statistical modeling.” And, while there were certain steps such as “receiving genotype data, inputting an initial haplotype phase, extracting the final predicted haplotype phase from the data structure, and storing it in computer memory,” these steps were “generic” and performed “with a regular computer.” As such they did not change the character of the claimed abstract idea.

The Federal Circuit also examined the written description to determine “whether the claimed advance . . . demonstrates an improvement of a technological process or merely enhances an ineligible concept.” The Court rejected the argument that the improvement in accuracy

constituted a practical application of an abstract idea because the cases in which the Court concluded that the claimed subject matter was a practical advance of an abstract idea involved “practical, technological improvements extending beyond improving the accuracy of a mathematically calculated statistical prediction.” “Unlike the technological improvements made in those cases, the improvement in computational accuracy alleged here does not qualify as an improvement to a technological process; rather, it is merely an enhancement to the abstract mathematical calculation of haplotype phase itself.”

Applying *Alice* step 2, the Court concluded that there was no inventive concept that would warrant treating the use of the claimed algorithms and mathematical calculations as patent eligible subject matter. “Further the recited steps of receiving, extracting, and storing data amount to well-known, routine, and conventional steps taken when executing a mathematical algorithm on a regular computer. Using a conventional computer to receive, extract, and store information does not transform an abstract idea into patent eligible subject matter.” The claims recited using a computer to undertake calculations that reflected basic tools of scientific and technological work, and thus were not eligible for patent protection.

4. Free Stream Media Corp v. Alphonso, Inc., 996 F.3d 1355 (Fed. Cir. 2021)

The parties appealed a claim construction order from the Eastern District of Texas, a grant of summary judgment of noninfringement, and a denial of a motion to dismiss under 35 U.S.C. § 101. Two patents were in dispute. The first patent was part of a stipulation of noninfringement under the claim construction order. The second was the subject of summary judgment of noninfringement and subject to the § 101 motion. The Federal Circuit reached only the claim construction and the patent eligibility issue and determined that the claims encompassed patent ineligible subject matter.

The patent at issue, U.S. Patent No. 9,386,356, related to a way to provide mobile phone users with advertisements that are targeted to the user’s mobile device based on data gathered from the user’s television. Claim 1 of the ’356 patent provides:

A system comprising:
a television to generate a fingerprint data;
a relevancy-matching server to:
match primary data generated from the fingerprint data with
targeted data, based on a relevancy factor, and
search a storage for the targeted data;
wherein the primary data is any one of a content identification data
and a content identification history;
a mobile device capable of being associated with the television to:

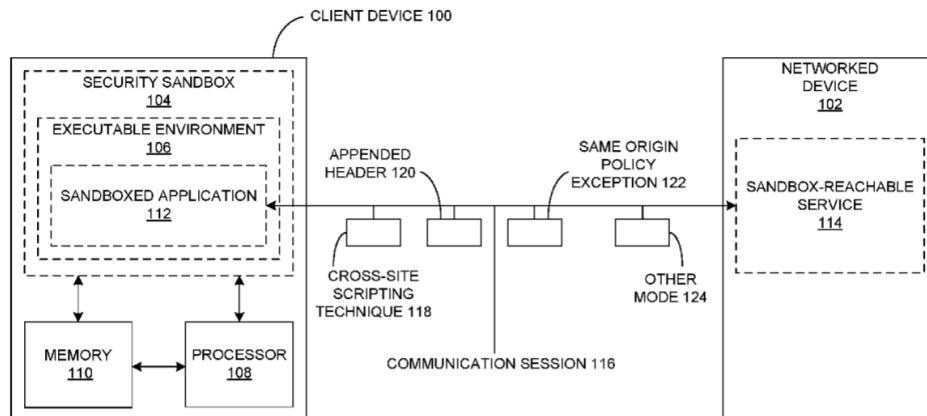
process an embedded object,
constrain an executable environment in a security sandbox, and
execute a sandboxed application in the executable environment;
and

a content identification server to:

process the fingerprint data from the television, and

communicate the primary data from the fingerprint data to any of a number of devices with an access to an identification data of at least one of the television and an automatic content identification service of the television.

The “security sandbox” is a “security mechanism for separating running programs and is described in the ’356 patent as being something that “may constrain what each of the number of applications is allowed to do.” For instance, it may “limit access to the network.” In this type of situation, a sandboxed application can communicate with a sandbox reachable service over a secure session, as shown below.



The specification disclosed one technique for establishing this session between the sandboxed application and the sandbox reachable service: through a cross-site scripting technique, an appended header, a same origin policy exception, and/or an other mode of bypassing a number of access controls of the security sandbox.” The relevancy matching server uses data from the networked device to select ads or other targeted data based on a relevancy factor associated with the user.

Under *Alice* step 1, the Federal Circuit determined that the claim was directed to the abstract idea of targeted advertising. This was because the claims are directed to: “(1) gathering information about television user’s viewing habits; (2) matching the information with other content (i.e., targeted advertisements) based on relevancy to the television viewer; and (3) sending that content to a second device.” The Court distinguished the cases upon which the patentee relied

because they were directed to a specific improvement in computer functionality and explained that to be patent eligible, the claims must have specificity to transform the claim from one that recites only a result to one that recites how to achieve the result. “All that is required at the eligibility phase is that the claim itself must identify how that functional result is achieved by limiting the claim scope to structures specified at some level of concreteness, in the case of a product claim, or concrete action, in the case of a method claim.” Here the claims failed to recite the techniques about how the computer system was able to establish a session between the sandboxed application and a sandbox reachable service using the techniques described in the patent.

Although Samba also asserts that its claimed invention results in televisions and mobile devices operating with respect to each other in a manner different from conventional televisions and mobile devices, Samba does not explain how that result improves the operability of these devices beyond providing a user with targeted content using generic processes and machinery. Samba’s claims merely improve the abstract idea of targeted advertising. Because we find that Samba’s asserted claims are not directed to an improvement of a technology or creation of a new computer functionality, Samba’s asserted claims are directed to an abstract idea.

With respect to *Alice* step 2, the Federal Circuit rejected the patentee’s argument that the claims recited “a specific, ordered combination of elements operating in unconventional ways, such that they override ‘their routine and conventional inability to share information with each other.’” The Federal Circuit explained that the invention merely worked around the existing constraints of conventional functioning of television and mobile devices. “However, such a ‘work around’ or ‘bypassing’ of a client device’s sandbox security does nothing more than describe the abstract idea of providing targeted content to a client device.” “[T]here is nothing inventive disclosed in the claims that permits communications that were previously not possible. . . . The claims here simply recite that the abstract idea will be implemented using conventional components and functions generic to the technology.”

5. PersonalWeb Technologies LLC v. Google LLC, 8 F.4th 1310 (Fed. Cir. 2021)

The patents at issue in this appeal related to data-processing systems that assign data items a substantially unique name called a “content-based identifier,” which as the name suggests, depends on each item’s content. This content-based identifier is generated, for example, using a hash function. The method claimed generally proceeds in three steps. First, a request containing a content-based identifier for a data item is received. Second, the content-based identifier is compared to a plurality of values. Third, access to the data item based on the comparison is either granted or disallowed. According to one of the patents, based on the comparison, items may be marked for deletion.

The district court granted a motion for judgment on the pleadings on the basis that the claims were patent ineligible under § 101. The Federal Circuit affirmed.

In evaluating whether the claims were patent eligible under *Alice* step 1, a court must evaluate whether the focus of the claimed advance over the prior art is such that its character as a whole is directed to excluded subject matter.

PersonalWeb contends that the claims are directed to “a substantially unique, algorithm-derived, content-based identifier for all data items in a networked computer, which allows a computer within the network containing diverse computing and storage systems to locate and distribute data without knowing either the file system of any device within the network or the conventional file name of any data item.”

The district court analogized the claimed advance to a conventional library and the Federal Circuit agreed with the analogy. The claimed functions were “mental processes that can be performed in the human mind or using a pencil and paper.” “The claims’ focus, therefore, is abstract.” Indeed, the Federal Circuit explained that each of the components of the claimed process—using context-based identifiers, comparing identifiers to values, and controlling access to data items, retrieving data items, or marking data items for deletion—had been deemed abstract in other cases.

The Court also rejected the argument that the claims reflected a patent eligible inventive concept that amounts to significantly more than the abstract idea. Instead, “the purported improvements that PersonalWeb sets forth just restate the abstract ideas discussed above.” The claims merely automate or otherwise make more efficient the abstract concepts using a computer. “That fails step two.”

The Federal Circuit also addressed PersonalWeb’s argument that fact disputes precluded judgment on the pleadings. Assuming everything PersonalWeb said about the specification was true, all of the things that PersonalWeb argued about the specification reflected only abstract ideas. This made judgment on the pleadings appropriate.

6. Universal Secure Registry LLC v. Apple Inc., 10 F.4th 1342 (Fed. Cir. 2021)

The district court held that claims of four patents related to securing electronic payment transactions were invalid because they claimed patent ineligible subject matter. The district court did so in the context of a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6). This appeal followed and the Federal Circuit affirmed.

The Federal Circuit noted that it had rendered several decisions involving authentication technology. It looked to those decisions for guidance to resolve this appeal. “In cases involving authentication technology, patent eligibility often turns on whether the claim provide sufficient specificity to constitute an improvement to computer functionality itself.” To support this

statement, the Federal Circuit identified *Secured Mail Solutions LLC v. Universal Wilde, Inc.*, 873 F.3d 905 (Fed. Cir. 2017), *Electronic Communication Technologies, LLC v. ShoppersChoice.com, LLC*, 958 F.3d 1178 (Fed. Cir. 2020), *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161 (Fed. Cir. 2019), and *Prism Technologies LLC v. T-Mobile USA, Inc.*, 696 F. App'x 1014 (Fed. Cir. 2017).

The claims at issue in this appeal were “directed to a method for enabling a transaction between a user and a merchant, where the merchant is given a time-varying code instead of the user’s secure (credit card) information.” This code is then used to access a database that can indicate restrictions on the user’s transactions and can allow a credit card company to approve or deny the transaction based on the secure information. This, the Federal Circuit concluded, merely recited “conventional actions in a generic way,” and “do[es] not purport to improve any underlying technology.” The Federal Circuit rejected the patentee’s attempts to analogize this case to *Ancora Technologies, Inc. v. HTC America, Inc.*, 908 F.3d 1343 (Fed. Cir. 2018), which used BIOS memory to assist with software verification in an unexpected way.

While we appreciate that the claims here are closer to the demarcation line between what is abstract and non-abstract than the claims in *Prism*, we conclude that, at *Alice* step one, the asserted claims are directed to a method for verifying the identity of a user to facilitate an economic transaction, for which computers are merely used in a conventional way, rather than a technological improvement to computer functionality itself.

The patentee contended that there were two inventive concepts that rendered the claims eligible under *Alice* step two: (1) the use of a time-varying code, and (2) sending data to a third-party as opposed to a merchant. Regarding the use of the time-varying code, the Court observed that the specification admitted that technique was “conventional and long-standing.” Regarding the use of a third party instead of the merchant to receive data, the Federal Circuit observed that the use of an intermediary in financial transactions was not a patent eligible innovation in *Alice*, so it was not here either.

As to another patent at issue on appeal which related to the use of two authentication mechanisms including biometrics, the Federal Circuit explained that “[t]here is no description in the patent of a specific technical solution by which the biometric information or the secret information is generated, or by which the authentication information is generated and transmitted.” Therefore, the claim failed to meet *Alice* step one. The Court distinguished *Finjan, Inc. v. Blue Coat Systems, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018), on the basis that the claims in that case involved the use of a “behavior-based” virus scan that compiled unique information and provided advantages over a traditional virus scan technique in that it could identify new computer viruses. The data called for by the claims here was “merely a collection of conventional data combined in a conventional way that achieves only expected results.”

Under *Alice* step two, the Federal Circuit reviewed the claim and the specification and held,

There is nothing in the specification suggesting, or any other factual basis for a plausible inference (as needed to avoid dismissal), that

the claimed combination of these conventional authentication techniques achieves more than the expected sum of the security provided by each technique. . . In other words, the combination of these long-standing conventional methods of authentication yields expected results of an additive increase in security.

And, merely verifying the identity of the user to facilitate a transaction is a “fundamental economic practice that has been performed at the point of sale well before the use of POS computers and Internet transactions.”

The Federal Circuit concluded that a third patent was also abstract because its claims were “directed to multi-factor authentication of a user’s identity using two devices to enable a transaction.” The claims of this patent lacked sufficient specificity to reveal that they are directed to a technical solution to address specific problems of prior authentication systems. And, “[t]he specification even discloses that” the information recited in the claims was “conventional.” “There is no description of a specific technical solution by which the biometric information is generated, or by which the authentication information is transmitted. Because the claims broadly recite generic steps and results—as opposed to a specific solution to a technological problem—we hold that the claims are abstract under *Alice* step one.” The claims also failed to recite an inventive concept because they only recited well-known and conventional ways to perform authentication. The claims here were just too “broad and nonspecific” and failed to “recite a new authentication technique.” Instead, they merely combined “non-specific, conventional authentication techniques in a non-inventive way.”

With respect to the fourth patent, which included at least one system claim, the Federal Circuit explained that the claims were “directed to multi-factor authentication of a user’s identity using two devices to enable a transaction.” And, while more detail was provided in these claims than in others, they still were not “sufficiently specific.” Thus, the claims recited an abstract idea under *Alice* step one. Under *Alice* step two, the Court explained:

[N]othing in the claims is directed to a new authentication technique; rather, the claims are directed to combining longstanding, known authentication techniques to yield expected additory amounts of security. There is nothing in the specification suggesting, or any other factual basis for a plausible inference (as needed to avoid dismissal), that the combination of these conventional authentication techniques results in an unexpected improvement beyond the expected sum of the security benefits of each individual authentication technique.

7. Cosmokey Solutions GmbH & Co. KG v. Duo Security LLC, 15 F.4th 1091 (Fed. Cir. 2021)

The patent at issue in this appeal related to a method for authenticating a user with a computer system using a mobile phone. Claim 1 of the patent-in-suit provides:

1. A method of authenticating a user to a transaction at a terminal, comprising the steps of:

transmitting a user identification from the terminal to a transaction partner via a first communication channel,

providing an authentication step in which an authentication device uses a second communication channel for checking an authentication function that is implemented in a mobile device of the user,

as a criterion for deciding whether the authentication to the transaction shall be granted or denied, having the authentication device check whether a predetermined time relation exists between the transmission of the user identification and a response from the second communication channel,

ensuring that the authentication function is normally inactive and is activated by the user only preliminarily for the transaction,

ensuring that said response from the second communication channel includes information that the authentication function is active, and

thereafter ensuring that the authentication function is automatically deactivated.

The patent stressed the importance of authenticating users when performing remote transactions and purports to improve upon prior techniques by having an authentication function which is normally inactive and is activated by the user only for a transaction. According to the method disclosed in the patent the only activity that is required for the user for authentication purposes is to activate the authentication function within a certain time window. According to the patent, the authentication method is easy to use and was useful on low complexity mobile devices. Checking for an activated authentication function replaces the manual entry of information for an authentication factor by the user. For example, the user may activate the authentication function by activating their mobile device, or by activating an application on the mobile device.

In this case, the district court agreed with the defendant that the claims were patent ineligible under § 101. Under *Alice* step one, the district court concluded that the claims were directed to the abstract idea of authentication—that is, verification of identity to permit access to transactions. Under *Alice* step two, the district court concluded that the claims recited merely generic computer functionality to perform the abstract concept of authentication. To reach this conclusion, the district court determined that the patent admitted that the detection of an authentication function's activity and the activation by users of an authentication function within a predetermined time relation were well understood and routine, conventional activities previously known in the authentication technology field.

The Federal Circuit reversed. While the court noted that it had previously considered the eligibility of various claims generally directed to authentication and verification under § 101 and found those claims abstract, it also found claims to be patent eligible for similar subject matter. For instance, two cases in which it found claims to be patent ineligible were *Prism Technologies LLC v. T-Mobile USA, Inc.*, 696 F’Appx 1014 (Fed. Cir. 2017), and *Universal Secure Registry LLC v. Apple, Inc.*, 10 F.4th 1342 (Fed. Cir. 2021). *Ancora Technologies Inc. v. HTC America, Inc.*, 908 F.3d 1343, 1348-49 (Fed. Cir. 2018), was identified as a case in which a claim directed to a method of improving computer security was found to be directed to patent eligible subject matter. This case fell on the *Ancora* side of things according to the Court.

The Federal Circuit questioned whether the district court provided too broad of a characterization of the claimed advance in concluding the idea was abstract, but determined that it did not need to reach the question because the claims satisfied *Alice* step two.²

Under *Alice* step two, the patent’s Claims and specification recite specific improvement to authentication that increases security, prevents unauthorized access by a third party, is easily implemented, and can advantageously be carried out with mobile devices of low complexity. The patent discloses a technical solution to a security problem in networks and computers. The Federal Circuit explained that the district court’s conclusion was incorrect by pointing to the last four claimed steps as indicative of the claim not being directed at conventional techniques. And, while the patent refers to three prior art references, none of those references discloses the recited steps. The specification “makes clear that the claimed steps were developed by the inventors, are not admitted prior art, and yield certain advantages over the described prior art,” and thus the district court erred in interpreting the specification as including admissions about conventional techniques. In fact, the “specification emphasizes the inventive nature of” the claimed steps, which provided an advantage over the prior art.

While prior cases can be helpful in analyzing eligibility, whether particular claim limitations are abstract or, as an ordered combination, involve an inventive concept that transforms the claim into patent eligible subject matter, must be decided on a case-by-case basis in light of the particular claim limitations, patent specification, and invention at issue. Here, the claim limitations are more specific and recite an improved method for overcoming hacking by ensuring that the authentication function is normally inactive, activating only for a transaction, communicating the activation within a certain time window, and therefore ensuring that the authentication function is automatically deactivated. The specification explains that these features in combination with other elements of the claim constitute an improvement that increases computer and network security, prevents a third party from

² This drew a concurrence from Judge Reyna, who said it was improper to proceed to step two of the *Alice* framework without first addressing step one. (Under step one, Judge Reyna would have concluded that the claims were patent eligible.)

fraudulently identifying itself as the user, and is easy to implement and can be carried out even with mobile devices of low complexity.

Like *Ancora*, this type of concept is not directed solely to an abstract idea of and improves upon the prior art by providing a simple method that yields higher security.

B. Prior Art; Scope and Content of the Prior Art

1. M & K Holdings, Inc. v. Samsung Electronics Co., Ltd., 985 F.3d 1376 (Fed. Cir. 2021)

The question presented on appeal was whether the PTAB's determination that certain working group documents submitted during the standards-setting process for High Efficiency Video Coding ("HEVC") were printed publications was supported by substantial evidence. The Federal Circuit concluded that it was.

The appellant first argued that while the standards-setting body may have been prominent and well known, the input documents relied upon in the IPR proceedings were not. The Federal Circuit explained that this argument

misunderstands the Board's finding of prominence. While a showing that the references themselves were prominent would likely establish public accessibility per se, such a showing is not required. The relevant inquiry is whether the channel through which the references were publicized is prominent or well-known among persons of ordinary skill in the art.

The appellant also argued that the search capabilities on the JCT-VC website were insufficient to allow a person of ordinary skill in the art to locate the input documents exercising only reasonable diligence. To locate the input documents, a skilled artisan would have had to navigate to the correct meeting page and then run a search on the title, instead of being able to search the contents of the documents. The Federal Circuit rejected this argument because the searching methodology was not insufficient. The Court explained that "[t]he law regarding public accessibility is not as restrictive as M & K suggests—a website's landing page is not required to have search functionality. Instead, given the prominence of JCT-VC, the dispositive question is whether interested users of the JCT-VC website could have located" the references through reasonable diligence. The evidence also showed that the POSITA would have understood that the website was structured to support the work of the JCT-VC in developing HEVC such that the fact that the materials were organized by meeting did not detract from a conclusion of public accessibility.

The Federal Circuit also rejected the argument that Samsung was required to prove that those skilled in the art had actually accessed the documents. Nor was Samsung required to prove that the oral presentations of the papers during the standards meetings disclosed the exact material that Samsung relied upon to show unpatentability.

2. Raytheon Technologies Corp. v. General Electric Co., 993 F.3d 1374 (Fed. Cir. 2021)

This decision addresses the question of when a reference needs to have a self-enabling disclosure in the context of an obviousness analysis. As a general matter, there is no absolute legal requirement that a reference used in an obviousness combination be self-enabling so long as the overall evidence of what was known at the time of invention establishes that a skilled artisan could have made and used the claimed invention.

In this case, the patentee submitted unrebutted evidence that a prior art reference relied upon in an obviousness combination disclosed “highly aggressive performance parameters for a futuristic turbine engine” that relied upon nonexistent composite materials. One reference, a 1987 reference published by NASA, described an advanced engine design that would use composite materials to obtain aggressive performance parameters. The evidence of record demonstrated that the performance parameters were unachievable even today. When the patentee raised this issue before the Board, the petitioner argued that the question of whether a POSITA would have been able to obtain the claimed power density was irrelevant to whether the engine could be made without undue experimentation. The Board agreed with the petitioner and concluded that the claims had been proven to be obvious. Because the prior art failed to enable the claimed subject matter, the Federal Circuit reversed the finding of unpatentability on obviousness grounds.

The relevant patent claims related to a gas turbine engine for an aircraft. The recited certain specifications including “a power density Sea Level Takeoff greater than or equal to 1.5 lbf/in³ and less than or equal to 5.5 lbf/in³ and defined as thrust in lbf measured by a volume of the turbine section in in³ measured between an inlet of a first turbine vane in said second turbine to an exit of a last rotating airfoil stage in said fan drive turbine.” Dependent claims required that “the fan drive turbine has from three to six stages,” and “said number of fan blades is less than 18 and the second turbine has two stages.” Dependent claim 15 required a claimed speed change system to have a “gear reduction.”

In reversing the Board’s determination, the Federal Circuit started with the proposition that “[t]o render a claim obvious, the prior art, taken as a whole, must enable a skilled artisan to make and use the claimed invention.” Nevertheless, “a prior art reference asserted under § 103 does not necessarily have to enable its own disclosure” This does not mean, however, that enablement plays no role in an obviousness inquiry. Specifically, “the evidence of record must still establish that a skilled artisan could have made the claimed invention.”

Here, the Board erred by examining whether the prior art NASA reference enabled a skilled artisan to determine the power density without undue experimentation—rather than whether it enabled the POSITA to make a turbo fan engine with the claimed power density. The only evidence in the record on the question of whether the NASA reference was enabling to create the claimed engine showed that the prior art failed to enable the claimed subject matter. That petitioner did not attempt to rebut this argument was dispositive here because there was no evidence in the record to support the Board’s determination under the correct legal standard.

3. Valve Corporation v. Ironburg Inventions Ltd., 8 F.4th 1364 (Fed. Cir. 2021)

This was an appeal from mixed final written decisions of the PTAB. There were several issues raised on appeal. This summary addresses the questions of authentication and public accessibility of purported prior art. Of interest is how the Federal Circuit decided that a copy of an exhibit submitted with the Petition was authentic based on a similar document found in certified file histories which, although not identical, was in substance the same. The Federal Circuit then determined that the record could not support any conclusion other than the reference was publicly accessible.

The Court first addressed the question of authenticity. The relevant exhibit was “a printed copy of an online review of an Xbox 360 controller” The IPR petitioner contended that this “was prior art because it was a printout of the same online article by Dave Burns—the Burns article—that was cited and enclosed in the prosecution histories of the ’688 patent, ’229 patent and another one of Ironberg’s patents . . . and those earlier documents were prior art.”

The Federal Circuit “first addressed the Board’s determination that the exhibit was not shown to be prior art because it was not shown to be the same as the documents in the prosecution history.” The Federal Circuit held that the Board had an obligation to perform a comparison of the documents in the file history with the exhibit—even without witness testimony to that effect. “Authentication by comparison is routine.”

The Board appears to have held that it was not obligated to compare the two because Valve provided no testimony that the two were identical. There is no requirement that such testimony be supplied. Rule 901(b)(3) of the Federal Rules of Evidence contemplates comparison by the ‘trier of fact,’ and, as noted, that is done routinely. . . . The Board had an obligation to make the comparison, as Rule 901(b)(3) contemplates and as the cases require.

The Federal Circuit pointed to four facts as constituting “overwhelming evidence” that a copy of the trial exhibit found in the file histories (i.e., the “’525 Burns article”) is prior art, and thus, the exhibit relied upon in the Petition, which was substantively the same, is also prior art. First, the article itself suggests that it had a promotional purpose by stating that “[f]or more info and to buy visit” a particular webpage. Second, a patent examiner found the Burns article to have been published at least two years before the critical date, and this was a “factual finding[] from a legally authorized investigation,” and had sufficient guarantees of trustworthiness (and thus was not hearsay). Additionally, the Federal Circuit endorsed the use of the Wayback Machine as a way to obtain older references. “District courts have taken judicial notice of the contents of web pages available through the Wayback Machine ‘as facts that can accurately and readily be determined from sources whose accuracy cannot reasonably be questioned.’ . . . We agree.” Third, during prosecution the applicants represented that the Burns article was published in October 2010 and confirmed this in litigation. The Federal Circuit rejected the argument that this was an improper use of an information disclosure statement because it was not the mere inclusion of the reference

on the IDS, but instead how they characterized the document in the IDS that was relevant. Finally, the examiner had located the document through a “brief” internet search. Because the legal standard is a reasonably diligent search, the examiner’s brief search for prior art was highly probative evidence that the Burns article was publicly accessible.

C. *Obviousness*

1. Canfield Scientific, Inc. v. Meloscan, LLC, 987 F.3d 1375 (Fed. Cir. 2021)

This decision serves as a reminder that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does not more than yield predictable results.” Here, the patent claims were directed to systems for identifying skin cancers. A person is placed in an enclosure and cameras are vertically and laterally spaced with respect to each other and light sources spaced peripheral to the imaging devices. The claimed cameras had to be on opposite sides of a centerline of an enclosure. The patent challenger applied several references in combination and the Board concluded that there was not a sufficient showing of motivation to combine the references to arrive at the claimed subject matter. The Federal Circuit reversed as to the independent claims and remanded for adjudication of the dependent claims.

One reference, Voigt, taught a system with cameras and lights, but the subject was to be placed against a wall:

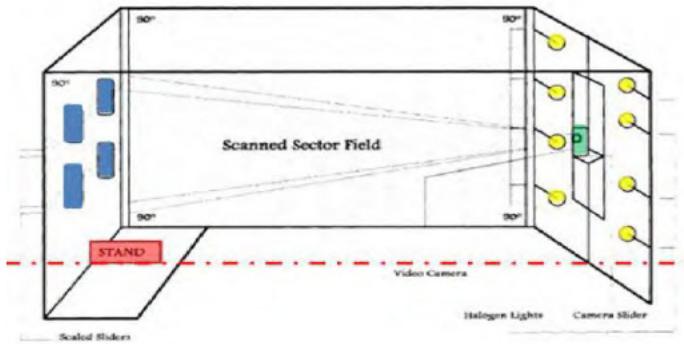
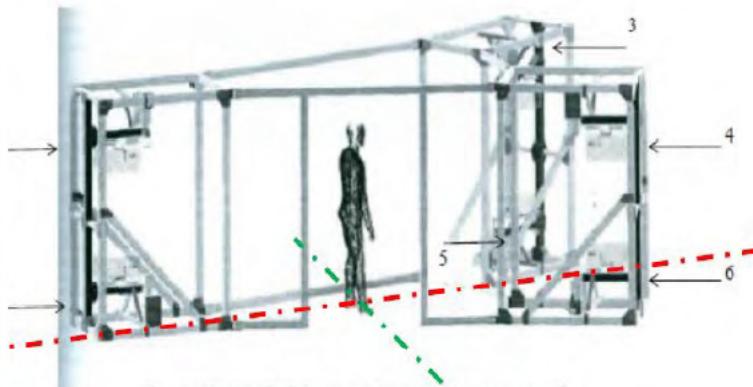


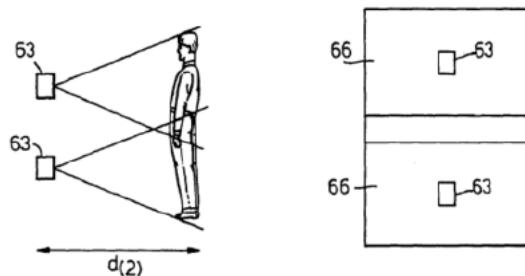
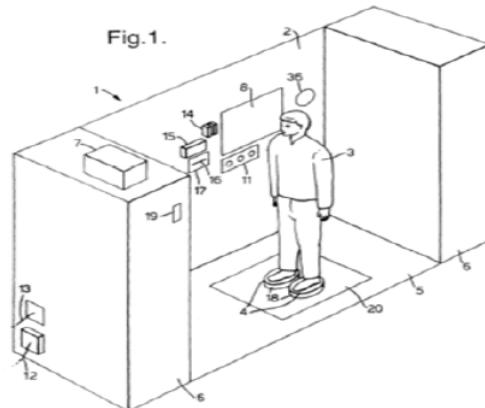
Fig. 1 (annotated by Canfield to show centerline)

A second reference, Hurley, illustrates a device in which a subject stands in the middle of the enclosure and is imaged to measure apparel (or to have other body measurements taken). This is shown below:



The Board determined that a POSITA would not have been motivated to combine Voigt and Hurley because Voigt's back wall would have blocked Hurley's rear cameras.

A third reference, Crampton, shows an “avatar kiosk” that includes horizontally and vertically placed cameras and lights around the subject with the subject standing between the cameras. Crampton also teaches that “image resolution is enhanced by the use of multiple cameras from various angles” This is shown below:



The Board concluded that a POSITA would not have had a reasonable expectation of succeeding in combining Crampton and Voigt because Voigt placed the subject along the wall.

A fourth reference to Daanen, teaches that the use of multiple cameras and lights around the subject increases resolution and reduces shadowing effects. The Board concluded that the petitioner had not sufficiently explained why a POSITA would have looked to Daanen and increased the number of cameras and position them when both Voigt and Hurley already disclosed specific arrangements of multiple cameras. According to the Board, the

Petition is devoid of any persuasive explanation of how Voigt's position framework could have been modified to simultaneously employ both Hurley's arrangement of imaging sensors and Daanen's arrangement of arrays, or why a person of ordinary skill in the art would have had reason to simultaneously use both Hurley's imaging sensors and Daanen's arrays.

On appeal, the appellant argued "that it would have been obvious to use known or obvious multiple imaging systems and known or obvious enclosures having the object being imaged at the center of the enclosure." Voigt places the object against a wall of the enclosure; Hurley and Crampton show the object placed at the center of the enclosure. Applying *KSR*, the Court reiterated that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."

The prior art showed the subject placed at different locations within enclosures and cameras laterally and vertically spaced with respect to each other. The claims merely recited variations of these concepts. Therefore, the Federal Circuit reversed the Board.

2. Becton, Dickinson & Co. v. Baxter Corp. Englewood, 998 F.3d 1337 (Fed. Cir. 2021)

This was an appeal from the final written decision of the PTAB in which the Board concluded that Becton—the IPR petitioner—had not shown that the challenged claims were unpatentable. The Federal Circuit reversed the Board's decision because it made two errors in assessing the prior art and in its understanding of the claimed subject matter.

The patent at issue, U.S. Patent No. 8,554,579, relates to systems and methods for telepharmacy in which data is collected and sent to a remote pharmacist for approval. The claimed subject matter included a screen displayed to the user in which an "operator" can "highlight" prompts to receive additional information about certain steps they need to undertake. The claim also required that "each of the steps must be verified as being properly completed before the operator can continue with the other steps of the drug preparation process . . ." These two aspects of the claim were central to the appeal and the Federal Circuit concluded that the Board erred as to its assessment of each of them.

With respect to the verification step, the Board construed the phrase to require that "the system will not allow the operator to proceed to the next step until the prior step has been verified." The Board also rejected the notion that this limitation imposed a requirement for an automatic trigger or system function causing the verification. This construction was not contested on appeal. The prior art reference relied upon in the Petition, Alexander, stated that "a remote pharmacist may

supervise pharmacy work as it is being performed. . . . [A] remote pharmacist may verify each step as it is performed and may provide an indication to a non-pharmacist performing the pharmacy that the step was performed correctly.” The Board interpreted this passage as being different than the claimed subject matter which required that the pharmacist “must” verify each step. The Board’s determination was not supported by substantial evidence because read in context, when the pharmacist is involved, the non-pharmacist is not allowed to proceed without the pharmacist’s verification. Baxter’s arguments to the contrary were unavailing.

As to the “highlighting” limitation, the prior art disclosed highlighting various information displayed on a screen such as patient characteristics and other references disclosed providing drug preparation steps on a computer. But, according to the Board, the petitioner had not sufficiently explained “why [the prior art] teaching to highlight patient characteristics when dispensing a prepackaged medication would lead one of ordinary skill to highlight prompts in a drug formulation context to receive additional information relative to one particular step in that process, or even what additional information might be relevant.” The Federal Circuit explained that the Board erred by looking only at one prior art reference for a determination of what information might be relevant to present to a user. “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” The expert testimony was one-sided on this issue in favor of the petitioner and thus the Board’s conclusion was not supported by substantial evidence.

Finally, the Federal Circuit rejected the argument that a patent which is issued, but later canceled in reexamination cannot constitute prior art under § 102(e) because it was canceled. “The text of the statute requires only that the patent be ‘granted,’ meaning that the ‘grant[]’ has occurred. 35 U.S.C. § 102(e)(2) (pre-AIA). The statute does not require that the patent be currently valid.”

3. Eli Lilly & Co. v. Teva Pharm. Int’l GmbH, 8 F.4th 1331 (Fed. Cir. 2021)

This was an appeal from the final written decision of the PTAB following inter partes review of three patents related to methods for treating headaches using monoclonal antibodies. The Board determined that the petitioner had not shown that the claims were unpatentable. The Federal Circuit affirmed. Several issues were raised. The first related to whether the preambles of the claims were limiting. That issue is addressed earlier in this outline. The Court also addressed the question of whether the Board’s conclusion that Lilly had not shown a reasonable expectation of success.

This decision serves as a reminder that it is not enough that a patent challenger show that a person of ordinary skill in the art would have had been motivated to combine prior art references to arrive at the claimed subject matter. Obviousness also requires that “the skilled artisan would have reasonably expected to achieve success” at achieving the claimed invention—here, a treatment. In this case, the Board made sufficient fact findings after a detailed review of the evidence and concluded that Lily had not met its burden of proof. The Federal Circuit declined to disturb the Board’s conclusion.

4. Teva Pharm Int'l GmbH v. Eli Lilly & Co., 8 F.4th 1349 (Fed. Cir. 2021)

This was an appeal from final written decisions by the PTAB following three inter partes reviews. In those decisions, the PTAB determined that the petitioner had demonstrated that challenged claims related to humanized antibodies that antagonize CGRP and thus inhibit its activity in the body by targeting and binding to the CGRP ligand were unpatentable as obvious. The antibodies are useful for treating certain conditions, such as migraines.

The appellant challenged several aspects of the Board's obviousness analysis, but this summary focuses on the Federal Circuit's discussion of secondary considerations and how its decision in *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366 (Fed. Cir. 2019), applied in this case. Specifically, Teva contended that its product AJOVY® and petitioner's product Emgality® enjoyed substantial commercial success. Teva argued that the success of these products had a nexus to the challenged claims because the products were coextensive with the claims:

It has long been recognized that a patentee is entitled to a rebuttable presumption of nexus between the asserted evidence of secondary considerations and a patent claim if the patentee shows that the asserted evidence is tied to a specific product and that product *is* the invention disclosed and claimed. . . . The presumption applies when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them. . . . Conversely, when the thing that is commercially successful is not coextensive with the patented invention—for example, if the patented invention is only a component of a commercially successful machine or process, the patentee is not entitled to a presumption of nexus.

Much has been written discussing the “coextensiveness” requirement for the presumption of nexus, and in *Fox Factory* we attempted to summarize the current state of the law. We rejected attempts to reduce the coextensiveness requirement to an inquiry into whether the patent claims broadly cover the product that is subject of the evidence of secondary considerations. . . . Rather, we explain, the degree of correspondence between a product and a patent claim falls along a spectrum. . . . At one end of the spectrum lies perfect or near perfect correspondence, and at the other end lies no or very little correspondence. . . . Although we do not require the patentee to prove perfect correspondence to meet the coextensiveness requirement, what we do require is that the patentee demonstrates that the product is essentially the claimed invention. . . . Whether a product is coextensive with the patented invention, and therefore whether a presumption of nexus is appropriate given case, is a question of fact.

Bound up with the coextensiveness requirement is the issue of unclaimed features in the commercial product, which we also addressed in *Fox Factory*. . . . We have never held that the existence of one or more unclaimed features, standing alone, means nexus may not be presumed. . . . Indeed, like the coextensiveness requirement itself, the concept of unclaimed features is best viewed as part of a spectrum. Toward one end of the spectrum, we have said that if the unclaimed features amount to nothing more than additional insignificant features, presuming nexus may nevertheless be appropriate. . . . Toward the other end of the spectrum, we have said that a patent claim is not coextensive with the product that includes a critical unclaimed feature that is claimed by a different patent and that materially impacts the product functionality.

The Board viewed the Federal Circuit's discussion in *Fox Factory* as not making a distinction between "critical" features and those that "materially impact" the functionality of the product. Therefore, "the Board concluded that in order to defeat a presumption of nexus, patent challenger need only show that the unclaimed feature materially affects the functioning of the product that is alleged to be coextensive with the claim."

The Federal Circuit rejected the Board's conclusion insofar as it announced the bright line rule that a presumption of nexus does not apply if an unclaimed feature materially affects the functioning of a product that is alleged to be coextensive with the claim. This would lead to any material impact by some unclaimed feature defeating nexus.

Such a rule would be unsound. For example, a claim to a new and unobvious pharmaceutical compound would surely have a nexus to the marketed finished product sold to consumers, although that finished product will almost always contain excipients such as solubilizers, antioxidants, stabilizers etc., that materially affect its functionality. Such excipients should not reasonably be found to destroy the nexus between the claim and the product.

Even though the Board erred in its interpretation of the law, the Board's findings were sufficient for the Federal Circuit to conclude they were correct under the correct legal standard. Important to the Federal Circuit's analysis was the fact that the claims in this case were described in

terms of their function—in particular, their ability to bind to the CGRP ligand. . . . As we have recently noted, functional claim language can lead to broad claims, especially when there are no structural limitations to clearly define the scope. . . . A claim to 'anything that works hardly has nexus to any particular product. Thus, we reject the strained comparisons that the parties and the

Board have made between the facts of this case and the facts in other cases dealing with the presumption of nexus. . . .

Because the claims in this case have a broad scope due to their lack of structural limitations, the unclaimed features in the commercial products cited here are of particular importance to the coextensiveness analysis. . . .

In view of the extremely broad scope of the functionally claimed antibodies of the challenged claims and the unclaimed features that undisputedly materially affect how AJOVY® and Emgality® function as humanized anti-CGRP antagonist antibodies, no reasonable fact finder could conclude that that point [the point at which the differences between a product and a patent claim have become so significant that nexus cannot be presumed] has not been crossed in this case.

A second question raised regarding secondary considerations was whether the Board was correct when it did not give much weight to evidence of a license to the challenged patents. The issue was that the license encompassed 188 patents and there was no showing that the motivation to enter the license was to gain access to the technology covered by the three patents at issue on the appeal as opposed to some other patent rights licensed under the agreement. The patentee had to present more evidence to show a nexus between the license agreement and the patent claims at issue here before these facts could be weighed more heavily in support of nonobviousness.

5. University of Strathclyde v. Clear-Vu Lighting LLC, No. 2020-2243 (Fed. Cir. Nov. 4, 2021)

This is an appeal from a final written decision of the PTAB finding certain claims to be obvious over combinations of prior art. The Federal Circuit reversed.

The patent at issue claimed a method of disinfecting air, surfaces, or materials using certain wavelengths of light. The method was designed to “inactivate” certain antibiotic resistant bacteria “without using a photosensitizer.” Performing the method without a photosensitizer overcame issues with the need to apply a photosensitizer to the bacteria to be inactivated.

The Board concluded that the claims were obvious based on two prior art references. The first reference disclosed using a photosensitizer on certain bacteria known to cause acne. The reference disclosed light of the appropriate wavelength and demonstrated that the degree of inactivation of the bacteria increased with increasing light intensity. The second reference performed testing on MRSA, a known antibiotic resistant bacteria, and did not use a photosensitizer. Critically, the reference did not show that the bacteria were inactivated. Nevertheless, the Board concluded that the combined teachings disclosed inactivating bacteria without using a photoensitizer and found that the person of ordinary skill in the art would have expected success in making the proposed combination and inactivating the bacteria.

Applying substantial evidence review to the Board's fact-findings, the Federal Circuit reversed. First, the Federal Circuit examined the prior art and concluded that the second reference suggested to the person skilled in the art that irradiating the bacteria with light of the specified wavelengths would not render the bacteria inactive. "We find it particularly relevant that [the second prior art reference] itself disclosed such a photosensitizer-free embodiment and was wholly unsuccessful in achieving inactivation."

With respect to whether a person skilled in the art would have reasonably expected to succeed in making the claimed combination, the Board concluded that a person having ordinary skill in the art would have expected that MRSA could be inactivated by certain wavelengths of blue light. And, the Board concluded that the person having ordinary skill in the art would have understood that this could be done without the use of a photosensitizer.

The Federal Circuit concluded that the Board's conclusion was based on conjecture. Specifically, while the parties agreed that MRSA naturally produces endogenous porphyrin and because of this they naturally produced a photosensitizing element, the facts of record suggested that the absence of an added photosensitizing element would not have resulted in inactivation of the bacteria. Specifically, both the second prior art reference and an earlier study by the same authors suggested that without a photosensitizing agent, the bacteria would not be inactivated. While the patentee presented expert testimony on the issue, the Board ruled that the testimony was not supported by underlying facts or data. But, the Federal Circuit gave that ruling no deference because the expert's testimony was in fact discussing an article by the same authors as the second reference.

[N]ot only is there a complete lack of evidence in the record that any bacteria were inactivated after exposure to 407-420 nm blue light without using a photosensitizer, there is other evidence showing others had *failed* to inactivate MRSA . . . without using a photosensitizer, despite experimenting with different light doses and different wavelength ranges of blue light. we have found that such failures undermine a finding of a reasonable expectation of success.

6. Intel Corporation v. Qualcomm Incorporated, 21 F.4th 784 (Fed. Cir. 2021)

This was an appeal from the PTAB after an inter partes review. The Board concluded that Intel had succeeded in challenging some claims but not others. Intel was partially successful in opposing Qualcomm's motion to substitute claims. Intel appealed the Board's final written decisions on the issues it lost on. This decision addresses several issues. The obviousness analysis reflects how the Federal Circuit believed that the Board's decision varied from Supreme Court's decision in *KSR* when it came to the assessment of Qualcomm's proposed substitute claims.

Intel proposed a modification to the prior art that Intel contended would have improved energy efficiency. Intel's rationale proceeded in two steps. First, a POSITA would have sought to improve energy efficiency by shutting off aspects of the circuits when they were not in use. Second,

when doing so, this would have triggered a known problem to which a prior art switch discussed in the background of the Burgener reference offered a solution. The Board rejected this theory as (1) being too generic, (2) the prior art switch had shortcomings, and (3) the combination would have been unsuitable for its intended purposes.

To support its first rationale, the Board cited to *ActiveVideo Networks, Inc. v. Verizon Communications, Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012). The Federal Circuit explained that this decision “didn’t denounce energy efficiency as per se insufficient as the Board’s decision suggests,” but instead that case addressed expert testimony that bore no relation to any specific combination of references and did not explain why the POSITA would have combined references in the way the claimed invention does. The Federal Circuit explained that on the record, Intel’s discussion of how any why the prior art would have been modified to arrive at the claimed subject matter was not too conclusory. This was an example of Intel fitting “the teachings of multiple patents together like pieces of a puzzle,” which might lead to a conclusion of obviousness under *KSR*.

As to the problems of the Burgener reference’s prior art switch, the Federal Circuit explained that the Board misapplied the Federal Circuit’s caselaw. “It’s not necessary to show that a combination is the best option, only that it is a suitable option.” *PAR Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1197-98 (Fed. Cir. 2014). Finally, the Federal Circuit concluded that the Board incorrectly looked to the intended purposes of the prior art references themselves, which “does not control.”

7. Moderna Tx, Inc. v. Arbutus Biopharma Corp., No. 2020-2329 (Fed. Cir. Dec. 1, 2021)

This appeal presented questions of standing and obviousness. Unlike the other appeal that Moderna brought against Arbutus from the PTAB (summarized later in this outline), in this case the Court concluded there was standing due to Moderna’s development and shipment of COVID-19 vaccines. The Court then addressed the question of obviousness and affirmed the Board’s conclusion that the claims were not shown to be obvious.

The claims at issue here related to a “nucleic acid-lipid particle” that claimed certain constituent components present in certain amounts claimed as ranges. All but one of the ranges was disclosed in the combined teachings of the prior art, and the petitioner contended that the skilled artisan could have derived the fourth range from the teachings of the references. Thus, the petitioner argued that a presumption of obviousness should have applied.

The Federal Circuit left unanswered the question of whether a presumption of obviousness could apply when the ranges are not explicitly disclosed in the prior art. Instead, it concluded that Moderna failed to show that the overlapping range was taught by the prior art in the first instance. The first flaw identified by the Federal Circuit was that Moderna assumed that each of the variables was able to be manipulated over the full ranges set forth in the references. Instead, here, the record showed that the “lipid components of the nucleic acid-lipid particle are interdependent, and they interact with each other unpredictably.”

Even in cases with overlapping ranges involving multiple components, we have held that evidence that the components “interacted in an unpredictable or unexpected way could render the combination nonobvious.” *In re Applied Materials, Inc.*, 692 F.3d 1289, 1298 (Fed. Cir. 2012). That holding applies even more strongly here, where the assumption necessary to derive the implicit overlapping range is itself undermined by the unpredictable interactivity between the components.

The Court also rejected Moderna’s routine optimization arguments. Specifically, it concluded that Moderna failed to put forth evidence regarding the interdependence of the claimed lipid components and how the adjustments that were allegedly routine would have affected the nucleic acid-lipid particle as a whole. “The unpredictable interactivity between the various lipid components renders the claims of the ’069 patent nonobvious.”

8. Teva Pharm. USA, Inc. v. Corcept Therapeutics, Inc., No. 2021-1360
(Fed. Cir. Dec. 7, 2021)

The patent at issue in this case involved a method of treating Cushing’s syndrome in a patient by reducing a dosage of mifepristone to 600 mg per day and administrating a strong CYP3A inhibitor. The prior art included a label that instructed physicians to administer no more than 300 mg per day of mifepristone when administrating a strong CYP3A inhibitor, but when not doing so, the physician could administer a dose of up to 1200 mg per day. The PTAB found that the petitioner failed to prove a reasonable expectation of success in combining the prior art to achieve the claimed invention. The PTAB also refused to apply precedents regarding prior art that encompasses claimed ranges.

As to the reasonable expectation of success analysis, the Federal Circuit made it clear that the person of ordinary skill in the art must have a reasonable expectation of success in achieving the claimed invention—it must be “tied to the scope of the claimed invention.” Therefore, Teva needed to prove that a person of ordinary skill would have had a reasonable expectation of success in administering 600 mg/day doses of mifepristone while administering a strong CYP3A inhibitor. This did not require Teva to prove that safety would have been precisely predicted. However, here, the art and evidence did not establish a reasonable expectation of success in achieving the claimed subject matter.

As to the application of cases regarding obviousness of claimed ranges, the Federal Circuit explained that the evidence showed that the maximum safe dosage of mifepristone when a strong CYP3A inhibitor was being administered was thought to be 300 mg/day. “The Board’s finding that the prior art ranges do not overlap with the claimed ranges is supported by substantial evidence.” It did not matter that the prior art taught a range of 300 mg to 1200 mg/day when a strong CYP3A inhibitor was not being administered because that was not what was claimed.

D. Written Description

1. Juno Therapeutics, Inc. v. Kite Pharma, Inc., 10 4th 1330 (Fed. Cir. 2021)

This is an appeal from a denial of judgment as a matter of law on various issues, which resulted in a final judgment in excess of \$1.2 billion. One of the issues raised on appeal was the sufficiency of the written description. That was the only issue the Federal Circuit reached because it concluded that no reasonable juror could have concluded that the written description supported the full scope of the claims.

The patent at issue related to a chimeric T cell receptor encoded with a nucleic acid polymer. The chimeric T cell receptor included, among other things, “a binding element that specifically interacts with a selected target.” The binding element “determines what target molecule or antigen the CAR [i.e., chimeric antigen receptor] can recognize or bind to. The binding element was recited generically and did not identify what the element was or what it targeted. One type of binding element disclosed in the patent was a single-chain antibody variable fragment or “scFv.” These fragments include unique amino acid sequences that dictate whether and how an antibody, and thus an scFv, binds to a target.

The Federal Circuit addressed the scope of these claims and the requirements of the written description requirement:

For genus claims using functional language, like the binding function of the ScFvs claimed here, the written description must demonstrate that the applicant has made a generic invention that achieves the claim result and do so by showing that the applicant has invented species sufficient to support a claim to the functionally-defined genus. . . . The written description requirement ensures that when a patent claims a genus by its function or result, the specification recites sufficient materials to accomplish that function. Generally, a genus can be sufficiently disclosed by either a representative number of species falling within the scope of the genus or structural features common to the member of the genus so that one of skill in the art can visualize or recognize the members of the genus.

* * * * *

To satisfy the written description requirement, the patent needed to demonstrate to a skilled artisan that the inventors possessed and disclosed in their filing the particular species of scFvs that would bind to a representative number of targets. Kite demonstrated by clear and convincing evidence that this patent does not satisfy the written description requirement for the claims issue and this record does not contain substantial evidence upon which a jury could have concluded otherwise. The disclosure of one scFv that binds to CD19

and one scFv that binds to a PSMA antigen on prostate cancer cells in the manner provided in this patent does not provide information sufficient to establish that a skilled artisan would understand how to identify the species of scFvs capable of binding to the limitless number of targets as the claims require.

The Federal Circuit explained that patentees did not have an obligation in each case to disclose the nucleotide or amino acid sequences of the claimed scFvs to satisfy the written description requirement when such sequences are already known in the prior art. . . . But, the written description must lead a person of ordinary skill in the art to understand that the inventors possessed the entire scope of the claimed invention.

The patent must provide some means for identifying which scFvs would bind to which targets based on, for example, some “common structural characteristics or shared traits.” The failure of the patent to provide even structural features common to the members of the genus was fatal and thus the patent failed to contain a written description sufficient for the inventors to show that they had possession of the full scope of the claims.

2. Indivior UK Limited v. Dr. Reddy's Laboratories S.A., No. 2020-2073
(Fed. Cir. Nov. 24, 2021)

This decision addresses the question of the necessary level of written description for claimed ranges. The PTAB held that certain challenged claims were unpatentable as being anticipated by the earlier publication of a parent application and that one challenged claim was not unpatentable. The linchpin of the Board’s determination was whether the claims of the challenged patent were entitled to the benefit of the earlier-filed application’s filing date. The Federal Circuit affirmed.

The patent claims at issue pertained to a mucoadhesive film. Claim 1 required the claimed film to have “about 40 wt% to about 60 wt% of a water soluble polymeric matrix.” The patentee argued that Tables 1 and 5 disclose formulations with 48.2% and 58.6% polymer, that the specification discloses a film composition with “a film forming polymer in an amount of at least 25% by weight of the composition,” and that the combination of these disclosures discloses the claimed range. The patent challenger disagreed because, in its view “a skilled artisan would not have discerned the claimed ranges because the ’571 application does not disclose any bounded range, only a lower end point and some exemplary formulations.

The Federal Circuit agreed with the Board. The Federal Circuit noted that “the range was not expressly claimed in the ’571 application; if it had been, that could have constituted written description support.” The Federal Circuit explained:

We have said that it is not necessary that the limitations of a claim be set forth in *haec verba*, . . . or presumably, in the case where

numbers, nor words, are at issue, in haec numera. But the specification must indicate with some clarity what the claim recites. In the case of the claimed range, a skilled artisan must be able to reasonably discern a disclosure of that range. No range of “about 40 wt % to about 60 wt %” appears in the ’571 application. Moreover, various other indications of the polymeric content of the film are present in the ’571 application, rendering it even less clear that an invention of “about 40 wt % to about 60 wt %” was contemplated as an aspect of the invention.

The specification indicates that “any desired level of . . . polymer” could be used, and in another place the specification said “at least 25%” of polymer can be used, and in another place, the specification refers to “at least 50%” polymer. The Federal Circuit explained that even the disclosure of 50 wt % is “hardly clear support in light of other inconsistent language.”

And, even though examples were provided within the claimed range,

these values do not constitute ranges; they are only specific, particular examples. For written description support of a claimed range, more clarity is required. Here, one must select several components, add up the individual values, determine the aggregate percentages, and then couple those aggregate percentages with other examples in the ’571 application to create an otherwise unstated range. That is not written description of the claimed range.

* * * * *

A written description sufficient to satisfy the requirement of the law requires a statement of an invention, not an invitation to go on a hunting expedition to patch together after the fact a synthetic definition of an invention. “[A] patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion.” *Brenner v. Manson*, 383 U.S. 519, 536 (1966).

With respect to claim 8, which recited an example in which the film comprises about 48.2% of the water soluble polymeric matrix, the claimed value could be calculated by the person of ordinary skill in the art based on examples in the specification. Therefore, the Federal Circuit affirmed the Board’s determination regarding claim 8, though the Federal Circuit observed that “one might see some inconsistency between this result and our above holding concerning the principal appeal.” In other words, because claim 8 was narrower and supported by the written description the alleged prior art reference was not in fact prior art to claim 8 while it was prior art to the broader, unsupported claims.

Judge Linn dissented. He disagreed with the majority’s conclusion that the person of ordinary skill in the art would have needed to cobble various statements and information in the patent together to arrive at a range. He also disagreed that the range was unbounded as disclosed

and instead was between 25%-100% or between 50% and 100%. Finally, he believed that the majority failed to apply binding precedent: *In re Wertheim*, 541 F.2d 257 (CCPA 1976), and *Nalpropion Pharms., Inc. v. Actavis Labs. FL, Inc.*, 934 F.3d 1344 (Fed. Cir. 2019).

3. [Biogen Int'l GmbH v. Mylan Pharmas. Inc., No. 2020-1933 \(Fed. Cir. Nov. 30, 2021\)](#)

The district court determined that claims directed to a method of treating multiple sclerosis (MS) using a “therapeutically effective amount of dimethyl fumarate (DMF) (or other compounds)” where the “therapeutically effective amount” was “about 480 mg per day” were invalid for lack of written description. The Federal Circuit affirmed.

While the specification disclosed ranges of DMF concentration including 100-1,000, 200-800, 240-720, and 480-720 mg/day, the only mention of the 480 mg/day concentration was in a passage that did not list MS as a condition that may be treated using DMF. MS was instead listed elsewhere in the specification among about three dozen other conditions that may be treated with DMF. The Court therefore affirmed the district court’s determination that the patent was invalid for lack of written description because the specification failed to demonstrate that the inventors were in possession of an MS treatment where the dosage was about 480 mg/day. This is another example of a case where the patentee had to cobble together isolated statements from the specification to demonstrate that aspects of the claims were described. “The written-description requirement limits patent protection only to individuals who perform the difficult work producing a complete and final invention featuring all its claimed limitations and publicly disclose the fruits of that effort.” Here, on the record, the district court did not clearly err in concluding that this standard had not been met.

Judge O’Malley dissented and indicated that she would have concluded that there was a difference between clinical efficacy and therapeutic efficacy. One aspect of this case was that the patentee had prevailed in an IPR at least in part because the petitioner could not show that a person of ordinary skill in the art would have reasonably expected success in arriving at the claimed subject matter. Judge O’Malley saw a distinction between the arguments that were made in the IPR and the district court proceedings and concluded that the district court erred in determining that the patentee was judicially estopped from arguing that a person of ordinary skill in the art would have seen a difference between clinical and therapeutic efficacy.

E. *Enablement*

1. [Amgen Inc. v. Sanofi, Aventisub LLC, 987 F.3d 1080 \(Fed. Cir. 2021\)](#)

The district court granted judgment as a matter of law that the asserted claims of two patents were invalid for lack of enablement. The claims recited an “isolated monoclonal antibody” that “when bound to” a proprotein convertase called PCSK9, binds to at least one of 15 different residues and blocks the binding of PCSK9 to LDLR (i.e., LDL cholesterol receptors). These antibodies “are defined by their function: binding to a combinations [sic] of sites (residues) on the

PCSK9 protein, in a range from one residue to all of them; and blocking the PCSK9/LDLR interaction.”

After analyzing its decisions regarding enablement of antibodies, the Federal Circuit explained that

[w]hat emerges from our case law is that the enablement inquiry for claims that include functional requirements can be particularly focused on the breadth of those requirements, especially where predictability and guidance fall short. In particular, it is important to consider the quantity of experimentation that would be required to make and use, not only the limited number of embodiments that the patent discloses, but also the full scope of the claim.

And, “[w]hile functional claim limitations are not necessarily precluded in claims that meet the enablement requirement, such limitations pose high hurdles in fulfilling the enablement requirement for claims with broad functional language.” Here, the Federal Circuit concluded that while the claims were expressed in “double function” format, “[t]he binding limitation is itself enough here to require undue experimentation.”

In addition to the functional requirements of the claims, the invention is in an unpredictable field of science “with respect to satisfying the full scope of the functional limitations.” The Federal Circuit agreed that the person of ordinary skill in the art would have had to either (1) engage in trial and error screening to identify other antibodies that were not disclosed, but were within the scope of the claim or (2) try to discover the antibodies *de novo* using the randomization-and-screening process disclosed in the patent. “Either way, we agree with the district court that the required experimentation would take a substantial amount of time and effort.” The Court explained that it is “appropriate . . . to look at the amount of effort needed to obtain embodiments outside the scope of the disclosed examples and guidance.”

2. Pacific Biosciences of California, Inc. v. Oxford Nanopore Technologies, Inc., 996 F.3d 1342 (Fed. Cir. 2021)

The patents at issue in this appeal related to methods for sequencing nucleic acid templates. The jury determined that the claims were invalid for lack of enablement. The district court denied the patentee’s motion for judgment as a matter of law on the question of enablement. The Federal Circuit affirmed.

The key here, as it has been in a number of enablement and written description cases in 2021, was the scope of the claims. As the Federal Circuit reiterated, “a patentee chooses broad claim language at the peril of losing any claim that cannot be enabled across its full scope of coverage.” Here, the claims broadly recited a method of determining the sequence of the template nucleic acid without limiting the nature of the template nucleic acid. While the patentee identified some expert testimony elicited on cross examination that a person provided with a particular document (a grant application) would have been able to perform the claimed method,” the Federal Circuit concluded that the record revealed substantial evidence to support the jury’s verdict.

The substantial evidence included testimony that the patentee had not actually reduced the invention to practice. The inventor testified that the patentee had not performed any of the nanopore sequencing techniques recited in the claims at the time the applications were filed, and, in fact, the patentee had never performed such methods at any time. There was also evidence before the jury that the patentee tried to “fool” competitors and “tangle” them up with the way that the patents were drafted. This, coupled with testimony including that those in the field were unable to perform nanopore sequencing on biological DNA until years after the patent was filed, provided substantial evidence to support the jury’s verdict.

F. Claim Definiteness

1. Infinity Computer Prods, Inc. v. Oki Americas, Inc., 987 F.3d 1053 (Fed. Cir. 2021)

This decision addresses what happens when a patentee uses a claim term that is not found in the originally-filed application in inconsistent ways during proceedings before the Patent Office: the claim can be rendered indefinite. In this case, the district court held that the words “passive link” and “computer” rendered patent claims indefinite. The Federal Circuit affirmed.

The patent related to a technique for using a fax machine as a printer and scanner for a computer. According to the patents, “[t]he ‘principal object’ of the claimed invention is ‘to provide a circuit for interfacing a PC and a facsimile to enable the facsimile to be utilized as a scanner or a printer for a PC and to accomplish all of the objectives of a scanner or a printer in a simple straightforward manner through the use of a circuit of highly simplified design and low cost.’” The parties agreed that claim 1 of U.S. Patent No. 6,894,811 was representative. That claim provided:

1. A method of creating a scanning capability from a facsimile machine to a computer, with scanned image digital data signals transmitted through a bi-directional direct connection via a passive link between the facsimile machine and the computer, comprising the steps of:

by-passing or isolating the facsimile machine and the computer from the public network telephone line;

coupling the facsimile machine to the computer;

conditioning the computer to receive digital facsimile signals representing data on a scanned document; and

conditioning the facsimile machine to transmit digital signals representing data on a scanned document to the computer, said computer being equipped with unmodified standard protocol send/receive driver communications software enabling the reception of scanned image signals from the facsimile machine, said transmitted digital fac-simile signals being received directly into the

computer through the bi-directional direct connection via the passive link, thereafter, said computer processing the received digital facsimile signals of the scanned document as needed.

The patents at issue were continuations-in-part of an earlier application. In the earlier-filed application, fax modem circuitry was disclosed as being either inside or outside of the computer, as shown below:

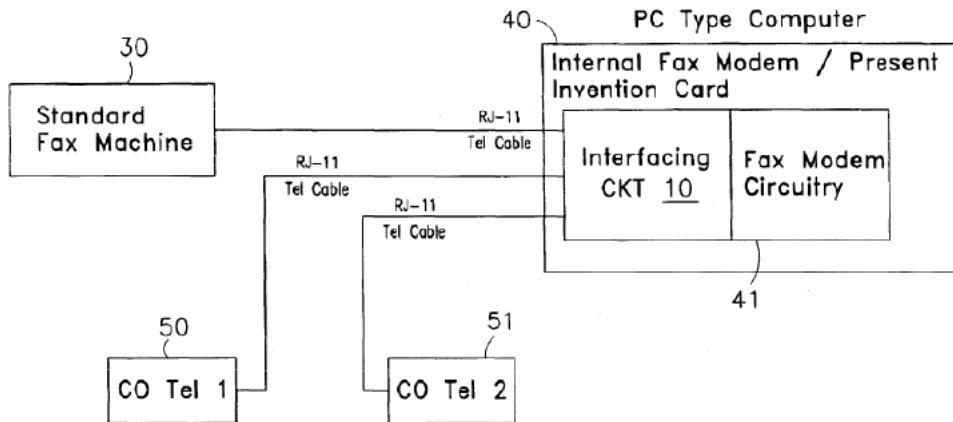
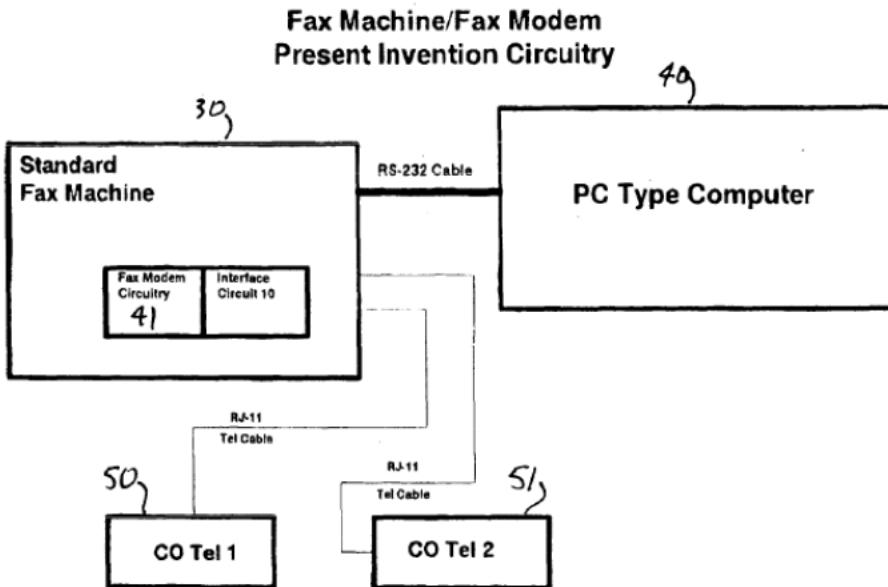


Fig. 2b

In the application that led to the patents-in-suit, the relevant circuitry and modem were disposed within the fax machine:



To secure the patent, the applicant had to distinguish a prior art reference called Perkins. Perkins showed a fax modem that was either between the fax machine and the computer or internal

to the computer on a card. The applicant's first attempt to distinguish Perkins involved arguing that the signals between the computer and the fax machine were uninterrupted by circuits for modulating or demodulating the signals. The examiner was not convinced and pointed to the embodiment disclosed by Perkins in which the modem circuits were within the computer. The applicant would then turn to amending the claim to recite the concept of a "passive link" between the fax machine and the computer. The invention, according to the applicant "does not require any intervening apparatus," while Perkins did. In other words, Perkins required a modem either between or in the computer, while the invention allows the transfer of digital signals between the fax machine and the computer without the need for a modem at the computer interface. In making these arguments, the applicant relied upon the figures that were added in the CIP application, which do not depict a modem between the fax machine and the computer. The applicants further stressed that Perkins modem is a peripheral device regardless of whether it is internal to the computer or external to it because it intercepts data before it is transferred to the I/O bus of the computer. The patent eventually issued.

The patent was subjected to reexamination post-issuance. During reexamination the patentee relied upon the originally filed figures, which show fax modem circuitry within the computer to antedate a potential prior art reference. To make this argument, the patentee contended that the link or cable between the fax and the computer was the passive link without regard to whether any internal circuitry within the computer intercepted the signal and modified it before it reached the I/O bus of the computer. This was inconsistent with the position that it took during original examination, but the examiner agreed with it.

Oki argued that the claims were indefinite because Infinity took conflicting positions on the meaning of "passive link" and "computer" during prosecution. During the claim construction hearing, Infinity's counsel agreed that a POSITA would have had to be reasonably certain where the passive link ended, and the computer began, for the claims to be definite. The district court agreed with Oki and found the claims indefinite.

In affirming the district court's judgment, the Federal Circuit explained that "[i]ndefiniteness may result from inconsistent prosecution history statements where the claim language in the specification on their own leave uncertainty that, if unresolved, would produce indefiniteness." Analogizing the claim construction issue in this case to the construction of the term "molecular weight" in *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1341 (Fed. Cir. 2015), the Court explained that "the claim language and specification do not provide reasonable certainty about crucial aspect of 'passive link,' namely, where it ends. And far from resolving the uncertainty during prosecution, Infinity took conflicting positions during prosecution regarding the scope of 'passive link.'"

The public- notice function of a patent and its prosecution history requires that we hold patentees to what they declare during prosecution. . . . But holding Infinity to both positions results in a flat contradiction, providing no notice to the public of "what is still open to them." . . . Here, one of ordinary skill cannot determine with any reasonable certainty, for instance, whether or not the claims

cover arrangements like the internal-card embodiment of Perkins and the internal-modem embodiments of figures 2b-d. On the record before us, therefore, we agree with the district court that the intrinsic evidence leaves an ordinarily skilled artisan without reasonable certainty as to where the passive link ends and where the computer begins.

IV. INFRINGEMENT

A. Bio-Rad Laboratories, Inc. v. Int'l Trade Commission, 998 F.3d 1320 (Fed. Cir. 2021)

This was an appeal from the Final Determination of the International Trade Commission that one of 10X's products infringed certain asserted patents and one of 10X's products did not infringe another asserted patent. Both parties appealed the decisions that were adverse to them. The issues raised included claim construction, infringement determinations, and questions of indirect infringement and the sufficiency of the evidence for findings of indirect infringement. The Federal Circuit affirmed all aspects of the Final Determination. This summary addresses one of the direct infringement issues.

The patents at issue related to a device called a “chip” that is used in microfluidics to create aqueous droplets that act as mini-test tubes in which a fluid can be subjected to chemical reactions. The claim at issue in Bio-Rad's appeal recited:

A system for forming a plurality of sample-containing droplets suspended in a background fluid, comprising:

a substrate having a bottom surface and a top surface;

a sample well, a background fluid well, and a droplet well each having an upper region protruding from the top surface of the substrate;

a network of channels formed in the bottom surface of the substrate and fluidically interconnecting the sample well, the background fluid well, and the droplet well; and

a droplet generation region defined by the network of channels and configured to generate sample-containing droplets suspended in the background fluid;

wherein the droplet generation region is defined by the intersection of a first channel, a second channel, and a third channel;

wherein the first channel is configured to transport sample-containing fluid from the sample well to the droplet generation region, the second channel is configured to transport background

fluid from the background fluid well to the droplet generation region, and the third channel is configured to transport sample-containing droplets from the droplet generation region to the droplet well; and

wherein the substrate and the upper region of each well are injection molded as a single piece.

The chip accused of infringing this claim—called “Chip GB”—was used by 10X as part of its internal manufacturing processes to make droplets that are then used to generate gel beads. The gel beads are then provided to 10X customers. Chip GB holds one aqueous monomer in one well, an oil in another well, and channels intersect to allow the formation of droplets that are collected in a droplet well. The question was whether the well that holds the monomer was a “sample well” or whether Bio-Rad even had to prove what the well was ultimately used for because the claim recited an apparatus, not an intended use.

The Federal Circuit rejected Bio-Rad’s arguments. First, the parties had agreed to a construction of “sample” that was reflected in the specification itself. Under that construction “sample” meant “a compound, composition, and/or mixture of interest, from any suitable source(s).” The ALJ found, and the ITC confirmed, that the evidence showed that the monomer in the well was not a “sample” and instead was a reagent used to make a gel bead when the material polymerized. The patent distinguished samples from reagents. Based on the evidence, and applying the substantial evidence standard of review, the ITC’s determination was upheld.

The Federal Circuit also rejected the argument that infringement of the claims cannot depend on the substances inside the claimed wells and channels. Setting aside whether the argument was preserved before the Commission, the Federal Circuit explained that

Bio-Rad’s summary of the claim is not remotely close to what the claim says. The claim contains more than 25 lines of text that characterize and define the features of the chip (*e.g.*, wells and channels) by differentiating them from each other based on the material (*e.g.*, sample, background fluid, or droplets) that is contained within them. . . . Inventors are masters of their claims, and the words they use to describe and claim their invention are decisive and binding.

Here, the inventors chose to differentiate the wells by the materials contained in them. Bio-Rad “cannot escape that choice by pointing to the general proposition of law that ‘apparatus claims cover what a device *is*, not what a device *does*.’”

B. Edgewell Personal Care Brands, LLC v. Munchkin, Inc., 989 F.3d 1358 (Fed. Cir. 2021)

The two patents at issue in this case involved cassettes used in diaper pails. This appeal followed a district court claim construction, which led to summary judgment of no infringement.

Two questions were presented on appeal. The first was a claim construction issue that is addressed earlier in this outline. The second question was whether the district court properly concluded that a doctrine of equivalents theory that encompassed an accused product with a “two part cover” would have vitiated the claim limitation of an “annular cover,” when the term “annular cover” was construed to be limited to a one-part cover. The Federal Circuit held that while the district court properly construed the term “annular cover” and the term “tear-off section,” it erred in applying the concept of vitiation to preclude application of the doctrine of equivalents.

“Under the doctrine of equivalents, an infringement theory . . . fails if it renders a claim limitation inconsequential or ineffective. . . . This vitiation doctrine ensures the application of the doctrine of equivalents does not effectively eliminate a claim element in its entirety.” Vitiation, therefore, is a determination that no reasonable jury could determine two elements to be equivalent. The Federal Circuit explained that “[v]itiation has its clearest application where the accused device contains the antithesis of the claim structure.” But, vitiation should not be addressed by identifying a binary choice in which a claim element is either present or not present. In this regard, the district court erred because it evaluated the equivalents question “as a binary choice between a single-component structure and a multi-component structure, rather than evaluating the evidence to determine whether a reasonable juror could find that the accused products performed substantially the same function, in substantially the same way, achieving substantially the same result as the claims.” Here, there was sufficient evidence in the record that would have permitted a reasonable juror to conclude that there was infringement under the doctrine of equivalents.

C. *Lubby Holdings LLC v. Chung*, 11 F.4th 1355 (Fed. Cir. 2021)

At trial the appellant defended against a finding of infringement in his personal capacity by arguing that all activities he undertook were in his capacity acting as an executive of his company. Therefore, he argued that it was necessary to pierce the corporate veil before holding him liable for patent infringement. The Federal Circuit disagreed and affirmed the finding of infringement.

The Federal Circuit explained that piercing of the corporate veil is “not the standard,” and explained that

[c]orporate officers can be personally liable for their own acts of infringement, even if those acts were committed in their corporate capacity. In *Wordtech Systems, Inc. v. Integrated Networks Solutions, Inc.*, 609 F.3d 1308 (Fed. Cir. 2010), we stated that ‘the corporate veil shields a company’s officers from personal liability for direct infringement that the officers commit in the name of the corporation, unless the corporation is the officers’ “alter ego.”

But, this does not change the fact that a person is liable for his own conduct even if committed as a corporate officer.

D. *GlaxoSmithKline LLC v. Teva Pharms USA, Inc.*, 7 F.4th 1320 (Fed. Cir. 2021)

This case involves “skinny labels” in the ANDA context and whether a specific label could support a finding of inducement of infringement under 35 U.S.C. § 271(b). This case was before the Court on a petition for rehearing. The panel granted the petition and reheard the case. Consistent with its past decision, the majority concluded that substantial evidence supported the finding of inducement of infringement. The panel issued a revised decision that attempted to explain that its holding is fact-specific and, given the substantial evidence review, is supported by the evidence.

Under the FDCA, a generic producer can exclude patented uses from its proposed label and, if the label carves out patented uses, it may be approved to market the generic drug for non-patented uses. *See* 21 U.S.C. § 355(j)(2)(A)(viii); 21 C.F.R. § 314.94(a)(8)(iv). “GSK argues that, despite Teva’s section viii certification purporting to carve out one heart failure indication and its deletion of the indication from its partial label, substantial evidence supports the jury’s finding that Teva induced doctors to infringe the method of use claimed in the ’000 patent.”

The Federal Circuit deferred to the jury’s implicit finding that Teva’s label did not properly effect a section viii carve-out. “GSK provided substantial evidence that Teva’s partial label instructed the method of use claimed in the ’000 patent and thus was not a skinny label.” The evidence included expert testimony—supported by both sides’ experts—that the label instructed doctors about the infringing use. The Federal Circuit distinguished this case from *Bayer Schering Pharma AG v. Pupin, Ltd.*, 676 F.3d 1316 (Fed. Cir. 2012), because in *Bayer* there was no evidence that the patented method was indicated by the label, and that was not the case here. The Federal Circuit also rejected the argument that the label, at best, encouraged both infringing and noninfringing uses. Moreover, the Federal Circuit concluded that the jury was entitled to rely upon press releases saying that Teva obtained tentative approval to market a generic version of GSK’s Coreg® to find encouragement of the patented use.

The district court erred in this case by concluding that whether the label instructed an infringing use was a question of law, as opposed to a question of fact. “Whether treating post-MI LVD patients with symptomatic heart failure with carvediol was within the scope of the claims was a fact question. It was for the jury, not this court or the District Court, to resolve.” And, while the record did have conflicting evidence on this fact question, it was within the providence of the jury to resolve those disputes.

GSK presented evidence that Teva’s partial label did not successfully carve out the patented use, and thus, Teva was selling its generic with a label which infringed the method claim. GSK presented evidence that doctors read and consider labels, that Teva’s marketing materials guided doctors to the label and to its website promoting the patented use, that Teva issued press releases encouraging doctors to prescribe carvedilol for the patented use, that Teva’s own employees expected doctors to prescribe carvedilol during the partial label period for the patented uses, and expert

testimony that Teva's actions encouraged doctors to do so. This is substantial evidence from which a reasonable jury could conclude that Teva intentionally encouraged the practice of the claimed method. Accordingly, substantial evidence supports the jury's finding of induced infringement for the partial label period.

The Federal Circuit also affirmed with respect to the "full label," which was added to Teva's generic from 2011 until 2015. "Substantial evidence supports the finding that Teva encouraged physicians to use its carvediol for an infringing purpose during the full label period."

With respect to causation, the Federal Circuit explained that "[t]o establish inducement, a patent owner must show that the accused inducer's actions actually induced the infringing acts of another and knew or should have known that its actions would induce actual infringement." The jury received instructions that Teva must have communicated with the direct infringers and that the direct infringement must be the result of the communication. The record included substantial evidence to support the jury's implicit determination that Teva induced infringement. "The jury had sufficient circumstantial evidence, in the form of labels, marketing materials, catalogs, press releases, and expert testimony, for it to conclude that Teva succeeded in influencing doctors to prescribe carvedilol for the infringing use."

With respect to damages for the acts of inducement, the district court refused to instruct the jury that "GSK must prove that, for every infringing sale Teva made, the direct infringer would have purchased Coreg® rather than another generic producer's carvedilol." The problem that the district court found with this instruction was that the other eight generic manufacturers' uses were infringing uses—not non-infringing uses. And, the damages calculation already accounted for the fact that 17.1% of sales were attributable to the infringing use. "Had another generic producer made those sales, those uses too would have been infringing. The other generic carvedilol producers were, therefore, not noninfringing alternatives."

Judge Prost dissented because she would not have found that the jury's verdict was supported by substantial evidence. In her view, the label did not encourage an infringing use.

E. *CommScope Technologies LLC v. Dali Wireless Inc., 10 F.4th 1289 (Fed. Cir. 2021)*

This decision reverses a judgment of, in part, infringement of one patent based on a claim construction. It also applies the adage that which infringes if later anticipates if earlier. But, since there was no infringement, there was no anticipation.

The patent addressed by the Court relates to wireless communication systems in which a power amplifier is used to boost the signal. Boosting the signal can cause unwanted distortion. Therefore, the patent resolves the problem using a training mode, which employs a feedback loop and lookup tables are updated to create predistortion values that are applied to the signal. The patented device can operate in a training mode or an operating mode.

The asserted claim was a method claim and provided:

A method of operating a power amplifier, the method comprising:

initializing the power amplifier;

performing a training phase comprising:

establishing pre-computed distortion contributions based on pre-compensation training feedback signals representative of output of the power amplifier; and

storing the pre-computed distortion contributions in a lookup table; and

performing an operating phase comprising:

switching a controller off to disconnect signal representative of the output of the power amplifier;

accepting an original value that reflects information to be communicated;

generating a digital lookup table key based on the original value;

retrieving from the lookup table, using the digital lookup table key, a corresponding pre-computed distortion contribution for the original value;

distorting the original value based on the corresponding pre-computed distortion contribution to obtain a distorted value to pre-compensate for the nonlinear characteristics of the power amplifier; and

wirelessly transmitting a pre-distorted signal based on the distorted value.

The disclosed system with the feedback loop in use is shown below:

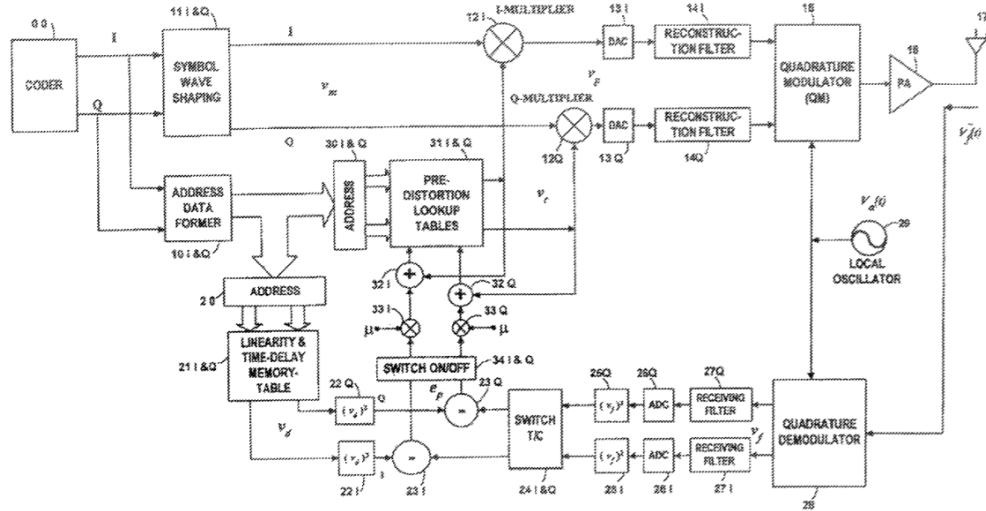


FIG. 3

The disclosed system in the operational mode is shown in the patent's Figure 4, below:

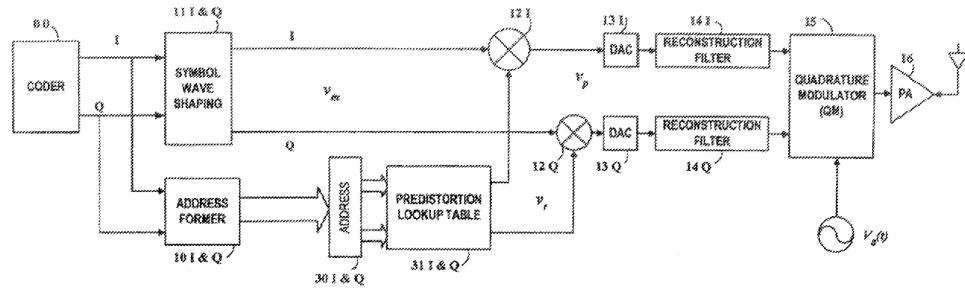
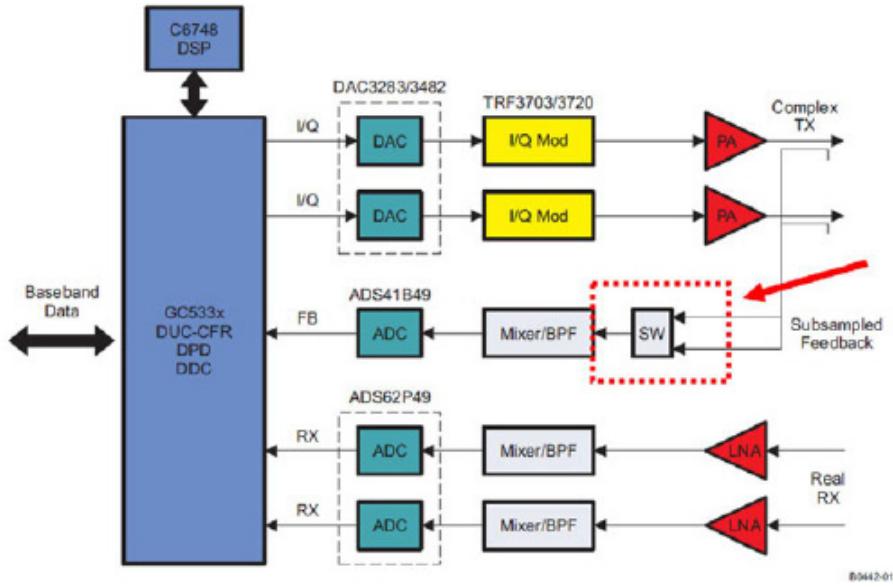


FIG. 4

The accused product used a feedback signal to calculate a predistortion value, but it used two amplifiers. A switch was used to continuously choose between feedback signals from two power amplifiers to calculate the predistortion value. A block diagram related to the accused product is shown below, with the switch shown in the red dashed box:



At trial, a prior art reference that included a switch that selected among a number of different amplifiers, much like the one in the accused product was introduced into evidence and the accused infringer argued that the configuration in the prior art anticipated the claim. The jury disagreed. It rendered a verdict of both infringement and no invalidity.

The district court construed the phrase “switching a controller off” meant “[s]witching a controller to an off status,” and that “off” meant switching the controller to a non-operating state. After determining that the patentee did not preserve its argument that the district court erred when it construed the claim, the Court moved to the second step of the infringement analysis: a comparison between the claim and the accused method.

Despite a lack of clarity about what the patentee’s expert was calling the controller, the Federal Circuit iterated through each possibility and rejected each of them:

In any case, we do not decide which mapping was presented below because Dali points to no evidence showing that any of the following are put in a nonoperating state in the accused FlexWave: (1) the switch itself, (2) the controller itself, or (3) the combination of the switch and the controller. The key portion of Dr. Kennedy’s testimony above never states that either the switch or the controller is rendered nonoperating. Rather, the testimony points to the result that you turn the feedback off rather than the specific mechanism claim to achieve that result—switching a controller off. This testimony from Dr. Kennedy thus does not provide substantial evidence to support the jury’s finding that the FlexWave meets the district courts claim construction.

The Federal Circuit rejected an argument that there was infringement because the functionality required by the claim was performed—i.e., “to disconnected signal representative of

the output of the power amplifier.” The Federal Circuit explained that “the meaning ascribed to the claims is significant” in a literal infringement case, and “the properly construed claim [must] read[] on the accused device exactly.” Therefore, contrary to the patentee’s contention, relying on the claims as construed by the district court was not “hairsplitting” as the patentee argued. Because Dali failed to provide evidence that whatever it was contending was the controller was “nonoperating,” it had not shown infringement.

The Federal Circuit also criticized Dali for taking opposite positions on the question of infringement and validity. “Dali cannot simultaneously argue: (1) that the FlexWave infringes by using a switch that is effectively nonoperating for a single power amplifier when feeding back the signal for the power amplifier, and (2) that Wright does not anticipate, given it has a switch that operates identically to select feedback from multiple power amplifiers.” The following side-by-side comparison from Dali’s brief appears in the opinion to underscore this point:

Infringement	Invalidity
<p>“CommScope’s premise that the controller <i>itself</i> must be turned ‘off’ is also literal nonsense, because something needs to turn the switch back on each time the system goes back to the training phase, and that something is <i>the controller</i>.¹⁰</p> <p>Cross-Appellant’s Br. 44 n.10.</p>	<p>“Claim 1 of the ’521 Patent requires a controller that controls a switch and <i>places itself</i> and the switch in a non-operating state in order to disconnect the [power amplifier] output from the training circuit.”</p> <p>Cross-Appellant’s Br. 47.</p>

“This case falls squarely within the principle that a patent may not, like a nose of wax, be twisted one way to avoid anticipation and another to find infringement.”

F. *Acceleration Bay LLC v. 2K Sports, Inc., 15 F.4th 1069 (Fed. Cir. 2021).*

This was an appeal from the district court’s grant of summary judgment of non-infringement as to four patents. Procedural mistakes and their impact on the outcome of the appeal as to three of the patents are discussed later in this outline. This section discusses the theory of direct infringement presented by the patentee as to the fourth patent.

The district court construed the claim term “a component in a computer system for locating a call-in port of a portal computer” to mean “a *hardware* component programmed to located [sic]

a call-in port of a portal computer.” This stemmed from an agreement that the term “component” signified hardware. Even though the accused infringers did not make any hardware, Acceleration Bay contended that it had a viable theory of infringement under a theory that the accused infringer was the “final assembler” of the accused system because the software controls the processors in the customers’ consoles causing the processors to allegedly operate in a way that satisfies the claims, as in *Centrak, Inc. v. Sonitor Techs., Inc.*, 915 F.3d 1360 (Fed. Cir. 2019).

The Federal Circuit disagreed and explained that “Acceleration Bay misapprehends *Centrak*,” because Acceleration Bay’s theory is that the accused infringers were “making” the claimed system even though they provided no hardware because the accused software runs on them. Instead, the Federal Circuit explained that *Centillion Data Systems, LLC v. Qwest Communications International, Inc.*, 631 F.3d 1279, 128 (Fed. Cir. 2011), controlled. That decision demonstrates that the customer, not the accused infringer completed the system by providing the hardware and installing the software. Therefore, the grant of summary judgment of non-infringement was affirmed.

G. *Traxcell Technologies, LLC v. Sprint Communications Co. LP*, 15 F.4th 1121 (Fed. Cir. 2021)

The district court granted judgment of invalidity for indefiniteness as to one patent-in-suit and granted summary judgment of non-infringement as to three other patents. There were a number of issues on appeal relating to claim construction and infringement. A couple of those issues stand out or were thematic in the Court’s decision, and are addressed here. First, after losing, the patentee attempted to argue that a claim construction it had agreed to before the district court was wrong. On several occasions as for different parties, patents, and issues, the appellant pointed to various documents and proof that there was infringement, but the arguments premised on those documents and other evidence was too thin to oppose summary judgment.

As to the first issue, the patentee agreed that the claim term “location” meant “location that is not merely a position in a grid pattern.” The district court adopted that construction. “Now Traxcell insists in retrospect that this construction was wrong. But having stipulated to it, Traxcell cannot pull an about-face.”

For various claim limitations, the Federal Circuit criticized the arguments presented by the appellant. For instance, the Court explained that “Traxcell also insisted that the LSM [LTE Service Manager] generates a device’s location through an alphabet soup of approaches” This “unexplained listing of accused elements that purported send, receive, generate, store, or use a wireless device’s location is insufficient to generate a genuine issue of material fact.” And, as to another limitation Traxcell provided a “long list of various types of data that the accused products allegedly use without explaining how using that . . . data would satisfy the claim construction,” and thus “didn’t link its citations to the claims and left its evidence unexplained.” The appellant’s failure to explain the “role of that evidence in its infringement theory” was “not enough to meet” its burden to oppose summary judgment. As to another limitation of a different claim, the patentee included “an army of citation footnotes crouching in a field of jargon,” leading the Court to conclude that the patentee’s argument was “simply too unexplained and too conclusory to meet

the summary judgment-standard.” As to another party, the Court explained that “[t]o be sure, Traxcell has cited swaths of documents,” but “failed to link to those documents” to the accused technology or explain how they supported “its infringement theory.”

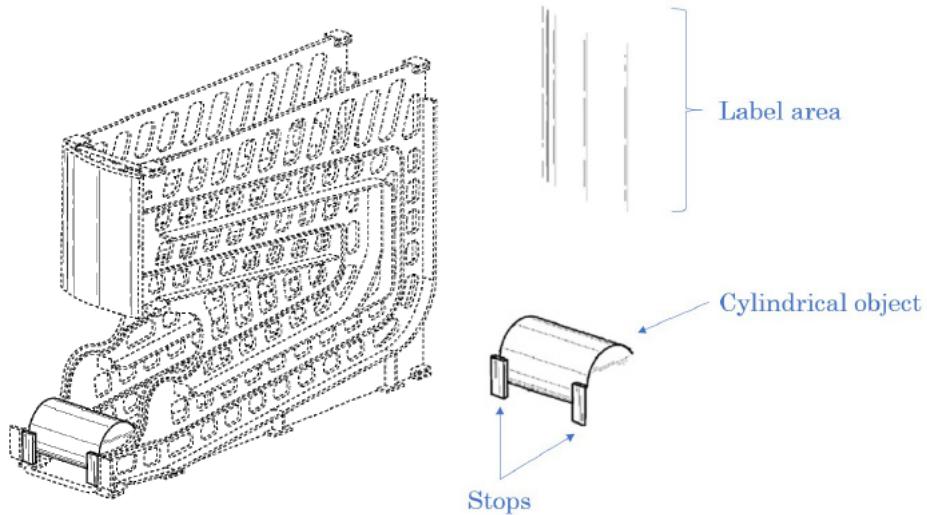
Therefore, this case demonstrates that a patentee must do more than simply cite to rafts of evidence allegedly supporting an infringement theory with the hopes that it will convince the district court that there is a triable case. Instead, the patentee must explain why the documents show that the claim limitations are met and show that there is in fact a triable case.

V. DESIGN PATENTS

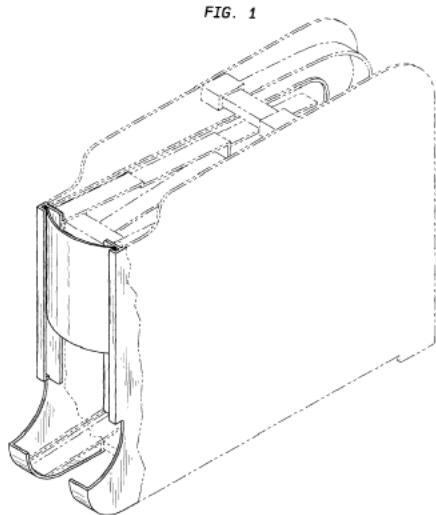
A. *Campbell Soup Co. v. Gamon Plus, Inc., 10 F.4th 1268 (Fed. Cir. 2021)*

This was an appeal from the PTAB’s final written decisions that certain design patents had not been shown to be unpatentable. The PTAB’s decision largely turned on its assessment of secondary considerations in the context of design patents. The Federal Circuit reversed because of errors in the Board’s application of the law of secondary considerations.

The patented design, as reflected in the illustrations below related to soup can dispensers of the type that you might see at a grocery store. The claimed ornamental design was limited to the soup can, can stops, and label area, as shown:



The prior art showed the following design, that exhibited only slight differences from the claimed design:



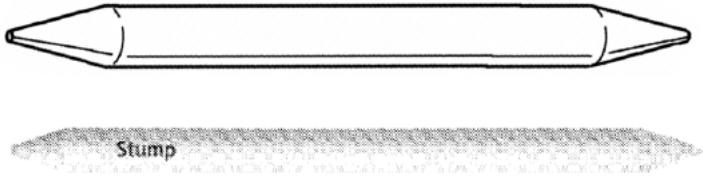
The Board concluded that while the prior art design had the same overall visual appearance the obviousness of the claimed design was outweighed by secondary considerations including commercial success, praise by those in the industry, and copying. The Federal Circuit concluded that nexus had not been shown, and thus the first two secondary considerations were not relevant and that copying had not overcome the strong showing of obviousness.

First, the Federal Circuit rejected the Board's determination that a presumption of nexus applied. Specifically, the Board held that the unclaimed aspects of the design were not prominent ornamental features and therefore those were insignificant to the ornamental design. This was deemed to be "circular reasoning." The question "is not whether unclaimed features are insignificant *to a product's ornamental design*," but is instead "whether unclaimed features are 'insignificant,' period." This is "because the coextensiveness requirement is to ensure that nexus is presumed only when the product is the invention disclosed and claimed." The Federal Circuit also rejected the Board's attempt to distinguish *Fox Factory* on the basis that in that case a utility patent was at issue. "[T]he coextensiveness requirement does not depend on the type of patent at issue."

The Federal Circuit also concluded that the Board erred in finding a nexus in fact because the Board failed to assess whether the objective indicia related to the claimed designs unique characteristics. "We therefore hold that, as in the utility patent context, objective indicia must be linked to a design patent claim's unique characteristics."

B. In re Surgisil, L.L.P., 14 F.4th 1380 (Fed. Cir. 2021)

The Board affirmed an examiner's anticipation rejection of a design patent claim directed to a lip implant based on a design for an art tool called a stump, which is used for blending areas of pastels or charcoal in drawings. The sole figure of the design application, followed by the prior art applied by the examiner are reflected in the figures below:



Following its 2019 decision in *Curver Luxembourg, SARL v. Home Expressions Inc.*, 938 F.3d 1334, 1336 (Fed. Cir. 2019), the Federal Circuit explained that it was improper to reject the claim to the lip implant over the stump because the claims of the design patent application were limited to the article of manufacture to which the design was applied. “Here, the claim identifies a lip implant” and the “claim language recites ‘a lip implant,’” and the Board found that the figure “depicts a lip implant.” “As such, the claim is limited to lip implants and does not cover other articles of manufacture.” Therefore, the Federal Circuit reversed.

VI. DAMAGES

A. *Bayer HealthCare LLC v. Baxalta Inc.*, 989 F.3d 964 (Fed. Cir. 2021)

This decision addresses a number of issues ranging from claim construction to enablement to damages. This summary addresses the damages issue, which presented the question of whether an expert witness can publish a range of reasonable royalty values to a jury rather than identify a single reasonable royalty. The Federal Circuit explained that a party may publish a range of reasonable royalty values to a jury and allowing the jury to select an appropriate rate.

The patentee’s damages expert relied on the Nash Bargaining Solution to provide a royalty analysis. The expert opined that the bargaining range would have been between 5.1% and 42.4%. the expert then concluded that the parties would have settled on the midpoint in the range—i.e., 23.75% as the reasonable royalty. The district court excluded this last step of the analysis as being based on insufficient facts. Based on this ruling, the expert was permitted to publish the bargaining range to the jury, but not his opinion about how the parties would have selected the rate.

The Federal Circuit concluded that the district court did not abuse its discretion in allowing the expert to testify about the bargaining range. “While an expert must use reliable methodology for determining the range of possible hypothetical negotiation royalty rates, we are aware of no precedent that requires an expert to provide a single proposed royalty rate.” The Federal Circuit reviewed its cases and explained that a jury is free to reject both parties’ damages models and accept some royalty that is supported by the testimony and evidence. The Federal Circuit noted that parties that present only ranges of royalty rates run a risk of loss of credibility of the expert.

After the jury returned its verdict, the court assessed supplemental damages based on sales that were made after the period presented to the jury. It rejected the argument that this violated the defendant’s right to a jury trial because the district court merely applied the jury’s rate to the additional sales.

B. Luby Holdings LLC v. Chung, 11 F.4th 1355 (Fed. Cir. 2021)

In addition to questions of infringement, the appellant appealed the issue of damages, arguing that the jury improperly awarded damages even though there was no evidence that the patentee had complied with the requirements of 35 U.S.C. § 287 by providing actual or constructive notice. The Federal Circuit agreed and vacated the damages award and remanded for a new trial.

The first question that the Court had to grapple with was whether the patentee was required to put on proof that it complied with § 287 at all. Specifically, it argued that the accused infringer had not identified unmarked products. This, the Federal Circuit concluded, was incorrect. Indeed, the patentee provided a notification of its calculation of damages pursuant to Fed. R. Civ. P. 26(a)(1)(A)(iii) on the day before trial. That same day, in response to the disclosure, the appellant provided a statement that the patentee's products were not properly marked as required by 35 U.S.C. § 287, and identified the J-Pen Starter Kit as being one example of such a product. This was sufficient to require the patentee to put on evidence that either the product was marked or that the product did not practice the patent and thus did not need to be marked. It provided evidence of neither, and thus did not carry its burden on constructive notice.

As to actual notice, the Federal Circuit rejected the argument that the defendant knew of the alleged infringement and the patent and thus should be held liable for it. While there was plenty of evidence suggesting that the defendant knew of the patent, and may have even been aware of infringement, there was no evidence that actual notice was provided by the patentee of the appellant's infringement. In the absence of such proof in the record, the Federal Circuit concluded that it had to vacate the damages award. Moreover, because there was no way based on the evidence in the record to determine how many units were sold since the filing date of the Complaint, the Federal Circuit remanded for a trial to make such a determination.

Judge Newman dissented in part—the part addressed in this summary. Specifically, she would have concluded, based on all of the evidence, that the accused infringer knew of the patent and of the infringing activity that this was sufficient evidence upon which the jury could have concluded that the patentee had actual notice. Therefore, she would have affirmed the jury's verdict and damages award.

C. MLC Intellectual Property, LLC v. Micron Technology, Inc., 10 F.4th 1358 (Fed. Cir. 2021)

This case came before the Federal Circuit on an interlocutory appeal from a district court decision excluding certain damages opinions from evidence. Three evidentiary rulings were appealed.

First, the district court granted a *Daubert* motion excluding the plaintiff's damages expert from testifying about a 0.25% royalty rate based on two lump sum agreements. While those lump sum agreements did not specify any royalty rate, the patentee's expert inferred that the agreements reflected a 0.25% rate based on a most-favored licensee provision in another agreement under the

logic that the two lump sum agreements must have at least reflected a license on par with the agreement with the most-favored licensee provision. The Federal Circuit concluded that the district court did not abuse its discretion. It found the fact that if a rate of 0.25% was applied over the life of the agreements that the “lump-sum amounts would have been far greater than” the \$21M and \$25M lump-sum payments made under those agreements. Moreover, there was no mathematical analysis to derive the 0.25% royalty rate from the agreements and therefore, the district court reasonably determined that the licenses “cannot support testimony that the lump-sum payments were, in fact, based on the royalty rate.” The Federal Circuit observed that had the expert testified that 0.25% was a relevant point to consider in evaluating a reasonable royalty, that would have been fine, but the expert crossed the line when he testified that the other agreements applied that rate.

Second, the Federal Circuit affirmed the district court’s decision striking portions of the patentee’s expert report under Fed. R. Civ. P. 37(c)(1) for failing to disclose certain facts as required by the accused infringer’s interrogatories. Specifically, the district court held that the patentee’s expert could not testify as to a 0.25% royalty because the patentee failed to disclose in discovery all of the evidence that its expert relied upon to support that opinion. The Federal Circuit noted that because the relevant agreements were lump-sum agreements “that do not contain specific royalty rates, absent a disclosure by MLC, Micron would have no way of knowing that [the patentee’s expert] would opine that the agreements reflect a 0.25% royalty rate, particularly given the Rule 30(b)(6) testimony indicating that MLC did not know the royalty rate in the Hynix and Toshiba agreements.” Moreover, these agreements were in the patentee’s possession since the outset of the case. The Federal Circuit concluded that the district court did not abuse its discretion in concluding that the patentee was required to provide its interpretation of the royalty figure it contended was reflected in the agreements and the facts relied upon to support that assertion. “District courts have discretion to encourage parties to provide discovery of damages theories prior to expert discovery. Doing so promotes judicial efficiency, informs settlement discussions, and helps parties determine the resources that will be devoted to a case based on its potential value.” Moreover, the Federal Circuit rejected the patentee’s argument that the request for the factual basis for the patentee’s reasonably royalty claim invaded privilege because privilege prevents the disclosure of communications, not the underlying facts.

Third, the Federal Circuit affirmed the district court’s grant of Micron’s *Daubert* motion for the patentee’s expert’s failure to apportion in calculating a reasonably royalty. There was no legitimate question that there was no apportionment. Instead, the key question was whether the licenses were comparable to the point where no apportionment was required. The Federal Circuit answered that question in the negative. “We agree with the district court that the cases in which we have held the damages can be based on the terms of a comparable license that already values the patented technology involved very different facts than those presented here.” Here, there were several flaws in the expert’s analysis. For instance, the expert provided no evidence or explanation for how the royalty rate he derived from the agreement accounts for apportionment of the accused products. There was no assessment of the licensed technology versus the accused technology or any accounting of differences between them. “Moreover, unlike the agreement in *CSIRO*, the Hynix agreement is not a license for the same single patent. . . . To the contrary, the Hynix

agreement granted a license to a portfolio for forty-one U.S. and international patents and patent applications, and only one of those forty-one patents is at issue in the hypothetical negotiation. For these reasons, we see no abuse of discretion in the district court's determination that "the patent experts comparable license theory does not properly apportion for the value of the patented technology.

D. *Omega Patents, LLC v. Calamp Corp., 13 F.4th 1361 (Fed. Cir. 2021)*

One of the issues raised in this appeal was whether the damages award was appropriate following a finding of infringement. This aspect of the judgment was vacated on appeal and remanded for a new trial on the question of damages. The Federal Circuit's decision was based on a failure to apportion the proposed rate to the value added by the patented invention. There are several points that are relevant to this decision.

First, the patentee argued that because the accused component was what is claimed by the patent, there was no need to apportion. The Federal Circuit rejected this argument applying its decision in *Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., LLC*, 879 F.3d 1332, 1348 (Fed. Cir. 2018). As in *Exmark*, even if the claim is directed to the product as a whole, patentees seeking damages for a reasonable royalty must still apportion damages between the patented improvement and the conventional components. And, here, there were conventional components within the accused products and those components were not explicitly covered by the patent. Therefore, the patentee had to apportion.

Second, the Federal Circuit rejected the patentee's argument that it had provided evidence that the patented features drove demand for the patented product. The Court noted that the patentee introduced "lesser testimony" that suggested that the patented features were "helpful" and "important," and that development of the feature was "driven by a general market need." But, that testimony also shows that even without the patented feature, the accused products would still have had value. Under *Laser Dynamics, Inc. v. Quanta Comput., Inc.*, 649 F.3d 51, 67 (Fed. Cir. 2012), "[i]t is not enough to show that the [patented improvement] is viewed as valuable, important, or even essential to the use of the [accused product]."

Third, the Federal Circuit rejected the argument that the license agreements introduced by the patentee did not have apportionment built in. Specifically, the patentee presented testimony that it licensed its entire patent portfolio for \$5.00 per unit, and that this would be the same price for one or for all of the patents, regardless of whether only one patent was needed or 30 were needed. The Federal Circuit rejected this argument, explaining that "to hold otherwise would improperly permit Omega to hide behind its generic licensing arrangement to avoid the task of apportionment." The approach taken by the patentee in licensing its patent portfolio did not account for apportionment. The Federal Circuit also rejected an argument based on the most-favored licensee clause because the evidence did not correlate the language of the provision—which required like sales volumes and distribution channels and payment terms—to the facts of the case to show the provision would have been triggered. The Federal Circuit did observe that the patentee could have introduced evidence to distinguish between the licenses it was relying upon and the facts presented at trial related to one patent-in-suit.

The case was thus remanded for a new trial on damages. Judge Hughes dissented.

VII. EQUITABLE DEFENSES

A. *Prosecution Laches*

1. Hyatt v. Hirshfeld, 998 F.3d 1347 (Fed. Cir. 2021)

This appeal involved the question of prosecution laches and whether it applied to preclude issuance of patent applications filed by Mr. Hyatt. The district court concluded that the Patent Office failed to carry its burden to show that prosecution laches applied. The Federal Circuit vacated the decision and remanded for the district court to rule on the issue of prosecution laches applying the correct legal standard.

We hold that prosecution laches is a defense available to the Patent and Trademark Office in an action to obtain a patent under 35 U.S.C. § 145. We further hold that the district court erred in concluding that the Patent and Trademark Office had failed to prove prosecution laches.

The Court began its discussion with a summary of “submarine patents” and how the GATT amendments were designed to reduce the impact that such patents had on the public by changing the patent term from 17 years from issuance to 20 years from the earliest effective filing date. The applications at issue were referred to as “GATT Bubble” applications because they were filed in a period just before the U.S. was to change the patent term. Hyatt filed 399 related applications—381 of them were filed during the GATT Bubble period. The 381 applications were photocopies of one of 11 earlier-filed applications. These applications have hundreds of pages of text and dozens of figures, making them unusually complex.

In 1995, the Patent Office Group Director reached out to Hyatt and asked him to “focus each applications’ claims on distinct subject matter.” By 2003, however, amendments were filed that grew the claim sets to over 115,000 total claims, with an average of 300 claims per application. “Mr. Hyatt’s claim amendments adding hundreds of claims per application on average meant that Hyatt had presented claims for examination between 12 and 28 years after their alleged priority dates.”

By 2013, the Patent Office had created a special art unit of 12 experienced examiners to dedicate their time to Mr. Hyatt’s applications. First office actions were hundreds of pages long and took examiners four to five months to write. In October 2013 the Office issued 11 “Requirements” to Mr. Hyatt seeking certain information to help “streamline” examination. One issue the Patent Office was faced with was determining the proper priority date of the applications because of the complex priority claims—some of which dated back to applications filed between 1969 and 1983. Due to the large number of patent claims, the PTO estimated it would have taken 532 examiner years to examine the applications.

The Federal Circuit began its analysis by discussing the origins of the prosecution laches defense—“two Supreme Court cases in the early 1900s.” See *Woodbridge v. United States*, 263 U.S. 50 (1923); *Webster Elec. Co. v. Splitdorf Elec. Co.*, 264 U.S. 463 (1924). In *Woodbridge*, the Court explained that “[a]ny practice by the inventor and applicant for a patent through which he deliberately and without excuse postpones beyond the date of the actual invention, the beginning of the term of his monopoly, and thus puts off the free public enjoyment of the useful invention, is an evasion of the statute and defeats its benevolent aim.” The Federal Circuit traced the evolution of prosecution laches through its own precedents and explained that in *Cancer Research Technology Ltd. v. Barr Laboratories, Inc.*, 625 F.3d 724 (Fed. Cir. 2010), it held that a party seeking to invoke prosecution laches must prove “(a) that the patentee’s delay in prosecution was unreasonable and inexcusable under the totality of the circumstances, and (b) that the accused infringer suffered prejudice attributable to the delay.” This latter showing of prejudice required the patentee to show “evidence of intervening rights, that is, that the accused infringer or others ‘invested in, worked on, or used the claimed technology during the period of delay.’”

In addressing the merits of the appeal, the Federal Circuit first held that the PTO could raise prosecution laches in an action under 35 U.S.C. § 145. First, the PTO has the authority to reject applications for prosecution laches. Second, § 282 makes defenses such as prosecution laches “broadly available.” “In our view it would make little sense for the PTO to have the authority to use prosecution laches as a basis for denying a patent, but lack the authority to defend against issuance of a patent in a § 145 action on the same basis.” Furthermore, the PTO may raise prosecution laches in litigation under § 145 even if it did not raise the matter earlier. Applying *Kappos v. Hyatt*, 566 U.S. 431, 445-46 (2012), “[f]airness dictates that the door must also remain open for the PTO to assert its meritorious defenses under the circumstances, including prosecution laches.” Moreover, the public interest is benefited if, in a § 145 action, a patent is denied on laches ground rather than forcing the public to litigate the matter when the PTO could have prevailed on the defense.

The Federal Circuit concluded that the district court committed several errors in reaching its conclusion. First, it failed to weigh the totality of the circumstances by choosing instead to discount or ignore “swaths of evidence in certain situations” and instead focused on the PTO’s actions rather than Hyatt’s actions during prosecution. Second, the district court erred in emphasizing the PTO’s conduct, which, under Federal Circuit precedent, may be considered in evaluating the totality of the circumstances, but its delay cannot excuse an applicant’s delay.

Third, the Federal Circuit explained that under the correct legal standards, the PTO’s positions on the question of prosecution laches should have been sufficient to shift the burden to Hyatt. “The magnitude of Hyatt’s delay in presenting his claims for prosecution suffices to invoke prosecution laches.” Here, the delay was between 12 and 28 years. Moreover, Hyatt’s approach to prosecution “made it effectively impossible for the PTO to process” the applications. Hyatt’s prosecution tactics “created a perfect storm that overwhelmed the PTO.”

Finally, with respect to prejudice, the Federal Circuit looked to its laches jurisprudence and explained that after six years, there is a presumption that the delay is unreasonable, inexcusable, and prejudicial. This shifts the burden to the patentee to prove that the delay was reasonable or that

the defendant suffered no prejudice from the delay. The Federal Circuit rejected the argument that the PTO was not required to show intervening rights and concluded that “in the context of a § 145 action, the PTO must generally prove intervening rights to establish prejudice, but an unreasonable and unexplained prosecution delay of six years or more raises a presumption of prejudice, including intervening rights.” Additionally, the Federal Circuit held that “where a patent applicant has committed a clear abuse of the PTO’s patent examination system, the applicant’s abuse and its effects meet the prejudice requirement of prosecution laches. A clear abuse of the patent system occurs when, for example, the applicant’s conduct unduly increases the administrative burden on the PTO and thereby effectively taxes everyone using the system.” Here, Hyatt did just that. It took the PTO about \$10 million in administration fees to process Hyatt’s applications, when he had paid only \$7 million in fees. This was a burden on the system.

The Federal Circuit thus declined to rule on the substantive patentability issues and instead remanded for the district court to rule on the question of prosecution laches under the appropriate legal standards.

B. Inequitable Conduct

1. Belcher Pharms, LLC v. Hospira, Inc., 11 F.4th 1345 (Fed. Cir. 2021)

This case came before the Federal Circuit on an appeal from a district court judgment that the patent-in-suit was unenforceable for inequitable conduct. The Federal Circuit affirmed.

The inequitable conduct found by the district court was pinned on the patentee’s Chief Science Officer, who played a central role in both the submission of the New Drug Application and the prosecution of the patent application leading to the patent-in-suit. The patent related to a formulation of 1-epinephrine having a pH between 2.8 and 3.3, and having certain other properties. The pH is a critical part of the underlying decision.

During prosecution of the patent, the examiner rejected the claims over prior art showing 1-epinephrine with a pH between 2.2 and 5.0. To distinguish this prior art, the applicant argued that the range of between 2.8 and 3.3 was critical and provided unexpected results. The examiner agreed and incorporated this criticality conclusion into the reasons for allowance, leading to the issuance of the patent-in-suit.

However, before all of this took place, the applicant’s representatives sought FDA approval to market a composition including a pH of between 2.2 to 5.0. The NDA referred to the range of 2.4 to 2.6 pH as “new” and the range of 2.8 to 3.3 pH as “old.” When the FDA asked the NDA applicant to evaluate the effect of the pH range of 2.4 to 2.6 on racemization, consultants recommended that Belcher revert to 2.8 to 3.3 pH range shown in the batch data from Sintetica, a company that supplied certain samples to Belcher for evaluation. With the modified pH range, the FDA approved the NDA. While Belcher’s CSO knew of the Sintetica epinephrine formulations, knew that the claimed range was described as “old” in the NDA, and knew of certain other prior art, none of it was disclosed to the Patent Office. The CSO argued that he did not intend to deceive but instead held a good faith belief that it was not relevant because of “high overages.”

With respect to materiality, because the prior art relied upon for the inequitable conduct defense also rendered the claims obvious, the Federal Circuit concluded that the district court's conclusion of materiality was not clearly erroneous. That is because a product that renders a claim obvious is "necessarily material to patentability." The Federal Circuit also rejected the cumulativeness argument presented by the patentee because it was at odds with the arguments made during prosecution regarding criticality.

With respect to intent, the Federal Circuit concluded that the district court's findings were not clearly erroneous. Specifically, the district court correctly concluded that the CSO was an active participant in both the NDA and the prosecution of the patent-in-suit. The positions taken in the NDA and before the USPTO could not be reconciled: he called the pH levels "old" to the FDA to seek a fast approval and called the pH levels "critical" and inventive to the Patent Office to obtain the patent. The Federal Circuit rejected the "post hoc rationales for withholding material prior art" offered here and credited the district court's fact-findings that the justifications for withholding material prior art to be "implausible and not credible."

C. *Intervening Rights*

1. John Bean Techs. Corp. v. Morris & Assocs., 988 F.3d 1334 (Fed. Cir. 2021)

This decision relates to intervening rights resulting from changes to patent claims during reexamination. According to 35 U.S.C. § 307(b), if a claim is amended during reexamination (or if a new claim is added during reexamination), that claim has "the same effect as that specified in section 252 for reissued patents . . ." Under § 252, a court

may provide for the continued manufacture, use, offer for sale, or sale of the thing made . . . of which substantial preparation was made before the grant of the reissue . . . to the extent and under such terms as the court deems *equitable for the protection of investments made or business commenced before the grant of the reissue*.

The question presented in this case was whether intervening rights could apply for allegedly infringing products made and sold long after the alleged infringer had recouped investments. The Federal Circuit explained that it does.

The relevant facts occur over more than a decade. In June 2002, the accused infringer wrote the patentee and told the patentee that the patent it had secured only weeks earlier was invalid. Eleven years later, the patentee petitioned for ex parte reexamination of the patent. Claims were amended and a reexamination certificate issued. Six weeks after issuance of the reexamination certificate the patentee sued. By this time, the accused infringer's product was profitable, it had recouped its investment and two-thirds of its business was in selling the accused products. The accused infringer moved for summary judgment of equitable intervening rights and the district court granted the motion.

On appeal, the patentee argued that the Federal Circuit “should deem monetary recoupment of investments made prior to the grant of reissue as sufficient to protect investments and defeat the grant of the equitable remedy.” While the Federal Circuit explained that it “ha[d] not yet had the opportunity to examine the boundaries of the phrase ‘protection of investments’ in § 252,” and “the statute’s text does not specify when the protection begins and ends or precisely which types of investments are entitled to protection,” recoupment of investments “is not the sole objective of § 252’s protection of ‘investments made or business commenced’ before the claims’ alteration.” While recoupment is a factor that may be considered, it is not the only factor. “Determining entitlement to equivalent intervening rights is an analysis broader than simply determining whether a party claiming intervening rights has fully recouped its monetary investment.” The Federal Circuit thus affirmed the grant of summary judgment.

VIII. WILLFUL INFRINGEMENT, EXCEPTIONAL CASE, ATTORNEYS’ FEES, OTHER FEE ISSUES

A. Energy Heating, LLC v. Heat On-The-Fly, LLC, 15 F.4th 1378 (Fed. Cir. 2021)

This case was before the Federal Circuit for a second time. The first time the case came before the Court, it affirmed a judgment of patent unenforceability for inequitable conduct. After the case returned to the district court for clarification of the reasons that it had previously denied attorneys’ fees, the district court determined the case was exceptional and awarded attorneys’ fees. That decision was appealed. The Federal Circuit affirmed.

The appellant made three arguments for why it believed that the district court erred in awarding fees: (1) the district court erred in its fact findings, (2) the district court did not address or properly weigh the relevant factors, and (3) the district court did not properly apply the law. As to the first issue, the appellant argued that the district court erred in considering the jury’s finding of bad faith, which appellant contended related to the tortious interference claims, not the patent claim. The Federal Circuit disagreed and explained “[t]hat HOTF made representations in bad faith that is held a valid patent was within the district court’s ‘equitable discretion’ to consider as part of the totality of the circumstances of [the appellant’s] infringement case.”

The Federal Circuit rejected the arguments that the jury’s finding of “no deceit” on the state law claims needed to be evaluated in weighing the exceptional case issue and that the district court needed to consider its prior order denying attorneys’ fees. The “no deceit” finding was irrelevant to inequitable conduct, which was tried to the court. Additionally, the earlier district court order declining to order fees was vacated on appeal and nothing required the court to consider that vacated order.

With respect to weighing the relevant factors, the Federal Circuit concluded that the court provided ample reasoning for its conclusion that the underlying litigation positions were substantively weak, that the district court did not need to consider its prior, vacated order denying fees, and did not need to weigh a “lack of litigation misconduct.” While the manner in which a party litigates its case is a “relevant consideration,” the “absence of litigation *misconduct* is not

separately of mandatory weight.” Moreover, the Federal Circuit rejected the argument that “litigation misconduct is ‘necessary to find a case exceptional.’” Moreover, the appellant argued that the fact that the USPTO had granted continuation patents with similar claims after they disclosed the prior art that was previously withheld suggested that the conduct in the litigation was not egregious and, in fact, the Patent Office agreed with the position it took in litigation.

Finally, the Federal Circuit rejected the argument that the district court misapplied the law. Specifically, appellant argued that the district court believed that a finding of inequitable conduct necessitated a finding that the case was exceptional. But, the Federal Circuit noted, that is not what the district court said in its opinion. Instead, the opinion stated that “[a] finding of inequitable conduct does not mandate a finding of exceptionality.”

B. *Hyatt v. Hirshfeld*, 16 F.4th 855 (Fed. Cir. 2021)

This decision addresses two issues: whether Mr. Hyatt is entitled to attorneys’ fees under the Equal Access to Justice Act (EAJA) and whether the USPTO is entitled to recover expert witness fees under 35 U.S.C. § 145’s requirement that the applicant is to bear all costs of district court litigation to obtain a patent. The Federal Circuit dispatched of the first point by observing that since it decided *Hyatt v. Hirshfeld*, 998 F.3d 1347 (Fed. Cir. 2021), Mr. Hyatt was no longer a prevailing party and thus no longer entitled to attorneys’ fees.

As to the second issue, which the Federal Circuit described as presenting “a close case,” the Federal Circuit applied *Peter v. NantKwest, Inc.*, 140 S. Ct. 365, 369 (2019), which addressed the question of whether the USPTO could recover its attorneys’ fees as part of expenses covered by applicants. The USPTO had relied on the language of 35 U.S.C. § 145 to recover its expert witness expenses since the 1980s. And while *NantKwest* addressed attorneys’ fees, and not expert expenses, it was relied upon by the Federal Circuit to conclude that Congress did not abrogate the American Rule with sufficient clarity to warrant expert fee shifting. Moreover, the fact that district courts had been awarding the USPTO its expert expenses for years was also not sufficient because “longstanding practice is not enough to overcome the American Rule presumption.” Other court decisions addressing other statutes and concluding that the expenses include expert witness fees were undermined by *NantKwest*. Finally, the Federal Circuit explained that the use of the word “expenses” instead of “costs” was not a sufficient indication that expert expenses were to be included. And, while the patent system is set up such that applicants are to bear the burden for their own patent applications, this too was insufficient reason to find an explicit indication of fee-shifting required by the American Rule.

C. *SRI International, Inc. v. Cisco Systems, Inc.*, 14 F.4th 1323 (Fed. Cir. 2021)

This case came back to the Federal Circuit for a second time. In the first appeal, the Federal Circuit determined that the district court applied an incorrect legal standard in evaluating the jury’s finding of willful infringement in connection with ruling on Cisco’s JMOL motion. On remand, the district court granted the motion for JMOL and concluded that the jury’s finding of willful infringement was not supported by substantial evidence.

The Federal Circuit reversed the district court's grant of JMOL. "On remand, the district court reasonably read our opinion to require a more stringent standard for willful infringement than our other cases suggest—conduct rising to 'the level of wanton, malicious, and bad-faith behavior.'" After stepping through the evidence of record as well as the instructions provided to the jury, the Federal Circuit concluded that substantial evidence supported the jury's verdict and concluded that JMOL should not have been granted. The Federal Circuit also clarified its earlier decision and explained "[t]o eliminate the confusion created by our reference to the language 'wanton, malicious, and bad-faith' in *Halo*, we clarify that it was not our intent to create a heightened requirement for willful infringement," and indeed the passage in *Halo* related to conduct warranting enhanced damages, not willful infringement. Instead, under *Halo*, "the concept of 'willfulness' requires a jury to find no more than deliberate or intentional infringement."

IX. INVENTORSHIP

A. Wagner v. Ashline, No. 2021-1715 (Fed. Cir. Nov. 17, 2021)

Wagner brought a claim under 35 U.S.C. § 256 to be added as an inventor to U.S. Patent No. 8,272,074. The district court granted summary judgment for the defendant. Wagner appealed and the Federal Circuit affirmed.

Mr. Ashline developed head and neck restraints used to secure drivers during high-performance vehicle collisions. Ms. Wagner, a nurse, had an interest in developing safety vests for children to use while riding in cars. In 2003, Wagner met Ashline and over the course of several years, they had some discussions about Ms. Wagner's safety vest and a line of children's safety books. After a time, the relationship soured. Each had patent applications on file, which would issue as patents. Ms. Wagner filed suit to be named as an inventor on Mr. Ashline's patent because she claimed to have been a co-inventor and have contributed to the conception of "shoulder portions," which were recited in the claims of Mr. Ashline's patent.

The Federal Circuit affirmed the grant of summary judgment because of insufficient corroboration. The facts showed that Mr. Ashline's patent application disclosed the shoulder portions before they were disclosed to him by Ms. Wagner. The testimony of other witnesses was insufficient to show that Ms. Wagner was a co-inventor. "At best, the allegedly corroborating evidence demonstrates that Ms. Wagner and Mr. Ashline met and spoke several times over a period of three years, during which Ms. Wagner sought and received guidance from Mr. Ashline regarding her vest and/or a series of children's books."

X. PATENT TRIAL AND APPEAL BOARD

A. Appointments Clause

1. Arthrex

- a. New Vision Gaming & Development, Inc. v. SG Gaming, Inc., 996 F.3d 1378 (Fed. Cir. 2021)

This is the shortest precedential opinion of the year. The majority concludes that because *Arthrex* issued after the appellant sought rehearing from the Board panel, it had not waived a request for a Director rehearing under *Arthrex*. The majority, therefore, remanded to the PTAB to allow the patentee to seek rehearing by the Director.

Judge Newman dissented in part. She believed that the Federal Circuit should have resolved a forum selection clause dispute because, in her view, the matter should not have been before the PTAB in the first place because the parties had agreed that disputes would be adjudicated in Nevada state or federal courts.

B. Due Process

- 1. Mobility Workx, LLC v. Unified Patents, LLC, 15 F.4th 1146 (Fed. Cir. 2021)

On appeal from the Patent Trial and Appeal Board, the appellant argued that the structure and funding of the Patent Trial and Appeal Board violated due process because of structural bias in the way that it is funded and makes decisions that impact that funding. The Federal Circuit rejected the argument based on three Supreme Court cases that “define the scope of due process in this area:” *Tumey v. Ohio*, 273 U.S. 510 (1927), *Dugan v. Ohio*, 277 U.S. 61 (1928), and *Ward v. Monroeville*, 409 U.S. 57 (1972). These were mayor’s court cases in which a mayor had certain powers to levy penalties or fines and in some respect, the monies from those penalties or fines were used to fund the mayor’s salary.

One aspect of Mobility Workx’s argument was that the Chief APJ, Deputy Chief APJ, and Vice Chief APJ participate in AIA review proceedings and provide policy direction and ensure the quality and consistency of AIA decisions, while also overseeing and planning expenditures of the office. This, according to Mobility Workx, was an impermissible mixing of judicial and administrative/executive roles. The Federal Circuit rejected this argument because the Chief APJ, Deputy Chief APJ, and Vice Chief APJ do not have any responsibility for the Patent Office’s finances. The Director of the USPTO is responsible for budgeting and the role of these APJs is too remote to give rise to a due process violation. And, even more fundamentally, the USPTO is fee-funded by Congress and thus fee revenue from AIA reviews “do not automatically become available to the agency.” “The President, not the USPTO, submits the budget, and Congress ultimately sets the USPTO budget, Congress similarly controls whether the USPTO has access to the surplus funds collected in the Patent Trademark Fee Reserve Fund,” and Congress may appropriate those fees to other parts of the government should it choose to do so. This congressional control rendered the agency interest in fees generated via the AIA review process too remote to constitute a due process violation.

Mobility Workx also argued that the ALJs have an unconstitutional interest in instituting AIA reviews because their own compensation in the form of performance bonuses is favorably

affected. One aspect of APJ compensation is that an APJ must earn at least 84 decisional units per year. According to Mobility Workx, this provides an incentive to institute AIA reviews. The Federal Circuit disagreed and concluded that “APJs do not have a significant financial interest in instituting AIA proceedings to earn a bonus.” The “decisional units” are not contingent on the outcome of the decision. Therefore, an APJ that denies a request for AIA review gets the same decisional credit that an APJ that grants institution of an AIA review. Moreover, even though APJs can get an additional credit for a Final Written Decision, there was no showing “that APJs institute AIA proceedings to earn decisional units to qualify for a bonus.” Specifically, there is a backlog of ex parte appeals and APJs are assigned to work on those in addition to AIA reviews.

This decision was remanded to the Patent Office under *Arthrex* to allow Mobility Workx the opportunity to petition for rehearing by the Director.

Judge Newman dissented. One of the reasons she dissented was because of the way that the Director had delegated the institution decision to the APJs, and the institution decision is final and nonappealable. She states that “[t]his court should consider whether the removal of institution from the Director is in accordance with law and the Constitution.” Judge Newman also contends that by restoring the Director to the role of deciding whether an AIA trial should be instituted, bias or at least the appearance of bias, could be eliminated. This, according to Judge Newman, was Congress’s design.

C. *Estoppel*

1. *Uniloc 2017 LLC v. Facebook Inc.*, 989 F.3d 1018 (Fed. Cir. 2021)

This case, which was on appeal from the Final Written Decision of the PTAB after inter partes review, presented four questions. The first was whether the “no appeal” provision of 35 U.S.C. § 314(d) precluded review of the Board’s determination that Facebook was not in privity with LG Electronics such that 35 U.S.C. § 315(e)(1) estoppel did not bar LG’s challenges. The second was whether Facebook was estopped from challenging claim 7 of the challenged patent. The third and fourth were related to the patentability of the challenged claims. The Federal Circuit first concluded that it could review the Board’s decision. Then, it concluded that estoppel applies on a claim-by-claim basis and since Facebook had not received a Final Written Decision on claim 7, it was not estopped in its challenge of that claim. This summary addresses the procedural issues related to appealability and estoppel.

Facebook filed two petitions for IPR raising certain grounds and challenging certain claims. Apple had already filed its own challenge. Once Apple’s petition was instituted, Facebook filed another petition seeking joinder of Apple’s petition. The only claim challenged by Facebook but not challenged in the Apple proceeding was claim 7. The Board granted Facebook’s joinder request. LG then copied Facebook’s two petitions and sought joinder. Facebook’s two petitions were instituted and, eventually, LG was permitted to join those proceedings. Apple and Facebook went on to lose their joined proceeding. And the question of estoppel arose.

Facebook argued that even if it was estopped to proceed with its challenges to the claims that were involved in the Apple proceeding, it should still be able to maintain its challenge to claim 7. While the Board concluded that Facebook was estopped as to its challenges of claims that were also at issue in the Apple IPR, LG was not impacted by that estoppel. The Board went on to find all challenged claims unpatentable in the merged Facebook-LG IPRs.

With respect to the first question—i.e., can the Federal Circuit review the Board’s estoppel decision—the Federal Circuit concluded that it could. The critical factor to the Court’s analysis was that the “estoppel-triggering event occurred after institution.” The Court looked at the question as being analogous to the one it faced in *Credit Acceptance Corp. v. Westlake Services*, 859 F.3d 1044, 1050 (Fed. Cir. 2017), in which it interpreted the similar “no appeal” clause in § 324(d).

The Court also concluded that the Board’s decision that LG was not a real-party-in-interest or privy with Facebook was supported by substantial evidence. “But just because LG expressed an interest in challenging the ’433 patent’s patentability, through its filing of its own IPR petition and joinder motion, does not by itself make LG an RPI to Facebook’s IPR.” There was no evidence in the record to suggest that LG controlled Facebook’s decision to file its IPR, or that LG recruited Facebook to file the IPR petition on its behalf. Therefore, LG was not acting in a proxy role for Facebook. “Instead, the record shows that LG, through its own counsel, filed its own IPR petitions in an effort to be recognized as an additional party to the proceeding here, seeking to assert its own interests.” Moreover, there was no evidence that LG and Facebook had a preexisting established relationship regarding the Apple IPR, no evidence of joint funding, and no evidence of substantial coordination, a finding that Facebook and LG were in privity or RPIs in each of the respective proceedings would have been improper. “The mere fact the Board procedurally required LG and Facebook to consolidate their arguments and evidence and combined filings in this proceeding does not, without more, make them privies of each other such that one petitioner automatically loses its right to assert its challenge once the other petitioner loses its rights through estoppel.”

The Federal Circuit also rejected the argument that Facebook should be estopped as to claim 7. The question was complicated by the fact that claim 7 depended from claim 1, and Facebook could no longer challenge claim 1. Any challenge to claim 7 would by necessity require a finding that claim 1 was unpatentable. This question was answered by the language of 35 U.S.C. § 315(e)(1), which refers to estoppel based on claims—not entire patents. “Because claim 7 was not at issue in the Apple IPR, the plain language of the statute supports the conclusion that Facebook is not estopped from challenging this claim in this proceeding, regardless of its dependency on claim 1. . . . Accordingly, that claim 7 was not at issue in the Apple IPR is enough to conclude that Facebook may challenge it here.”

D. *Appealability of Institution Decision / Mandamus*

1. *Mylan Labs. Ltd. v. Janssen Pharmaceutica, N.V.*, 989 F.3d 1375 (Fed. Cir. 2021)

This came before the Court on a petition for writ of mandamus (as well as an attempted direct appeal) from a denial of the IPR. The Federal Circuit dismissed the direct appeal for want of jurisdiction and denied the petition for writ of mandamus.

The underlying IPR petition was denied on *Fintiv* grounds—i.e., the Board concluded that it was inefficient to proceed because a federal trial was likely to proceed before a final written decision could issue and the issues presented at trial would overlap those presented in the petition. Under § 314(d), the Federal Circuit concluded that it lacked jurisdiction over the appeal.

But it held that, in extraordinary circumstances, judicial review may be available by writ of mandamus. Specifically, the Court explained that when a party has taken a preliminary step that might lead to appellate jurisdiction in the court in the future, then prospective jurisdiction has been triggered. Here, the filing of a petition for IPR was sufficient to trigger prospective jurisdiction. And, given the statutory scheme the Federal Circuit “alone has prospective jurisdiction once a petitioner seeks IPR.” The Federal Circuit explained that when the PTAB denies institution, mandamus jurisdiction is “especially important,” because the Court must be able to protect its “prospective jurisdiction through mandamus.”

While the Court heard the mandamus petition, it denied relief. “When a mandamus petition challenges a decision denying institution, the mandamus standard will be especially difficult to satisfy,” and the scope of review is very narrow. The Director’s exercise of discretion not to institute a review is not reviewable by mandamus.

E. *Standing to Appeal from the PTAB; Mootness*

1. ABS Global, Inc. v. Cytonome/ST, LLC, 984 F.3d 1017 (Fed. Cir. 2021)

This decision addresses the question of when an appeal is mooted by an action of the patent owner following a final written decision in an *inter partes* review. The patent at issue, U.S. Patent No. 8,529,161, was the subject of both a district court litigation and an IPR. In the district court action, the district court granted a motion for summary judgment of noninfringement of the ’161 patent. In the parallel IPR proceeding, the PTAB determined that the petitioner prevailed with respect to some, but not all, challenged claims. ABS, the IPR petitioner, appealed the adverse aspects of the PTAB’s ruling. In the patent owner’s responsive brief to the Federal Circuit, counsel for the patentee submitted an affidavit that said that patent owner “has elected not to pursue an appeal of the district court’s finding of non-infringement as to the ’161 patent and hereby disclaims such an appeal.” In light of this disavowal of the right to appeal, the patentee argued that ABS lacked standing. But, rather than address the question as one of standing, the Federal Circuit addressed it as a question of mootness.

The Federal Circuit concluded that the “voluntary cessation doctrine governs the mootness inquiry in this case” and the patentee has shown that its conduct is not reasonably likely to recur, and that because ABS had not shown that it was likely to engage in any activities that were not covered by the disavowal, the appeal needed to be dismissed as moot.

The Federal Circuit's analysis was guided by the Supreme Court's decision in *Already, LLC v. Nike, Inc.*, 568 U.S. 85 (2013). That case, involving a trademark infringement action, resulted in Nike issuing a covenant not to sue to the defendant in the midst of the litigation. The covenant indicated that Nike would not pursue any trademark or unfair competition claims based on the defendant's current products or colorable imitations thereof. The broad covenant in that case met the requirement that Nike would not be reasonably expected to resume its enforcement efforts.

Here, because the patentee voluntarily ceased its enforcement efforts, "the voluntary cessation doctrine governs the mootness inquiry." First, the Federal Circuit concluded that the affidavit submitted with the appeal brief was sufficient to demonstrate that the patentee had ceased its enforcement efforts and could not be reasonably expected to resume them. Here, the disavowal of the right to appeal following a grant of summary judgment of noninfringement barred the patentee from asserting the same patent claims a second time. Under the *Kessler* doctrine, the IPR petitioner had the right to continue to sell its products freely without interference from the patentee in light of the unappealed judgment, and suits against the petitioner for substantially the same products would also be barred.

This conclusion shifted the burden to the appellant to show that it plans to engage in activities (or is engaged in activities) that would subject it to infringement liability notwithstanding the cessation by the patentee. Here, the appellant admitted that it faced no specific enforcement threat. Instead, it argued that based on prior litigation history between the parties, it was conceivable it would be sued again, even though it believed it would have a strong preclusion argument. The Federal Circuit looked to its jurisprudence on standing to appeal from the PTAB in concluding that the appellant had not rebutted the showing that the voluntary cessation doctrine was inapplicable. "Considering these cases, we conclude that ABS's IPR appeal is moot because there is no injury sufficient to support an ongoing case or controversy."

The Federal Circuit also rejected an argument that *Fort James Corp. v. Solo Cup Co.*, 412 F.3d 1340 (Fed. Cir. 2005), and *Cardinal Chemical Co. v. Morton International, Inc.*, 508 U.S. 83, 96 (1993), precluded a finding of mootness. The distinction between *Fort James* and *Cardinal Chemical*, according to the Federal Circuit, was that the IPR invalidity determination could not provide an alternative basis to affirm a judgment from the district court, whereas a finding of invalidity or unenforceability could provide an alternative ground for the district court's judgment in the other proceeding.

Finally, the Federal Circuit refused to vacate the Board's final written decision because it concluded that ABS had forfeited the argument by not raising it in its opening brief.

2. Apple Inc. v. Qualcomm Inc., 992 F.3d 1378 (Fed. Cir. 2021)

This case came to the Federal Circuit following final written decisions of the PTAB that found that Apple had not proven that the challenged claims of two patents were unpatentable. Addressing the threshold question of standing to appeal only, the Federal Circuit concluded that Apple lacked standing and dismissed the appeal.

Qualcomm had sued Apple for infringement of the two patents that were the subject of the appeal. Apple, in turn, filed petitions for IPR of the patents. Before the filing of the appeals, Apple and Qualcomm settled their litigation worldwide. The resolution involved a “six-year license agreement, which included a license to the patents at issue.” Qualcomm characterized the agreement as a covenant not to sue as to the patents involved here. In addition to the original six-year term, the agreement can be extended by two years. Apple had ongoing payment obligations under the agreement.

The question was whether Apple had standing in light of the settlement. Apple contended it did. In doing so, it focused on three things: (1) the ongoing payment obligations, (2) a threat that, after the expiration of the agreement, it would be subject to suit, and (3) IPR estoppel effects.

According to the Federal Circuit, “[i]n Apple’s view, a licensee’s obligation to pay royalties for a license to 100,000 patents would provide standing to challenge the validity of any single licensed patent, even if the validity of any one patent would not affect the licensee’s payment obligations.” Apple cited *MedImmune, Inc. v. Genentech, Inc.*, 529 U.S. 118, 120 (2007), to support its proposition, but the Federal Circuit did not interpret *MedImmune* so broadly. Unlike *MedImmune*,

Apple has not alleged that the validity of the patents at issue will affect its contract rights (i.e., its ongoing royalty obligations). This failure is fatal to establishing standing under the reasoning of *MedImmune*, whether we analyze apples evidence for injury and fact or redressability. Qualcomm asserts, and Apple does not contest, that the license agreement involves tens of thousands of patents.

Apple failed to show that a favorable ruling as to the patentability of the challenge patents would affect its ongoing payment obligations.

With respect to Apple’s argument that it faces potential for a future infringement suit, Apple failed to provide evidence that it intends to engage in any activity that may give rise to a risk of an infringement suit under the patents at issue on appeal. “Neither of the declarations Apple submitted as evidence of standing even mentioned the patents at issue. . . . Nor do they set forth any plans to engage in conduct after the expiration of the license agreement that might lead to an infringement suit.” The declarations simply were not sufficient to show that Apple would suffer an injury in fact. And, the Federal Circuit refused to take judicial notice that six years from now, Apple would be selling products that would be implicated by the patents-in-suit. Moreover, the Federal Circuit rejected Apple’s argument that “Qualcomm’s refusal to grant Apple and irrevocable license or other permanent rights in[the asserted patents] and Qualcomm’s history of asserting patents against Apple after certain royalty agreements expired provide standing.” These allegations, according to the Federal Circuit, merely reflect

speculation and conjecture about Qualcomm’s proclivity to assert its patent rights generally. But, they are devoid of the specificity necessary to show that Qualcomm is likely to assert these particular patents against any particular products which would be sold after the

license agreement expires in 2025 or 2027. As such, Apple has failed to show an injury in fact based on potential future allegations that its products infringe [the patents-at-issue].

Finally, applying its past precedents, the Federal Circuit dispatched the argument that the potential of an estoppel was sufficient to confer standing in an appeal from the PTAB.

3. Apple Inc. v. Qualcomm Inc., No. 2020-1683 (Fed. Cir. Nov. 10, 2021)

This was an appeal from the final written decision of the Patent Trial and Appeal Board finding that Apple, the petitioner in an *inter partes* review, had failed to show certain claims to be unpatentable. As noted by the Court, “[t]his is the second such dispute to reach us since these parties settled all their patent infringement litigation worldwide and entered into a global patent license agreement.” In the first appeal, the Federal Circuit dismissed for lack of standing. This appeal was also dismissed by applying the Court’s decision in *Apple I*.

In this case, Apple argued that there was a nuance in its arguments that the Court in *Apple I* did not address. Specifically, Apple argued that the Federal Circuit did not address “why the threat of liability, if Apple ceases the ongoing payment and the agreement is terminated, is not a sufficient injury to support standing.” The Federal Circuit did not find this “nuance” persuasive because it recognized that it was bound by the prior panel decision and that the argument had been raised in Apple’s petition for *en banc* review in *Apple I*, and that petition had been denied.

Apple also asked the Federal Circuit to vacate the Board’s decision “to eliminate any doubt about the applicability of estoppel.” The Federal Circuit refused because (1) the case cited by Apple, *United States v. Munsingwear, Inc.*, 340 U.S. 36, 40 (1950), related to a dismissal for mootness, not standing, and mootness arose during the appeal, whereas standing precluded the court from taking jurisdiction in the first place, and (2) it was Apple’s settlement that caused the lack of standing, and thus this did not justify vacatur.

Judge Newman dissented because she would have concluded that the law permitted a licensee to challenge a patent’s validity. According to Judge Newman, because Qualcomm refused to give a license for the life of the patents, there is a continuing controversy that will subject Apple to continuing royalty obligations and potential estoppel in district court litigation for future invalidity challenges.

4. Moderna Tx, Inc. v. Arbutus Biopharma Corp., No. 2020-1184 (Fed. Cir. Dec. 1, 2021)

This decision is from an appeal of a mixed decision from the PTAB following *inter partes* review of a patent directed to a nucleic acid-lipid particle having specific chemical components. The Court first concluded that the petitioner, Moderna, lacked standing to appeal from the PTAB’s Final Written Decision. Next, the Court affirmed the PTAB’s finding of anticipation as to the claims that were found unpatentable. This section of the outline addresses the standing question.

There were two time periods relevant to standing. The first was the period that ran from the outset of the appeal until some point that could have been as much as a year into the appeal. During this time, the appellant contended that it had standing because it was licensed under the challenged patent, that development of products that practiced the patent continued, and that it may be obligated to make a milestone royalty payment.

The Federal Circuit concluded that the appellant had not proven injury in fact sufficient to confer standing during this period because (1) the last time that a milestone payment had been made was in 2016, and (2) the patent license agreement licensed the challenged patent among a number of other patent rights and there was no indication that invalidating the challenged patent would change the need for a royalty payment should one be required. Therefore, the Federal Circuit held that this case was more like *Apple Inc. v. Qualcomm Inc.*, 992 F.3d 1378 (Fed. Cir. 2021), where the petitioner and appellant had rights under a broad swath of patents and could not show royalty obligations would change by invalidating any one or subset of those patents, than *Samsung Electronics Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363 (Fed. Cir. 2019), where the appellant had shown that the challenged patent was part of a patent pool and the challenger's share of revenues would increase if the patent was invalidated. Therefore, Moderna lacked standing at the time the suit was filed, which was enough to conclude that Moderna lacked standing to appeal.

As to the second time-period, during the pendency of the appeal, the appellant submitted a declaration indicating that circumstances had changed. The declaration indicated that the appellant had abandoned development of products that would practice the challenged patent, but it explained that it had been developing a vaccine for COVID-19 that would be commercially released as the Moderna vaccine. The declarant explained that the patentee had made a number of statements about the breadth of its patent claims and, given those aggressive statements, coupled with a refusal by the patentee to give a covenant not to sue and insistence that Moderna needed a license to the patents created a risk of suit over the patent. The Federal Circuit explained that even if Moderna had standing to appeal at the outset of the appeal, it did not provide a concrete enough timeline from the cessation of its activities under the license through when it started development of its COVID-19 vaccine.

As the appellant, Moderna bears the burden on the issue of standing . . . , including the burden to demonstrate that there has been no gap in its standing while this appeal has been pending. . . . In view of Moderna's concession that the basis for its standing shifted during the pendency of this appeal—i.e., from the financial burdens of the Acuitas sublicenses to a potential infringement suit for the COVID-19 vaccine—Moderna had to come forth with evidence to demonstrate the necessary continuity of jurisdiction. Moderna failed to do so.

5. Moderna Tx, Inc. v. Arbutus Biopharma Corp., No. 2020-2329 (Fed. Cir. Dec. 1, 2021)

This appeal presented questions of standing and obviousness. Unlike the decision addressed immediately before this one, in this case the Court concluded there was standing due to Moderna's development and shipment of COVID-19 vaccines. The following remark from the Federal Circuit indicated that it was concerned about the practical effect of dismissing the appeal in this instance:

It also bears noting that, if we were to dismiss this appeal for lack of standing, Arbutus could sue Moderna for infringement immediately thereafter. That possibility is easy to envision based on the record, and Arbutus has done nothing to dispel it. We seek to avoid such a result, which would perversely incentivize a future similarly situated patent owner to remain silent regarding its intentions during the pendency of an appeal and wait to sue for infringement until after the appeal has been dismissed for lack of standing.

6. Intel Corp. v. Qualcomm Inc., No. 2020-1664 (Fed. Cir. Dec. 28, 2021)

This was an appeal from the PTAB after an inter partes review. The Board concluded that Intel had succeeded in challenging certain claims and not others. Intel was partially successful in opposing Qualcomm's motion to substitute claims. Intel appealed the Board's Final Written Decisions on the issues it lost on. This decision addresses several issues. One of those issues is Intel's standing to appeal. This summary addresses that question.

This patent had been asserted against Apple. Qualcomm and Apple reached an agreement to settle their dispute in 2019. Qualcomm contended that after the Apple settlement, Intel lacked standing because there was no ongoing dispute over the challenged patent. The Federal Circuit disagreed.

The Federal Circuit believed that this case was analogous to *Grit Energy Solutions, LLC v. Oren Techs, LLC*, 957 F.3d 1309, 1319 (Fed. Cir. 2020). In the present case, Intel's products were the basis for the infringement allegations against Apple. And, Intel continued to supply Apple and one other entity with the product that was accused in the litigation. "Like in *Grit*, therefore, Intel's acts 'did give rise to an infringement suit.'" The Federal Circuit also explained that it was not relevant that the lawsuit was not against Intel or that the suit had been resolved. Qualcomm did not need to make a specific threat of assertion of the patent against Intel to confer standing. And because Intel was not a party to the settlement, the settlement was of no moment; indeed, Intel was not granted a covenant not to sue on Qualcomm's patent. "Because Intel's risks transcend mere conjecture or hypothesis, . . . we conclude Intel has standing."

7. Intel Corp. v. Qualcomm Inc., No. 2020-1828 (Dec. 28, 2021)

This appeal came to the Federal Circuit from the mixed decision of the Patent Trial and Appeal Board. The principal issues addressed in the decision were Intel's standing to appeal and issues related to claim construction. This summary addresses the standing issues.

In this case, the Federal Circuit largely relied on its decision in *Intel Corp. v. Qualcomm Inc.*, No. 20-1664 (Fed. Cir. Dec. 28, 2021). The Federal Circuit explained that “[h]ere, as there, Intel last engaged in activity that has already given rise to an infringement suit by Qualcomm,” and “Qualcomm has not disputed that, in those proceedings, it identified an Intel product as the ‘secondary processor’ of the ’949 patent.” The Court explained that Intel risked an infringement suit because the secondary processor was central to the claims, and there was a possibility of “direct infringement suits based on product testing, and the possibility of indirect infringement suits based on at least inducement.”

F. Injunctions Precluding PTAB Review

1. Kannuu Pty Ltd. v. Samsung Electronics Co., Ltd., 15 F.4th 1101 (Fed. Cir. 2021)

Kannuu sought a preliminary injunction to compel Samsung to dismiss certain petitions for inter partes review it had filed against Kannuu patents. The district court denied the motion. Kannuu appealed and the Federal Circuit affirmed.

Samsung and Kannuu entered into an agreement that, among other things, included a provision that “[a]ny legal action, suit, or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby must be instituted exclusively in a court of competent jurisdiction, federal or state, located within the Borough of Manhattan, City of New York, State of New York and in no other jurisdiction.” The Federal Circuit stated that “[t]he underlying question that this case presents is one of first impression: Does the forum selection clause in the non-disclosure agreement between the entities prohibit Samsung from petitioning for *inter partes* review of Kannuu’s patents at the Board?”

Here, the district court determined that the plain language of the agreement did not encompass inter partes review proceedings. The Federal Circuit agreed because the inter partes review proceedings did not relate to the agreement itself or to transactions contemplated under the agreement. The fact that the parties may have entered into the original agreement—a Non-Disclosure Agreement—in hopes of entering into a license agreement at some point in the future does not mean that the NDA relates to patent rights. Moreover, “[a]n adjudication of patent infringement allegations or a patent’s validity are patent-centric considerations that will necessarily impact the rights under a patent license agreement. But the same is not true for an NDA . . .”

Kannuu argued that the breach of the NDA is relevant to copying of the patented subject matter, thus tying the patent challenges at the PTAB to the NDA. The Federal Circuit was skeptical:

We also question whether Kannuu’s allegations of breach of the NDA provisions would even constitute relevant evidence of copying . . . It is Kannuu’s burden to show why the confidential information covered by the NDA would be specifically relevant to any claimed

invention. Given that patents are necessarily designed to publicly disclose enough information for a skilled artisan to make and use the claimed invention,[] Kannuu’s broad allegations of copying stemming from Samsung’s purported misuse of confidential information, without more, are not enough to demonstrate a sufficient connection to the challenge patent claims. Put another way, on the facts of this case, it is at best unclear whether Kannuu has legitimate evidence of copying that will be relevant to the Board’s analysis in the inter partes review proceedings.

Judge Newman dissents and suggests that the panel majority held that unless the agreement is a patent license agreement, the NDA could not control forum selection in this case. Judge Newman was also critical of the majority’s conclusion that the patent claims were not subject to the forum selection clause because the agreement was not a patent license because, according to her, this was a theory that neither the district court, nor the parties had advanced.

XI. FEDERAL PRACTICE

A. *Standing to Sue*

1. University of South Florida Research Foundation, Inc. v. Fuji Medical Systems U.S.A., Inc., No. 2020-1872 (Fed. Cir. Oct. 22, 2021)

This case was before the Federal Circuit from an appeal from a district court order dismissing a patent infringement case on the pleadings for lack of statutory and constitutional standing under Fed. R. Civ. P. 12(h)(3). The Federal Circuit vacated the dismissal and remanded for further proceedings.

There are several relevant agreements and, due to redactions in the Court’s opinions, the precise nature of those agreements is not entirely clear. However, what is clear is that the University of South Florida (USF) received an invention disclosure in April 1997 and in September 1997, the inventors assigned all rights to the patent application under a three-way “Revenue Allocation Agreement” between USF, the University of South Florida Research Foundation, Inc. (USFRF), and the inventors. At some point in time, this agreement was replaced, *nunc pro tunc*, with a license agreement.

Fuji Medical System moved for summary judgment that the license agreement did not transfer all substantial rights to USFRF and thus USFRF could not bring suit by itself. The district court held that the agreement failed to convey all substantial rights to allow USFRF to sue without joining USF. Additionally, the district court held that USFRF could not establish it had constitutional standing because (1) it could not tie the patent-in-suit to the license agreement without waiving attorney-client privilege, and (2) could not establish that USFRF held an exclusionary right before it filed the complaint because the license agreement was undated and there was no evidence of when it was executed.

The Federal Circuit agreed that USFRF could not sue on its own. It took care to note that the description of the issue as one of “statutory standing” was misplaced and to call the issue one of compliance with a “statutory requirement.” The Federal Circuit focused on three things to reach its conclusion: (1) USF retained the right to sue, (2) USF retained interest in the proceeds from the patent, and (3) some other consideration that is redacted from the unsealed opinion. As to the first issue—retaining the right to sue—the Federal Circuit explained that this “is the most important factor in determining whether an exclusive license transfers sufficient rights to render the licensee the owner of the patent.” *Alfred E. Mann Found. For Sci. Rsch. v. Cochlear Corp.*, 604 F.3d 1354, 1358-59 (Fed. Cir. 2010). Here, the agreement is silent on whether the right to sue was transferred at all. “The agreement’s silence on the right to sue accused infringers does not show an intent to transfer that right. Rather, it shows that USF retained the important right to enforce the patent against accused infringers.” The Federal Circuit also referred to a contractual obligation for USF and USFRF to cooperate in enforcement activities, which counseled in favor of finding that USFRF could not sue on its own.

As to constitutional standing, the Federal Circuit vacated the decision. “[T]he district court clearly erred by concluding that the only way that USFRF could establish that the license agreement covered the [patent-in-suit] was by waiving its attorney-client privilege and work-product protection” and producing its invention disclosure. Instead, the Federal Circuit explained that the evidence showed that the license agreement was related to the asserted patent. Moreover, the Federal Circuit concluded that whether the license agreement was signed before or after the complaint was filed was irrelevant because even under the Revenue Allocation Agreement, USFRF had at least one exclusionary right. “As we have held, constitutional standing is satisfied when a party holds at least one exclusionary right.”

2. Omni MedSci, Inc. v. Apple Inc., 7 F.4th 1148 (Fed. Cir. 2021)

This was an interlocutory appeal from a district court’s denial of Apple’s motion to dismiss for lack of standing. The Federal Circuit affirmed the denial of the motion to dismiss.

A University of Michigan professor came up with an invention while on leave. He filed provisional applications during that leave and converted them to non-provisional applications once he returned from leave. The University of Michigan has certain bylaws that the professor had agreed to abide by. Under those bylaws, there was an unresolved dispute over the ownership of the patents between the professor and the University. The relevant provision of the bylaws read:

Patents and copyrights issued or acquired as a result of or in connection with administration, research, or other educational activities conducted by members of the university staff and supported directly or indirectly open (e.g., through the use of University resources or facilities) by funds administered by the University regardless of the source of such funds, and all royalties or other revenues derived therefrom shall be the property of the University.

Years later the professor assigned the patents to a company, which then sued Apple. Apple moved to dismiss and contended that the University owned the patents—not the plaintiff. The core question was whether the language above effected a present tense assignment of inventions. The Federal Circuit agreed with the district court that it did not.

The question presented was one of contract interpretation. The Federal Circuit first explained that the relevant provision of the UofM's bylaws did "not unambiguously constitute either a present automatic assignment or a promise to assign in the future." Instead, the language "is more naturally read as a statement of intended disposition and a promise of a future assignment, not as a present automatic transfer." Moreover, another provision of the bylaws, which explains that certain inventions "shall be the property" of the inventor would make no sense because it would require an interpretation that the inventor assigned the invention to himself. Moreover, yet another provision of the bylaws required the parties to reach an agreement on ownership of patent rights, and provided that "resulting work products shall be owned as agreed upon in writing." This language again referred to a future allocation of patent rights, not one that occurred at the time of invention. The Federal Circuit also explained that interpreting the language as Apple wanted would be in tension with the University's invention disclosure form, which required an assignment to be executed.

Judge Newman dissented and would have found that the University owned the patents. She would have concluded that the plain language of the documents and the long-understood interpretation of these documents show that they do constitute a present-tense assignment of patent rights. For example, the documents, which are signed at the start of employment, by their nature apply to future inventions.

B. Personal Jurisdiction

1. Trimble Inc. v. PerDiemCo LLC, 997 F.3d 1147 (Fed. Cir. 2021)

This decision addresses personal jurisdiction in the context of a declaratory judgment action over allegations of patent infringement. More specifically, the question presented is whether the patentee's activities directed at the declaratory judgment plaintiff were sufficient to give rise to personal jurisdiction under *Red Wing Shoe Co. v. Hockerson-Halberstadt, Inc.*, 148 F.3d 1355 (Fed. Cir. 1998). Continuing a recent trend, the Federal Circuit held that *Red Wing Shoe* does not preclude personal jurisdiction in this case.

PerDiemCo owns eleven patents and sent a licensing demand letter to ISE, a subsidiary of Trimble, a California company. The letter threatened to sue ISE in Iowa. ISE, in turn, sent the letters to Trimble and Trimble responded. This led PerDiemCo to send a letter to Trimble accusing Trimble products—in addition to the originally-accused ISE products—of infringement. The parties discussed the possibility of mediation. PerDiemCo expanded the allegations from nine to eleven patents and accused additional products as the negotiations proceeded. PerDiemCo also threatened suit in the Eastern District of Texas and identified counsel retained for that purpose. In all, over the course of three months, PerDiemCo had twenty-two separate interactions with

Trimble's counsel. Trimble then filed a declaratory judgment action in the Northern District of California. PerDiemCo moved to dismiss for lack of personal jurisdiction and the district court granted the motion. The district court reasoned that *Red Wing Shoe* precluded an exercise of personal jurisdiction where the contacts with the forum were based on communications involving the licensing of the patents.

The Federal Circuit reversed. "On appeal, PerDiemCo argues that the district court was correct in holding that *Red Wing* controls because *Red Wing* held that sending of demand letters in that case did not create personal jurisdiction." The Federal Circuit disagreed, explaining that *Red Wing* involved three letters being sent from a patentee into a forum state.

"Three subsequent developments have clarified the scope of *Red Wing*," the Federal Circuit explained. First, the Supreme Court has repeatedly explained that "analysis of personal jurisdiction cannot rest on special patent policies" in cases such as *SCA Hygiene Products* (laches), *eBay* (injunctive relief), and *TC Heartland* (venue). Second, Supreme Court decisions such as *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080 (2018), show that communications sent to a state may create specific personal jurisdiction, depending on the nature and scope of such communications. Additionally, more recent Federal Circuit cases like *Jack Henry & Associates, Inc. v. Plano Encryption Technologies LLC*, 910 F.3d 1199 (Fed. Cir. 2018), demonstrate that "in the context of patent litigation, communication threatening suit or proposing settlement or patent licenses can be sufficient to establish personal jurisdiction." And, sister circuit decisions also show that communications can give rise to specific personal jurisdiction. Third, the Supreme Court's decision in *Ford Motor Co. v. Mont. Eighth Jud. Dist. Ct.*, 141 S. Ct. 1017 (2017) "has established that a broad set of a defendant's contacts with the forum are relevant to the minimum contacts analysis."

Under these principles, while *Red Wing* remains properly decided, "there is no general rule that demand letters can never create specific personal jurisdiction," and given the facts here, they did. The facts demonstrated an "extensive number of contacts with the forum in a short period of time" (3 months).

PerDiemCo amplified its threats of infringement as the communications continued, asserting more patents and accusing Moore of Trimble and dieses products of infringement. Indeed, PerDiemCo went so far as to identify the counsel it retained to sue Trimble and ISE and the venue in which it planned to file suit. PerDiemCo's twenty-two communications over the course of about three months fell well outside the "sufficient latitude" we sought to grant patentees "to inform others of [their] patent rights without subjecting [themselves] to jurisdiction in a foreign forum" on the basis of three letters sent over a similar time period in *Red Wing*. . . . PerDiemCo's attempts to extract a license in this case are much more akin to "an arms-length negotiation in anticipation of a long-term continuing business relationship," over which at this court may exercise jurisdiction.

The Federal Circuit also concluded that notions of fair play and substantial justice were not inconsistent with an exercise of jurisdiction over PerDiemCo in this case.

C. *Venue*

1. Venue in ANDA Cases

- a. Celgene Corp. v. Mylan Pharm. Inc., No. 2021-1154 (Fed. Cir. Nov. 5, 2021)

Celgene sued Mylan Pharmaceuticals, Mylan Inc., and Mylan N.V. in the United States District Court for the District of New Jersey for filing an abbreviated new drug application (“ANDA”) including a paragraph IV certification. None of the Mylan entities had a principal place of business in New Jersey, nor did they have formal offices there. The district court dismissed the suit as to Mylan Pharmaceuticals and Mylan Inc. for improper venue and dismissed the suit against Mylan N.V. for failure to state a claim because the allegations that Mylan N.V. was involved with the filing of the ANDA were too speculative. The Federal Circuit affirmed.

As to the venue issues, this case largely applied the Federal Circuit’s decision in *Valeant Pharms. N. Am. LLC v. Mylan Pharm. Inc.*, 978 F.3d 1374, 1381-82 (Fed. Cir. 2020). Some additional facts addressed in this case included the fact that the paragraph IV certification was mailed from Mylan’s facilities in West Virginia to Celgene’s offices in New Jersey. The Federal Circuit deemed that irrelevant because it is the submission of the paragraph IV certification to the FDA that constitutes the act of infringement under 35 U.S.C. §271(e), not sending the notice to the patentee that the ANDA has been filed or the basis for the challenge.

Second, seventeen Mylan employees apparently resided in New Jersey and some had storage lockers where they kept product samples for their jobs. The Federal Circuit concluded the homes of the seventeen employees were insufficient to establish New Jersey as a regular and established place of business because neither Mylan entity “(1) required or instructed those employees to live in New Jersey, (2) pays for their homes, (3) requires the employees to store materials in the homes or in New Jersey, or (4) pays for secretarial or support staff to work at the homes.” There was no indication that Mylan was holding these homes out as its place of business. Thus, the Federal Circuit found the case to be like *Cray* where the employees were allowed to work from their homes, but did not use their homes as a place of business within the district. With respect to the storage lockers, the lockers were rented in the employees’ own names and there was no evidence they were used like warehouses and there was no requirement that employees store any work-related materials in New Jersey. The key to the Federal Circuit’s decision in this regard appears to be that the corporation did not require the samples to be stored in New Jersey, and as such did not have a regular and established place of business in New Jersey.

Third, a now-defunct Mylan entity had a location in New Jersey until 2017. That Mylan entity was indirectly owned by Mylan Pharmaceuticals. Celgene argued its now-defunct location in New Jersey should be imputed to the Mylan entities in the suit. The Federal Circuit, applying

Third Circuit law, refused to impute the corporate activities of a subsidiary to the parent company. “In all, Celgene’s cited cases don’t support the wholesale imputation of venue here. And Celgene has identified no authority showing that affiliation of shared activities alone are enough. . . . Of course, it might be that a parent corporation might specifically ratify a subsidiary’s place of business, even if the two do maintain corporate separateness,” but that was not the argument presented here.

With respect to the dismissal for failure to state a claim, there were no non-conclusory applications that Mylan N.V. “submitted” the ANDA under 35 U.S.C. § 271(e)(2). Therefore, the relevant question was “whether Celgene pled sufficient facts that either (1) Mylan N.V. was actively involved in and directly benefited from the ANDA (including in the agent-principal sense) or (2) MPI acted as Mylan N.V.’s alter ego in derogation of the corporate form,” and here, the pleadings were insufficient to state a claim that was plausible on its face.

2. Patent Venue Statute

- a. Andra Group, LP v. Victoria’s Secret Stores, L.L.C., 6 F.4th 1283 (Fed. Cir. 2021)

After the district court dismissed a number of defendants for lack of venue, the patentee dismissed the sole remaining defendant and appealed the district court’s dismissal. This case concerned certain corporate affiliates to the company that operates Victoria’s Secret stores. The plaintiff presented several theories for why venue was proper and none panned out. The Federal Circuit thus affirmed.

First, the Federal Circuit rejected the theory that the non-store entities had deputized the store employees as their agents. There simply was no evidence that was the case and the evidence that was in the record showed that the store managers had autonomy in hiring, firing, and control of the employees. Second, the Federal Circuit rejected the argument that the non-store entities adopted the places of business of the stores as their own. The Federal Circuit explained that

[i]f corporate separateness has not been maintained, the place of business of one corporation may be imputed to the other for venue purposes. But where related companies have maintained corporate separateness, the place of business of one corporation is not imputed to the other for venue purposes.

Even if the non-store defendants had held the locations of the stores out as their place of business, that was not enough. The non-store defendants actually had to be doing business there to subject themselves to venue. After considering the facts, the Federal Circuit concluded that the non-store defendants had not ratified the store locations as their places of business.

3. Western District of Texas

- a. In re Juniper Networks, Inc., 14 F.4th 1313 (Fed. Cir. 2021)

The Federal Circuit granted a petition for writ of mandamus and ordered the Western District of Texas to transfer the underlying six actions to the Northern District of California. The following table summarizes the district court's decision as well as the Federal Circuit's decision addressing the district court's decision:

	Factor	District Court	Federal Circuit
Private	Ease of access to sources of proof	neutral	<p>The district court erred in faulting Juniper's declaration for stating that a "majority" of the evidence related to the case was in the Northern District of California because it was undisputed that Juniper kept no relevant evidence in the Western District of Texas.</p> <p>"We have held that the fact that some evidence is stored in places other than either the transferor or the transferee forum does not weigh against transfer."</p>
	Availability of compulsory process	Slightly against transfer	<p>"The sole basis of the district court's finding on that factor was based on the parties' failure to identify any unwilling witnesses who would need to be subpoenaed. That no party expressly identified any witness as unwilling to testify, however, does not cut in favor of conducting this litigation in the Western District of Texas rather than the Northern District of California. . . [T]his factor should be regarded as neutral at most, and certainly not as weighing against transfer."</p>
	Convenience of forum for witnesses	Slightly in favor of transfer	<p>This factor is "probably the single most important factor in the transfer analysis. <i>In re Genentech, Inc.</i>, 566 F.3d 1338, 1343 (Fed. Cir. 2009)." Here, "the district court clearly erred in not giving sufficient weight to the relative convenience of the transferee forum for the potential witnesses, particularly in light of the striking imbalance in the parties' respective presentations on this factor."</p> <p>"The court's assumption that Juniper would not call many party witnesses was not based on any evidence specific to this case. On the other side of the ledger, only one witness was identified as being located in or near the Western District of Texas, and that witness, a Brazos employee, was not alleged to have information relating to the merits of the infringement claims against Juniper."</p> <p>"We have previously rejected the district court's reliance on the proposition that the convenience-to-the witness factor is attenuated when the witnesses are employees of the party calling them. . . We have also rejected the district court's categorical assumption that defendants are</p>

	Factor	District Court	Federal Circuit
			<p>likely to call few if any of the proposed party witnesses or prior-art witnesses that are identified for the purposes of supporting transfer motions.”</p> <p>This factor was “particularly strong in light of the very weak showing” made by Brazos and thus heavily weighed in favor of transfer.</p>
	Practical considerations making trial easier, expeditious, inexpensive		
Public	Court congestion	Against transfer	<p>“[W]e have noted that the Western District of Texas and the Northern District of California show no significant differences in caseload or time-to-trial statistics. . . [W]e have held that it is improper to assess the court congestion factor based on the fact that the Western District of Texas has employed an aggressive scheduling order for setting a trial date.”</p>
	Local interest	Against transfer	<p>“[T]he district court erred in applying the local interest factor. The court acknowledged that the events forming the basis for Brazo’s infringement claims occurred mainly in the Northern District of California; none occurred in the Western District of Texas. That is sufficient to give the transferee venue a greater localized interest in the dispute, which favors transfer.”</p> <p>“Juniper’s general presence in the Western District of Texas is not enough to establish a local interest in that district comparable to that of the Northern District of California.”</p> <p>“Brazos’s status as a Waco-based entity is not entitled to significant weight” because its presence in the district is “both recent and relatively insubstantial. The office was established only a few months before the complaints against Juniper were filed, and the activities of the office are largely tied to bringing lawsuits in that court.”</p>

	Factor	District Court	Federal Circuit
	Familiarity with law		
	Conflict of law/need to apply foreign law		

Because the district court abused its discretion, the Federal Circuit granted the petition for writ of mandamus and ordered the case to be transferred under 28 U.S.C. § 1404(a) to the Northern District of California.

b. In re Google, No. 2021-178 (Fed. Cir. Nov. 15, 2021)

The Federal Circuit granted the petition for writ of mandamus and ordered the United States District Court for the Western District of Texas to transfer a patent suit to the Northern District of California. The district court itself concluded that transfer was unwarranted because it could resolve a trial more quickly than the Northern District of California even though “the transferee court was otherwise more convenient.” This was a “clear abuse of discretion” according to the Federal Circuit.

The district court denied a motion to transfer under 28 U.S.C. § 1404(a). Key facts included the fact that Google employees familiar with product development were in California and New York, but not Austin, Texas. The patentee was a nonpracticing entity headquartered in the Northern District of California. The patents had been asserted before in the Northern District of California. The district court found that the Northern District of California was more convenient for party witnesses, had more of a local interest in the case, and had an advantage in being able to compel non-party witnesses. But, because the Western District of Texas could adjudicate the case faster, the Western District determined that Google had not shown that the transferee venue was “clearly more convenient.”

The Federal Circuit concluded that the district court had correctly determined that the third party witnesses—namely two third party named inventors—slightly favored transfer. The district court also correctly concluded that the party witnesses favored transfer. Finally, because no underlying facts took place in Austin, Texas, while the design of the products at issue took place primarily in the Northern District of California, the district court correctly determined that the Northern District of California had a local interest in the dispute that was greater than that of the Western District of Texas.

The first mistake made by the district court was finding that the location of sources of proof was neutral. The record demonstrated that Express Mobile, the patentee, kept documents in the Northern District of California. Google created and maintained documents in the Northern District of California. “The district court erred by analyzing only the location of servers where

documents are stored, rather than also considering the location of document custodians and location where documents are created and maintained, which may bear on the ease of retrieval. This factor appears to slightly favor transfer.

The district court also erred in weighing the practical problems factor as neutral. Other cases involving the same patents had been filed in the Northern District of California. In fact, the Northern District of California had been the only district in which the patents had been asserted (until the suit against Google, and other suits were filed on the same day). The other suits filed in the Western District of Texas had been transferred or were subject to transfer motions. “[A]ny judicial economy considerations in having one trial judge handle lawsuits involving the same patents and technology do favor the Northern District of California.

The district court erred when weighing the court congestion issue heavily against transfer. “We have held that when other relevant factors weigh in favor of transfer or are neutral, ‘then the speed of the transferee district court should not alone outweigh all of those other factors.’ . . . And where, as here, the district court has relied only on time to trial to support its conclusion as to court congestion, we have characterized this factor as ‘speculative.’ . . . However, the time to trial statistics provided in this case, unsupported by additional facts such as the number of cases per judge and the speed and availability of other such case dispositions, cannot alone weigh ‘heavily against transfer.’ This factor is plainly insufficient to warrant keeping this case in the Texas forum given the striking imbalance favoring transfer based on the other convenience factors.”

- c. In re Atlassian Corp., PLC, No. 2021-177 (Fed. Cir. Nov. 15, 2021)

Like the In re Google case, this is another Express Mobile case that was brought in the Western District of Texas. The Court denied a motion to transfer for convenience under 28 U.S.C. § 1404(a). The Federal Circuit granted a petition for a writ of mandamus and ordered the case to be transferred to the Northern District of California.

There are some differences between this and the Google case, though the result and analysis largely track one another. First, the petitioner here filed declarations of prior art witnesses located in the Northern District of California that stated that they had no interest in traveling to Waco, Texas. The district court did not weigh these declarations heavily because it concluded that the prior art witnesses “are unlikely to testify,” and there was no proof they were “unwilling to testify in Texas” The Federal Circuit noted that it had rejected this same reasoning in other cases. “As in those cases, the district court here improperly substituted its own assumptions that prior art witnesses are unlikely to testify in place of specific reasons to believe that the prior art witnesses would be relevant. . . . Such categorical rejection of those witnesses entirely untethered to the facts of the particular case is an abuse of discretion.” Additionally, the Federal Circuit explained that the lack of compulsory service of process remains a relevant consideration when multiple third party witnesses are located within the subpoena power only the transferee venue.

The District Court also erred when it concluded that the defendant would not call many witnesses at trial. The Federal Circuit explained that the district court's reasoning was predicated on conjecture.

The remainder of the analysis largely tracks the Federal Circuit's decision in In re Google. At bottom, the district court abused its discretion and transfer was ordered.

d. In re Apple Inc., No. 2021-181 (Fed. Cir. Nov. 15, 2021)

Apple moved to transfer this case to the Northern District of California under 28 U.S.C. § 1404(a). Apple contended that relevant Apple employees, documentation, and third parties were in Northern California. And, the events that gave rise to the claims of infringement took place there. Apple employees in the Western District of Texas had no unique knowledge about the accused products. The plaintiff in this case was recently incorporated in Wyoming and had no connections with Texas. The district court denied the motion. The district court found two factors particularly weighty in denying transfer: (1) court congestion and its belief that it could get the case to trial faster than the Northern District of California, and (2) another case about the same patents was pending in the Western District of Texas. The Federal Circuit granted mandamus and ordered that the case be transferred.

The Federal Circuit faulted the district court for not weighing the sources of proof factor in favor of transfer. The only evidence at the time the district court made its decision was that Apple's sources of proof were in the Northern District of California and none were shown to be in the Western District of Texas. The Federal Circuit also concluded that the district court erred when it concluded that Apple should give its employees in Austin access to source code and documents for the purposes of litigation. "The district court should have compared the ease of access in the Western District of Texas relative to the ease of access in the Northern District of California" and under the appropriate analysis, transfer was warranted.

The district court also erred in failing to weigh the compulsory process factor in favor of transfer. Specifically, "[t]he district court erroneously discounted [specific] third parties [referenced in the complaint] when it faulted Apple for not identifying any specific employees of those entities."

Moreover, the district court failed to weigh the relative convenience of the two forums for party witnesses. Here, Apple had identified eight employees in the Northern District of California that had relevant information and may testify, while the plaintiff was unable to identify any witnesses that resided in the Western District of Texas with relevant information. "Because Apple identified several potential party and non-party witnesses residing in the Northern District of California, and no potential witnesses appear to reside in the Western District of Texas, the witness convenience factor weighs strongly in favor of transfer." Federal Circuit precedent requires weighing this factor in favor of transfer and "[n]otwithstanding this precedent, the district court gave no weight to the relative convenience of the transferee forum for the potential witnesses." The Federal Circuit observed that the district court's reliance on its own decisions as allowing this factor to be given little weight because a party can compel its own employees to testify at trial

was error as it had previously held. Moreover, the district court should not assume that a party will call few witnesses at trial, as it did here, or favor the identification of employees in the district over those outside the district without assessing their relative knowledge of those witnesses related to the subject matter of the action.

The district court also attached too much weight to the other suit pending in the Western District of Texas over the same patents. That is because the allegations in the other case do not involve the same third party software and thus would have different discovery and different evidence. Incremental gains, therefore, obtained by keeping both suits together were insufficient to warrant a denial of transfer.

With respect to the district court's reliance on time to trial statistics, the Federal Circuit explained that the district court "did not explain how any difference in the perspective time- 2-trial which caused by an appreciable difference in the degree of docket congestion between the two forums. Nor did the District Court point to any reason in its analysis why a possibly more rapid disposition of this case in Texas is worthy of important weight." Speed alone should not outweigh other factors when other relevant factors either favor transfer or are neutral. "the district court's speculation about what might happen with regard to the speed of adjudication is plainly insufficient to warrant keeping this case in the Texas forum given the striking imbalance favoring transfer based on the convenience factors."

Lastly, the district court erred in its consideration of the local interest factors. Here apple is headquartered in the Northern District of California it's witnesses are there but the court wait that factor only slightly in favor of transfer because of Apple's significant presence in the Western District of Texas. The error committed by the District Court was that wade apples general presence in the forum instead of focusing on the locus of events that give rise to the dispute. The proper connections to focus on are the events that give rise to the lawsuit.

For these reasons, the Federal Circuit granted mandamus relief and ordered the district court to transfer the underlying case to the Northern District of California.

e. W.D. Tex. Venue Scorecard

Case	Basis	Result
In re Bose Corp., 2021 U.S. App. LEXIS 15482 (Fed. Cir. May 25, 2021)	§ 1404(a)	Mandamus denied
In re Western Digital Techs., Inc., 2021 U.S. App. LEXIS 13756 (Fed. Cir. May 10, 2021)	§ 1404(a)	Mandamus denied
In re Tracfone Wireless, Inc., 2021 U.S. App. LEXIS 11388 (Fed. Cir. Apr. 20, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Apple Inc., 2021 U.S. App. LEXIS 10277 (Fed. Cir. Apr. 9, 2021)	§ 1404(a)	Mandamus denied

Case	Basis	Result
In re ADTRAN, Inc., 2021 U.S. App. LEXIS 8148 (Fed. Cir. Mar. 19, 2021)	§ 1404(a)	Mandamus denied
In re Tracfone Wireless, Inc., 2021 U.S. App. LEXIS 6689 (Fed. Cir. Mar. 8, 2021)	§ 1404(a)	Mandamus granted; proceedings stayed while venue resolved
In re SK Hynix Inc., 2021 U.S. App. LEXIS 5674 (Fed. Cir. Feb. 25, 2021)	§ 1404(a)	Mandamus denied
In re Intel Corp., 2021 U.S. App. LEXIS 1691 (Fed. Cir. Jan. 21, 2021)	§ 1404(a)	Mandamus denied
In re Dish Network LLC, 2021 U.S. App. LEXIS 24133 (Fed. Cir. Aug. 13, 2021)	§ 1404(a)	Mandamus denied
In re Apple Inc., 2021 U.S. App. LEXIS 23042 (Fed. Cir. Aug. 4, 2021)	§ 1404(a)	Mandamus denied
In re Hulu, LLC, 2021 U.S. App. LEXIS 22723 (Fed. Cir. Aug. 2, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re TCO AS, 2021 U.S. App. LEXIS 20629 (Fed. Cir. Jul. 13, 2021)	§ 1404(a)	Mandamus denied
In re Uber Techs. Inc., 2021 U.S. App. LEXIS 20216 (Fed. Cir. Jul. 8, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Samsung Elecs. Co., 2 F.4th 1371 (Fed. Cir. 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Volkswagen Group of Am., Inc., 2021 U.S. App. LEXIS 19252 (Fed. Cir. Jun. 29, 2021)	§ 1404(a)	Mandamus denied
In re Pandora Media, LLC, 2021 U.S. App. LEXIS 30963 (Fed. Cir. Oct. 13, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Netscout Sys., 2021 U.S. App. LEXIS 30500 (Fed. Cir. Oct. 13, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Google LLC, 2021 U.S. App. LEXIS 30052	§ 1404(a)	Mandamus granted, transfer ordered
In re Juniper Networks, Inc., 2021 U.S. App. LEXIS 29812 (Fed. Cir. Oct. 4, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Apple Inc., 2021 U.S. App. LEXIS 26959 (Fed. Cir. Oct. 1, 2021)	Re-transfer from Austin to Waco	Mandamus granted, transfer ordered

Case	Basis	Result
In re Intel Corp., 2021 U.S. App. LEXIS 29135 (Fed. Cir. Sept. 27, 2021)	§ 1404(a)	Mandamus denied
In re Google LLC, 2021 U.S. App. LEXIS 29137 (Fed. Cir. Sept. 27, 2021)	§ 14040(a)	Mandamus granted, transfer ordered
In re G&H Diversified Mfg., LP, 2021 U.S. App. LEXIS 29138 (Fed. Cir. Sept. 27, 2021)	§ 1404(a)	Mandamus denied
In re Juniper Networks, Inc., 14 F.4th 1313 (Fed. Cir. 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Medtronic, Inc., 2021 U.S. App. LEXIS 38143 (Fed. Cir. Dec. 27, 2021)	§1400(b), §1404(a)	Mandamus denied
In re accessiBe Ltd., 2021 U.S. App. LEXIS 35858 (Fed. Cir. Dec. 6, 2021)	§1404(a)	Mandamus denied without prejudice
In re Meraki Integrated Circuit (Shenzhen) Tech., Ltd., 2021 U.S. App. LEXIS 33791 (Fed. Cir. Nov. 15, 2021)	§1404(a)	Petition dismissed
In re Google LLC, 2021 U.S. App. LEXIS 33789 (Fed. Cir. Nov. 15, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Atlassian Corp. PLC, U.S. App. LEXIS 33790 (Fed. Cir. Nov. 15, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Apple Inc., U.S. App. LEXIS 33788 (Fed. Cir. Nov. 15, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Quest Diagnostics Inc., 2021 U.S. App. LEXIS 33405 (Fed. Cir. Nov. 10, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Dish Network LLC, 2021 U.S. App. LEXIS 31759 (Fed. Cir. Oct. 21, 2021)	§ 1404(a)	Mandamus granted, transfer ordered
In re Medtronic, Inc., 2021 U.S. App. LEXIS 38143 (Fed. Cir. Dec. 27, 2021)	§1400(b), §1404(a)	Mandamus denied

4. Federal Rules of Evidence

- a. *Wi-LAN Inc. v. Sharp Electronics Corp.*, 992 F.3d 1366 (Fed. Cir. 2021)

Parties opposing summary judgment must demonstrate that there are genuine issues of material fact based on admissible evidence. This decision demonstrates what happens when a party

fails to properly authenticate third-party source code during discovery and then tries to use it to oppose summary judgment. Here, the patentee failed to demonstrate a dispute of material fact regarding infringement and summary judgment of noninfringement was entered. The district court's judgment was affirmed.

The patentee, Wi-LAN, knew that it needed to obtain source code from defendant's chipset suppliers in order to prove its infringement case. When those suppliers refused to cooperate in discovery, Wi-LAN sued them for infringement. In exchange for dismissing those cases, Wi-LAN secured declarations stating that the source code provided the implementation of the deinterlacing process for digital video data in a specified list of chips" and that there were no material differences between various versions of code. Wi-LAN presented several arguments for why the code was admissible and should have been considered.

First, Wi-LAN argued that the code was a business record and thus admissible under the business record exception to the hearsay rule. But, this exception required Wi-LAN to show that the documents satisfied the requirements of the rule by testimony from a custodian or another qualified witness. Here, the declarations themselves were not a proxy for trial testimony because the witnesses were not likely to be available for trial and the declaration themselves were not business records. Moreover, Sharp and Vizio had shown that the materials were not trustworthy because they included "inconsistent dates in the metadata, copyright, and revision histories as well as added commentary on the printed excerpts." Moreover, Wi-LAN did not obtain collateral documentation, like change logs or other evidence of revisions to the code to clear up those inconsistencies.

Second, Wi-LAN argues that the code was authenticated and there was no legitimate question as to the trustworthiness of the code. The district court disagreed and cited the "highly dubious circumstances surrounding the production and the lack of indicia of trustworthiness in the code."

Third, Wi-LAN argued that the district court should have admitted the code because it was relied upon by its expert and it is the type of information relied upon by experts. This, according to the Federal Circuit, presented two questions: "(1) whether the source code printout was admissible because it was relied on by the expert and (2) whether the expert's testimony relying on the source code was admissible to establish infringement." As to the first question, the simple fact that an expert relies on the underlying documentation does not establish its admissibility under Fed. R. Evid. 703. Experts, in other words, cannot be used as a mere conduit to transmit otherwise inadmissible evidence to a jury. "Wi-LAN attempts to do exactly what is impermissible under Rule 703 by using its expert as a substitute for a fact witness to circumvent the rules of evidence to admit otherwise inadmissible evidence." As to the second question, the Federal Circuit agreed with the district court that while experts may rely on source code to formulate infringement opinions, experts do not routinely rely upon unauthenticated source code for that purpose.

5. Rule 60 – Vacating Judgment

- a. Cap Export, LLC v. Zinus, Inc., 996 F.3d 1332 (Fed. Cir. 2021)

This appeal came to the Federal Circuit after the district court vacated a judgment and set aside an injunction under Fed. R. Civ. P. 60(b)(6). The Federal Circuit affirmed.

The story starts with a patent infringement lawsuit (among other allegations). That suit wound its way up to the Federal Circuit after summary judgment of invalidity. The Federal Circuit vacated and remanded because the district court erred when it granted summary judgment and there was a factual dispute about whether a reference called the “bed in the box” was in fact prior art. On remand, the patentee moved for summary judgment of no invalidity and it was granted. This led the accused infringers to stipulate to the entry of judgment, agree to pay \$1.1 million in damages, and agree to the entry of an injunction.

During the now-resolved case, the patentee used its president as its expert witness. He had denied knowledge of certain alleged prior art, which prevented the accused infringers from proving its invalidity case.

The patentee then sued another company. But the now-enjoined company was watching the case. In connection with a motion to transfer venue, the defendant in the new case filed correspondence between a Chinese company and a Malaysian company related to certain prior art beds. This caused the now-enjoined company to send some employees to Malaysia on a fact-finding mission. What they came back with was a copy of an invoice signed by the patentee’s expert witness and president for the purchase of hundreds of prior art beds before the critical date. On the motion to vacate the judgment because of fraud, the district court found the patentee’s explanations for the false testimony implausible. It granted the motion.

On appeal, the Federal Circuit observed that the appellant was taking a position that amounted to blaming the accused infringer’s “incompetent lawyers” for the adverse consequences of the fraud. Specifically, the accused infringer did not serve document requests related to the prior art, did not depose the inventor, and did not take the 30(b)(6) deposition of the plaintiff. In other words, the patentee argued that the accused infringer should have discovered the fraud exercising reasonable diligence.

The Federal Circuit, applying Ninth Circuit law, explained that “[t]he issue . . . is not whether the conduct of Cap Export’s counsel fell below the standard of care for attorneys practicing patent litigation, but whether a reasonable company in Cap Export’s position should have had reason to suspect the fraud—here, that [the patentee’s president and expert] had testified falsely—and, if so, took reasonable steps to investigate the fraud.” Here, the accused infringer had no reason to suspect the fraud. And, after reviewing the district court’s decision for each of the requisite showings to vacate a judgment under Federal Rule of Civil Procedure 60(b)(3), the Federal Circuit affirmed.

6. Confidential Information in Pleadings; Public’s Right to Access

a. Depuy Synthes Products, Inc. v. Veterinary Orthopedic Implants, Inc., 990 F.3d 1364 (Fed. Cir. 2021)

This was an interlocutory appeal from the United States District Court for the Middle District of Florida. The district court, which had previously entered a protective order governing the exchange of trade secret information between the parties, denied a motion to seal an amended complaint. The amended complaint included the identity every third-party manufacturer and included other information in the form of emails and contractual terms. An interlocutory appeal was filed to determine whether the district court's ruling that the complaint should be publicly filed was correct. Two questions were presented on appeal. The first was whether the Federal Circuit had jurisdiction under the collateral order doctrine. And the second was whether the district court abused its discretion in ordering that the amended complaint needed to be publicly filed. The Federal Circuit affirmed.

The Court first had to determine whether it had jurisdiction to hear the interlocutory appeal. It explained that the collateral order doctrine is a narrow exception to the usual rule of finality and allows for an interlocutory appeal when a trial court order affects the rights that will be irretrievably lost in the absence of an immediate appeal. Three requirements must be met for the collateral order doctrine to apply. The Federal Circuit found each of these requirements met here. First, the district court order conclusively determined that the information sought to be sealed was to be publicly filed. Second, the issue sought to be resolved on appeal was an important one because it implicates the important balance between the public's interest and understanding judicial proceedings and the parties right to access the courts without being unduly required to disclose confidential information. Third, once the information was filed on the public docket, the order would be effectively unreviewable on appeal because the information would have slipped into the public domain. This was sufficient to give the Federal Circuit jurisdiction.

On the merits, the Federal Circuit determined that the district court did not abuse its discretion in ordering that the complaint would be publicly filed. The Court started its analysis by noting that there is a presumption that judicial records should be available to the public. However, when a party's proprietary interest and information overcomes the interest of the public and accessing the information then information in the court's docket may be sealed. When the relevant information is a complaint which includes the parties' names in the litigation, that generally must be disclosed to the public unless there are compelling countervailing circumstances.

The Federal Circuit rejected the argument that the protective order was informative on this issue.

To the extent that a protective order governs discovery and determines the confidentiality of the material that is exchanged between the parties, there is generally no issue of public access. ... But where the protective order purports to address the confidentiality of information on the public docket, the presumption of public access applies—and courts have an independent duty to protect the public right of access—even when the parties agreed to

maintain confidentiality of publicly filed information pursuant to a protective order.

Turning to the question of confidentiality, the Federal Circuit explained that the only theory presented by the appellant was that the information sought to be sealed contained a trade secret. The Federal Circuit explained that the district court did not abuse its discretion in concluding that the appellant had not shown the information constituted a trade secret. With respect to the manufacturer's name, there was no agreement of confidentiality and the appellant had not shown that there was an implicit obligation of confidentiality recognized between the parties such that the information sought to be sealed was a trade secret. With respect to the other information such as emails and contractual terms, the Federal Circuit noted that the appellant had also failed to carry its burden on this information. It invited the parties to negotiate the filing of a new amended complaint to remove this information if it was no longer important to the allegations being made by the appellee.

D. Appellate Practice

1. Mojave Desert Holdings, LLC v. Crocs, Inc., 987 F.3d 1070 (Fed. Cir. 2021)

A company called U.S.A. Dawgs had filed a request for *inter partes* reexamination of a patent owed by Crocs. During the pendency of the reexamination U.S.A. Dawgs went into Chapter 11 bankruptcy. As part of the bankruptcy proceeding, U.S.A. Dawgs assets were transferred "free and clear of all liens, claims, and encumbrances," to Dawgs Holdings, subject to provisions of the Bankruptcy Act. In the order allowing the conveyance, the bankruptcy court made clear that the transfer was

not free and clear of any claims Crocs, Inc. . . . may hold for patent infringement occurring post-Closing Date by any person including the Prevailing Bidder, or any defenses Crocs may have in respect to any litigation claims that are sold pursuant to the sale, including any rights to set off or recoupment against such claims to the extent validly existing under applicable law (together, the 'Retained Rights') and the retained rights are preserved in all respects.

Eventually, all litigation claims were transferred to Mojave, including, explicitly the *inter partes* reexamination. U.S.A. Dawgs dissolved, but existed for the purpose of "prosecuting and defending suits, actions, proceedings and claims of any kind or character by or against it" and "enabling it . . . to do every other act to wind up and liquidate its business and affairs."

Months passed after Mojave was assigned the litigation claims and then Mojave sought to have the Patent Office, and specifically the Patent Trial and Appeal Board, substitute it as a party in the *inter partes* reexamination. The request was expunged on three grounds, two of which the Federal Circuit interpreted as being the same: (1) the submissions did not prove Mojave was the real-party-in-interest; (2) Mojave is not a party under the transfer papers and did not have the

authority to update the real-party-in-interest designations; and (3) the submission was not timely and needed to be filed within 20 days of any change of real-party-in-interest information.

U.S.A. Dawgs filed a notice of appeal after the reexamination was unsuccessful. The Federal Circuit found this notice of appeal to be sufficient because it was a “protective” notice of appeal and U.S.A. Dawgs existed solely for the purpose of prosecuting and defending suits and actions, and winding up its affairs.

Mojave moved to substitute itself as a party in the appeal. This is the subject of the Court’s decision—not the substance of the appeal. The Court allowed Mojave to substitute itself as a party because Mojave had all of U.S.A. Dawgs’s assets, and U.S.A. Dawgs did not need to “enumerate each of its assets individually to effectuate the broad transfer. . . . Under the circumstances, the transfer of all assets on its face included the rights in the Board proceeding.”

The Federal Circuit also rejected the argument that because Mojave was not allowed to substitute as a party before the Board because it was untimely, it should not be permitted to substitute here. The Federal Circuit explained that it did not read 37 C.F.R. § 41.8(a)

as permitting the Board to ignore a transfer of interest in an inter partes reexamination that has been assigned to a successor-in-interest. The purpose of the rule is to detect conflicts of interest and to enable enforcement of inter partes reexamination estoppel provisions. . . . If the Board were permitted to preclude substitution on the basis of a transfer and interest because of a late filing, this would defeat the important interest in having the proper party before the Board. The Board erred by not substituting Mojave as the third party requester while the interparty examination was pending before the Board.

Additionally, the Federal Circuit noted that while “mere privies” cannot appeal an adverse decision in an inter partes reexamination, the Federal Circuit had not previously ruled upon whether the statute itself permits substitution. But, Supreme Court precedents permit assignment of various choses in action even though there are exceptions—even in the law of patents (e.g., a claim for patent infringement cannot be assigned without exclusive rights to the patent). Here, the bankruptcy sale transferred all rights including those relevant to assertions of infringement. This included the reexamination according to the Court.

Judge O’Malley dissented for the reasons provided in the Crocs briefing.

2. Mondis Technology Ltd. v. LG Electronics Inc., 6 F.4th 1379 (Fed. Cir. 2021)

This decision dismissed an interlocutory appeal on questions of liability for failure to meet the statutory timing requirements for an appeal. Specifically, under 28 U.S.C. § 1292(c)(2), the Federal Circuit has jurisdiction to hear appeals from judgments in a civil action for patent infringement which would otherwise be appealable to the United States Court of Appeals for the

Federal Circuit and is final except for an accounting. Such an appeal is subject to the statutory time limits applied in 28 U.S.C. § 2107(a), which indicates that an appeal cannot invoke the jurisdiction of an appellate court “unless notice of appeal is filed, within thirty days after entry of such judgment, order or decree.”

Here, LG sought JMOL on issues related to liability and damages. The district court denied JMOL as to liability issues in September 2019. But, it did not reach the damages issues until an order entered in April 2020. LG relied upon the April order as setting the deadline for the appeal of the orders denying JMOL on the merits, arguing that its motion tolled the deadline. The Federal Circuit explained that damages are part of an “accounting.” Therefore, when the district court denied the motion for JMOL on all issues except for an accounting, the order started the time limit for filing an interlocutory appeal.

This order will not be the end of the story for LG, however. LG has a right to appeal once the liability judgment is final because interlocutory appeals are voluntary. This interlocutory appeal, however, was untimely and was thus dismissed.

3. Acceleration Bay LLC v. 2K Sports, Inc., 15 F.4th 1069 (Fed. Cir. 2021)

This case came to the Federal Circuit after the district court granted summary judgment of non-infringement as to four patents. For three of the four patents appealed, the appellant made certain procedural errors that resulted in the Federal Circuit dismissing part of the appeal as moot and summarily affirming the judgement as to a third patent. The Court’s decision as to the fourth patent is discussed earlier in this outline.

Specifically, the district court granted summary judgment of non-infringement on two groups as to two of the patents: “(1) the accused video games do not meet the ‘m-regular’ limitation, and (2) Acceleration Bay’s theory that Take Two directly infringes because it is the ‘final assembler’ of the claimed networks failed for lack of case law support.” But, Acceleration Bay only raised one of the two grounds in its opening brief—i.e., the second ground. It thus forfeited an argument that the district court erred as to the first ground.

In opposing an argument that this forfeiture rendered the appeal as to the judgment on the two patents moot, Acceleration Bay argued that the Federal Circuit’s guidance as to the ground appealed would be informative on a forthcoming attorneys’ fees motion and it would inform the proceedings in other co-pending litigation over the same patents. As to the first issue, the Federal Circuit followed its decision in *Nasatka v. Delta Science Corp.*, 58 F.3d 1578, 1580 (Fed. Cir. 1995), which holds that a pending motion for attorneys’ fees cannot save an appeal from mootness if the appeal was otherwise moot. And, as to the second issue, the Federal Circuit followed two other circuits that had held that impacts on collateral litigation between other parties was not sufficient to preclude mootness. Acceleration Bay cited no cases on the other side of this issue.

As to the third patent, the district court construed two claim terms as requiring “m-regular” connections. While Acceleration Bay argued that the district court improperly imported the concept of “m-regular” networks into the claims of this patent, it only challenged one of the two

district court claim constructions that construed terms as requiring an m-regular network. Therefore, even if the Federal Circuit agreed with Acceleration Bay’s arguments on the term it briefed “the district court’s grant of summary judgment would remain intact because the district court interpreted a separate term in the [relevant] patent’s asserted claims to include the ‘m-regular’ limitation.” The judgement was thus affirmed because the alleged infringer was still entitled to judgment as a matter of law.

4. Seabed Geosolutions (US) Inc. v. Magseis FF LLC, 8 F.4th 1285 (Fed. Cir. 2021)

This was before the Court on an appeal from the PTAB. Before the Board, the petitioner did not rely upon the prosecution history to support its arguments about the claim construction issue. The patentee alleged that this was a waiver. The Federal Circuit disagreed. “The doctrine of waiver does not preclude a party from supporting its original claim construction with new citations to intrinsic evidence of record.” Here, the arguments do not “change the scope of the construction it advanced below” and does not rely on evidence that “was not in the record below.” Therefore, there was no waiver.

XII. REEXAMINATION

A. *In re Vivint, Inc., 14 F.4th 1342 (Fed. Cir. 2021)*

This case was on appeal from the final decision by the Patent Trial and Appeal Board affirming the rejection of claims following *ex parte* reexamination. The reexamination was the fourth proceeding brought against the challenged patent by the requester. The three earlier proceedings were *inter partes* review petitions filed September 28, 2015, November 2, 2015, and March 24, 2016—the latter shortly before the Board denied the earlier two petitions. While the first two petitions were denied for failing to meet the threshold for institution, the third petition was denied under 35 U.S.C. § 325(d) because it was a serial, follow-on petition by the same petitioner and thus risked harassment of the patent owner.

Despite the earlier denial of the third petition under 35 U.S.C. § 325(d), the former petitioner, now requester, repackaged some of the same arguments along with others and presented them in a request for *ex parte* reexamination. The request for reexamination was granted, petitions to vacate the decision ordering reexamination were denied, and, the Board ultimately affirmed the examiner’s rejection of the claims. This appeal followed and raised two questions: (1) were the questions presented in the request “new” questions of patentability under 35 U.S.C. § 303, and (2) was the Director’s ordering of the reexamination an abuse of discretion in light of the fact that the third petition for *inter partes* review had been denied under § 325(d) before the request for reexamination was filed?

As to the first question, the Federal Circuit held that the questions presented were “new” even though they were presented, at least in part, in the IPR petition that was denied under § 325(d). The Federal Circuit explained that the statute itself was not particularly helpful on what it meant to have a “new” question of patentability, but “[t]he broader statutory context, however, clarifies

that a question of patentability is new until it has been considered and decided on the merits.” Here, because the issues raised by the prior art in the reexamination request had not been decided on the merits, the questions presented in the reexamination request were in fact “new.”

The Federal Circuit agreed with the patentee, however, that the Patent Office abused its discretion and acted arbitrarily and capriciously when it ordered reexamination and then refused to terminate the proceeding in light of the fact that the Board had previously denied a petition raising overlapping grounds under § 325(d). First, the Federal Circuit faulted the Office for refusing to reconsider its order of reexamination after the order had issued—which the Federal Circuit deemed a “legal error.” Second, the Federal Circuit determined that the order of reexamination was arbitrary and capricious in light of the prior denial of IPR. As to this issue, the Federal Circuit observed that the denial of the final IPR petition focused on the petitioner’s “abusive filing practices,” and noted how the Board regularly denies institution when others have used “prior Board decisions as a roadmap to correct past deficiencies.” Here, the requester “copied, word-for-word, two grounds from the [denied] petition—the very petition deemed ‘a case of undesirable, incremental petitioning’—into its *ex parte* reexamination request. . . . Indeed, the *ex parte* reexamination request was a more egregious abuse than the [denied] petition under the same considerations already analyzed by the Board.”

The Federal Circuit did caveat its ruling, however, and noted that it was not holding “that the Director may never launch a reexamination even when a particular challenger has engaged in improper serial filing.”

XIII. PATENT TERM

A. *Chudik v. Hirshfeld*, 987 F.3d 1033 (Fed. Cir. 2021)

Patent term extensions can occur due to certain events that occur during prosecution of a patent application before the USPTO. This case addresses C-type delays, and, to a lesser extent, B-type delays. The appellant filed a patent application, had it rejected twice, and instead of appealing, sought continued examination. The next time the examiner made the rejection final—almost two years later—the appellant appealed to the Board. After considering the appeal brief, and rather than filing an Examiner’s Answer, the examiner reopened prosecution. This happened on several occasions until, finally, the examiner allowed the claims. The appellant contended that it was entitled to receive additional patent term because of the Board appeals. The district court disagreed and the Federal Circuit affirmed.

C-type delay is provided for by statute in 35 U.S.C. § 154(b)(1)(C)(iii):

The term of an original patent shall be adjusted if the issuance of the patent was delayed due to review by the patent trial and appeal board under 35 U.S.C. 134 or by a Federal court under 35 U.S.C. 141 or 145, if the patent was issued under a decision in the review reversing and adverse determination of patentability.

Here, because none of the appeals was subject to review by the Board or the Federal Circuit, and none was “issued under a decision in the review,” the applicant was not entitled to an extension due to C-delay.

The Federal Circuit also mentioned B-delay in the opinion. It observed that “[t]he unavailability of B-delay for nearly two years (655 days) of delay and the PTO illustrates what applicants should understand when deciding whether to request a continued examination rather than taking immediate appeal. The potential benefit of immediate re-engagement with the examiner through such continued examination comes with the potential cost.” Here, the applicant’s decision to file a request for continued examination rather than an appeal precluded it from claiming that the examiner’s reopening of prosecution constituted a B-delay.

XIV. ARBITRATION

A. In re MaxPower Semiconductor, Inc., 13 F.4th 1348 (Fed. Cir. 2021)

The appellant sought to directly appeal a decision instituting *inter partes* review or in the alternative seeking mandamus relief asking that the Board be compelled to terminate the *inter partes* review proceedings in light of an arbitration agreement. The Federal Circuit denied the relief sought, though Judge O’Malley dissented-in-part and concurred-in-part.

The majority concluded that the direct appeal was precluded as so many others have been under 35 U.S.C. § 314(d)’s no appeal clause. The Federal Circuit rejected the argument that the collateral order doctrine should provide an exception and warrants immediate review because there was no showing that the rights sought to be enforced would be irretrievably lost in the absence of an immediate appeal. The majority also rejected the argument that 9 U.S.C. § 16(a)(1) permitted the appeal because none of the statutory language applies to Board decisions. Finally, the majority rejected the argument that mandamus was appropriate because mandamus relief was simply being used to circumvent the no appeal provision under 35 U.S.C. § 314(d). And, “the arguments raised by MaxPower do not show, under the demanding standards for mandamus that the Board has clearly and indisputably exceeded its authority. The Board is not bound by the private contract . . . and MaxPower fails to explain why 35 U.S.C. § 294 clearly deprives the Board of authority to institute *inter partes* review when the statute does not by its terms task the agency with enforcing private arbitration agreements.”

Judge O’Malley would have granted the petition for writ of mandamus because she believes that the majority’s decision allows “the Patent Trial and Appeal Board to add a new caveat to congress’s clear instruction [found in 35 U.S.C. § 294] that agreements to arbitrate patent validity shall be ‘valid, irrevocable, and enforceable’—i.e., except during *inter partes* review.” This, she explained, irreversibly harms MaxPower and deprives it of the benefit of its arbitration agreement.

B. *ROHM Semiconductor USA, LLC v. MaxPower Semiconductor, Inc., No. 2021-1709 (Fed. Cir. Nov. 12, 2021)*

This was an appeal from a district court decision compelling arbitration after the plaintiff filed a declaratory judgment action related to four patents. The district court determined that the arbitrator must determine arbitrability of the dispute, not the court. The question on appeal was whether the decision of arbitrability should have been made by the court. The Federal Circuit affirmed.

Applying Ninth Circuit law, the Federal Circuit explained that courts should not presume that the parties agreed to arbitrate whether a dispute is arbitrable. Instead, there must be “unmistakable evidence” that they agreed to arbitrate arbitrability. Here, the agreement provided that arbitration is to be conducted “in accordance with the provisions of the California Code of Civil Procedure (‘CCCP’).” Because the CCCP includes provisions that require an arbitrator to determine arbitrability when raised by a party in the context of international disputes, and the dispute before the court was an international dispute, the Federal Circuit affirmed the district court’s determination that an arbitrator was to determine whether the dispute was arbitrable.