

RECENT DEVELOPMENTS IN PATENT LAW (SUMMER 2018)

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PATENTABLE SUBJECT MATTER

***Visual Memory LLC v. NVIDIA Corp.*, No. 2016-2254, 2017 WL 3481288 (Fed. Cir. Aug. 15, 2017)**

In this appeal from the District of Delaware, a divided Federal Circuit panel reversed and remanded the district court's finding that the '740 patent was ineligible under § 101.³

The '740 patent teaches that computer systems often use a three-tiered memory hierarchy including (1) a low-cost, low-speed memory for bulk storage, (2) a medium-speed main memory, and (3) an expensive, high-speed cache memory.⁴ This hierarchy permits code and non-code data to be transferred from the main memory to the cache during operation to ensure executing programs have quick access to the required data.⁵ The prior art systems lacked versatility because they were optimized based on the specific processor used in the system.⁶ Designing a new memory system for every processor is expensive, and substituting processors into a system decreases efficiency.⁷

The '740 patent addresses this problem by creating a memory system with programmable operational characteristics that self-configure based on the type of processor connected to the memory system,⁸ which in effect permits different types of processors to be installed on the same memory system without significantly compromising performance.⁹ The cache is divided into three separate caches each with functions defined by the type of processor connected to the system, which permits the memory system to “achieve or exceed the performance of a system utilizing a cache many times larger.”¹⁰ In addition, the main memory is divided into pages containing either code or non-code data, and the system provides a bias in favor of code or non-code pages depending on the connected processor.¹¹ Claim 1 of the '740 patent is generally directed to an improved computer memory system with one or more programmable operational characteristics defined based on the type of processor, wherein a programmable operational characteristic of the system determines the type of data stored by the cache.¹²

The district court found that the claims were directed to the “abstract idea of categorical data storage,”¹³ and the claims contained no inventive concept because the claimed computer components were generic and conventional.¹⁴ Moreover, the programmable operational characteristics did not provide the inventive concept because

³ *Visual Memory LLC v. NVIDIA Corp.*, No. 2016-2254, 2017 WL 3481288, at *1 (Fed. Cir. Aug. 15, 2017).

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* at *2.

¹⁰ *Id.* at *1 (quoting U.S. Patent No. 5,593,740 col. 4 ll. 24-26)

¹¹ *Id.* at *2.

¹² *Id.*

¹³ *Visual Memory LLC v. NVIDIA Corp.*, No. 15-CV-789, 2016 WL 3041847, at *4 (D. Del. May 27, 2016).

¹⁴ *Visual Memory*, 2017 WL 3481288, at *2.

they represent generic concepts, and the patent did not sufficiently explain the mechanism for accomplishing the result.¹⁵

A majority panel of the Federal Circuit reversed.¹⁶ The court likened the case to *Enfish* and *Thales*¹⁷ and found under step one of *Alice* that the claims are “directed to an improved computer memory system, not to the abstract idea of categorical data storage.”¹⁸ The improved memory system includes programmable operational characteristics that advantageously obviate the need to design a separate memory system for each type of processor, which proved to be costly and inefficient, and, at the same time, avoid the performance problems of the prior art memory systems.”¹⁹ Moreover, the improved system can outperform prior art memory systems that utilize a much larger expensive cache memory.²⁰

Judge Hughes dissented, arguing the claims are directed to categorical data storage and fail to recite any inventive concept.²¹ The dissent argued that unlike in *Enfish*, the claims do “not provide any specific limitations on the ‘programmable operational characteristic,’ making it a purely functional component” akin to “a black box.”²² Moreover, the remaining elements “are nothing more than a collection of conventional computer components.”²³ Judge Hughes further noted that issues relevant to enablement under § 112 can also be relevant validity under § 101.²⁴

The majority offered three responses to the dissent’s analysis:²⁵ (1) the patent includes an appendix with 263 frames of computer code, and whether this code enables a PHOSITA cannot be determined when reviewing a dismissal under Rule 12(b)(6); (2) the dissent raises an enablement issue under § 112, not an eligibility issue under § 101; and (3) the dissent inappropriately assumes that the innovative effort in the ’740 patent lies in the programming required for a computer to configure a programmable operational characteristic of a cache memory, even though the specification is clear that the invention is the creation of a memory system.²⁶

***Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356 (Fed. Cir. Jan. 25, 2018)**

In this appeal from the Eastern District of Texas, the Federal Circuit affirmed the district court’s denial of summary judgment that the asserted claims are patent ineligible under § 101.²⁷ The patents at-issue relate to an improved display interface for electronic devices, where the improved interface permits users “to more quickly access desired data

¹⁵ Visual Memory, 2016 WL 3041847, at *7.

¹⁶ Visual Memory, 2017 WL 3481288, at *1.

¹⁷ *Id.* at *4.

¹⁸ *Id.* at *3.

¹⁹ *Id.* at *4.

²⁰ *Id.*

²¹ *Id.* at *6 (Hughes, J., dissenting).

²² *Id.* at *7.

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.* at *5.

²⁶ *Id.*

²⁷ *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1359 (Fed. Cir. 2018).

stored in, and functions of applications included in, the electronic devices.”²⁸ More specifically, an application summary window that can be reached directly from the main menu displays the desired data and functions.²⁹

The Federal Circuit concluded that “[t]he asserted claims in this case are directed to an improved user interface for computing devices, not to the abstract idea of an index.”³⁰ “[T]hese claims are directed to a particular manner of summarizing and presenting information in electronic devices.”³¹ For instance, claim 1 of the ’476 patent requires that the application summary window can be reached from the menu, specifies how the summary window must be accessed, “requires the application summary window [to] list a limited set of data,” and recites that the summary window is displayed while the applications are in an unlaunched state.³²

The specification teaches that prior art interfaces made it difficult to find the right data and functionality, particularly on small screens.³³ The disclosed invention reduces this problem by coalescing a limited group of commonly accessed data and functions in a single spot.³⁴ Moreover, displaying certain data and functions in the summary window permits users to see that data and those functions without opening up the application.³⁵ Accordingly, “the claims are directed to an improvement in the functioning of computers, particularly those with small screens.”³⁶

***Finjan, Inc. v. Blue Coat Systems, Inc.*, No. 2016-2520, 2018 WL 341882 (Fed. Cir. Jan. 10, 2018)**³⁷

In this appeal from the Northern District of California, the Federal Circuit affirmed the district court’s finding that the ’844 patent was patent-eligible under § 101.³⁸ The ’844 patent is directed to an improved virus scanning approach that can proactively detect “*potentially* hostile operations” with a “‘behavior-based’ virus scan.”³⁹ This novel virus scanning approach is unlike prior art systems, which “are limited to recognizing the presence of previously-identified viruses.”⁴⁰

Although the court has previously found virus screening by itself to be an abstract idea,⁴¹ the court found the asserted claims patent-eligible under *Alice* step one because “the method of claim 1 employs a new kind of file that enables a computer security system to do things it could not do before.”⁴² For example, unlike prior art virus scanning

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.* at 1362-63.

³³ *Id.* at 1363.

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ Full disclosure: Mark Lemley represented Blue Coat in this appeal.

³⁸ *Finjan, Inc. v. Blue Coat Sys., Inc.*, No. 2016-2520, 2018 WL 341882, at *1 (Fed. Cir. Jan. 10, 2018).

³⁹ *Id.* at *3 (emphasis in original).

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.* at *4.

approaches, the improved virus scanning approach “can be used to protect against previously unknown viruses” as well as “known viruses that have been cosmetically modified to avoid detection by [prior art] code-matching virus scans.”⁴³ Moreover, the improved virus scanning approach permits administrators to flexibly apply “different security policies to different users.”⁴⁴

Blue Coat argued that even if the claims are directed to a new idea, they are still abstract because “they do not sufficiently describe how to implement that idea.”⁴⁵ The court agreed that the cases Blue Coat cited in support of its argument “hearken back to a foundational patent law principle: that a result, even an innovative result, is not itself patentable.”⁴⁶ But here, the Court concluded that the claims do not merely recite a result but rather “recite specific steps” to accomplish that result, though it was awfully vague on what those specific steps were.⁴⁷ Furthermore, “there is no contention that the only thing disclosed is the result and not an inventive arrangement for accomplishing the result.”⁴⁸

***Smart Systems Innovations, LLC v. Chicago Transit Authority*, No. 2016-1233, 2017 WL 4654964 (Fed. Cir. Oct. 18, 2017)**

In this appeal from the Northern District of Illinois, a divided Federal Circuit panel affirmed the district court’s finding that the patents-in-suit are patent ineligible under § 101.⁴⁹ The patents-in-suit are directed to overcome problems in the mass transit sector with an open-payment fare system in mass transit networks in the US.⁵⁰ The open-payment fare system eliminates the need for dedicated fare-cards by allowing riders to access mass transit using regular debit and credit cards.⁵¹

The Federal Circuit found the patents-in-suit ineligible under § 101. Under step one of *Alice*, the court reasoned that

[T]he Asserted Claims are directed to the formation of financial transactions in a particular field (i.e., mass transit) and data collection related to such transactions. The Asserted Claims are not directed to a new type of bankcard, turnstile, or database, nor do the claims provide a method for processing data that improves existing technological processes. Rather, the claims are directed to the collection, storage, and recognition of data.⁵²

Although the patented technology purportedly improves prior systems of fare collection, “[t]he claims are not directed to a combined order of specific rules that improve any technological process, but rather invoke computers in the collection and arrangement of

⁴³ *Id.* at *3.

⁴⁴ *Id.*

⁴⁵ *Id.* at *4.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, No. 2016-1233, 2017 WL 4654964, at *1 (Fed. Cir. Oct. 18, 2017).

⁵⁰ *Id.* at *2.

⁵¹ *Id.*

⁵² *Id.* at *6.

data.”⁵³ Moreover, the court found that the claims were not saved merely because they apply to a particularized, concrete field.⁵⁴ Furthermore, the court found that the claims failed to provide an inventive concept because they only “disclose the use of generic computer components and machinery.”⁵⁵

Judge Linn dissented in-part, arguing that two of the four patents-in-suit were not directed to an abstract idea.⁵⁶ Judge Linn first remarked that the current § 101 test is “almost impossible to apply consistently and coherently” and “often leads to arbitrary results.”⁵⁷ The test can also wrongly “strike down claims covering meritorious inventions”⁵⁸ and is in any event only intended to foreclose “those claims that preempt and thereby preclude or inhibit human ingenuity with regard to basic building blocks of scientific or technological activity.”⁵⁹

Judge Linn argued that two of the patents should be patent eligible because their claims focus on “the use of a white list in combination with a bankcard reader to regulate access to mass transit. The combination overcame the latency and connectivity issues that previously precluded the practical use of a bankcard to regulate mass transit.”⁶⁰ The ultimate “result of the interaction between the bankcard, the white list, and the terminal is the off-line regulation of access,” which “is not a financial transaction” and is not “merely the collection, analysis, and classification of data.”⁶¹

***Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329 (Fed. Cir. Nov. 1, 2017)**

In this appeal from the District of Delaware, the Federal Circuit affirmed the district court’s finding that the asserted patents are patent ineligible under § 101.⁶² The patents-at-issue describe the invention as a scalable architecture for delivering real-time information that includes a control mechanism to manage users who receive the real-time information.⁶³

Under *Alice* step one, the Federal Circuit found that the claims of the ’187 and ’005 patents were directed to an abstract idea.⁶⁴ The court reasoned that the claims recite “a method for routing information using result-based functional language. The claim requires the functional results of ‘converting,’ ‘routing,’ ‘controlling,’ ‘monitoring,’ and ‘accumulating records,’ but does not sufficiently describe how to achieve these results in a non-abstract way.”⁶⁵

⁵³ *Id.*

⁵⁴ *Id.* at *7.

⁵⁵ *Id.* at *9.

⁵⁶ *Id.* at *9 (Linn, J., dissenting).

⁵⁷ *Id.* at *11.

⁵⁸ *Id.*

⁵⁹ *Id.* at *10.

⁶⁰ *Id.* at *14.

⁶¹ *Id.*

⁶² *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1332 (Fed. Cir. 2017).

⁶³ *Id.* at 1333.

⁶⁴ *Id.* at 1337-38.

⁶⁵ *Id.* at 1337.

Under *Alice* step two, the court found that the claims did not provide an inventive concept.⁶⁶ While the specification may describe a purported innovative “scalable architecture,” that purported inventive concept was absent from the claims.⁶⁷ Although the claims referred “certain data ‘complying with the specifications of a network communication protocol’ and the data being routed in response to one or more signals from a user,” the claim did not specify “the rules forming the communication protocol” or the “parameters for the user signals.”⁶⁸ Because neither the protocol nor the selection signals were claimed, their contribution was precluded from the inventive concept determination.⁶⁹ In addition, the claim only used “generic functional language,” “conventional computer and network components operating according to their ordinary functions,” and a “conventional ordering of steps—first processing the data, then routing it, controlling it, and monitoring its reception—with conventional technology to achieve its desired result.”⁷⁰

Furthermore, the court found that the district court did not err by excluding Two-Way Media’s proffered evidence from prior proceedings before the USPTO and federal courts.⁷¹ These materials, consisting of expert report excerpts, expert trial testimony, inventor trial testimony, and a press release, related to other tribunals’ evaluation of the novelty and nonobviousness of the claimed inventions.⁷² The Federal Circuit opined that “[e]ligibility and novelty are separate inquiries,” and while that material was relevant to a novelty and obviousness analysis, it was not relevant to eligible subject matter.⁷³

SAP Am., Inc. v. InvestPic, LLC, No. 2017-2081, 2018 WL 2207254 (Fed. Cir. May 15, 2018)

In this appeal from the Northern District of Texas, the Federal Circuit affirmed the district court’s finding that the asserted claims of the ’291 patent recite patent-ineligible subject matter under § 101.⁷⁴ The patent explains that conventional financial information sites do not provide statistical information that is useful for forecasting the behavior of financial markets, because these sites utilize statistical calculations that make the “generally false” assumption that the underlying probability distribution function for the financial data follows the normal distribution.⁷⁵ In fact, the probability distribution function for financial market data is “heavy tailed.”⁷⁶ To fix this problem, the patent proposes utilizing resampled statistical methods for analyzing financial data, because doing so does not improperly assume a normal probability distribution.⁷⁷

⁶⁶ *Id.* at 1339-40.

⁶⁷ *Id.* at 1339.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.* The court made similar findings with respect to the ’622 and ’686 patents. *Id.* at 1340-41.

⁷¹ *Id.* at 1339-40.

⁷² *Id.* at 1336.

⁷³ *Id.* at 1339-40.

⁷⁴ *SAP Am., Inc. v. InvestPic, LLC, No. 2017-2081, 2018 WL 2207254, at *1 (Fed. Cir. May 15, 2018).*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.* at *2.

The Federal Circuit determined that the claims are directed to the abstract ideas of “selecting certain information, analyzing it using mathematical techniques, and reporting or displaying the results of the analysis.”⁷⁸ The court explained that these claims are different from the ones in *McRo* because the claims in *McRo* “were directed to the creation of something physical—namely, the display of ‘lip synchronization and facial expressions’ of animated characters on screens for viewing by human eyes.”⁷⁹ Put differently, “[t]he claimed improvement was to how the physical display operated (to produce better quality images), unlike (what is present here) a claimed improvement in a mathematical technique with no improved display mechanism.”⁸⁰ Moreover, the claims in *McRO* “had the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.”⁸¹ “Here, in contrast, the focus of the claims is not a physical-realm improvement but an improvement in wholly abstract ideas—the selection and mathematical analysis of information, followed by reporting or display of the results.”⁸²

In addition, the court determined that nothing in the claims transformed them into patent-eligible subject matter under *Alice* step two.⁸³ The additional claim limitations amounted to no more than applying the improved mathematical techniques on a conventional computer.⁸⁴

***Voter Verified, Inc. v. Election Systems & Software LLC*, 887 F.3d 1376 (Apr. 20, 2018)**

In this appeal from the Northern District of Florida, the Federal Circuit affirmed the district court’s finding that the ’449 patent is patent-ineligible under § 101.⁸⁵ The ’449 patent is directed to voting methods and systems that auto-verify a voter’s ballot.⁸⁶ Voter Verified previously sued Election systems over infringement of the ’449 patent in November 2009.⁸⁷ The district court determined then that certain claims of the ’449 patent were not infringed; the court also found that the claims were not invalid under § 101 because Election Systems failed to present any arguments or evidence regarding invalidity of the claims.⁸⁸ On appeal in 2012, the Federal Circuit upheld the validity ruling.⁸⁹

Voter Verified sued Election Systems again, and Election Systems once again argued that the asserted claims are invalid under § 101.⁹⁰ This time, the Federal Circuit agreed.⁹¹

⁷⁸ *Id.* at *4.

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.* at *5.

⁸⁴ *Id.* at *5-6.

⁸⁵ *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.2d 1376, 1379 (2018).

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.* at 1380.

⁹⁰ *Id.*

⁹¹ *Id.*

Issue Preclusion: The Federal Circuit found that the Supreme Court’s *Alice* decision did not constitute a substantial change in law that barred the use of issue preclusion in this case.⁹² The court explained that the Supreme Court in *Alice* simply applied the same two-step framework that was created in *Mayo*.⁹³ And because the Federal Circuit decided the § 101 issue in the first case post-*Mayo*, the *Mayo* decision was not intervening.⁹⁴ Accordingly, there was no substantial change in law between the decision in the first case and the present appeal.⁹⁵

Nevertheless, the Federal Circuit determined that issue preclusion did not apply in this case.⁹⁶ First, the § 101 issue was not actually litigated in the first case. It was “barely considered,” and the district court only “disposed of the § 101 issue when Election Systems chose not to respond.”⁹⁷ Second, the § 101 determination was not necessary to the judgment of noninfringement in the first action.⁹⁸

Section 101: The Federal Circuit ultimately agreed with the district court that the asserted claims are patent-ineligible under § 101.⁹⁹ Under *Alice* step one, the court determined that the claims are “drawn to the [abstract] concept of voting, verifying the vote, and submitting the vote for tabulation. Humans have performed this fundamental activity that forms the basis of our democracy for hundreds of years.”¹⁰⁰ Under *Alice* step two, the court found that the claims merely “recite the use of general purpose computers that carry out the abstract idea.”¹⁰¹

***Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. Feb. 8, 2018)**

In this appeal from the Northern District of Illinois, the Federal Circuit vacated the district court’s grant of summary judgment that certain claims of the ’713 patent were patent ineligible under § 101.¹⁰² The court agreed with the district court that the asserted claims are directed to an abstract idea.¹⁰³ Turning to *Alice* step two, the court explained that “[l]ike indefiniteness, enablement, or obviousness, whether a claim recites patent eligible subject matter is a question of law which may contain underlying facts.”¹⁰⁴ And “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact” that “must be proven by clear and convincing evidence.”¹⁰⁵ The court opined that “the mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional.”¹⁰⁶

⁹² *Id.* at 1381.

⁹³ *Id.* at 1382.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.* at 1383.

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Id.* at 1384.

¹⁰⁰ *Id.* at 1385.

¹⁰¹ *Id.*

¹⁰² *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1363 (Fed. Cir. 2018).

¹⁰³ *Id.* at 1367.

¹⁰⁴ *Id.* at 1368.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 1369.

Here, the patent’s “specification describes an inventive feature that stores parsed data in a purportedly unconventional manner,” which eliminates redundancies and improves system efficiency.¹⁰⁷ These purported “improvements in the specification, to the extent they are captured in the claims, create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities.” The court ultimately determined that claims 4-7, but not claims 1-3 and 9, were directed to these purported improvements.¹⁰⁸ Accordingly, it was premature to render claims 4-7 patent ineligible.¹⁰⁹

The court made clear that “[a]s our cases demonstrate, not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry.”¹¹⁰ And “[n]othing in this decision should be viewed as casting doubt on the propriety of those cases.”¹¹¹

The case is remanded, presumably for fact-finding at trial, but the court did not indicate who the factfinder should be.

***Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121 (Fed. Cir. Feb. 14, 2018)**

In this appeal from the Middle District of Florida, a divided Federal Circuit panel reversed the district court’s denial of Aatrix’s motion for leave to file a second amended complaint and vacated the district court’s finding that that the asserted claims of the ’615 and ’393 patents were invalid under § 101.¹¹²

The patents are directed to systems and methods for designing, creating, and importing data into a viewable form on a computer to permit users to manipulate the form data and create viewable forms and reports.¹¹³ The majority stated that “[w]hile the ultimate determination of eligibility under § 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination.”¹¹⁴ For instance, “[w]hether the claim elements of the claimed combination are well-understood, routine, conventional [under *Alice/Mayo* step two] is a question of fact.”¹¹⁵ Here, the district court erred “when it denied leave to amend without claim construction and in the face of factual allegations, spelled out in the proposed second amended complaint, that, if accepted as true, establish that the claimed combination contains inventive components and improves the workings of the computer.”¹¹⁶

For example, the proposed second amendment states that the patented inventions “allow[] data to be imported from an end user application without needing to know

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* at 1369-70.

¹⁰⁹ *Id.* at 1370.

¹¹⁰ *Id.* at 1368.

¹¹¹ *Id.*

¹¹² *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1123 (Fed. Cir. 2018).

¹¹³ *Id.* at 1123.

¹¹⁴ *Id.* at 1128.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 1125.

proprietary database schemas and without having to custom program the form files to work with each outside application.”¹¹⁷ The inventions also “permit data to be retrieved from a user application and inserted into a form, eliminating the need for hand typing in the values and eliminating the risk of transcription error.”¹¹⁸ Furthermore, the complaint alleges that the claimed invention “uses less memory, results in faster processing speed, and reduces the risk of thrashing which makes the computer process forms more efficiently.”¹¹⁹ These allegations “at a minimum raise factual disputes underlying the § 101 analysis, such as whether the claim term ‘data file’ constitutes an inventive concept.”¹²⁰ [The patent was filed in 2002].

Judge Reyna concurred-in-part and dissented-in-part.¹²¹ Judge Reyna “disagree[d] with the majority’s broad statements on the role of factual evidence in a § 101 inquiry” because “[o]ur precedent is clear that the § 101 inquiry is a legal question.”¹²² In Judge Reyna’s view, the problem with the majority’s approach is that it permits “the introduction of an inexhaustible array of extrinsic evidence, such as prior art, publications, other patents, and expert opinion.”¹²³ Moreover, “[o]ne effect of this approach is that a plaintiff facing a 12(b)(6) motion may simply amend its complaint to allege extrinsic facts that, once alleged, must be taken as true, regardless of its consistency with the intrinsic record.”¹²⁴

***Exergen Corp. v. Kaz USA, Inc.*, 2018 WL 1193529 (Fed. Cir. Mar. 8, 2018)**

In this nonprecedential decision, a divided Federal Circuit panel affirmed the District of Massachusetts’ determination that the asserted patents were patent-eligible under § 101.¹²⁵ The patents disclose a body temperature detector that takes temperature readings of a person’s forehead directly above the superficial temporal artery and utilizes that reading to determine the person’s core body temperature.¹²⁶ The patents explain that the superficial temporal artery is ideal for taking a person’s temperature due to its accessibility, stable blood flow, and temperature close to that of the heart.¹²⁷ The Federal Circuit acknowledged that there was “no dispute . . . that the asserted claims employ a natural law to achieve their purpose,” because the claims were directed to the correlation between a person’s core body temperature and forehead temperature just above the superficial temporal artery.¹²⁸

The Federal Circuit determined that the district court did not clearly err in determining that the patents included an inventive concept.¹²⁹ In addition to the natural

¹¹⁷ *Id.* at 1127.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.* at 1126.

¹²¹ *Id.* at 1130 (Reyna, J., dissenting).

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Exergen Corp. v. Kaz USA, Inc.*, 2018 WL 1193529, at *1 (Fed. Cir. Mar. 8, 2018).

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.* at *3.

¹²⁹ *Id.*

law, the claims recited three additional steps: (1) moving while laterally scanning; (2) obtaining a peak temperature reading; and (3) obtaining at least three readings per second.¹³⁰ Although all of these additional elements were known in the prior art, “simply being known in the art [is insufficient to] establish that the subject matter was not eligible for patenting.”¹³¹ These claim elements were known in the art to detect hot spots indicating injury or tumors, but not to take human body temperature.¹³² “And these [prior art] methods made no use of the newly calculated coefficient for translating measurements taken at the forehead into core body temperature readings.”¹³³ Accordingly, the district court did not err in determining that the claims transformed a natural law by incorporating the law into an unconventional method of measurement.¹³⁴

Finally, the Federal Circuit rejected Kaz’s argument that the district court erred in making its § 101 determination because Kaz had a Seventh Amendment right to have a jury resolve any underlying factual disputes.¹³⁵ The Federal Circuit acknowledged that “[w]hether the Seventh Amendment guarantees of a jury trial on any factual underpinnings of § 101 is a question which awaits more in-depth development and briefing than the limited discussion in this case.”¹³⁶ But the court need not decide this issue here, because Kaz waived its right to a jury trial.¹³⁷

Judge Hughes dissented, arguing that “the claimed inventions merely calculate a law of nature that governs the relationship between core body temperature and forehead skin temperature.”¹³⁸ Judge Hughes reasoned that temperature-detecting products that meet the temperature detector requirement in the claims “have existed for decades,” which the district court recognized.¹³⁹ And the other requirements, such as obtaining peak temperatures and taking multiple measurements per second “are ubiquitous features in the prior art.”¹⁴⁰ Furthermore, “the combination of these elements into a single product was also well-known” and the patents are invalid.¹⁴¹ In the dissent’s view, “[t]he majority attempts to salvage the district court’s decision by emphasizing the novelty of the heat balance coefficient,” but “a patent-ineligible law of nature cannot be the inventive concept.”¹⁴²

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.* at *6.

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ *Id.* at *10 (Hughes, J., dissenting).

¹³⁹ *Id.* at *11.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.*

***Cleveland Clinic Foundation v. True Health Diagnostics LLC*, 859 F.3d 1352 (Fed. Cir. June 16, 2017)**

In this appeal from the Northern District of Ohio, the Federal Circuit affirmed the district court's finding that three of the asserted patents are ineligible under § 101.¹⁴³

Increased MPO level is a known early symptom of cardiovascular disease, and it can thus serve as an indicator of a patient's risk of cardiovascular disease.¹⁴⁴ The inventors developed a way to correlate a patient's MPO levels with the patient's risk of developing cardiovascular disease.¹⁴⁵ The inventors found the proper correlation by compiling MPO data from a population of subjects and creating a control value by statistically comparing the differences in MPO levels between the healthy subjects and subjects with cardiovascular disease.¹⁴⁶ The patent claims are generally directed to methods for characterizing a test subject's risk for cardiovascular disease by determining levels of MPO in a bodily sample and comparing that with the MPO levels in persons not having cardiovascular disease.¹⁴⁷ The patents disclose that the level of MPO in a bodily sample can be determined by a variety of standard methods well-known in the art.¹⁴⁸

The district court found the patents ineligible under § 101,¹⁴⁹ and the Federal Circuit affirmed.¹⁵⁰ Under step 1 of the *Alice* framework, the Federal Circuit found that the patents are directed to multistep methods for observing the law of nature that MPO correlates to cardiovascular disease.¹⁵¹ Under *Alice* step 2, the court concluded that the claims did not contain an inventive concept but were rather nothing more than an implementation of a natural law (that MPO correlates to cardiovascular disease) using common and well-known MPO detection techniques.¹⁵² The court reasoned that the claims merely utilized common, well-known MPO detection techniques to compare a subject's MPO value to control values derived from well-known statistical methods.¹⁵³

***Vanda Pharmaceuticals Inc. v. West-Ward Pharmaceuticals International Ltd.*, 887 F.3d 1117 (Fed. Cir. Apr. 13, 2018)**

In this appeal from the District of Delaware, a divided Federal Circuit panel affirmed the district court's finding that the asserted claims were not invalid under § 101.¹⁵⁴ The '610 patent is directed to a method of treating schizophrenia, comprising the steps of determining whether a patient is a poor metabolizer of CYP2D6, and then administering a dosage iloperidone that varies depending on whether the patient is a poor

¹⁴³ *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1355 (Fed. Cir. 2017).

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at 1356.

¹⁴⁸ *Id.* at 1355.

¹⁴⁹ *Id.* at 1358.

¹⁵⁰ *Id.* at 1355.

¹⁵¹ *Id.* at 1360.

¹⁵² *Id.* at 1362.

¹⁵³ *Id.*

¹⁵⁴ *Vanda Pharms. Inc. v. West-Ward Pharms. Int'l Ltd.*, 887 F.3d 1117, 1121 (Fed. Cir. 2018).

CYP2D6 metabolizer.¹⁵⁵ Administering the drug was not new, but the discovery of poor metabolizers was.

The court concluded that this case “is not *Mayo*.”¹⁵⁶ “[T]he claim in *Mayo* stated that the metabolite level in blood simply ‘indicates’ a need to increase or decrease the dosage, without prescribing a specific dosage regimen or other added steps to take as a result of that indication.”¹⁵⁷ Put differently, the claim in *Mayo* involved “recognizing . . . a need to increase or decrease a dose” but did not “involve doctors *using* the natural relationship.”¹⁵⁸ Conversely, here although the inventors “recognized the relationship between iloperidone, CYP2D6 metabolism, and QTc prolongation,[] that is not what they claimed.”¹⁵⁹ Rather, “[t]hey claimed an application of that relationship” that requires “a treating doctor to administer iloperidone . . . depending on the result of a genotyping assay.”¹⁶⁰

Chief Judge Prost dissented.¹⁶¹ In her view, the claims “set[] forth a natural relationship—namely, the relationship between the CYP2D6 genotype and the likelihood that a dosage of iloperidone will cause QTc prolongation.”¹⁶² And, like in *Mayo*, the claims are “no more than an optimization of an existing treatment of schizophrenia” in view of a discovered natural law.¹⁶³ In short, the discovered natural law “is both the means and the ends of this claim” and there is “no distinction from *Mayo*.”

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* at 1135.

¹⁵⁸ *Id.* (emphasis in original).

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.* at 1141 (Prost, C.J., dissenting).

¹⁶² *Id.* at 1142.

¹⁶³ *Id.* at 1143.

Venue

***In re Cray Inc.*, No. 2017-129, 2017 WL 4201535 (Fed. Cir. Sept. 21, 2017)**

Cray petitioned for a writ of mandamus vacating the order of the Eastern District of Texas’s denial of Cray’s motion to transfer the case to another district.¹⁶⁴ The Federal Circuit found that the district court abused its discretion in refusing to transfer the case.¹⁶⁵

Cray allowed two of its employees, including Mr. Harless, to work remotely from their respective homes in the Eastern District of Texas.¹⁶⁶ Notably, Mr. Harless was a “sales executive” in the district for approximately seven years with sales of Cray systems in excess of \$345 million.¹⁶⁷ There were no Cray products in storage at Mr. Harless’s home.¹⁶⁸ Cray never paid Mr. Harless for the use of his home to operate its businesses and never indicated that the home was a Cray place of business.¹⁶⁹

Relying on *In re Cordis Corp.*, 769 F.2d 733 (Fed. Cir. 1985), the district court denied transfer for improper venue.¹⁷⁰ To resolve the patent venue uncertainty created by the Supreme Court’s in its recent decision in *TC Hearland LLC v. Kraft Foods Group Brands LLC*, No. 16-341, slip. Op. at 1 (U.S. May 22, 2017), the district court also laid out its own four-factor inquiry into what constitutes a regular and established place of business.¹⁷¹

The Federal Circuit found that “the district court misunderstood the scope and effect of our decision in *Cordis*, and its misplaced reliance on that precedent led the court to deny the motion to transfer.”¹⁷² The Federal Circuit concluded that the *Cordis* court “did not, in its opinion, evaluate venue in light of the statutory language of § 1400(b).”¹⁷³ However, the court “must focus on the full and unchanged language of the statute, as *Cordis* did not consider itself obliged to do.”¹⁷⁴ Finding persuasive the plain meaning of the statute and the legislative history of § 1400(b)’s predecessor,¹⁷⁵ the court rejected the district court’s four-factor test.¹⁷⁶

Instead, the court adopted the following three-factor test: “(1) there must be a physical place in the district; (2) it must be a regular and established place of business; and (3) it must be the place of the defendant.”¹⁷⁷ Under the first factor, the court noted that the statute “requires a ‘place’” which means a building or “quarters of any kind”

¹⁶⁴ *In re Cray Inc.*, No. 2017-129, 2017 WL 4201535, at *1 (Fed. Cir. Sept. 21, 2017).

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* The court focused its analysis on Mr. Harless and not the other employee, since Mr. Harless provided the stronger case. *Id.* at *2, *7.

¹⁶⁷ *Id.* at *1.

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *Id.* at *2.

¹⁷¹ *Id.*

¹⁷² *Id.* at *3.

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* at *4.

¹⁷⁶ *Id.* at *5.

¹⁷⁷ *Id.* at *4.

from which business is conducted.¹⁷⁸ While the place need not be “a formal office or store, there must still be a physical geographical location in the district from which the business of the defendant is carried out.”¹⁷⁹

Under the second requirement, a business may be regular if it operates in a steady, uniform, orderly, and methodical manner, as opposed to a sporadic manner.¹⁸⁰ For the third requirement, the place must be the place of the defendant and not solely the place of the defendant’s employee.¹⁸¹ “Relevant considerations include whether the defendant owns or leases the place, or exercises other attributes of possession or control over the place.”¹⁸² When the place is owned by the employee, “if the employee can move his or her home out of the district” at her own discretion, “that would cut against the employee’s home being considered a place of business of the defendant.”¹⁸³

Turning to the case at hand, the court found that Mr. Harless’s home was not a regular and established place of business.¹⁸⁴ The mere fact that Cray “allowed its employees” to work from the district was insufficient.¹⁸⁵ “There is no evidence that Cray owns, leases, or rents any portion of Mr. Harless’s home.”¹⁸⁶ Moreover, no evidence showed that Cray “had any intention to maintain some place of business in that district in the event Mr. Harless . . . decided to terminate [his] residence[.]” or that Cray otherwise exhibited any control over the location from which Mr. Harless worked.¹⁸⁷

Finally, the court distinguished *Cordis* on the ground that “Cordis’s business specifically depended on employees being physically present at places in the district, and it was undisputable that Cordis affirmatively acted to make permanent operations within that district to service its customers there.”¹⁸⁸

***In re Micron Technologies Inc.*, No. 2017-138, 2017 WL 5474215 (Fed. Cir. Nov. 15, 2017)**

In this appeal from the District of Massachusetts, the Federal Circuit granted Micron’s petition for writ of mandamus to set aside the district court’s denial of Micron’s motion to dismiss or transfer the case for improper venue.¹⁸⁹ Federal Rules of Civil Procedure 12(h)(1)(A) and 12(g)(2) together provide that a defendant waives all *available* venue defenses not raised in an initial motion to dismiss.¹⁹⁰ The district court concluded that the Supreme Court’s decision in *TC Heartland* was not a change of law

¹⁷⁸ *Id.* at *5.

¹⁷⁹ *Id.* (citation omitted).

¹⁸⁰ *Id.*

¹⁸¹ *Id.* at *6.

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* at *7.

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *Id.* at *8.

¹⁸⁹ *In re Micron Techs. Inc.*, No 2017-138, 2017 WL 5474215, at *1 (Fed. Cir. Nov. 15, 2017).

¹⁹⁰ *Id.*

and therefore that venue was an available defense under the statutes even before that decision.¹⁹¹

The Federal Circuit disagreed.¹⁹² The Federal Circuit found that “[t]he venue objection [under *TC Heartland*] was not available until the Supreme Court decided *TC Heartland* because, before then, it would have been improper, given controlling precedent, for the district court to dismiss or transfer for lack of venue.”¹⁹³ Accordingly, the defense could generally be raised for the first time in the wake of *TC Heartland*. Nonetheless, “Rule 12(h)(1) is not the sole basis on which a district court might, in various circumstances, rule that a defendant can no longer present a venue defense that might have succeeded on the merits.”¹⁹⁴ For instance, the Supreme Court has held that “a district court possesses inherent powers that are ‘governed not by rule or statute but by the control necessarily vested in courts to manage their own affairs so as to achieve the orderly and expeditious disposition of cases.’”¹⁹⁵ To properly exercise such inherent power, the exercise must be a “reasonable response to the problems and needs” confronting the court’s fair administration of justice,¹⁹⁶ and cannot be contrary to any express grants or limitations on such power.¹⁹⁷

The court concluded by making a few “limit[ed]” observations on this inherent power. Regarding timeliness, the court admitted that it “has not provided a precedential answer to the question of whether the timeliness determination may take account of factors other than the sheer time from when the defense becomes available to when it is asserted, including factors such as how near is the trial, which may implicate efficiency or other interests of the judicial system and of other participants in the case.”¹⁹⁸ But the court highlighted that it has denied mandamus in “several cases involving venue objections based on *TC Heartland* that were presented close to trial.”¹⁹⁹ Second, the court noted “a scenario that presents at least an obvious starting point for a claim of forfeiture, whether based on timeliness or consent or distinct grounds: a defendant’s tactical wait-and-see bypassing of an opportunity to declare a desire for a different forum, where the course of proceedings might well have been altered by such a declaration.”²⁰⁰

***In re ZTE (USA) Inc.*, No. 2018-113, 2018 WL 2187782 (Fed. Cir. May 14, 2018)**

Despite having said just days before that mandamus was generally unavailable in venue cases, the Federal Circuit granted ZTE’s petition for a writ of mandamus directing the District of Texas to dismiss the case for improper venue.²⁰¹ The Federal Circuit began by noting that this the type of case where mandamus relief might be appropriate because

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Id.* at *3.

¹⁹⁴ *Id.* at *6.

¹⁹⁵ *Id.* (quoting *Link v. Wabash R. Co.*, 370 U.S. 626, 630-31 (1962)).

¹⁹⁶ *Id.* at *7 (quoting *Degen v. United States*, 517 U.S. 820, 823-24 (1996)).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at *8.

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *In re ZTE (USA) Inc.*, No. 2018-113, 2018 WL 2187782, at *1 (Fed. Cir. May 14, 2018).

it presented two “basic” and “undecided” issues relating to proper venue in the wake of *TC Heartland*: (1) does Federal Circuit or regional circuit law govern who bears the burden of persuasion for determining the propriety of venue under § 1400(b); and (2) which party bears the burden?²⁰²

(1) does Federal Circuit or regional circuit law govern: The court explained that whether venue is proper under § 1400(b) is governed by Federal Circuit law because it is an issue unique to patent law.²⁰³ Because the issue of which party bears the burden of persuasion in establishing venue under § 1400(b) is “intimately related to the substantive determination,” and because who bears the burden of persuasion “is treated across many contexts as a substantive aspect of a legal rule,” the question of who bears the burden of persuasion under § 1400(b) is likewise governed by Federal Circuit law.²⁰⁴

(2) who bears the burden on venue: Turning to its own law, the Federal Circuit that the plaintiff bears the burden of establishing proper venue.²⁰⁵ The court found persuasive that “[p]rior to the formation of the Federal Circuit, regional circuits uniformly placed the burden to show proper venue in patent cases on the Plaintiff following a motion by the Defendant challenging venue.”²⁰⁶ The court also reasoned that “[s]ection 1400(b)’s intentional narrowness supports placing the burden of establishing proper venue on the Plaintiff.”²⁰⁷ Thus, placing the burden on the plaintiff “best aligns with the weight of historical authority among the circuits and best furthers public policy.”²⁰⁸

In re BigCommerce, Inc., No. 2018-120, 2018 WL 2207265 (Fed. Cir. May 15, 2018)²⁰⁹

Despite having said just days before that mandamus was generally unavailable in venue cases, the Federal Circuit granted the petitions for a writ of mandamus challenging the District of Texas’s orders denying motions to dismiss and transfer the case for improper venue.²¹⁰ The respondents each filed patent infringement suits against BigCommerce in the Eastern District of Texas.²¹¹ BigCommerce is incorporated in the state of Texas, and its headquarters and registered office is in the Western District of Texas.²¹² All parties agreed that BigCommerce had no place of business in the Eastern District of Texas.²¹³

²⁰² *Id.* at *2.

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ *Id.* at *4.

²⁰⁶ *Id.*

²⁰⁷ *Id.*

²⁰⁸ *Id.*

²⁰⁹ Full disclosure: Mark Lemley represented BigCommerce in this appeal.

²¹⁰ *In re BigCommerce, Inc., No. 2018-120, 2018 WL 2207265, at *1 (Fed. Cir. May 15, 2018).*

²¹¹ *Id.*

²¹² *Id.*

²¹³ *Id.*

BigCommerce challenged venue in the Eastern District.²¹⁴ The district court determined that venue in the Eastern District was proper.²¹⁵ The court argued that, in its view, a corporation resides for venue purposes in every judicial district of the corporation’s state of incorporation.²¹⁶ BigCommerce filed a petition for a writ of mandamus.²¹⁷

The Federal Circuit determined that this case presented a “basic” and “undecided” issue relating to proper venue—whether a corporation resides in every judicial district within its state of incorporation—and that this basic question warranted mandamus review.²¹⁸ The Federal Circuit held that the venue statute’s “language, history, purpose, and precedent” make clear that domestic corporations do not reside in every judicial district within its state of incorporation.²¹⁹

The court reasoned that the venue statute clearly states that patent infringement lawsuits “may be brought in *the judicial district* where the defendant *resides*,”²²⁰ which “speaks to venue in only one particular judicial district in the state.”²²¹ The court noted that Congress expanded the definition of where a corporation resides in some areas of law, but did so using different language from that in § 1400(b), which suggests that Congress did not intend for § 1400(b) to be read so expansively.²²² Furthermore, the Supreme Court has cited, and applied with respect to § 1400(b)’s predecessor statute, authority holding that for venue purposes, a corporation is only a resident in the judicial district within its state of incorporation where the corporation kept its principal office and transacted its business.²²³ This is particularly notable given Congress intended § 1400(b) to maintain the substance of the law as defined by its predecessor statute.²²⁴

The respondents argued that the Supreme Court in *Fourco* stated that residence is synonymous with state of incorporation.²²⁵ But that statement alone, the court explained, implies nothing about whether venue is proper in every district within the state of incorporation.²²⁶ Moreover, the *Fourco* court “simply did not address the corporate venue at the district level of granularity.”²²⁷ For these reasons, the court held that “for purposes of determining venue under § 1400(b) in a state having multiple judicial districts, a corporate defendant shall be considered to ‘reside’ only in the single judicial district within that state where it maintains a principal place of business, or, failing that, the judicial district in which its registered office is located.”²²⁸

²¹⁴ *Id.*

²¹⁵ *Id.* The district court also determined that BigCommerce waived its right to challenge venue against one of the two respondents, but the Federal Circuit determined that the waiver determination was clearly incorrect. *Id.* at *1-2.

²¹⁶ *Id.*

²¹⁷ *Id.* at *1.

²¹⁸ *Id.* at *2.

²¹⁹ *Id.* at *3.

²²⁰ *Id.* (quoting 28 U.S.C. § 1400(b) (emphasis added)).

²²¹ *Id.*

²²² *Id.*

²²³ *Id.* at *4.

²²⁴ *Id.* at *3.

²²⁵ *Id.* at *4.

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ *Id.* at *6.

***In re HTC Corp.*, No. 2018-130, 2018 WL 2123357 (Fed. Cir. May 9, 2018)**

The Federal Circuit denied HTC’s petition for writ of mandamus seeking dismissal from the District of Delaware for improper venue.²²⁹ First, the Federal Circuit explained that “[g]iven the availability of adequate relief on appeal, mandamus review of improper-venue decisions is generally inappropriate.”²³⁰ HTC can assert improper venue on appeal to try to get the judgment vacated, and there was no reason to think that this remedy would be inadequate in this case.²³¹

In addition, HTC could not show that it had a clear and indisputable right to issuance of the writ.²³² HTC, an alien defendant, argued that the district court erred first by applying § 1391(c)(3) in a patent case rather than only § 1400(b), and second by failing to reinterpret § 1391(c)(3) in view of its 2011 amendment.²³³ The Federal Circuit disagreed.²³⁴ The court noted that there is a “centuries-old understanding that the venue laws (as opposed to requirements of personal jurisdiction) do not restrict the location of suits against alien defendants, unless Congress has specifically provided otherwise.”²³⁵ The Supreme Court in *Brunette Machine Works, Ltd. v. Kockum Industries, Inc.* made clear that § 1400(b) was not intended to apply to alien defendants.²³⁶ The 2011 amendments to § 1391 did not change this long-standing fact.²³⁷

HTC’s argument that § 1400(b) applies “would make some foreign corporations that infringe a U.S. patent unamenable to domestic suit even though personal jurisdiction exists—a gap we cannot conclude Congress created.”²³⁸ Moreover, finding that the 2011 amendments “discarded the alien-venue rule would extend far beyond patent law and would impact other types of civil cases. Given that this would be a sea change in federal venue law, we expect Congress would make its intent clear, if indeed this was its intent.”²³⁹

PATENT TRIAL AND APPEAL BOARD

***Inter Partes* Review Procedure**

²²⁹ *In re HTC Corp.*, No. 2018-130, 2018 WL 2123357, at *1 (Fed. Cir. May 9, 2018).

²³⁰ *Id.* at *2.

²³¹ *Id.*

²³² *Id.* at *3.

²³³ *Id.*

²³⁴ *Id.*

²³⁵ *Id.* at *4.

²³⁶ *Id.* (citing *Brunette Mach. Works, Ltd. v. Kockum Indus., Inc.* 406 U.S. 706, (1972)).

²³⁷ *Id.*

²³⁸ *Id.*

²³⁹ *Id.* at *9.

***Oil States Energy Services, LLC v. Greene’s Energy Group, LLC*, 2018 WL 1914662 (U.S. Apr. 24, 2018)**

The Supreme Court ruled 7-2 that IPR proceedings do not violate Article III or the Seventh Amendment of the Constitution.²⁴⁰ The Court noted that Supreme Court “precedents have given Congress significant latitude to assign adjudication of public rights to entities other than Article III courts.”²⁴¹ “Our precedents have recognized that [this public-rights] doctrine covers matters ‘which arise between the Government and persons subject to its authority in connection with the performance of the constitutional functions of the executive or legislative departments.’”²⁴² And “[i]nter partes review involves one such matter: reconsideration of the Government’s decision to grant a public franchise.”²⁴³

The Court explained that it has long recognized the grant of a patent as being a “matte[r] involving public rights.”²⁴⁴ The grant of a patent is a matter between the public and the patentee because by issuing a patent, the PTO takes valuable rights from the public and gives them to the patentee.²⁴⁵ More specifically, patents are “public franchises.”²⁴⁶

Furthermore, patents are public rights because granting patents is a constitutional function that can be carried out by the executive and legislative branches without judicial determination.²⁴⁷ For example, Article I gives Congress the power to promote the sciences and useful arts, “Congress can grant patents itself by statute,” and “from the founding to today, Congress has authorized the Executive Branch to grant patents that meet the statutory requirements for patentability.”²⁴⁸

Because “[i]nter partes review involves the same basic matter as the grant of a patent[,] . . . it, too, falls on the public-rights side of the line.”²⁴⁹ Inter partes review is nothing more than a second look at a previous administrative grant of a patent.²⁵⁰ And “inter partes review involves the same [public] interests as the determination to grant a patent in the first instance.”²⁵¹ It does not matter that inter partes review takes place after a patent has issued because “[p]atent claims are granted subject to the qualification that the PTO has ‘the authority to reexamine—and perhaps cancel—a patent claim.’”²⁵² Indeed, “[t]his Court has recognized that franchises can be qualified in this manner.”²⁵³

²⁴⁰ *Oil States Energy Servs., LLC v. Greene’s Energy Grp., LLC*, 2018 WL 1914662, at *3 (U.S. Apr. 24, 2018).

²⁴¹ *Id.* at *5.

²⁴² *Id.* (quoting *Crowell v. Benson*, 285 U.S. 22, 50 (1932)).

²⁴³ *Id.*

²⁴⁴ *Id.* at *6 (quoting *United States v. Duell*, 172 U.S. 576, 582-83 (1899)).

²⁴⁵ *Id.* (citing *United States v. Am. Bell Tel. Co.*, 128 U.S. 315 (1888)).

²⁴⁶ *Id.* (quoting *Seymour v. Osborne*, 11 Wall. 516, 533 (1871)).

²⁴⁷ *Id.* at *6.

²⁴⁸ *Id.*

²⁴⁹ *Id.* at *7.

²⁵⁰ *Id.*

²⁵¹ *Id.*

²⁵² *Id.* (quoting *Cuozzo Speed Technologies, LLC v. Lee*, 136 S. Ct. 2131, 2137 (2016)).

²⁵³ *Id.*

Accordingly, “the public-rights doctrine covers the matter resolved in inter partes review.”²⁵⁴

Oil States and the dissent argued that inter partes review violates the “general” principle that “Congress may not ‘withdraw from judicial cognizance any matter which, from its nature, is the subject of a suit at the common law, or in equity, or admiralty.’”²⁵⁵ They reason that “patent validity was often decided in English courts of law in the 18th century.”²⁵⁶ Yet “there was another means of canceling a patent in 18th-Century England, which more closely resembles inter partes review: a petition to the Privy Council to vacate a patent.”²⁵⁷ The Privy Council “had exclusive authority to revoke patents until 1753, and after that, it had concurrent jurisdiction with the courts.”²⁵⁸ Thus, “it was well understood at the founding that a patent system could include a practice of granting patents subject to potential cancellation in the executive proceeding of the Privy Council.”²⁵⁹

The Court emphasized that it did “not address whether other patent matters, such as infringement actions, can be heard in a non-Article III forum,” and “our decision should not be misconstrued as suggesting that patents are not property for purposes of the Due Process Clause or the Takings Clause.”²⁶⁰ In addition, the Court determined that “[b]ecause inter partes review is a matter that Congress can properly assign to the PTO, a jury is not necessary in these proceedings.”²⁶¹

Justice Breyer, joined by Justices Ginsburg and Sotomayor, concurred in the judgment (although all three Justices joined the majority opinion in full) to make clear that “the Court’s opinion should not be read to say that matters involving private rights may never be adjudicated other than by Article III courts.”²⁶²

Justice Gorsuch, joined by Justice Roberts, dissented.²⁶³ The dissent noted that the founders “went to great lengths to guarantee a degree of judicial independence for future generations that they themselves had not experienced.”²⁶⁴ The dissent acknowledged that supporters of inter partes review believe that it offers an efficient solution to weed out bad patents.²⁶⁵ “And, no doubt, dispensing with constitutionally prescribed procedures is often expedient;” however, “economy supplies no license for ignoring these—often vitally inefficient—[Constitutional] protections.”²⁶⁶

The dissent argued that “[t]he Constitution cannot secure the people’s liberty any less today than it did the day it was ratified.”²⁶⁷ The dissent explained that “[t]he last time an executive body (the King’s Privy Council) invalidated an invention patent on an ordinary application was in 1746,” and “the last time the Privy Council even *considered*

²⁵⁴ *Id.* at *8.

²⁵⁵ *Id.* at *9 (quoting *Stern v. Marshall*, 564 U.S. 462 (2011)).

²⁵⁶ *Id.*

²⁵⁷ *Id.*

²⁵⁸ *Id.*

²⁵⁹ *Id.* at *10.

²⁶⁰ *Id.* at *11.

²⁶¹ *Id.* at *11.

²⁶² *Id.* at *12.

²⁶³ *Id.* (Gorsuch, J., dissenting).

²⁶⁴ *Id.*

²⁶⁵ *Id.*

²⁶⁶ *Id.*

²⁶⁷ *Id.* at *13.

doing so was in 1753.”²⁶⁸ Although the majority pointed to three cases filed between 1779 and 1810 before the Privy Council, these cases “involved an effort to override a patent on munitions during wartime.”²⁶⁹ “At most, [these cases] suggest that the Privy Council might have possessed some residual power to revoke patents to address wartime necessities.”²⁷⁰ But they do not prove “that patent disputes were routinely permitted to proceed outside a court of law.”²⁷¹

The dissent also pointed out that “[a]ny lingering doubt about English law is resolved for me by looking to our own.”²⁷² American patent holders were thought to hold property in their inventions “as the farmer holds his farm and flock.”²⁷³ And just like with farm and flock, “it was widely accepted [in the United States] that the government could divest patent owners of their rights only through proceedings before independent judges.”²⁷⁴ Furthermore, in the 1800s, the dissent pointed out that the Supreme Court rejected the Executive’s effort to cancel a patent.²⁷⁵ The dissent was unpersuaded by the majority’s response that the case only interpreted statutes that were in force in 1898 and was inapplicable today.²⁷⁶

***SAS Institute Inc. v. Iancu*, No. 16-969, 2018 WL 1914661 (U.S. Apr. 24, 2018)**

The Supreme Court ruled 5-4 that when the Patent Office elects to institute an inter partes review, it must institute review on all the claims in the petition and cannot selectively choose to limit its review to only some of the challenged claims.²⁷⁷ Section 318(a) provides that the Patent Office must “issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner.”²⁷⁸ The Court determined that this statute provided a “clear answer” to the case: “[i]n this context, as in so many others, ‘any’ means ‘every.’ The agency cannot curate the claims at issue but must decide them all.”²⁷⁹ “Where a statute’s language carries a plain meaning, the duty of an administrative agency is to follow its commands as written, not to supplant those commands with others it may prefer.”²⁸⁰

The Director argued that although the Board must decide every challenged claim, not every challenged claim has to gain admission to the review process.²⁸¹ But “[t]he trouble is, nothing in the statute says anything like that.”²⁸² Petitions for review are filed

²⁶⁸ *Id.* (emphasis in original)

²⁶⁹ *Id.* at *14.

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Id.* at *15.

²⁷³ *Id.* (quoting *Hovey v. Henry*, 12 F.Cas. 603, 604 (No. 6,742) (C.C.D.Mass. 1846) (Woodbury, J.)).

²⁷⁴ *Id.*

²⁷⁵ *Id.* at *16 (citing *McCormick Harvesting Machine Co. v. Aultman*, 169 U.S. 606 (1898)).

²⁷⁶ *Id.*

²⁷⁷ *SAS Inst. Inc. v. Iancu*, No. 16-969, 2018 WL 1914661, at *2 (U.S. Apr. 24, 2018).

²⁷⁸ 35 U.S.C. § 318(a).

²⁷⁹ *SAS*, 2018 WL 1914661, at *2.

²⁸⁰ *Id.* at *4.

²⁸¹ *Id.* at *5.

²⁸² *Id.*

by parties, not the Director, which means “the petitioner, not the Director,[] gets to define the contours of the proceeding.”²⁸³ Section 314 permits the Director to do nothing more than make the “binary choice” as to whether to institute review.²⁸⁴

The Director argued that because § 314(a) says the Director must focus on the claims “in the petition” but § 318(a) says the Board must resolve the claims challenged “by the petitioner,” this “[s]light[] linguistic discrepancy” means that the Director can selectively institute review on only some challenged claims.²⁸⁵ The Court disagreed because both § 314(a) and § 318(a) focus on the petitioner’s contentions, not the Director’s discretion.²⁸⁶ The discrepancy in language is more likely because the patent owner can cancel patent claims during the proceedings.²⁸⁷

Finally, the Director argued that the Court cannot second-guess this practice because under Section 314(d) the Director’s decisions to institute inter partes review are final and nonappealable.²⁸⁸ But section 314(d) does not inhibit courts from determining whether the agency is exceeding its statutory bounds, but only from reviewing the Director’s binary decision to institute review at all.²⁸⁹

Justice Ginsburg, joined by Justices Breyer, Sotomayor, and Kagan, wrote the first dissenting opinion.²⁹⁰ Justice Ginsburg explained that the Board can always deny a petition while noting that some of the specified claims warrant reexamination, and then institute review on a subsequent petition “shorn of challenges the Board finds unworthy of inter partes review. Why should the statute be read to preclude the Board’s more rational way to weed out insubstantial challenges?”²⁹¹

Justice Breyer also wrote a second dissenting opinion, which was joined by Justices Ginsburg and Sotomayor, and by Justice Kagan except as to Part III-A.²⁹² In Justice Breyer’s view, the agency’s view constitutes a reasonable interpretation of an ambiguous phrase and is thus entitled to *Chevron* deference.²⁹³ Justice Breyer argued that “it is more than reasonable to think that the phrase ‘patent claim challenged by the petitioner’ refers to challenges made in the proceeding, not challenges made in the petition but never made a part of the proceeding.”²⁹⁴

In addition, Justice Breyer noted that “when we, as judges, face a difficult text, it is often helpful to ask not just ‘whether’ or ‘what’ but also ‘why.’”²⁹⁵ More specifically, why “would Congress have intended to require the Board to proceed with an inter partes review, take evidence, and hear argument in respect to challenges to claims that the Board had previously determined has no ‘reasonable likelihood’ of success?”²⁹⁶ Rather,

²⁸³ *Id.*

²⁸⁴ *Id.*

²⁸⁵ *Id.* at *7.

²⁸⁶ *Id.*

²⁸⁷ *Id.*

²⁸⁸ *Id.* at *8.

²⁸⁹ *Id.* at *9.

²⁹⁰ *Id.* at *9-10 (Ginsburg, J., dissenting).

²⁹¹ *Id.* at *10.

²⁹² *Id.* at *10 (Breyer, J., dissenting).

²⁹³ *Id.*

²⁹⁴ *Id.* at *13.

²⁹⁵ *Id.* at *14.

²⁹⁶ *Id.*

“[t]he statute would seem to give the Director discretion to achieve the opposite, namely, to avoid wasting the Board’s time and effort.”²⁹⁷

***Wi-Fi One, LLC v. Broadcom Corp.*, 878 F.3d 1364 (Fed. Cir. Jan. 8, 2018) (en banc)**

The Federal Circuit *en banc* overruled a prior panel decision in *Achates Reference Publishing, Inc. v. Apple Inc.*²⁹⁸ holding that the PTAB’s § 315(b) time-bar determination is final and nonappealable under § 314(d).²⁹⁹ Section 314(d) provides that “[t]he determination by the Director whether to institute an inter partes review *under this section* shall be final and nonappealable.”³⁰⁰ Section 315(b) provides that “[a]n inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.”³⁰¹ The *Achates* panel determined that § 314(d) prohibited the court from reviewing the PTAB’s determination to initiate IPR proceedings over the patent owner’s objection that the proceedings were time-barred under § 315(b).³⁰²

Subsequent to the original *Achates* panel decision, the Supreme Court in *Cuozzo Speed Technologies, LLC v. Lee*³⁰³ addressed whether § 314(d) bars judicial review of the Director’s § 312(a)(3) determinations on whether the petition identified with sufficient particularity “each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.”³⁰⁴ The Supreme Court determined that § 314(d) forbids judicial review of § 312(a)(3) determinations because the 312(a)(3) “question of whether a petition was pleaded with particularity amounted to ‘little more than a challenge to the Patent Office’s conclusion, under § 314(a), that the ‘information presented in the petition’ warranted review.”³⁰⁵ In the majority’s view, the Supreme Court “expressly left open the potential for review, under certain circumstances, of decisions to institute IPR.”³⁰⁶

The *en banc* Federal Circuit panel found that “[w]e find no clear and convincing indication in the specific statutory language in the AIA, the specific legislative history of the AIA, or the statutory scheme as a whole that demonstrates Congress’s intent to bar judicial review of § 315(b) time-bar determinations.”³⁰⁷ Because § 314(d) states that determinations made by the Director “under this section” shall be unappealable, the Federal Circuit explained that “[t]he natural reading of the statute limits the reach of § 314(d) to the determination by the Director whether to institute IPR as set forth in § 314.”³⁰⁸

²⁹⁷ *Id.*

²⁹⁸ 803 F.3d 652 (Fed. Cir. 2015).

²⁹⁹ *Wi-Fi One, LLC v. Broadcom Corp.*, 878 F.3d 1364, 1367 (Fed. Cir. 2018).

³⁰⁰ *Id.* at 1368 (quoting 35 U.S.C. § 314(d)) (emphasis in original).

³⁰¹ 35 U.S.C. § 315(b).

³⁰² *Wi-Fi One*, 878 F.3d at 1368-69.

³⁰³ 136 S. Ct. 2131 (2016).

³⁰⁴ *Wi-Fi One*, 878 F.3d at 1369 (quoting 35 U.S.C. § 312(a)(3)).

³⁰⁵ *Id.* at 1369 (quoting *Cuozzo*, 136 S. Ct. at 2142).

³⁰⁶ *Id.* at 1369-70.

³⁰⁷ *Id.* at 1372.

³⁰⁸ *Id.*

Section 314(a)—“the only subsection addressing substantive issues that are part of the Director’s determination ‘under this section’”—“does only two things: it identifies a threshold requirement for institution” and “grants the Director discretion not to institute.”³⁰⁹ In contrast, because “§ 315(b) controls the Director’s authority to institute IPR[, which] is unrelated” to the Director’s authority under § 314(a), § 315 time-bar determination is appealable.³¹⁰ The court added that their interpretation “is consistent with the overall statutory scheme as understood through the lens of *Cuozzo*’s directive to examine the statutory scheme in terms of what is ‘closely related’ to the § 314(a) determination.”³¹¹

Judge O’Malley concurred.³¹² In Judge O’Malley’s view, § 314(d)’s bar is “directed to the substantive adequacy of a timely filed petition. Because § 315(b)’s time bar has nothing to do with the substantive adequacy of the petition,” § 314(d) does not apply.³¹³

Judge Hughes, joined by three other judges, dissented.³¹⁴ In the dissent’s view, “§ 314(d) is not limited to the merits of the petition, but8. also bars judicial review of closely related issues such as the petition’s timeliness.”³¹⁵ This is because, *inter alia*, the statute clearly indicates that the Director’s determination whether to institute an inter partes review shall be nonappealable.³¹⁶ The dissent further argued that, in addition to the plain language of the statute, the *Cuozzo* court made clear that § 314(d) “prohibits judicial review of ‘questions that are closely tied to the application and interpretation of statutes related to the Patent Office’s decision to initiate inter partes review.’”³¹⁷ “The petition’s timeliness under § 315(b) is part of the Board’s institution decision, and is therefore barred from judicial review.”³¹⁸

³⁰⁹ *Id.*

³¹⁰ *Id.* at 1373.

³¹¹ *Id.*

³¹² *Id.* at 1375 (O’Malley, J., concurring).

³¹³ *Id.* at 1376.

³¹⁴ *Id.* at 1377 (Hughes, J., dissenting).

³¹⁵ *Id.* at 1378.

³¹⁶ *Id.*

³¹⁷ *Id.* (quoting *Cuozzo*, 136 S. Ct. at 2141).

³¹⁸ *Id.*