HAVE WE GONE TOO FAR: DOES THE SEVENTH AMENDMENT COMPEL FACT-FINDING BEFORE REACHING A DECISION ON PATENT-ELIGIBLE SUBJECT MATTER?

JESSE D.H. SNYDER*

I. INTRODUCTION

Something seems amiss. Settled notions of what can be patentable are changing.¹ To complicate matters further, so far, neither the Supreme Court nor the Federal Circuit has addressed whether the inquiry into patent-eligible subject matter is factual, legal, or both. And while the scope of patentable subject matter is understandably constricting, the end result may not be coterminous with the Supreme Court's guidance in *Alice Corporation Party Limited v. CLS Bank.*² Under *Alice*, which built upon the patent-eligible subject matter frameworks of prior cases, for those patent claims that are directed to a patent-ineligible concept (e.g., abstract ideas), patentability turns on whether an "inventive concept" exists to "transform the nature of the claim' into a patent-eligible application."³

The lower courts have seized on the *Alice* holding, inhuming patents whose subject-matter failures render them invalid as a matter of law. But what if the means adopted by the lower courts to reach that legal conclusion also sidesteps certain constitutional guarantees? What if they are simplifying the analysis at a facial level when a more granular investigation is required? What if, at the motion to dismiss stage, fact-finding is still required to determine whether a patent is

- 2. See Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014).
- 3. Id. at 2355 (citation omitted).

^{* 2015-2016} term law clerk to the Honorable Jimmie V. Reyna of the U.S. Court of Appeals for the Federal Circuit. I earned my J.D., *summa cum laude*, from Texas Wesleyan School of Law and my B.S. from the United States Air Force Academy. While in law school, I served as Editor-in-Chief of the *Texas Wesleyan Law Review*. Upon graduating from law school, I clerked for the Honorable Jorge A. Solis at the U.S. District Court for the Northern District of Texas. I would like to thank my wife, Amy, for her helpful comments and suggestions. Also, I would like to recognize the outstanding efforts of Rebecca Sundin and the *Chicago-Kent Journal of Intellectual Property—*I sincerely appreciate their hard work toward publishing my paper!

^{1.} See Steven E. Tiller, Alice and the Ensuing Rabbit Hole for Patents, WHITEFORD TAYLOR PRESTON, LLP, www.wtplaw.com/documents/2014/10/alice-and-the-ensuing-rabbit-hole-forpatents (Oct. 13, 2014) ("[a]s the issue continues to seesaw, the latest standard on what is subject to patent protection as it applies to software related inventions was provided by the Supreme Court in its recent opinion in Alice Corp. v. CLS Bank Int'l.").

invalid under 35 U.S.C. § 101? And what if the pleading stage of litigation is simply too soon to reject a patent when the ideas of what is abstract and inventive are still being developed? If those questions dignify an affirmative answer, then dismissing a case for want of patentable subject matter may be inapposite with our jury system.

In the six months following *Alice*, its effects could not be more pronounced. In all, courts at various levels have applied *Alice* to invalidate 68 patents (and more than 1,800 claims).⁴ Although several of those patents succumbed to invalidity after some level of fact-finding, ten of them faltered on the pleadings.⁵ This state of affairs has prompted some commentators to question whether the pendulum has swung too far against patent rights.⁶ Guided by Supreme Court precedent, the subject matter eligibility test necessarily is not susceptible to a ruling based on cold pleadings and file histories. Rather, linedrawing determinations of what is a transformative, inventive concept to one of ordinary skill in the art lend themselves to evidence and fact-finding. Only by reaching those baseline determinations can a court properly reach the legal conclusion of whether certain subject matter is eligible for patent protection. The pleadings alone cannot suffice.

This article affirmatively argues that patent eligibility is a question for the jury and, under the patentability test defined by *Alice*, courts should not determine patent eligibility without some level of fact-finding. In three parts, the article explores the role of the jury and the nature of fact-finding in the context of patent law, highlights the evolu-

- 4. See Robert Sachs, A Survey of Patent Invalidations Since Alice, LAW 360 (Jan. 13, 2015), www.law360.com/articles/604235/a-survey-of-patent-invalidations-since-alice (citations omitted).
- 5. See, e.g., id. (citations omitted); Dan Lui and Glaser Weil, A Sea Change after Alice: Recent Court Decisions Show Patents Are Vulnerable under Section 101 Attack, LAW.COM (Oct. 30, 2014), www.law.com/sites/jdsupra/2014/10/30/a-sea-change-after-alice-recent-court-decisions-show-patents-are-vulnerable-under-section-101-attack/#ixzz3Q9Bc9Clb ("[a]nother interesting trend is that the district courts have been willing to decide Section 101 issues at early stages of litigation, even without claim construction. Among the seventeen district court cases, nine were brought under Fed. R. Civ. P. § 12(b)(6) and two under Fed. R. Civ. P. § 12(c). The district courts denied the motions as premature in only three of these cases because there was insufficient evidence in the record to determine whether any of the claimed limitations could meet the second step of the Mayo test.").
- 6. See, e.g., Ryan Davis, USPTO Examples Show What Passes Muster Under Alice, LAW 360 (Jan. 27, 2015), www.law360.com/ip/articles/615550/uspto-examples-show-what-passes-muster-under-alice; Did the Supreme Court Intend to Kill Software Patents?, IP NAV BLOG (Sep. 10, 2104), www.ipnav.com/blog/did-the-supreme-court-intend-to-kill-software-patents; Eric Guttag, Ignorance Is Not Bliss: Alice Corp. v. CLS Bank International, IPWATCHDOG, (Jul. 24, 2014), www.ipwatchdog.com/2014/07/25/ignorance-is-not-bliss-alice-corp-v-cls-bank-international/id=50517 ("[w]ith the Supreme Court's most recent foray into the patent-eligibility world in Alice Corp. v. CLS Bank International, we now have a complete and utter disaster as to what data processing claims can (or more unfortunately cannot) survive scrutiny by Our Judicial Mount Olympus under 35 U.S.C. § 101.").

tion of case law in the area of patent-eligible subject matter in the wake of *Alice*, and explains why determinations of eligibility at the pleadings stage may be too hasty. To be clear, this article is not about facially invalid patents that should be summarily dismissed out of hand. Motions to dismiss and the like still carry full weight in that area. Rather, this article is about the grey area—the area where evidence can flesh out what is transformative. In the end, this position is not pro-patent or anti-infringer—this position is about the Constitution. And for those salvageable patents, if a court takes the extraordinary step of invalidating a patent, there must be some threshold fact-finding to preserve the constitutional guarantees inherent in the jury system.

II. THE SEVENTH AMENDMENT AND THE RIGHT TO A JURY

The interplay between who should decide an issue is often subject to debate and litigation. The reason for that concern is simple: the Constitution generally guarantees a jury trial for most controversies. Where that begins and ends in the context of patent claim construction was discovered just 20 years ago.

A. Markman and the Roles of the Judge and Jury

The effect of *Markman v. Westview Instruments, Inc.* on how patent cases are tried (and probably won) cannot be overstated.⁸ That case, of course, held that judges construe claims and juries determine infringement.⁹ Relevant here is how Justice David Souter's unanimous opinion explained the constitutional underpinnings of when and where the right to a jury springs to life.

The Seventh Amendment guarantees that "[i]n Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved." Tracing back to its origins, "[t]he right of trial by jury thus preserved is the right which existed under the English common law when the Amendment was adopted." To ascertain whether an issue is for the jury to decide, Justice Souter articulated a two-step framework: (1) "whether we are dealing with a cause of action that either was tried at law at the time of the founding or is at least analogous to one that was"; and, failing that, (2) "whether

- 7. See U.S. CONST. amend VII.
- 8. See Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).
- 9. Id. at 372
- 10. U.S. CONST. amend VII.
- $11.\,$ Markman, 517 U.S. at 376 (quoting Baltimore & Carolina Line, Inc. v. Redman, 295 U.S. 654, 657 (1935)).

the particular trial decision must fall to the jury in order to preserve the substance of the common-law right as it existed in 1791."12

As to the first issue, courts "compare the statutory action to 18th-century actions brought in the courts of England prior to the merger of the courts of law and equity." There, Justice Souter observed that the issue of claim construction appeared to be tried through administrative proceedings:

Although by 1791 more than a century had passed since the enactment of the Statute of Monopolies, which provided that the validity of any monopoly should be determined in accordance with the common law, patent litigation had remained within the jurisdiction of the Privy Council until 1752 and hence without the option of a jury trial.¹⁴

Concluding that claim construction was not tried at law, the Court highlighted the prevailing practices of claim construction as akin to discerning the metes and bounds of deeds: "These indications of our patent practice are the more impressive for being all of a piece with what we know about the analogous contemporary practice of interpreting terms within a land patent, where it fell to the judge, not the jury, to construe the words." 15

Turning to the second inquiry, Justice Souter resisted the "easy" reflexive answer "of leaving the issue for a jury," lamenting that the issue of claim construction requires "a judgment about the scope of the Seventh Amendment guarantee without the benefit of any foolproof test." Thus, divining an answer to the second question unavoidably turned on "whether the jury must shoulder this responsibility as necessary to preserve the substance of the common-law right of trial by jury." According to the Court, that issue must be "fundamental" and "inherent in and of" the jury system. Laying a foundation, Justice Souter first distinguished issues of substance from procedure and issues of fact from law. Then he clarified that, above all things, when available, a court should "classify a mongrel practice (like construing a

- 12. Id. (citations omitted).
- 13. Id. at 377 (citations omitted).
- 14. *Id.* at 380–81 (citations omitted).
- 15. Id. at 382-83.
- 16. Id. at 377.
- 17. *Id.* (internal quotation marks omitted and citations omitted).
- 18. Id. at 377-78.
- 19. See id. at 378 (citations omitted).

term of art following receipt of evidence) by using the historical method."20

Reviewing the historical context for giving meaning to patent terms—amid other functional considerations—the Court concluded that judges are better with an issue that "falls somewhere between a pristine legal standard and a simple historical fact." Recognizing the need for experts (and perhaps foreshadowing the next watershed case in claim construction), the Court reflected that "[i]n the main, we expect, any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document, required by the standard construction rule that a term can be defined only in a way that comports with the instrument as a whole." With a nod to uniformity across cases, 23 the Court concluded that "there is sufficient reason to treat construction of terms of art like many other responsibilities that we cede to a judge in the normal course of trial, notwith-standing its evidentiary underpinnings." 24

So *Markman* reserved the role of claim construction to the judge, which the Federal Circuit later interpreted as an area that should be reviewed *de novo* at all levels of fact-finding.²⁵ Whether by the intrinsic record alone or with the aid and supplementation of experts, that level of deference remained—that is, until *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*²⁶

B. Teva – If Subsidiary Findings of Fact Occur During Claim Construction, They Should Be Reviewed with Deference

Nearly 20 years after *Markman*, on January 20, 2015, the Supreme Court considered the level of deference to afford fact-finding outside of the intrinsic record during claim construction. In *Teva*, writing for a 7-2 majority, Justice Steven Breyer held that, when reviewing a district court's resolution of subsidiary factual matters made in the course of

^{20.} *Id.* (citations omitted). Recently, my nephew referred to me as a mongrel. He most likely was not thinking about claim construction, judges, or juries when he said it.

^{21.} *Id.* at 388 (quoting Miller v. Fenton, 474 U.S. 104, 114 (1985)).

^{22.} Id. at 389 (citations omitted).

^{23.} See id. at 390-91.

^{24.} Id. at 390.

^{25.} *See* Lighting Ballast Control LLC v. Philips Electronics N. Am. Corp., 744 F.3d 1272, 1276–77 (Fed. Cir. 2014) (en banc) (reaffirming *de novo* review of district court claim construction).

^{26.} See Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., No. 13-854 (U.S. Jan. 20, 2015).

its construction of a patent claim, the Federal Circuit must apply a clear error standard of review.²⁷

There, the basic dispute centered on the meaning of the phrase "molecular weight."²⁸ Teva Pharmaceuticals ("Teva") owned the relevant patent, which covers a manufacturing method for the multiple sclerosis drug Copaxone.²⁹ The active ingredient, "copolymer-1," is made up of molecules of varying sizes.³⁰ Teva sued after the accused infringers attempted to market a generic version of Copaxone.³¹ The claims at issue required that co-polymer 1 have "a molecular weight of about 5 to 9 kilodaltons," and the parties disagreed over the meaning of the phrase "molecular weight."³²

While the case was being litigated, the Supreme Court issued its opinion in *Nautilus, Inc. v. Biosig Instruments, Inc.*, holding that "a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention."³³ Against this backdrop, Sandoz, Inc. argued that the phrase "molecular weight" caused the claims to be invalid for indefiniteness because that phrase could refer to any one of three different methods of calculation.³⁴ The district court, after taking expert evidence from both sides, concluded that the term was sufficiently definite. Among other things, it found that one of ordinary skill in the art would understand that the term "molecular weight" referred to molecular weight as calculated by "peak average molecular weight."³⁵ For that reason and others, the court held that the patent was valid.³⁶

On appeal, the Federal Circuit reversed the construction regarding indefiniteness, reviewing *de novo* each facet of the record—expert testimony and intrinsic evidence alike.³⁷ The Supreme Court later granted certiorari to resolve the standard of review for claim construction decisions.

```
27. See id. at 1-2.
28. Id. at 2.
29. See id.
30. Id.
31. See id.
32. Id.
33. Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2125(2014).
34. Teva, slip op. at 3.
35. Id.
36. See id.
```

37. See id. at 3-4.

After reviewing Federal Rule of Civil Procedure 52,³⁸ Justice Breyer delineated that intrinsic evidence should be reviewed *de novo*, but the review of extrinsic evidence is now under the clear error standard:

We recognize that a district court's construction of a patent claim, like a district court's interpretation of a written instrument, often requires the judge only to examine and to construe the document's words without requiring the judge to resolve any underlying factual disputes. As all parties agree, when the district court reviews only evidence intrinsic to the patent (the patent claims and specifications, along with the patent's prosecution history), the judge's determination will amount solely to a determination of law, and the Court of Appeals will review that construction *de novo*.³⁹

Following that, and germane to the issue of patent eligibility, the Court noted that findings of fact are necessary when disputes over subsidiary facts arise:

In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the *background science* or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne,* 11 Wall. 516, 546 (1871) (a patent may be "so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning"). *In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence.* These are the "evidentiary underpinnings" of claim construction that we discussed in *Markman*, and this subsidiary fact-finding must be reviewed for clear error on appeal.⁴⁰

As part of the *Teva* aftermath, some observers have taken the seemingly cynical view that the Supreme Court's long-awaited decision may prompt district court judges to pad the record with findings on expert witnesses to fortify challenges on appeal, thereby leveraging a more deferential standard of review.⁴¹ Nevertheless, at least one district judge—who, incidentally, carries the largest patent docket among

^{38.} Federal Rule of Civil Procedure 52 reads, in pertinent part, "[f]indings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, and the reviewing court must give due regard to the trial court's opportunity to judge the witnesses' credibility." FED. R. CIV. P. 52.

^{39.} *Teva*, slip op. at 11–12.

^{40.} Id. at 12 (emphasis added and text reformatted).

^{41.} See Ryan Davis, High Court Claim Construction Ruling Set to Spur New Fights, LAW 360, www.law360.com/articles/612961/high-court-claim-construction-ruling-set-to-spur-new-fights (Jan. 20, 2015).

the federal judiciary 42 —has resisted the temptation to entertain live witnesses following $Teva.^{43}$

In sum, both *Markman* and *Teva* inform on the roles of judges and juries, and the cases discuss the types of evidence that are important when making factual findings. No doubt, *Markman* altered the manner in which patent suits are litigated for both the parties and the courts, affecting local procedures, strategy, time, cost, and settlement. The rise of the patent-assertion entity (i.e., an entity that sues under a patent that it does not practice) and the increased volume of patent cases in the federal court system have exacerbated those consequences.⁴⁴ Stemming in part from that, in the not too distant past, software and computer-based patents were considered by some to be a scourge on industry.⁴⁵ Those generalized sentiments—at least as it relates to entities that sue over patents that they do not practice—still continue today.⁴⁶ In fact, not only do non-practicing entities invite legislative efforts to curtail patent litigation, they also inspire investigations into whether asserting a patent is anticompetitive.⁴⁷

As reflected in *Teva*, *Nautilus*, and other recent opinions, the Supreme Court has taken a fresh interest in certain nuances of patent law. While the motives for granting certiorari generally involve a variety of considerations, such as those found in Rule 10 of the Rules of the Supreme Court of the United States,⁴⁸ the perception of non-practicing entities filing blanket lawsuits with suspect claims may have wondered

^{42.} See Owen Burd & Brian Howard, Lex Machina 2013 Patent Litigation Year in Review, LEX MACHINA, at 2 (2014).

^{43.} See Content Guard Holdings, Inc. v. Amazon.com, Inc., et al., No. 2:13-cv-1112-JRG, Dkt. No. 383 (E.D. Tex. December 18, 2013) ("[t]he Court observes that this is the first claim construction proceeding in which a party has addressed the Teva decision to the Court. This Court has long maintained an established custom and practice of providing that evidentiary support for a parties' claim construction positions be submitted as sworn declarations attached to the briefing filed with the Court, rather than via live witness[es].). The parties have not asserted (and the Court is not aware) of any requirement in Teva that would compel the Court to alter either its established custom and practice or its rules.").

^{44.} *See* Owen Byrd & Brian Howard, *Lex Machina, 2013 Patent Litigation Year in Review* LEX MACHINA, at 1 (2014) ("[p]laintiffs filed 6,092 new patent cases in U.S. District Courts in 2013, compared to 5,418 new cases filed in 2012, a 12.4% increase.").

^{45.} See Timothy B. Lee, Will the Supreme Court Save us from Software Patents?, THE WASHINGTON POST, www.washingtonpost.com/blogs/the-switch/wp/2014/02/26/will-the-supreme-court-save-us-from-software-patents (Feb. 26, 2014).

^{46.} See Jimmy Hoover, Patent Reform to get New Life in GOP-Led Congress, LAW 360, www.law360.com/ip/articles/616444/sen-cornyn-says-gop-led-congress-will-fight-patent-trolls (Jan. 29, 2015).

^{47.} See Melissa Lipman, Patent Troll Study Shouldn't Slow Reforms, FTC's Bill Says, LAW 360, www.law360.com/ip/articles/616680/patent-troll-study-shouldn-t-slow-reforms-ftc-s-brill-says (Jan. 29, 2015).

^{48.} See Sup. Ct. R. 10.

into the Court's train of thought when *Alice* came up from the lower courts.

III. ALICE AND THE ENSUING CASE LAW ON PATENTABLE SUBJECT MATTER

Section 101 of the Patent Act defines the subject matter eligible for patent protection:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.⁴⁹

Though facially simplistic, the Supreme Court has recognized certain "important implicit exception[s]: laws of nature, natural phenomena, and abstract ideas are not patentable."50 Federal courts have held fidelity to those exceptions "for more than 150 years." 51 At their core, those exceptions seek to avoid preemption of "the basic tools of scientific and technological work."52 According to the Supreme Court, "monopolization of those tools through the grant of a patent might tend to impede innovation more than it would tend to promote it"53—a result antagonistic to the aim of patent law.54 Even so, courts "tread carefully in construing this exclusionary principle lest it swallow all of patent law."55 Recognizing that all inventions have some underlying abstractness at a high level, applications that build on those concepts "to a new and useful end"56 remain eligible for patent protection. As observed by the Court, the trick is to distinguish between the "building blocks of human ingenuity and those that integrate the building blocks into something more."57 Between the two, only the latter is patentable.

On March 31, 2014, the Supreme Court heard oral argument in *Alice* and issued an opinion shortly thereafter that offered the next iteration in the concept of what is patentable and what falls outside of patent protection. It was the first Supreme Court case on the patent

- 49. 35 U.S.C. § 101 (2012).
- 50. Association for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013) (internal quotation marks and brackets omitted).
- 51. Alice Corp. Pty. v. CLS Bank Int'l, 134 S. Ct. 2347, 2349 (2014) (citing Bilski v. Kappos, 561 U.S. 593, 130 (2010)); O'Reilly v. Morse, 56 U.S. 62, 62, 14 L. Ed. 601, 601 (1853); Le Roy v. Tatham, 55 U.S. 156, 160 14 L. Ed. 367, 371 (1852)).
 - 52. Association for Molecular Pathology, 133 S. Ct. at 2116.
 - 53. Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293 (2012).
- 54. U.S. CONST. art. I, \S 8, cl. 8 (Congress "shall have Power... To promote the Progress of Science and useful Arts").
 - 55. Alice, 134 S. Ct. at 2353 (citing Mayo, 132 S. Ct, at 1293-94).
 - 56. Gottschalk v. Benson, 409 U.S. 63, 67, (1972).
- 57. Alice, 134 S. Ct. at 2353 (citing Mayo, 132 S. Ct. at 1303) (internal quotation marks omitted).

eligibility of software since *Bilski v. Kappos* in 2010, which was the first case of that sort in three decades.⁵⁸ The *Alice* opinion would later be likened to a maelstrom of change.⁵⁹

A. Alice – Recitation of a Generic Computer Is Not Transformative

In *Alice*, the Supreme Court held that a claim drawn to an abstract idea on a generic computer is not enough to transform that idea into a patentable invention.⁶⁰ Alice Corporation ("Alice") owned four patents related to computer-implemented, electronic escrow services for facilitating financial transactions that mitigate the risk of one party failing to perform under the transaction.⁶¹ According to Alice, CLS Bank International and CLS Services Ltd. (together, "CLS Bank") began to use a similar technology in 2002.⁶² Alice notified CLS Bank of its probable infringement, and the companies discussed licensing the patents.⁶³

In 2007, CLS Bank filed a declaratory judgment action against Alice in the U.S. District Court for the District of Columbia, seeking a declaration of non-infringement, invalidity, and unenforceability of the patents.⁶⁴ On summary judgment—not on the pleadings—the trial court found that all claims were ineligible for patent protection because they were directed to the abstract idea of "employing a neutral intermediary to facilitate simultaneous exchange of obligations in order to minimize risk."⁶⁵ One year later on appeal, a divided panel reversed, holding that it was not "manifestly evident" that the claims were directed to an abstract idea.⁶⁶

After rehearing the case en banc, the Federal Circuit vacated the panel opinion and affirmed the judgment of the lower court in a one-

^{58.} See Timothy B. Lee, Will the Supreme Court save us from software patents?, The Washington Post (Feb. 26, 2014), www.washingtonpost.com/blogs/the-switch/wp/2014/02/26/will-the-supreme-court-save-us-from-software-patents.

^{59.} See R. David. Donoghue, Hurricane Alice: The Broad Impact of the Supreme Court's Software Patent Decision, RETAIL PATENT LITIGATION (Sep. 15, 2014), www.retailpatentlitigation.com/2014/09/15/hurricane-alice-the-broad-impact-of-the-supreme-courts-software-patent-decision.

^{60.} See Alice, 134 S. Ct. at 2352.

⁶¹ See id

 $^{62.\ \}textit{See}\ \text{ALICE}\ \textsc{Corporation},\ www.alicecorp.com/fr_patents.html}$ (last visited on Jan. 28, 2015).

^{63.} See id

^{64.} See Alice, 134 S. Ct. at 2353.

^{65.} *Id.* (quoting CLS Bank Int'l v. Alice Corp. Pty. Ltd., 768 F. Supp. 2d 221, 252 (D.D.C. 2011)).

^{66.} *Id.* (quoting CLS Bank Int'l v. Alice Corp. Pty. Ltd., 685 F.3d 1341, 1352, 1356 (Fed. Cir. 2012)).

paragraph per curiam opinion.⁶⁷ Seven of the ten participating judges agreed that the method claims (and certain "media" claims) were ineligible, while a five-member plurality affirmed the trial court on the system claims.⁶⁸ Writing for the plurality and relying on *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, Judge Alan Lourie concluded that both the system and method claims "draw on the abstract idea of reducing settlement risk by effecting trades through a third-party intermediary," and that the use of a computer to maintain, adjust, and reconcile shadow accounts added nothing of substance to that abstract idea."⁶⁹ In contrast, Chief Judge Randall Rader⁷⁰ and Judge Kimberly Moore would have held that the system claims are eligible under the Patent Act.⁷¹ And Judges Pauline Newman, Richard Linn, and Kathleen O'Malley would have held that all claims are eligible.⁷² The Supreme Court later sought to resolve the issue.

In a unanimous decision, Justice Clarence Thomas applied a two-step framework as articulated in *Mayo*, holding that method claims directed to an "abstract idea implemented on a generic computer" and system claims that "recite a handful of generic computer components configured to implement the same idea" are ineligible for patent protection under § 101.73 That framework necessarily requires determinations of whether the subject matter fits within one of the judicially recognized exceptions to patentable subject matter and, if so, whether the claims contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible invention.74

First, the Court determined that the claims "are drawn to the abstract idea of intermediated settlement."⁷⁵ Extrapolating from prior cases, Alice argued unavailingly that abstract ideas should be limited to "preexisting, fundamental truth[s]' that 'exis[t] in principle apart from any human action."⁷⁶ The Court rebuffed that position by citing the abstract idea of *Bilski* (i.e., "the concept of hedging, or protecting

- 68. Id. (citation omitted).
- 69. Id. (citation omitted).

- 71. See Alice, 134 S. Ct. at 2353 (citation omitted).
- 72. See id. at 2354.
- 73. Id. at 2360.
- 74. See id. at 2355.
- 75. *Id.*
- 76. Id. at 2356. (citation omitted) (alterations in original).

^{67.} See id. (citing CLS Bank Int'l v. Alice Corp. Pty. Ltd., 717 F.3d 1269, 1273 (Fed. Cir. 2013) (en banc)).

^{70.} Judge Rader served as Chief Circuit Judge until 2014. *See Randall Ray Radar*, WIKIPEDIA, http://en.wikipedia.org/wiki/Randall_Ray_Rader (last visited Jan. 1, 2015).

against risk"⁷⁷) as a case that was not defined as a fundamental truth.⁷⁸ To Justice Thomas, the *Alice* patents seemed to naturally extend from the claimed risk hedging in *Bilski* as "a fundamental economic practice long prevalent in our system of commerce."⁷⁹ By that reasoning, the *Alice* patents were reduced to "[t]he use of a third-party intermediary (or 'clearing house')" as a "building block of the modern economy."⁸⁰ Lest there be doubt, the Court went so far as to hold that the concept of intermediated settlements was "squarely within the realm" of abstraction.⁸¹

Next, the Court held that inclusion of generic computers alone does not transform abstract ideas into something more.82 Fundamentally, the addition or application of "existing computers long in use" does not transform an abstract idea into a patent-eligible application.83 Throughout the opinion, Justice Thomas reiterated that an invention of "wholly generic computer implementation" was inadequate by itself.84 Indeed, "the relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea of intermediated settlement on a *generic* computer."85 While rejecting that a computer playing a substantial role in the claims could salvage the patent, Justice Thomas suggested that claims purporting "to improve the functioning of the computer itself" could lead to a different result.86 And certain hardware configurations beyond something "purely functional and generic" may pass muster.87 But, as in the case of the Alice patents, computers performing "well-understood, routine, conventional activit[ies]' previously known to the industry" did not transform the abstract idea into something more.88 Thus, without "a meaningful limitation beyond generally linking the use of the [method] to a particular technological environment," the Supreme Court found all claims at issue ineligible under § 101.89

```
77. Bilski v. Kappos, 561 U.S. 593, 611 (2010).
```

- 78. Alice, 134 S. Ct. at 2356 (citation omitted).
- 79. *Id.* (internal quotation marks omitted) (citation omitted).
- 80. *Id.* (citation omitted) (alterations in original).
- 81. Id. at 2357.
- 82. See id. at 2357-60.
- 83. Id. at 2357 (citation omitted).
- 84. See, e.g., id. at 2358 (citation omitted).
- 85. *Id.* at 2359 (emphasis added).
- 86. Id.
- 87. Id. at 2360.
- 88. *Id.* at 2359-60 (citation omitted).
- 89. Id. at 2360 (internal quotations omitted, alteration in original, and citation omitted).

For those saving room for additional authority, Justice Sonya Sotomayor, joined by Justices Ruth Bader Ginsburg and Steven Breyer, wrote a short concurrence reiterating "that any claim that merely describes a method of doing business does not qualify as a process under § 101."90 And with that, the three justices joined the majority.

Given the strongly-worded, unanimous opinion, some practitioners questioned what the lower court's reaction would be to Alice. It did not take long to find out.

B. The Alice Aftermath – Interpreting Eligibility on the Pleadings

The first published opinion that cited *Alice* came just five days after the Supreme Court issued its opinion.⁹² There, Judge Leonard Stark, a federal judge carrying the second highest patent caseload in 2013,⁹³ requested additional briefing on the impact of *Alice*.⁹⁴ In the six months that followed, courts at various levels would cite *Alice* to invalidate almost 70 patents and more than 1,800 claims.⁹⁵ Ten patents in particular were invalidated on a Federal Rule of Civil Procedure 12(b)(6) motion to dismiss or Rule 12(c) motion for judgment on the pleadings; only five patents subjected to similar motions survived.⁹⁶ In view that, at the pleadings stage, accused infringers must show the "only plausible reading of the patent must be that there is clear and convincing evidence of ineligibility,"⁹⁷ those numbers are remarkable. The recent victims include patents directed to business

 $^{90.\,}$ Id. at 2360-61 (Sotomayor, J., concurring) (internal quotation marks omitted and citation omitted).

^{91.} See Jason Rantanen, SCOTUSblog symposium on Alice v. CLS Bank, PATENTLYO (Jun. 22, 2014), http://patentlyo.com/patent/2014/06/scotusblog-symposium-alice.html.

^{92.} *See* Walker Digital, LLC v. Google, Inc., No. 11-318-LPS, 2014 U.S. Dist. LEXIS 85539, at *4–5 (D. Del. June 24, 2014).

^{93.} See Owen Byrd & Brian Howard, Lex Machina 2013 Patent Litigation Year in Review, LEX MACHINA, at 2 (2014).

^{94.} See Walker Digital, 2014 U.S. Dist. LEXIS 85539, at *4–5 ("[i]n light of the recent ruling by the United States Supreme Court in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (June 19, 2014), and Google's notice of supplemental authority (D.I. 304), Google shall file supplemental briefing not to exceed five (5) pages addressing the impact of *Alice Corp.* on Google's pending motion for summary judgment of invalidity for lack of patentable subject matter under 35 U.S.C. § 101 (D.I. 250).").

^{95.} See Robert Sachs, A Survey of Patent Invalidations Since Alice, LAW 360, www.law360.com/articles/604235/a-survey-of-patent-invalidations-since-alice (Jan. 13, 2015) (citations omitted).

^{96.} See id. ("[o]f particular interest is that 10 patents were invalidated on a Rule 12 motion to dismiss/judgment on the pleadings (or a motion to dismiss was affirmed by the Federal Circuit); by comparison, only five patents survived such motions.").

^{97.} Tuxis Techs., LLC v. Amazon.com, Inc., No. 13-1771-RGA, 2014 U.S. Dist. LEXIS 122457, at *4-5 (D. Del. Sept. 3, 2014) (quoting Ultramercial, Inc. v. Hulu, LLC, 722 F.3d 1335, 1339 (Fed. Cir. 2013)).

methods, document management, digital image management, networks, databases, medical records, and computer animation.⁹⁸

For many observers, *Alice* is synonymous to a death knell for software patents.⁹⁹ Even the United States Patent and Trademark Office is grappling with how to create examples of computer-related inventions that can survive challenges under *Alice*.¹⁰⁰ Reviewing recent patent office direction on patentability, while many practitioners appreciated the effort, they still decried the examples as vague and without the necessary explanation to demonstrate what turns an abstract idea into something transformative.¹⁰¹

While hand-wringing naturally will persist, and until sufficient time has passed for arguments to sharpen and for courts to sort through the nuances of *Alice*, practitioners representing patent holders should not languish. Addressing the concerns of *Alice* involves meeting *Alice* at its terms. Those terms include demonstrating and advocating that, because patent eligibility is a jury question, the pleading stage is often too early to determine whether patents bear eligible subject matter.

IV. THE NEED FOR A JURY: WHY THRESHOLD FACT-FINDING IS NECESSARY BEFORE RENDERING A PATENT INVALID

There will always be dead ducks in litigation: certain cases, certain claims, and even certain patents destined for demise from the outset. This article is not about patents, such as the *Alice* patents, with abstract ideas chain-linked to a generic computer, as a generic computer would be understood by one of ordinary skill in the art. The federal rules have procedures to dispatch with the bad cases and bad patents. And, along similar lines as the Supreme Court in *Alice*, sketching the exact contours between a facially ineligible patent and one that

^{98.} See Robert Sachs, A Survey of Patent Invalidations Since Alice, LAW 360 (Jan. 13, 2015), www.law360.com/articles/604235/a-survey-of-patent-invalidations-since-alice ("[w]hile business method patents (23) constituted the majority of the patents that were invalidated, the types of technologies ranged widely, including 3-D computer animation (two), digital image management (seven), document management (10), and [sic] medical records (two), database architecture (two) and networking (four).").

^{99.} See Gene Quinn, A Software Patent Setback: Alice v. CLS Bank, IPWATCHDOG (Jan 9, 2015), www.ipwatchdog.com/2015/01/09/a-software-patent-setback-alice-v-cls-bank/id=53460/ ("[b]ased on this decision it is hard to see how any software patent claims written in method form can survive challenge.").

^{100.} See, e.g., Ryan Davis, USPTO Examples Show What Passes Muster Under Alice, LAW 360 (Jan. 27, 2015), www.law360.com/ip/articles/615550/uspto-examples-show-what-passes-muster-under-alice.

^{101.} See id.

^{102.} See, e.g., FED. R. CIV. P. 12(b)(6), (c).

could benefit from additional review is beyond the scope of this article. 103 Rather, the focus is about what practitioners should advocate to reach the grey, in-between area where evidence can pull a patent from the jaws of defeat. Stated differently, once a court is able to see that more evidence is needed, ineligibility is not the single most plausible outcome from the pleadings. 104 And if that analysis involves a factual determination—and genuine disputes of material fact are present—the jury should examine the relevant evidence before the court reaches the determinative legal conclusion.

As a threshold, neither the Supreme Court nor the Federal Circuit have addressed whether the § 101 inquiry is factual, legal, or both. But, as explained in *Teva*, if an inquiry involves a factual determination, and the parties dispute an issue of material fact, the fact-finder must examine evidence and make factual findings before the court can render its conclusion. In her casebook *Patent Litigation and Strategy*, Judge Kimberly Moore observed that, while attacking patentable subject matter "may be attempted on a motion to dismiss, the need for claim construction or development may preclude that possibility." ¹⁰⁵ As Judge Moore explains, the analysis of patent-eligible subject matter may not be entirely legal in nature:

As the inquiry into § 101 becomes more searching, is it still viable to consider the issue entirely as a question of law? For example, under *Mayo*, the scope of the claims play a role in determining patent eligibility, and the scope of the claims may be determined in part by extrinsic evidence. Further, *Mayo* suggests that portions of the claim that are well-known and conventional do not contribute to patent eligibility; but how should a court determine what is well-known?¹⁰⁶

Given Judge Moore's comments, and in light of the increasing propensity to deny eligibility under *Alice*, it is time to review the § 101 inquiry with an eye toward who should be making the underlying factual determinations.

Following the approach from *Markman*, when determining who should decide the underlying facts for a legal conclusion of patent eligibility, courts should ask whether the issue of patent-eligible subject

^{103.} See Alice, 134 S. Ct. at 2357 ("[i]n any event, we need not labor to delimit the precise contours of the 'abstract ideas' category in this case.").

^{104.} See Robert Sachs, A Survey of Patent Invalidations Since Alice, LAW 360 (Jan. 13, 2015), www.law360.com/articles/604235/a-survey-of-patent-invalidations-since-alice ("[t]hat's a significant outcome since on a Rule 12 motion the court must find that there is find no "plausible" interpretation of the claims to save the patent. Those courts that denied Rule 12 motions focused on this factor, and the need for evidence to support such an argument.").

¹⁰⁵. Kimberly A. Moore, Timothy R. Holbrook, & John F. Murphy, Patent Litigation and Strategy 643 (4th ed. 2013).

^{106.} Id. at 647.

matter was tied to an action at law at the time of the founding of our country and, if not, whether the jury should still resolve this issue to preserve the common law as understood in $1791.^{107}$ Reviewing the nature of patent eligibility under *Alice*, determining the underlying facts that lead to the legal conclusion of patentability is a role best suited for a juror.

First, similar to the conclusion in *Markman*, every historic indication is that decisions on patent eligibility were not inherently causes of action at law during the time of the founding. Anecdotally, the Federal Circuit Bar Association's Model Jury Instructions do not even include a section for eligibility defenses.¹⁰⁸ Whatever can be said of the distinctions between construing claims and determining patentable subject matter, the first inquiry cannot be answered in favor of the jury.¹⁰⁹

Nonetheless, turning to the second inquiry, thoroughly considering the interplay between the role of the judge and juror leads to the conclusion that underlying factual determinations of eligibility should be made by a jury. From the very precedent cited in *Markman*, the task of determining patent eligibility is different from claim construction:

Questions of construction are questions of law for the judge, not questions of fact for the jury. As it cannot be expected, however, that judges will always possess the requisite knowledge of the meaning of the terms of art or science used in letters patent, it often becomes necessary that they should avail themselves of the light furnished by experts relevant to the significance of such words and phrases. The judges are not, however, obliged to blindly follow such testimony.

As described above, giving meaning to words and phrases is unlike the analysis prescribed by *Alice*. That same treatise cited by *Markman* later distinguished the roles of the judge and jury when making determinations of novelty:

[T]he question of novelty is not decided by a construction of the prior patent, "but depends rather upon the outward embodiment of the terms contained in the [prior patent]; and that such outward embodiment is to be properly sought, like the explanation of latent ambigu-

^{107.} See Markman, 517 U.S. at 376 (1996).

^{108.} See The Federal Circuit Bar Association, Model Patent Jury Instructions (2014), available at

www.fedcirbar.org/olc/filelib/LVFC/cpages/9008/Library/FCBA%20Model%20Patent%20Jury %20Instructions%20(UPDATED%20May2014).pdf.

^{109.} See Alexander J. Hadjis, Are Questions Of Fact Being Overlooked In Software Cases?, LAW 360, www.law360.com/articles/609322/are-questions-of-fact-being-overlooked-in-software-cases (Jan. 12, 2015).

 $^{110.\} Markman,\,517$ U.S. at 387 (emphasis added) (quoting A. Walker, Patent Laws § 189, p. 173 (3d ed. 1895)).

ities arising from the description of external things, by evidence in pais." 111

And the Markman opinion approvingly cites cases where novelty was reserved for the jury. 112

The concepts of novelty, usefulness, nonobviousness, and eligibility have long been tethered together to determine patentability;¹¹³ claim construction is a "mongrel"¹¹⁴ task that comes only afterward. So the essence of determining whether an abstract idea has been transformed into an inventive concept or whether a computer is truly generic has ties to historical precedent as a jury issue. Where legitimate factual disputes arise, as *Teva* requires, fact-finding must occur at some level. And, if a patent is not facially abstract or hugged alongside a generic computer, those facts should be determined by a jury.

Beyond historic underpinnings, as correspondingly illustrated by the Supreme Court in 1966, "while the ultimate question of patent validity is one of law, the [obviousness] condition . . . lends itself to several basic factual inquiries." [15] Courts have since determined that a jury decides the following underlying factual inquiries: "(1) the scope and content of the prior art; (2) the level of ordinary skill in the pertinent art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence such as commercial success, long-felt need, and the failure of others." [16] Similar underlying facts beget an eligibility determination: (1) the scope and extent of natural phenomena, laws of nature, or abstract ideas in the patent's field of invention; (2) the level of ordinary skill in the pertinent art; (3) the scope and extent of an inventive concept in the patent's field of invention; and (4) objective evidence that the invention is transformative as understood by those in the field.

In view of the material underlying facts, the *Markman* functional considerations weigh in favor of a jury deciding eligibility. The interpretive skills of the judge, it can be argued, are less important for abstractness questions than claim construction. The latter involves

^{111.} *Id.* at 381–82 (citing Bovill v. Moore, Dav. Pat. Cas. 361, 399, 404 (C. P. 1816); Turner v. Winter, 1 T. R. 602, 99 Eng. Rep. 1274 (K. B. 1787); Arkwright v. Nightingale, Dav. Pat. Cas. 37 (C. P. 1785)).

^{112.} See id. at 387 (quoting A. WALKER, PATENT LAWS § 75, p. 68 (3d ed. 1895)).

^{113.} See Kimberly A. Moore, Timothy R. Holbrook, & John F. Murphy, Patent Litigation and Strategy 641 (4th ed. 2013); see also 35 U.S.C. §§ 101, 102, 103 (2012).

^{114.} Markman, 517 U.S. at 378.

^{115.} Graham v. John Deere, Co., 383 U.S. 1, 17 (1966) (internal citation omitted).

^{116.} Monarch Knitting Mach. Corp. v. Sulzer Morat GmBH, 139 F.3d 877, 881 (Fed. Cir. 1998); see also KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 427 (2007); see also KIMBERLY A. MOORE, TIMOTHY R. HOLBROOK, & JOHN F. MURPHY, PATENT LITIGATION AND STRATEGY 1102 (4th ed. 2013).

interpreting the meaning of esoteric terms and phrases. In contrast, the eligibility question involves identifying whether the patent claims are abstract ideas, and, if so, whether it nonetheless embodies an inventive concept superseding the mere abstract idea itself. Similarly, unlike the interpretation of legal instruments, none of the eligibility inquiries stand out as particularly well suited for judges when compared to juries. They are not grounded on legal acumen—they rest on technical realities, contextual awareness of the technical field, and common sense. Credibility issues will arise inevitably as experts try to explain the technical field at issue, the line between abstract and concrete, the scope of the invention and its relationship to abstract concepts, the state of the art, and even what would be considered a generic computer. The penetrating skills to root out who is more credible are the hallmarks of a juror and the utility that juries play in our legal system. A contrary conclusion is inapposite with what society expects from our legal system and the Seventh Amendment.

Altogether, while the legal issue of eligibility is a legal question, litigants have a right to a jury to decide the underlying fact issues. To be sure, in an unsettled, unclear area of the law, effective advocacy is the only option to advance these principles. Attorneys representing patentees with viable patents must present cogent arguments that fact-finding is required and dismissal is inappropriate until that level of scrutiny occurs. Here, the plain issue is not so much about patent rights as it is about the guarantees of fairness and the value of a jury trial by peers if the parties hold their respective positions without succumbing to settlement. In reality, the debate should not be about vices of patent trolls¹¹⁷ or greed—it should be about the constitutional guarantees.

V. CONCLUSION

The recent trend in patent-eligible jurisprudence is clear: *Alice* has provided a tool to dispense with lawsuits quickly. Yet practitioners also sit at the precipice of opportunity to ameliorate that trend. Upon review and consideration, the current position on *how* to jettison a patent for want of eligibility must change. Effective advocacy is the

^{117.} Recently, Judge Leonard Stark proscribed the use of that term during trial. See Gregory B. Williams, Judge Stark Grants Motion in Limine in Part Precluding Defendant from Referring to Plaintiff as "Patent Troll" During Trial, INTELLECTUAL PROPERTY LITIGATION IN DELAWARE (Jan. 20, 2015), http://delawareintellectualproperty.foxrothschild.com/2015/ 01/articles/intellectualproperty/judge-stark-grants-motion-in-limine-in-part-precluding-defendant-from-referring-to-plaintiff-as-patent-troll-during-trial.

panacea for unsettled areas of the law, and the appropriate role that judges and jurors play in determining eligibility under § 101 is one of those areas. Put in proper view, the question of what is a transformative inventive concept begs for a jury to make a factual determination similar to the defense of obviousness. It is incumbent on practitioners to raise the issue early on to ward off motions to dismiss that invite early resolution. Those advocates must explain that extrinsic evidence can assist the court in better understanding the patented invention and that dismissal deprives the patent holder of a meaningful opportunity to defend a legal instrument presumed valid. As Markman demonstrates, the dilemma of assigning roles to judges and jurors extends to our beginnings as a country. It is a constitutional protection that is the envy of other nations unable to fully embrace a government of, by, and for the people. And, for that, when confronted with eligibility attacks, it is on the patentee to remind us all why eligibility should turn on something more than pleadings.