

Can Juries Decide Patent Eligibility Under 35 U.S.C. § 101?

Gregory H. Lantier & Richard A. Crudo*

Introduction

No provision of the Patent Act has been more frequently litigated over the last several years than 35 U.S.C. § 101. After not having decided a § 101 case in nearly a decade, the Supreme Court issued four § 101 decisions in as many years, most recently articulating a test for determining whether computer system claims are patent eligible in its 2014 *Alice Corp. Pty. v. CLS Bank International* decision.¹ Since then, the Federal Circuit has decided more than fifty cases involving § 101, many of which were appeals from district court actions where parties raised § 101 as a defense to infringement. And in many of those cases, courts resolved § 101 challenges at the pleading stage on either a Rule 12(b)(6) or Rule 12(c) motion. Indeed, more than 56% of such motions have been granted or granted in part, indicating courts' willingness to adjudicate § 101 at the outset of a case.² Thus, there is no doubt that, in many cases, § 101 is properly resolved by a judge at the pleading stage or on summary judgment.

But for as much as has been decided about § 101 over the past several years, there remain several outstanding issues. What happens, for example, when a judge denies an infringement defendant's motion for summary judgment under § 101, but does not expressly grant summary judgment of no invalidity to the patentee? Can a jury hear this issue? *Should* a jury hear this issue? More fundamentally, does the Seventh Amendment jury trial right attach to § 101 challenges? These important procedural and constitutional questions have received little attention. Instead, courts and commentators seem to assume

* Greg Lantier is a litigation partner with WilmerHale in Washington, DC. His practice focuses on intellectual property and other complex commercial litigation and counseling at the trial and appellate stages in state and federal courts. His full biography is available at: https://www.wilmerhale.com/gregory_lantier/. Richard A. Crudo is a former senior associate in the Washington, D.C. office of WilmerHale. All research and drafting of this article occurred while Mr. Crudo was employed at WilmerHale.

¹ *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014); *see also* *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

² As of October 3, 2017. This figure is based on the authors' review and tabulation of all district court cases addressing § 101 after *Alice*.

that “patent-eligible subject matter is a pure legal question for the Court, not the jury, to decide.”³ Litigants, therefore, routinely ask courts to decide patent eligibility, even *after* a jury trial is held as to other issues.⁴ They appear to do this without ever considering Seventh Amendment implications.

Indeed, none of the best-known sets of model jury instructions for patent infringement cases contains an instruction on patentable subject matter under § 101.⁵ This is true even though those very same instructions contain

³ *Metaswitch Networks Ltd. v. Genband US LLC*, No. 2:14-cv-744-JRG-RSP, 2016 WL 866715, at *1 (E.D. Tex. Mar. 5, 2016) (quoting expert report); *Contentguard Holdings, Inc. v. Apple Inc.*, No. 2:13-CV-1112-JRG, 2016 WL 1637280, at *6 (E.D. Tex. Apr. 25, 2016) (denying renewed motion for judgment as a matter of law based on § 101 as “nonsensical” given that “[p]atent eligibility is a matter of law and is not properly submitted to a fact-finder such as a jury”).

⁴ *See, e.g.*, *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1311 (Fed. Cir. 2016) (“After trial, Symantec brought a motion under Fed. R. Civ. P. 52(c) for a judgment that all the asserted claims of the three patents-in-suit are unpatentable under 35 U.S.C. § 101, an issue not addressed in the jury verdict.”); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1251 (Fed. Cir. 2014) (“At the conclusion of trial, NLG and Digital River renewed motions for JMOL pursuant to Rule 50(b) of the Federal Rules of Civil Procedure (FRCP) on several grounds. NLG contended the asserted claims of the ’572 and ’399 patents are invalid under 35 U.S.C. § 101 because the claims are directed to patent-ineligible subject matter”); *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1341 (Fed. Cir. 2010) (“In April 2006, the district court held a fourteen-day jury trial on the issues of infringement and validity. . . . In August 2006, the court conducted a four-day bench trial on Lilly’s additional defenses of unpatentable subject matter, inequitable conduct, and prosecution laches, ruling in favor of Ariad on all three issues.”); *Finjan, Inc. v. Blue Coat Sys., Inc.*, No. 13-cv-03999-BLE, 2016 WL 3880774, at *1 (N.D. Cal. July 18, 2016) (“Following the jury’s verdict, the Court held a bench trial on non-jury legal issues regarding . . . patent eligibility under 35 U.S.C. § 101[.]”); *Constr. Tech., Inc. v. Lockformer Co.*, 781 F. Supp. 195, 198 (S.D.N.Y. 1991) (matters left over following trial included whether the subject matter was non-patentable); *see also* *Howes v. Great Lakes Press Corp.*, 679 F.2d 1023, 1024, 1027–28 (2d Cir. 1982) (finding that district court properly exercised its authority to decide patent eligibility issue for first time on motion notwithstanding the verdict after jury trial).

⁵ *See, e.g.*, Fed. Circuit Bar Ass’n, *Model Patent Jury Instructions* (July 2016), [https://www.fedcirbar.org/Portals/0/File%20Manager/Resources/Publications/Model%20Patent%20Jury%20Instructions/FCBA%20Model%20Patent%20Jury%20Instructions%20\(UPDATED%20DRAFT%20July%202016\).pdf](https://www.fedcirbar.org/Portals/0/File%20Manager/Resources/Publications/Model%20Patent%20Jury%20Instructions/FCBA%20Model%20Patent%20Jury%20Instructions%20(UPDATED%20DRAFT%20July%202016).pdf) *archived at* <https://perma.cc/6YF9-CCHJ>; AIPLA, *Model Patent Jury Instructions* (Apr. 2016), http://www.aipla.org/learning-center/library/books/otherpubs/Pages/default.aspx?utm_source=PDN+Dec.+18&utm_campaign=PDN6.12&utm_medium=email *archived at* <https://perma.cc/U7BV-XSEE> [hereinafter Fed. Circuit Bar Ass’n]; U.S. District Court for the Northern District of Calif., *Model Jury Instructions* (July 2015), <http://cand.uscourts.gov/juryinstructions> *archived at* <https://perma.cc/E93A-KGLK>; U.S. District Court for the District of Del., *Uniform Jury*

models addressing other invalidity challenges that are ultimate issues of law, including obviousness and lack of written description under §§ 103 and 112, respectively.⁶ The model instructions even provide guidance on issues litigated far less frequently than subject matter eligibility, such as inventorship and infringement of means-plus-function claims under the doctrine of equivalents.⁷ This omission is surprising in light of the Federal Circuit’s pre-*Alice* observation that § 101 can involve resolution of questions of fact—questions akin to those that are typically resolved by juries. Such questions include, for example, whether “limitations in the claims . . . narrow or tie the claims to specific applications of an otherwise abstract concept,” “whether the patent embraces a scientific principle or abstract idea,” and “how much of the field is ‘tied up’ by the claim,” which “by definition will involve historic facts.”⁸ In any other context, juries would be called upon to resolve such questions when they are not already answered by the intrinsic evidence or an undisputed record.

This oddity has only recently drawn the attention of scholars and litigants, and courts have been slow to address it. Only a single case—an unpublished district court decision issued before *Alice*—has expressly considered whether it is proper to submit § 101 to the jury, and, against the weight of the established practice described above, answered affirmatively.⁹ But even that case did not address the Seventh Amendment. This Article attempts to fill the gap.

This Article first outlines the substantive law surrounding § 101 and addresses procedural issues that are relevant for determining whether juries ought to hear § 101 challenges, including whether § 101 is a “threshold” legal issue. The Article next engages in a historical analysis and examines whether a Seventh Amendment jury trial right attaches to § 101 challenges. Finally, the Article addresses policy considerations that bear on the issue. If a Seventh Amendment right does attach to § 101 challenges, parties should have the opportunity to either avail themselves of that right or consciously waive it.

Instructions for Patent Cases (Mar. 1993), <http://www.ded.uscourts.gov/sites/default/files/forms/Patent%20Jury%20Instructions.pdf> archived at <https://perma.cc/33XF-Z5D8>.

⁶ See *infra* note 9.

⁷ Fed. Circuit Bar Ass’n, *supra* note 5, at 22, 53.

⁸ *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1339 (Fed. Cir. 2013), *vacated sub nom.* *WildTangent, Inc. v. Ultramercial, LLC*, 134 S. Ct. 2870 (2014).

⁹ In *VS Technologies, LLC v. Twitter, Inc.*, No. 2:11cv43, 2012 WL 1481508, at *10 (E.D. Va. Apr. 27, 2012), the court denied plaintiff’s motion for judgment as a matter of law after the jury returned a verdict invalidating the patent at issue under § 101, finding that the patent eligibility question was properly submitted to the jury. See *infra* Part II.A.1; see also *infra* note 95 (describing other cases in which § 101 was given to the jury without objection).

I. Section 101 in Patent Litigation

Before discussing the Seventh Amendment and its application to patent law, this Article begins with a discussion of § 101 substantive and procedural law. In particular, section I.A discusses the Supreme Court's *Alice* decision and its impact on patent litigation, as well as the factual questions that could arise in *Alice*'s two-step framework. With that framework in mind, Section I.B examines one possible rationale for why courts have not traditionally given § 101 challenges to juries—i.e., that § 101 is a threshold, quasi-jurisdictional issue.

A. Substantive Law

Section 101 of the Patent Act states that “[w]hoever 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.”¹⁰ The Supreme Court has interpreted § 101 as defining an exclusive list of statutory subject matter; if an invention is directed to subject matter other than that enumerated in § 101, it may not be patented, even if the invention is useful, new, and nonobvious.¹¹ The Court has created three judicial exceptions to the scope of § 101: “laws of nature, physical phenomena, and abstract ideas.”¹² Inventions that fall into one of these categories are ineligible for patent protection.¹³ Thus, for example, a process that embodies no more than an abstract idea may not be patented, even though processes are generally patentable.

The Supreme Court set out the substantive test for determining whether patent claims are invalid under § 101 in its 2014 *Alice Corp. Pty. Ltd. v. CLS Bank International*¹⁴ decision. There, the Court invalidated patent claims directed toward a computer-implemented electronic escrow service for facilitating financial transactions, and, in so doing, set forth a two-step framework for assessing patent eligibility.¹⁵ First, a court must determine whether the focus of the claims is directed to one of the patent-ineligible categories excluded from § 101.¹⁶ Second, if the court determines that the claims are directed to patent-ineligible subject matter, the court must next consider “the elements of each claim both individually and ‘as an ordered combination’ to determine

¹⁰ 35 U.S.C. § 101 (2012).

¹¹ See *Kewanee Oil v. Bicron Corp.*, 416 U.S. 470, 483 (1974).

¹² See *Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980)).

¹³ See *id.*

¹⁴ 134 S. Ct. 2347, 2355 (2014).

¹⁵ *Id.* at 2351–52, 2355.

¹⁶ *Id.* at 2355.

whether the additional elements” provide an “inventive concept”—i.e., whether they “transform the nature of the claim’ into a patent-eligible application.”¹⁷

Section 101 challenges have increased dramatically in the wake of *Alice*, with some studies calculating as much as a 400% increase.¹⁸ Indeed, the Federal Circuit has issued more than fifty decisions applying *Alice*’s two-part test, and district courts across the country have issued over 425 decisions addressing *Alice* in various contexts.¹⁹ Yet, even three years after *Alice*, there has been no reported case in which § 101 was given to a jury.²⁰ This is peculiar because, long before *Alice*, the Federal Circuit acknowledged that the § 101 inquiry “may require findings of underlying facts.”²¹ The court subsequently confirmed in *Ultramercial, Inc. v. Hulu, LLC*²² that “§ 101 . . . is rife with underlying factual issues.”²³ Specifically, the § 101 analysis requires courts to “search for limitations in the claims that narrow or tie the claims to specific applications of an otherwise abstract concept.”²⁴ Further, the *Ultramercial* panel stated that courts must “determin[e] whether the patent embraces a scientific principle or abstract idea,” which also involves analysis of underlying facts.²⁵ Finally, courts must determine “how much of the field is ‘tied up’ by the claim,” which “by definition will involve historic facts: identifying the ‘field,’ the available alternatives, and preemptive impact of the claims in that

¹⁷ *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1298–98, 1294 (2012)).

¹⁸ See, e.g., Stephen A. Marshall, *The Alice-Effect: An Empirical Study of Section 101 Motion Practice*, FISH & RICHARDSON (Mar. 9, 2015), <https://www.fr.com/fish-litigation/the-alice-effect-an-empirical-study-of-section-101-motion-practice/> archived at <https://perma.cc/SQ4C-MMJ5>.

¹⁹ See *supra* note 4.

²⁰ But see *infra* note 68 (discussing pre-*Alice* case in which the court gave § 101 to the jury).

²¹ *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1055–56 (Fed. Cir. 1992); see also *In re Comiskey*, 554 F.3d 967, 975 (Fed. Cir. 2009) (acknowledging that “there may be cases in which the legal question as to patentable subject matter may turn on subsidiary factual issues”).

²² 722 F.3d 1335, 1339 (Fed. Cir. 2013), *vacated sub nom.* *WildTangent, Inc. v. Ultramercial, LLC*, 134 S. Ct. 2870 (2014).

²³ *Id.* at 1339; cf. *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1330 (Fed. Cir. 2016) (Stoll, J., dissenting) (noting that jury verdict of validity under §§ 102 and 103 “supports the notion” that the invention “was not conventional” under § 101).

²⁴ *Ultramercial*, 722 F.3d at 1339.

²⁵ *Id.*

field.”²⁶ In short, the Federal Circuit said, “factual inquiries . . . abound” in the § 101 analysis.²⁷

The Supreme Court vacated *Ultramercial* in the wake of *Alice*, but the Federal Circuit has similarly noted even after *Alice* that “[t]he § 101 inquiry ‘may contain underlying factual issues.’”²⁸ Lower courts, too, have acknowledged that, “[w]hile the question of whether a claim is directed at patent-eligible subject matter is one of law, that determination will often entail the resolution of underlying factual questions.”²⁹ Commentators have noted the same. Practitioners have opined, for example, that the Step Two analysis might require some degree of factfinding, including “comparison to the prior art and the capabilities of a person having ordinary skill in the art at the time of the invention . . . to show that a patent lacks an inventive concept.”³⁰

That prediction appears to have been borne out, at least to some extent. It is not uncommon, for example, for courts to compare patent claims to what was previously known in the art to determine whether the claims provide an inventive concept at Step Two of *Alice*. *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*³¹ provides one such example. In that case, the Federal Circuit vacated a district court decision granting a motion to dismiss under § 101, where the patent at issue claimed a method and system for filtering Internet content using customized filters at a remote server.³² The Federal Circuit compared the claimed invention to the state of the prior art, as described in the patent, to determine whether the claims provided an inventive concept: “By taking a prior art filter solution (one-size-fits-all filter at the ISP server) and making it more dynamic and efficient (providing individualized filtering

²⁶ *Id.*

²⁷ *Id.*; see also *id.* at 1346 (“[E]ven if a claim does not wholly pre-empt an abstract idea, it still will not be limited meaningfully if it contains only insignificant or token pre- or post-solution activity—such as identifying a relevant audience, a category of use, field of use, or technological environment. . . . Again, these may involve factual inquiries.” (citations omitted)).

²⁸ See *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325–26 (Fed. Cir. 2016) (quoting *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013)) (holding that § 101 was properly decided at summary judgment despite “dueling expert testimony” where the district court relied only on the patent claims and specification, and, in any event, the expert testimony related only to “non-material historical information”).

²⁹ *Protostorm, LLC v. Antonelli, Terry, Stout & Kraus, LLP*, No. 08-CV-931 (PKC) (JO), 2015 WL 3605143, at *10 (E.D.N.Y. June 5, 2015).

³⁰ Alexander Hadjis, *Are Questions of Fact Being Overlooked in Software Cases?*, LAW 360 (Jan. 15, 2015), https://www.law360.com/articles/609322_archived_at_https://perma.cc/CX5K-LYLD.

³¹ 827 F.3d 1341 (Fed. Cir. 2016).

³² *Id.* at 1343–45.

at the ISP server), the claimed invention represents a ‘software-based invention[] that improve[s] the performance of the computer system itself.’”³³ While the court did not address that its analysis could be considered as engaging in factfinding, the court remanded (rather than reversed) the district court’s decision,³⁴ and the defendants could have conceivably presented evidence of patent ineligibility on remand.

In another case, a Delaware court denied in part a motion to dismiss based on § 101, stating that the § 101 inquiry is a “question of law” that “may be informed by subsidiary factual issues.”³⁵ The court found that “there is a real factual dispute about the degree to which the claimed system would significantly preempt the relevant field of applications,” and that “there are at least viable disputes of material fact as to whether the [claimed invention] . . . does more than perform ‘well-understood, routine, and conventional activities’ commonly used in the relevant industry, or whether it would preempt a substantial number of systems that make use of the asserted abstract idea.”³⁶ One would think that a jury, and not a judge, should resolve such disputes in a civil action in which damages are claimed.

B. Section 101 as a Threshold Issue

One possible rationale for why courts have not given § 101 challenges to juries is because such challenges constitute “threshold,” quasi-jurisdictional issues akin to subject matter jurisdiction, personal jurisdiction, and venue, which courts typically decide.³⁷ If patent eligibility is a threshold issue, it would never be proper to ask the jury to render a verdict resolving it.

Some within the patent bar have subscribed to this view, concluding—based primarily on the Supreme Court’s passing reference to § 101 as a “threshold test”³⁸—that courts must address § 101 *before* any other defense in an infringe-

³³ *Id.* at 1350–51 (quoting Brief for United States as *Amicus Curiae* in support of Respondents at 30–31, *Alice Corp. Pty. Ltd. V. CLS Bank Int’l*, 134 S.Ct. 2347 (2014)); *see also* *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–16 (Fed. Cir. 2016) (upholding claims reciting technological benefits over prior art systems for automatically animating lip synchronization and facial expression of animated characters).

³⁴ *BASCOM*, 827 F.3d at 1354.

³⁵ *Yodlee, Inc. v. Plaid Techs. Inc.*, No. 14-1445-LPS, 2016 WL 2982503, at *2 (D. Del. May 23, 2016), *adopted*, 2017 WL 385039 (D. Del. Jan. 27, 2017) (quoting *Cyber Fone Sys., LLC v. Cellco P’ship*, 885 F. Supp.2d 710, 715 (D. Del. 2012)).

³⁶ *Yodlee, Inc.*, 2016 WL 2982503, at *12, 29–30.

³⁷ *But see* *Grayson v. Anderson*, 816 F.3d 262, 267–68 (4th Cir. 2016) (“[O]nly when a material jurisdictional fact is disputed and that fact overlaps with a fact that needs to be resolved on the merits by a jury might a court defer its legal ruling on personal jurisdiction to let the jury find the overlapping fact.”).

³⁸ *Bilski v. Kappos*, 561 U.S. 593, 602 (2010).

ment case.³⁹ One judge commenting on this issue at a 2011 Stanford Law School symposium hypothesized that, “[l]ike subject matter jurisdiction, it might become proper to regard invalidity due to non-statutory subject matter as a non-waivable defense,” and that, if “there is no properly issued patent, one might argue that the district court lacks subject matter jurisdiction to entertain the infringement action.”⁴⁰ Others have similarly opined that,

[j]ust as subject matter jurisdiction is a threshold issue that may be more difficult to decide than other issues in a lawsuit, but nevertheless should be decided before turning to the merits of the lawsuit precisely because it is a threshold issue, patentability should be decided at the outset of the litigation before turning to issues that are specific to the patent-in-suit. . . . Patentability under Section 101 is a doctrine that is different in kind from anticipation, obviousness, and the other invalidity defenses found in Sections 102, 103, and 112. While those doctrines assess the validity of a claim against specific prior art references or standards of adequacy of the patent’s specification, Section 101 asks a court to police the boundaries of what can and cannot be patented, a different enterprise with a different set of aims. If the former sections tell us whether a patentee played the game by the rules, the latter section tells us whether he or she was playing the game at all.⁴¹

Arguably, language in some Supreme Court decisions supports this view. In several early cases, for example, the Supreme Court stated that invalidity issues generally could not be waived—i.e., that courts could not “overlook the question of patentability”⁴² and that “the question [of] whether the invention . . . is patentable or not is always open to the consideration of the court, whether the point is raised by the answer or not.”⁴³ More recently, several

³⁹ See, e.g., *Compression Tech. Sols. LLC v. EMC Corp.*, No. C-12-01746 RMW, 2013 WL 2368039, at *3 (N.D. Cal. May 29, 2013), *aff’d* 557 Fed. Appx. 1001 (Fed. Cir. 2014) (“Patentability [under § 101] is a threshold test, which a court may consider prior to claim construction.”); see also *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1330 n.2 (Fed. Cir. 2012) (Linn, J.) (noting that the Supreme Court characterizes patent eligibility under § 101 as a “threshold test”). It is likely, however, that the Supreme Court referred to § 101 as a “threshold test” in *Bilski* because, even though the Patent Office’s § 101 rejection served as the basis for appeal, the patent application could not issue until it was also examined under the other provisions of the Patent Act: “Even if an invention qualifies as a process, machine, manufacture, or composition of matter, in order to receive the Patent Act’s protection the claimed invention must also satisfy ‘the conditions and requirements of this title.’ § 101. Those requirements include that the invention be novel, see § 102, nonobvious, see § 103, and fully and particularly described, see § 112.” *Bilski*, 561 U.S. at 602.

⁴⁰ Hon. James Ware, Keynote Address at the Stanford Law Review Symposium: When District Judges Look Beyond *Bilski*, We Still See *Markman* 3 (Jan. 28, 2011), <http://www.stanfordlawreview.org/2011keynote.pdf> archived at <https://perma.cc/CRK8-TRBK>.

⁴¹ *Amicus Curiae* Brief of Retailers in Support of Neither Party at 8–9, *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (No. 13-298) (citations omitted).

⁴² *Hill v. Wooster*, 132 U.S. 693, 698 (1890).

⁴³ *Slawson v. Grand St. R.R.*, 107 U.S. 649, 652 (1883).

Justices seemed to support a similar view in *Laboratories Corp. of American Holdings v. Metabolite Laboratories, Inc.*⁴⁴ In that case, a jury found the asserted claim reciting a method for detecting a deficiency of cobalamin or folate in warm-blooded animals valid and willfully infringed.⁴⁵ The district court denied the defendant's motion for judgment as a matter of law and issued an injunction.⁴⁶ At no time did the defendant raise a § 101 defense, and the jury received no instruction to reach a verdict on whether the claim recited patentable subject matter. On appeal, the Federal Circuit affirmed the district court's ruling.⁴⁷

Based on the lower courts' broad construction of the claims at issue, the defendant filed a Petition for Writ of Certiorari asking the Supreme Court to address the § 101 issue for the first time.⁴⁸ After hearing oral argument on the case from the parties and the Solicitor General, the Court dismissed the Writ as improvidently granted.⁴⁹ In dissent, Justice Breyer, joined by Justices Stevens and Souter, argued that the Court should have decided the case on the merits because "the essence of the [§ 101] claim" was argued below and "the . . . issue ha[d] been fully briefed and argued by the parties, the Government, and [twenty] *amici*."⁵⁰ Justice Breyer also noted that "important considerations of the public interest—including that of clarifying the law in this area sooner rather than later—argue strongly for our deciding the question presented . . ."⁵¹ Justice Breyer did not go so far as to say that the § 101 defense can never be waived, but one could read his opinion to suggest that the § 101 issue is closer to a jurisdictional issue than an ordinary waivable defense.⁵²

Consistent with this view, some pre-Federal Circuit appellate decisions expressly held that courts may address § 101 issues *sua sponte* before addressing other invalidity issues. The Second Circuit opined in 1982, for example, that "Section 101 deals with the subject matter of patents and, as such, it is

⁴⁴ 548 U.S. 124 (2006) (per curiam).

⁴⁵ *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1358 (Fed. Cir. 2004), *cert. dismissed*, *Lab. Corp. of Am. Holdings v. Metabolite Labs, Inc.*, 548 U.S. 124 (2005).

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ Petition for Writ of Certiorari, *Lab. Corp. of Am. Holdings v. Metabolite Labs.*, (Nov. 3, 2004) (No. 04-607) 2004 WL 2505526 at *26.

⁴⁹ *Metabolite Labs., Inc.*, 548 U.S. 124, 125 (2006) (per curiam).

⁵⁰ *Id.* at 132–33 (Breyer, J., dissenting).

⁵¹ *Id.* at 134 (Breyer, J., dissenting).

⁵² *See id.* at 125–26 (Breyer, J., dissenting) ("The Court has dismissed the writ as improvidently granted. In my view, we should not dismiss the writ. The question presented is not unusually difficult. We have the authority to decide it."); *see also id.* at 132–33.

always open to the consideration of the court”⁵³ There is even language in some Federal Circuit decisions that echoes this view. *In re Comiskey*,⁵⁴ for example, states in a footnote that “[t]he § 101 issue is an antecedent question to the § 103 issue[.]”⁵⁵ And, even today, at least one Federal Circuit judge advocates for treating § 101 as a threshold issue “that must be addressed before [the] court can consider whether particular claims are invalid as obvious or anticipated.”⁵⁶

⁵³ *Howes v. Great Lakes Press Corp.*, 679 F.2d 1023, 1028 (2d Cir. 1982), *cert. denied*, 459 U.S. 1038, *aff'd without opinion by* 897 F.2d 538 (Fed. Cir. 1990). This principle appeared to have applied more generally to all invalidity defenses. *See Borden Co. v. Clearfield Cheese Co.*, 369 F.2d 96, 99–100 (3d Cir. 1966) (“[T]he court could dismiss a bill because the invention described in the patent was not patentable, even when no defense of invalidity was set up in the answer[.]”); *Barkeij v. Lockheed Aircraft Corp.*, 210 F.2d 1, 2 (9th Cir. 1954), *cert. denied*, 348 U.S. 847 (“[I]t is the duty of the court to dismiss a patent infringement suit whenever it affirmatively appears that the patent is invalid.”).

⁵⁴ 554 F.3d 967 (Fed. Cir. 2009).

⁵⁵ *Id.* at 975 n.7. This is probably an overly aggressive reading of that decision for two reasons. First, *Comiskey* arrived at the Federal Circuit on appeal from the Patent Office. Thus, the court was reviewing the Patent Office’s rejection of a patent subject to the provisions for judicial review of an agency’s decision under the Administrative Procedure Act. In that context, administrative law principles, which are not relevant in patent infringement cases, are particularly salient. Specifically, the court found that it could permissibly reach the § 101 issue never raised during the Patent Office proceeding below because doing so would not require the court to make determinations of fact not previously made by the Patent Office. Second, “antecedent,” as used in *Comiskey* refers to an issue that must be resolved before another issue logically can be addressed. The *Comiskey* court cited to the Federal Circuit’s *In re Seagate Technology, LLC* opinion, in which the court determined that it could permissibly revisit its willfulness doctrine even though that issue had not been decided by the district court. But, in that case, the dispute at issue related to the scope of discovery for willful infringement, and the court could not logically determine which evidence was discoverable without first deciding the proper standard for willful infringement. Thus, the standard for willful infringement was in fact an antecedent issue to the scope of discovery on that issue.

⁵⁶ *See MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1264 (Fed. Cir. 2012) (Mayer, J., dissenting); *see also I/P Engine, Inc. v. AOL Inc.*, 576 F. App’x 982, 995–96 (Fed. Cir. 2014) (Mayer, J., concurring) (“Until it is determined that claimed subject matter is even *eligible* for patent protection, a court has no warrant to consider subordinate validity issues such as non-obviousness under 35 U.S.C. § 103 or adequate written description under 35 U.S.C. § 112.”), *cert. denied*, 136 S. Ct. 54 (2015); *Alexsam, Inc. v. IDT Corp.*, 715 F.3d 1336, 1348 (Fed. Cir. 2013) (Mayer, J., dissenting) (“[§ 101] must be addressed before this court can consider subordinate issues related to obviousness and infringement.”); *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 41–42 (Fed. Cir. 2012) (Mayer, J., dissenting) (criticizing majority for not broaching the § 101 issue *sua sponte*), *cert. denied*, 568 U.S. 1162 (2013).

Nevertheless, although the authority above arguably supports the notion that § 101 is a threshold issue that judges must resolve as a preliminary matter (which has garnered some support), that view has not prevailed. Instead, the Federal Circuit has confirmed that “§ 101 challenges constitute validity and patentability challenges” on equal footing with other invalidity challenges.⁵⁷ And, like other invalidity defenses, § 101 is often decided on summary judgment.

But what happens when a § 101 summary judgment motion is denied—when a court concludes that a reasonable factfinder could decide that a patent is directed toward statutory subject matter? Should the § 101 issue go before a jury?

II. An Issue for the Judge or Jury?

It is well established that invalidity challenges generally involve factual determinations for which the Seventh Amendment’s jury trial right attaches, but there is a paucity of caselaw and scholarship analyzing the Seventh Amendment vis-à-vis patent eligibility specifically. Only a single law review article has addressed this issue and concluded 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.”⁵⁸ But even that article, while thought-provoking, does not provide a detailed Seventh Amendment framework for analyzing the issue. This Article provides such a framework, beginning with a summary of the Seventh Amendment and a description of how it has been applied to patent invalidity defenses.

A. Seventh Amendment Framework

1. Generally

The Seventh Amendment to the Constitution provides: “In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved[]”⁵⁹ The Amendment does not create a jury trial right for all cases, but, rather, *preserves* a jury right for causes of action analogous to those in which the right “existed under the English common law when the Amendment was adopted.”⁶⁰ To determine whether a cause of action

⁵⁷ *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1330 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 2510 (2016).

⁵⁸ Jesse D.H. Snyder, *Have We Gone Too Far: Does The Seventh Amendment Compel Fact-Finding Before Reaching a Decision on Patent-Eligible Subject Matter?*, 14 CHI. KENT J. INTEL. PROP. 437 (2015).

⁵⁹ U.S. CONST. amend. VII.

⁶⁰ *Balt. & Carolina Line, Inc. v. Redman*, 295 U.S. 654, 657 (1935).

is subject to the Seventh Amendment's jury guarantee, a court must engage in a two-step analysis. First, the court must "compare the statutory action to [eighteenth]-century actions brought in the courts of England prior to the merger of the courts of law and equity."⁶¹ Second, the court must "examine the remedy sought and determine whether it is legal or equitable in nature."⁶²

To determine whether a subsidiary issue occurring within a jury trial is itself subject to the Amendment's guarantee to a jury determination, a court must also determine "whether 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."⁶³ Thus, a court must determine whether the trial decision at issue, or one analogous to it, went before a jury under English practice at the time of the Founding.⁶⁴ Where there is no clear historical evidence that the subsidiary question was tied to juries under the pre-Constitution English practice, a court should focus on existing precedent and functional considerations to inform its decision, including "the relative interpretive skills of judges and juries and the statutory policies that ought to be furthered by the allocation."⁶⁵

2. Application to Validity Challenges

There are few precedential decisions that engage in a robust historical analysis of whether the Seventh Amendment requires that patent validity issues be tried to juries. And scholarship suggests that eighteenth-century English practice was somewhat equivocal:

Juries did often decide factual questions underlying issues of patent validity, though their decisions were much more circumscribed in scope and in number than they are today. What we think of today as a ruling on patent invalidity—the voiding of a patent—was reserved for the chancery courts under the writ of *scire facias*. Under that writ, the case would be sent to the law courts for a jury trial only if validity depended on a disputed issue of fact.⁶⁶

Nevertheless, the Federal Circuit has held that factual inquiries related to the invalidity of a patent in infringement actions for monetary damages are within the province of the jury.⁶⁷ And most invalidity issues—including written

⁶¹ Tull v. United States, 481 U.S. 412, 417 (1987).

⁶² *Id.* at 417–18.

⁶³ Markman v. Westview Instruments, Inc., 517 U.S. 370, 376 (1996), *aff'd without opinion by* Markman v. Lehman, 178 F.3d 1306 (Fed. Cir. 1998).

⁶⁴ *Id.*

⁶⁵ *Id.* at 377, 384.

⁶⁶ Mark A. Lemley, *Why Do Juries Decide If Patents Are Valid?*, 99 VA. L. REV. 1673, 1691 (2013).

⁶⁷ See *Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 603 (Fed. Cir. 1985) ("The right to a jury trial on issues of patent validity that may arise in a suit for patent infringement is protected by the Seventh Amendment."), *rehearing denied by* 771 F.2d 480; see also *In re Tech.*

description and enablement—have long been tried to juries.⁶⁸ Notably, juries also decide utility under § 101.⁶⁹ In that context, juries determine whether the “achievement” of the claimed invention has a “practical application and or utility in the same art[]” and whether “the achievement will operate or function in a manner claimed and produce a useful result calculated by the invention.”⁷⁰

Even invalidity defenses that constitute ultimate questions of law are tried to juries. Obviousness is one such example.⁷¹ Although the ultimate judgment of obviousness is a legal determination, that determination “is a question of law based on underlying questions of fact.”⁷² Indeed, the obviousness analysis

Licensing Corp., 423 F.3d 1286, 1291 (Fed. Cir. 2005) (per curiam) (holding that neither party has a right to a jury trial under the Seventh Amendment on the question of patent validity where the patentee seeks only an injunction), *cert. denied*, Tech. Licensing Corp. v. U.S. Dist. Court, 547 U.S. 1178 (2006); Tegal Corp. v. Tokyo Electron Am., Inc., 257 F.3d 1331, 1339 (Fed. Cir. 2001) (holding that the Seventh Amendment does not apply where defendant asserts an affirmative defense of patent invalidity in a case where the patentee does not seek damages), *cert. denied*, 535 U.S. 927 (2002); *In re Lockwood*, 50 F.3d 966, 976 (Fed. Cir. 1995) (holding that Seventh Amendment applies where defendant asserts counterclaim for a declaration of invalidity in suit for damages), *vacated sub nom.* Am. Airlines v. Lockwood, 515 U.S. 1182 (1995). There are those who argue that, because patent validity is an issue of public concern, the Seventh Amendment does not require adjudication of validity by a jury in an Article III tribunal under the Supreme Court’s public rights doctrine. *See, e.g., Lockwood*, 50 F.3d at 983 (Nies, J., dissenting). That view, however, has not prevailed.

⁶⁸ *Battin v. Taggart*, 58 U.S. (17 How.) 74, 85 (1854) (“It was the right of the jury to determine from the facts in the case, whether the specifications, including the claim, were so precise as to enable any person skilled in the structure of machines, to make the one described. This the statute requires, and of this the jury are to judge.”); *Wood v. Underhill*, 46 U.S. (5 How.) 1, 5–6 (1847) (holding that the question of whether a patentee’s description of his invention is sufficiently “full, clear, and exact . . . to enable one skilled in the art to . . . use it” is “a question to be decided by a jury”).

⁶⁹ *Klein v. Russell*, 86 U.S. (19 Wall.) 433, 467 (1873) (finding that the question of utility was properly submitted to jury); *Mitchell v. Tilghman*, 86 U.S. (19 Wall.) 287, 396 (1873) (“Utility in most cases is a question of fact, as it usually depends upon the evidence resulting from actual experiment.”), *overruled in part on other grounds*, *Tilghman v. Proctor*, 102 U.S. 707 (1880).

⁷⁰ *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1573 (Fed. Cir. 1992) (quoting jury instruction and affirming jury verdict that patent was possessed utility).

⁷¹ *Adams v. Bellaire Stamping Co.*, 141 U.S. 539, 542 (1891) (ruling that all the “important questions” as to whether the claimed invention showed patentable invention or merely required mechanical skill—i.e., whether the invention was obvious—were properly submitted to the jury).

⁷² *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007), *rev’d sub nom.* *Apotex Inc. v. Daiichi Sankyo, Inc.*, 781 F.3d 1356 (Fed. Cir. 2015).

often requires the adjudicator to resolve nuanced factual inquiries specific to each case. The factual inquiries articulated by the Supreme Court in *Graham v. John Deere Co. of Kansas City*⁷³ involve determining the scope and content of the prior art, ascertaining the differences between the claimed invention and the prior art, and resolving the level of ordinary skill in the pertinent art.⁷⁴ Additionally, oftentimes one must consider “secondary considerations” to rebut a prima facie showing of obviousness.⁷⁵ Such considerations include skepticism among experts, long-felt and unresolved needs, prior failures, unexpected results, licensing activities, copying by others, and commercial success.⁷⁶ “Submission of the obviousness question to the jury” is often “accompanied by detailed special interrogatories designed to elicit responses to at least all the factual inquiries enumerated in *Graham*[.]”⁷⁷ But when it is not, the Federal Circuit will “presume that the jury resolved the underlying factual disputes in favor of the verdict [] and leave those presumed findings undisturbed if they are supported by substantial evidence.”⁷⁸

The only invalidity defense (other than patent eligibility) that is *not* given to a jury is indefiniteness under § 112. The Federal Circuit has held that indefiniteness “is a matter of claim construction,” which, as described below, is reserved for judges.⁷⁹

3. Application to Claim Construction

Although the Supreme Court has described it as a “mongrel practice,” claim construction is an issue of law exclusively within the province of the court.⁸⁰ In its 1996 *Markman v. Westview Instruments, Inc.*⁸¹ decision, the Supreme

⁷³ 383 U.S. 1 (1966).

⁷⁴ *Id.* at 17.

⁷⁵ *Id.* at 17–18.

⁷⁶ *Id.*

⁷⁷ *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1547 (Fed. Cir. 1983) (affirming judgment notwithstanding the verdict overturning jury’s nonobviousness verdict, and holding that “it is not error to submit the question of obviousness to the jury”).

⁷⁸ *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1356-57 (Fed. Cir. 2012); *see also Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1234 (Fed. Cir. 1989) (“It is established that the jury may decide the questions of anticipation and obviousness, either as separate special verdicts or en route to a verdict on the question of validity, which may also be decided by the jury.”), *cert. denied* 493 U.S. 853.

⁷⁹ *Praxair, Inv. v. ATMI, Inc.*, 543 F.3d 1306, 1319 (Fed. Cir. 2008).

⁸⁰ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 378 (1996). To the extent that subsidiary factual determinations are made, those determinations are made by a judge and reviewed with deference. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 833 (2016).

⁸¹ 517 U.S. at 372.

Court considered whether a Seventh Amendment jury trial right attaches to claim construction issues. The Court rejected the petitioners' argument that the trial court erred in not allowing the jury to construe the patent claims.⁸² The Court found that, although juries regularly heard patent infringement cases in eighteenth-century England, there were no cases suggesting that juries performed the act of construing terms in patent disclosures.⁸³

Finding that historical English cases were not conclusive one way or the other, the Court analyzed functional, including public policy, considerations and found that allocating claim construction to a judge would better promote "sound administration of justice" because "[t]he construction of written instruments is one of those things that judges often do and are likely to do better than jurors unburdened by training in exegesis."⁸⁴ The Court reasoned that judges, who regularly interpret statutes and contracts, understand the importance of construing a term or phrase in a document in such a way that comports with the way that the term or phrase is used elsewhere in the document, and that allowing judges to construe claims would lead to internal consistency within a patent.⁸⁵ The Court also noted that its decision would promote uniformity in the treatment of a given patent, as courts' decisions with respect to certain issues would have persuasive effect on other courts addressing the same issues.⁸⁶ Thus, the Court placed substantial weight on judicial expertise and uniformity rationales for finding that judges, and not juries, should construe claims.

In so holding, the Court rejected petitioners' argument that juries should decide questions of claim meaning, because those questions are often the subject of testimony requiring credibility determinations, which juries typically make.⁸⁷ The Court acknowledged that a case could arise where a simple credibility judgment would suffice to resolve a question of interpretation, but that case would be rare, because "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."⁸⁸ Thus, "a jury's capabilities to evaluate demeanor . . . are much less significant than a trained ability to evaluate the testimony in relation to the overall structure of the patent."⁸⁹

⁸² *Id.*

⁸³ *Id.* at 517 U.S. at 377–88.

⁸⁴ *Id.* at 388.

⁸⁵ *Id.* at 388–90.

⁸⁶ *Id.* at 390–91.

⁸⁷ *Id.* at 389–90.

⁸⁸ *Id.* at 389.

⁸⁹ *Id.* at 389–90 (citations omitted).

4. Comparison to Patent Eligibility

Based purely on a comparison of how courts treat other invalidity issues, there is no obvious reason why factual issues underlying patent-eligibility challenges should not be given to juries. Indeed, like written description, enablement, utility, and obviousness, patent eligibility under § 101 constitutes an invalidity defense to patent infringement.⁹⁰ And, unlike indefiniteness, subject matter eligibility is not a matter of claim construction.⁹¹ Notably, the statutory basis for subject matter eligibility is the same as that for utility.⁹² It would be somewhat odd that utility was given to juries, but subject matter eligibility—as a separate provision in the same statute—was not.⁹³ In short, based on treatment of other invalidity defenses, it seems that patent eligibility is an issue that a jury can decide.

Applying that analysis, at least one court has given the issue of subject matter eligibility to the jury. In *VS Technologies, LLC v. Twitter, Inc.*⁹⁴—a pre-*Alice*, unpublished opinion—the Eastern District of Virginia gave the § 101 issue to the jury, which returned a verdict in the defendant's favor, finding that the asserted claims were not infringed and that the claims were invalid as anticipated, obvious, and abstract.⁹⁵ In ruling on the plaintiff's post-trial

⁹⁰ *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1330 (Fed. Cir. 2015), *cert. denied* 136 S. Ct. 2510 (2016).

⁹¹ *See Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada*, 687 F.3d 1266, 1273 (Fed. Cir. 2012) (“[C]laim construction is not an inviolable prerequisite to a validity determination under § 101.”), *cert. denied* 134 S. Ct. 2870 (2014).

⁹² *See* 35 U.S.C. § 101.

⁹³ Such disparate treatment is not unprecedented, however, as some defenses available under 35 U.S.C. § 112 (written description and enablement) are decided by a jury, while others (indefiniteness) are exclusively decided by judges. However, the justification given for this treatment is normally that indefiniteness is a claim construction issue.

⁹⁴ No. 2:11cv43, 2012 WL 1481508 (E.D. Va. Apr. 27, 2012).

⁹⁵ *Id.* at *1. In another case, a Washington court denied plaintiff's motion for judgment notwithstanding the verdict after a jury found that the patent was invalid because, inter alia, it was not directed toward patentable subject matter. Apparently, the jury was given the § 101 issue without objection from the parties. *See Arachnid Inc. v. Medalist Mktg. Corp.*, No. C89-204C, 1991 WL 501962, at *5-6 (W.D. Wash. Feb. 15, 1991), *aff'd*, 972 F.2d 1300 (Fed. Cir. 1992). In a more recent case, a Wisconsin court found on summary judgment that the patents at issue were directed to an abstract idea under *Alice* Step One but upheld one of the patents at Step Two. *See Ameritox, Ltd. v. Millennium Health, LLC*, 88 F. Supp.3d 885, 909–11, 916 (W.D. Wis. Feb. 19, 2015). Thereafter, the court denied plaintiff's motion *in limine* to exclude at trial evidence concerning § 101, requesting instead that the parties “advise the court of their views as to what *facts remain in dispute* for the jury to decide.” *Ameritox, Ltd. v. Millennium Health, LLC*, No. 13-cv-832-wmc, 2015 WL 1520821, at *6 (W.D. Wis. Apr. 3, 2015). Following briefing on this issue—in which *VS Technologies*

motion for judgment as a matter of law, the court rejected the argument that the question of patentable subject matter is a legal one that should never have gone before the jury.⁹⁶

The court acknowledged that “the ultimate question of the validity of a patent is considered to be a question of law,” but noted that “where the issue of validity depends upon the resolution of a factual dispute, a jury is permitted to decide the issue.”⁹⁷ The court analogized the § 101 inquiry to the obviousness inquiry, where the ultimate determination is a question of law but is based on several underlying factual findings decided by the jury.⁹⁸ Because the issue of validity depended upon the resolution of the factual dispute over whether the claimed process involved a machine, the court found that “the question properly fell within the province of the jury.”⁹⁹ The patentee did not appeal the district court’s judgment, and the jury’s § 101 determination remains undisturbed.¹⁰⁰

As discussed above, the factual inquiries underlying invalidity issues, including obviousness, are within the purview of the jury. Thus, the *VS Technologies* court’s analogy to § 103 seems apt from an analytical standpoint.¹⁰¹ For example, the *Alice* Step Two analysis bears some similarities to an obviousness-type analysis. According to that test, the factfinder must determine whether the claim limitations, considered individually and as an ordered combination, provide an inventive concept.¹⁰² But that inquiry requires the factfinder to essentially determine the scope and content of the prior art, ascertain the differences between the claimed invention and the prior art, and determine the thrust of the claim’s contribution to the art. Juries typically answer these questions

was cited as the only case in which § 101 had been given to the jury—the court stated at a conference during trial: “I realize because of *Alice* we have some issue as to whether there are certain circumstances in which [the § 101 issue] could go to the jury. . . . It’s primarily a legal issue, in any event, and I think it would be confusing to this jury to be given the different standards, and that, in the context of this trial, it’s more appropriate for me to decide the 101.” Trial Transcript at 166–67, *Ameritox, Ltd. v. Millennium, Health, LLC*, 2015 WL 1272280 (2015) (No. 3:13-cv-00832). After a jury verdict finding that the patents were infringed and not invalid, the court entered partial judgment in favor of plaintiffs on the defendant’s § 101 defense. *See Ameritox, Ltd. v. Millennium Health, LLC*, No. 13-cv-832-wmc, 2015 WL 1915043, at *3 (W.D. Wis. Apr. 24, 2015).

⁹⁶ *VS Techs. LLC v. Twitter, Inc.*, No. 2:11cv43, 2012 WL 1481508, at *4 (E.D. Va., Apr. 27, 2012).

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S. Ct. 2347, 2355 (2104).

in the obviousness context. Thus, where there are actual disputes of fact, the type of inquiry embodied by § 101 could require factual findings similar to those made by juries in infringement cases involving an obviousness defense.

The *VS Technologies* court did not specifically address Seventh Amendment considerations. The Section below engages in such an analysis, but, rather than addressing the Seventh Amendment's application to invalidity challenges generally, this Article focuses specifically on the Seventh Amendment's application to subject matter eligibility as a standalone issue, beginning with a historical analysis.

B. Section 101 and the Seventh Amendment

1. Historical Analysis

The current version of § 101 derives from the Patent Act of 1790, enacted shortly before the Seventh Amendment was ratified. The 1790 Act “was largely based on and incorporated” features of the English system,¹⁰³ and stated that a patent may be granted to any person who invented “any useful art, manufacture, engine, machine, or device, or any improvement therein not before known or used[.]”¹⁰⁴ Thus, English courts in the eighteenth century faced patent eligibility issues somewhat similar to those that arise in American courts today.¹⁰⁵ Nevertheless, historical English practice is complex and records are ambiguous, which makes an analysis of this issue particularly difficult.¹⁰⁶

Based upon these records, it appears that many issues related to patentable subject matter were primarily decided by “English judges [who] had to consider what could be regarded as falling within the meaning of the term ‘new manufactures’” in the statute.¹⁰⁷ Judges were “called upon to deliver [their]

¹⁰³ EDWARD C. WALTERSCHEID, *TO PROMOTE THE PROGRESS OF USEFUL ARTS: AMERICAN PATENT LAW & ADMINISTRATION, 1798-1836* 109 (1998).

¹⁰⁴ Ch. 11, § 1, 1 Stat. 109, 110 (Apr. 10, 1790).

¹⁰⁵ The English Statute of Monopolies, from which United States patent law is derived, was narrower in scope, and referred only to the crown's ability to issue patent rights for “manufactures.” See R. CARL MOY, *1 MOY'S WALKER ON PATENTS* § 5:2 (4th ed. 2012).

¹⁰⁶ See Lemley, *supra* note 66, for a more comprehensive historical analysis than what is provided here.

¹⁰⁷ GEORGE TICKNOR CURTIS, *A TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS, AS ENACTED AND ADMINISTERED IN THE UNITED STATES OF AMERICA* § 3 2 (4th ed. 1873); see also W. M. HINDMARCH, *A TREATISE ON THE LAW RELATING TO PATENT PRIVILEGES FOR THE SOLE USE OF INVENTIONS* 454 (1846) (stating that the issue of patent eligibility “raises a question which is more for the decision of the Judge than of the jury”); *id.* at 501 (“When the meaning of the specification has thus been ascertained, it is for the Judge to determine whether invention can legally be made the subject of a patent grant or not.” (footnote omitted)).

opinions on the dry question of law, whether upon the case disclosed . . . , [the] patent can or cannot be sustained.”¹⁰⁸ But judges could predicate their patent eligibility decisions on “facts which may be necessary to the right understanding of the specification” that are “ascertained by the jury[.]”¹⁰⁹

English judges gave varying degrees of deference to jury determinations vis-à-vis subject matter eligibility, as demonstrated by *Hornblower v. Boulton*.¹¹⁰ In that case, the Justices faced the question of whether a “method of lessening the consumption of steam, and consequently, fuel in fire engines,” was eligible for patent protection under statutory law.¹¹¹ The defendants argued that the invention was not an “organized machine, instrument, or manufacture,” but instead was directed toward “mere principles only, for which no such letters patent could by law be granted.”¹¹² The jury ultimately rendered a general verdict for the plaintiffs, without specifically addressing the patent eligibility issue.¹¹³

On appeal, the Court of King’s Bench affirmed.¹¹⁴ Several Justices acknowledged that the jury had determined other issues in the case,¹¹⁵ but proceeded to address the patent-eligibility issue de novo, grappling with the issue in earnest.¹¹⁶ Justice Lawrence, for example, decided that the invention was patent eligible without mentioning the jury verdict, and he thereafter acknowledged that the *enablement* issue “is not now a question for our decision; it was a question for the determination of the jury, and they have decided it.”¹¹⁷

But other judges in *Hornblower* appear to have given deference to the jury’s verdict and assumed that the jury considered the patent-eligibility issue. Chief Justice Lord Kenyon, for example, expressed the view that the jury had already implicitly decided the patent eligibility issue:

¹⁰⁸ *Boulton v. Bull* (1795) 126 Eng. Rep. 651, 653, 661; 2 H. BL. 463, 467, 482–83; *see also id.* at 662 (noting that the jury had not decided the invention’s subject matter).

¹⁰⁹ HINDMARCH, *supra* note 107, at 455.

¹¹⁰ *Hornblower v. Boulton*, (1799) 101 Eng. Rep. 1285, 1287–88; 8 T. R. 95, 97–98.

¹¹¹ *Id.* at 1285 n. (a)².

¹¹² *Id.* at 1287.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *See, e.g., id.* at 1289 (Grose, J.) (“Upon some of the questions there seems to be no doubt: there is no doubt on this record coupled with the finding of the jury, that the patentee was the inventor of that which is stated in the declaration to be . . . an invention . . .”).

¹¹⁶ *See, e.g., id.* (“[T]his is not a patent for a mere principle, but for the working and making of a new manufacture within the words and meaning of the statute. I have been led to adopt this opinion by considering the words and description of the invention in the patent . . .”); *id.* at 1290 (“But it seems to me that, in this specification, he does describe a new manufacture, by which his principle is realized[.]”).

¹¹⁷ *Id.* at 1292 (Lawrence, J.).

The questions here are, whether by looking at the patent, explained as it is by the specification, it does not appear to be a patent for a manufacture? . . . The jury have not indeed answered those questions in the affirmative in terms; *but they have impliedly done so by finding a general verdict for the plaintiffs below.*¹¹⁸

Relying at least partially on the jury's determination, Lord Kenyon found that the invention qualified as a manufacture that was eligible for patent protection.¹¹⁹ And even though Justice Grose engaged in a more robust patent eligibility analysis, he still placed weight on the jury verdict in concluding that "the patent is not merely for principles."¹²⁰ He asked, "[c]an it then be said that the making and combining of these parts is not some manner of new manufacture? I cannot say that it is not. But if that had been doubtful, *the verdict ascertains the fact.*"¹²¹

These analyses seem to acknowledge that juries played at least some role in determinations related to patent eligibility. This Article proceeds to analyze early American precedent.

2. Early American Precedent

Notwithstanding the historical English practice, it appears that United States jurists have always treated § 101 patent eligibility issues as reserved for the court alone. As discussed above, some form of § 101 has existed in the United States since 1790, and American courts have, therefore, grappled with questions related to patentable subject matter for more than two centuries. The caselaw shows that, although courts regularly called upon juries to make findings regarding patent infringement, trial judges would often decide "objections of a nature purely legal," including whether the invention was directed toward "a thing not patentable under the act of congress[.]"¹²²

In *Parker v. Hulme*,¹²³ for example, the trial judge determined that an invention directed toward a "new and useful improvement in hydraulic power" was not "an abstraction[]" and stated to the jury that "the court instructs you, not without being aware that the question is one of possible difficulty, that [the invention] is a valid subject of claim, and properly to be secured by letters

¹¹⁸ *Id.* at 1288 (Kenyon, C.J.) (emphasis added).

¹¹⁹ *Id.*

¹²⁰ *Id.* at 1290.

¹²¹ *Id.* (emphasis added).

¹²² *Kneass v. Schuylkill Bank*, 14 F. Cas. 746, 747 (C.C. Pa. 1820) (No. 7875); *see also* GEORGE TICKNOR CURTIS, TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS, AS ENACTED AND ADMINISTERED IN THE UNITED STATES OF AMERICA 621 (1873) ("The question whether the invention disclosed by the specification is a proper subject for a patent, is a question of law, on which the court will instruct the jury.")

¹²³ 18 F. Cas. 1138 (C.C.E.D.Pa. 1849) (Kane, J.) (charging jury).

patent.”¹²⁴ More relevant to the § 101 inquiry, in *Le Roy v. Tatham*¹²⁵—a case widely credited as establishing the judicial exceptions to statutory subject matter—the district judge refused to instruct the jury “[t]hat the using of a metal in a certain state, or at a certain temperature, alone, or in combination with a machine, was not the subject of a patent,” having already instructed the jury that the invention “is a patentable subject.”¹²⁶

Although American courts in the mid-eighteenth century generally decided patent eligibility issues and instructed juries accordingly, contemporaneous treatises acknowledge that patent eligibility issues “may involve the finding of a variety of facts,” and only when “the facts are all ascertained,” is the issue “a question of law.”¹²⁷ This acknowledgement suggests that factual determinations related to patent eligibility could have been decided by juries. Nevertheless, it appears that cases in which juries actually decided patent § 101 issues were rare if any existed at all. For that reason, the Article proceeds to apply *Markman*’s policy considerations.

3. *Markman*’s “Functional Considerations”

As discussed above, the last patent-specific issue that the Supreme Court analyzed in the context of the Seventh Amendment was claim construction, which was addressed in *Markman* more than twenty years ago.¹²⁸ There, the

¹²⁴ *Id.* at 1141.

¹²⁵ 55 U.S. (14 How.) 156 (1853), *rev’d*, 63 U.S. (22 How.) 132 (1860).

¹²⁶ *Id.* at 163. Ultimately, the Supreme Court found that the trial judge erred in instructing the jury that the “originality” of the invention consisted of “bringing a newly discovered principle into practical application,” finding instead that the patent was directed to machinery, and therefore the question of the machinery’s *novelty* should have gone to the jury. *Id.* at 174, 177. Because the “newly discovered” principle referenced by the trial judge was not claimed in the patent, the Court decided that “the question whether the [invention] might have been patented, if claimed as developed, without the invention of machinery, was not in the case.” *Id.* at 177. Nevertheless, the Court articulated for the first time the exceptions to patent statutory subject matter: “A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.” *Id.* at 175.

¹²⁷ GEORGE TICKNOR CURTIS, TREATISE ON THE LAW OF PATENTS FOR USEFUL INVENTIONS, AS ENACTED AND ADMINISTERED IN THE UNITED STATES OF AMERICA 621 (1873).

¹²⁸ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). The Court recently granted certiorari in *Oil States Energy Servs., LLC v. Greene’s Energy Gr.*, 137 S. Ct. 2239 (2017), to decide a different issue involving the Seventh Amendment, specifically “Whether inter partes review—an adversarial process used by the Patent and Trademark Office (PTO) to analyze the validity of existing patents—violates the Constitution by extinguishing private property rights through a non-Article III forum without a jury.” *Id.* (granting writ of certiorari as to Question 1 of petition); Petition for Writ of Certiorari, *Oil States Energy Servs.*, 137 S. Ct. 2239 (2017) (No. 16-712), 2016 WL 6995217, at *ii. See also *id.* 2016

Court found that neither English precedent nor early-American precedent conclusively established a jury trial right to construe patent claims.¹²⁹ The Court, therefore, turned to “functional considerations” to determine who—judge or jury—is “better suited to find the acquired meaning of patent terms.”¹³⁰ Because judges have “special training and practice” interpreting written instruments such as contracts and statutes, the Court found that they are “more likely to give a proper interpretation” to patents.¹³¹ The Court also observed that “[u]niformity would[] . . . be ill served by submitting issues of document construction to juries.”¹³² These functional considerations weighed in favor of giving claim construction to judges rather than juries.

How do the judicial expertise and uniformity considerations addressed in *Markman* apply to § 101? On the one hand, the judicial expertise rationale articulated in *Markman* for delegating claim construction to judges less compelling with respect to the patent eligibility issue. Although, as trained attorneys, judges are well suited for interpreting terms and phrases in legal documents, including patents, they are not necessarily better suited than jurors for making judgments as to whether a particular invention is abstract, a mathematical formula, or a law of nature. One of the aspects of American patent law that differentiates it from other legal systems is that juries comprised of laypeople regularly decide complex patent cases. The mere fact that patent eligibility issues may be complex is not necessarily a sufficient justification for excluding juries from deciding such issues. Indeed, the Supreme Court itself has noted that “judges are not institutionally well suited to making the kinds of judgments needed to distinguish among different laws of nature.”¹³³

On the other hand, *Markman*’s uniformity rationale might be especially important in the § 101 context. Giving the § 101 issue to juries could tend to increase the likelihood of seemingly inconsistent decisions among cases involving similar claimed subject matter, insofar as juries tend to place substantial weight on the credibility of witnesses testifying at trial, which differs from case to case.¹³⁴ Based on the Supreme Court’s reasoning in *Markman*,

WL 6995217 at n.4 (“While the dividing line between law and equity can be difficult to draw and has spawned debate over whether a jury should be required in every case . . . the issue here is that the option must be open to patent holders and not foreclosed by *inter partes* review proceedings.”).

¹²⁹ *Markman*, 517 U.S. at 377, 381–82.

¹³⁰ *Id.* at 388.

¹³¹ *Id.* at 389 (quoting *Parker v. Hulme*, 18 F. Cas., 1138, 1140 (C.C.E.D.Pa. 1849)).

¹³² *Id.* at 391.

¹³³ *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1303 (2012).

¹³⁴ Of course, collateral estoppel applies to patent validity so that no two juries could reach opposite determinations of validity with respect to the *same patent*. See *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313, 350 (1971).

this problem could be mitigated by delegating such decisionmaking to a judge, because that appropriation of responsibility would promote uniformity across jurisdictions. On balance, there are legitimate arguments that the Seventh Amendment should protect litigants’ right to submit factual inquiries underlying the patent eligibility determination under § 101 to a jury, and legitimate arguments that it should not.

Conclusion

In the wake of *Alice*, the district courts have witnessed an explosion of § 101 challenges. And while the substantive law of patent eligibility has received much attention, many subsidiary issues surrounding § 101 have largely been ignored. But if a Seventh Amendment jury trial right exists for patent eligibility under § 101, parties should have the opportunity to either avail themselves of that right or consciously waive it. As long as § 101 remains a hotly litigated issue in patent law, courts will need to—and likely soon will—address this important constitutional issue.