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THE CONFLATION OF PATENT ELIGIBILITY AND OBVIOUSNESS: *ALICE*'S SUBSTITUTION OF SECTION 103

*Paxton M. Lewis**

INTRODUCTION

Patent protection has been a priority since the United States' founding fathers granted Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."¹ With its power, Congress has created limitations on what is patentable through section 101 of the Patent Act.² Courts have continuously emphasized the broad understanding "of what constitutes patentable subject matter under section 101," referencing a House note that "anything under the sun that is made by man' is eligible for the patent monopoly."³ However, the conditions for patent eligible subject matter have significantly narrowed, particularly since the introduction of abstract ideas in 1978.⁴ And although the Supreme Court has addressed numerous patents involving matters of patent eligibility,⁵ the Court has refused to define or clarify what falls under the patent ineligible category of abstract ideas.⁶

In *Alice Corporation v. CLS Bank International*, the Supreme Court adopted a

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¹ U.S. CONST. art. I, § 8, cl. 8.

² Section 101 of the Patent Act analyzes whether the invention is patent eligible. The statute states: "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." 35 U.S.C. § 101 (2012).

³ Annal D. Vyas, *Alice in Wonderland v. CLS Bank: The Supreme Court's Fantastic Adventure into Section 101 Abstract Idea Jurisprudence*, 9 AKRON INTELL. PROP. J. 1, 5 (2015) (quoting *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 132 S. Ct. 1289, 1304 (2012)).

⁴ See *Parker v. Flook*, 437 U.S. 584, 598 (1978) (Stewart, J., dissenting) ("It is a commonplace that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter.").

⁵ See e.g., *id.* at 585–96 (majority opinion) (addressing whether a mathematical formula for computing "alarm limits" in a catalytic conversion process was an abstract idea); *Bilski v. Kappos*, 561 U.S. 593, 611–12 (2010) (addressing whether a method for hedging was an abstract idea).

⁶ *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2357 (2014) ("In any event, we need not labor to delimit the precise contours of the 'abstract ideas' category in this case.").

framework for determining whether section 101 is met for patents claiming abstract ideas,⁷ setting a higher standard for patent eligibility and “invalidating numerous patents in district courts.”⁸ To satisfy *Alice*, “the [patentee’s] invention must ‘supply a “new and useful” application of the [abstract] idea.’”⁹ Since the *Alice* decision, hundreds of patents have been invalidated for failure to add an inventive concept that sufficiently transforms the abstract idea into a patent eligible application.¹⁰ The courts fail to provide a consistent analysis, if any at all, of the two-step framework provided in *Alice*.¹¹

The *Alice* framework confuses the lower courts because judges must decide if an invention is “an abstract idea or an inventive concept of an abstract idea.”¹² But the Supreme Court even admits that “[a]t some level, ‘all inventions. . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’”¹³ Without, at a minimum, a clear understanding of what claims fall under an abstract idea, it is not reasonable to expect the lower courts to conclude what additional elements are enough to constitute an inventive concept of an abstract idea. Further, the Supreme Court’s emphasis on an inventive concept is misplaced under section 101. Step two of the *Alice* framework engages the court to determine if the other elements of the claims are “well-understood, routine, conventional activit[ies].”¹⁴ However, this analysis already takes place under section 103¹⁵ for obviousness, which “exists to prevent the patent monopoly from being granted on well-understood, routine, or conventional activity.”¹⁶

Numerous issues arise with the Supreme Court’s conflation of patent eligibility and obviousness. First, it is unclear why step one is necessary if all

⁷ *Id.* at 2355 (citing *Mayo*, 132 S. Ct. at 1296–97).

⁸ *Ameritox, Ltd. v. Millennium Health, LLC*, 88 F. Supp. 3d 885, 903 (W.D. Wis. 2015).

⁹ *Id.* at 908 (quoting *Alice*, 134 S. Ct. at 2357).

¹⁰ *See, e.g., buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (invalidating Patent No. 7,644,019); *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 56 F. Supp. 3d 813, 820–25 (E.D. Va. 2014) (invalidating Patent Nos. 7,631,065, 7,412,510, 6,836,797, and 6,947,984); *Comcast IP Holdings I, LLC v. Spring Commc’ns Co. L.P.*, 55 F. Supp. 3d 544, 550 (D. Del. 2014) (invalidating Patent No. 6,873,694), *appeal filed*.

¹¹ *See e.g., Intellectual Ventures I LLC v. Mfrs. and Traders Trust Co.*, 76 F. Supp. 3d 536, 548 (D. Del. 2014) (providing a detailed outline of the two-step inquiry and concluding the patents were valid without an analysis).

¹² *Vyas, supra* note 3, at 3 (internal quotations omitted).

¹³ *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (omission in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 132 S. Ct. 1289, 1293 (2012)).

¹⁴ *Id.* at 2359 (quoting *Mayo*, 132 S. Ct. at 1294) (alteration in original).

¹⁵ 35 U.S.C. § 103 (2012) (“A patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.”).

¹⁶ *Vyas, supra* note 3, at 22.

inventions embody patent ineligible matter at some level.¹⁷ Second, the Court's use of "inventive concept" is confusingly similar to the analysis for obviousness. Even if the Court intended a different meaning, the lower courts' interpretations are inconsistent and routinely apply a consolidated analysis for issues of patent eligibility and obviousness.¹⁸ Third, if the issues of obviousness and patent eligibility merge, it is unclear how the patent should be evaluated. For example, the components of a claim may not be assessed individually under section 103. But the claims are analyzed *individually* and as a whole when determining if the additional elements of a patent transform the abstract idea into patent eligible matter under section 101.¹⁹

This Note begins with a brief review of the statutes in patent law that come under issue in *Alice*. It then delves into the history of patent ineligibility and abstract ideas. Next, the Article goes into detail about *Alice*, and then discusses the aftermath of the case in the lower courts. This Article walks through the related issues, mentioned in the paragraph above, that arise from the two-step analysis for patent eligibility of an abstract idea. It proposes two alternatives to resolve the current issues: (1) eliminate step one and change the language of step two to properly explain the Court's concern of preemption rather than obviousness; or (2) accept the consolidation of the analyses for patent eligibility and obviousness, but clarify the guidelines to prevent *Alice* from becoming an unmerciful patent killer.

I. LEGAL BACKGROUND

A. *The Patent Act*

The Constitution grants Congress the power to grant patents and to create limitations on what is patentable.²⁰ The Progress Clause is intended to serve two functions. It "encourag[es] inventors to engage in research and innovation," and it "reward[s] the public by having more fruit strung to the tree of human knowledge that is sufficiently ripe for consumption and progress."²¹ In other words, the Progress Clause's purpose is to create incentive for inventors to continue inventing in exchange for limited exclusive rights to the idea while also promoting industrialism and allowing other inventors to build on previous ideas.

Although Congress has enacted numerous statutes relevant to granting

¹⁷ See *Mayo*, 132 S. Ct. at 1293.

¹⁸ See e.g., *I/P Engine, Inc. v. AOL Inc.*, 576 Fed. Appx. 982, 986, 994 (Fed. Cir. 2014) (The majority opinion is an analysis of obviousness and the concurring opinion is an analysis of patent eligibility, but the analyses are very similar and come to the same conclusion.); see also *Versata Dev. Grp., Inc. v. SAP America, Inc.*, 793 F.3d 1306, 1333 (Fed. Cir. 2015).

¹⁹ *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014).

²⁰ U.S. CONST. art. 1, § 8, cl. 8.

²¹ Vyas, *supra* note 3, at *4.

patents,²² the two significant statutes relating to *Alice* are section 101 and section 103 of the Patent Act because *Alice* conflates the two separate requirements into one analysis. Section 101 governs patentable inventions.²³ The statute states: “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.”²⁴ Although the language of section 101 is quite expansive, there are “three judicially created exceptions.”²⁵ Laws of nature, physical phenomena, and abstract ideas are ineligible patent subject matter.²⁶

Section 103 governs one of the conditions for patentability. That is, the invention must claim non-obvious subject matter.²⁷ Specifically, the statute states:

A patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention *as a whole* would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.²⁸

The framework for analyzing Section 103 has been laid out since the 1800’s.²⁹ Under an obviousness analysis, the court looks at: “the scope and content of the prior art . . . differences between the prior art and the claims at issue . . . the level of ordinary skill in the pertinent art . . . [and] secondary considerations [such] as commercial success, long felt but unsolved needs, failure of others, etc.”³⁰

B. Development of Abstract Ideas

1. Patent Eligibility in Early Dicta

The issue of abstractness was discussed as early as 1852 when the Supreme Court heard *Le Roy v. Tatham*.³¹ Famous for a singular statement cited in almost every case on patent eligibility, the Court briefly mentioned: “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.”³² Mistakenly,

²² See e.g., 35 U.S.C. §§ 101 to 103, 112.

²³ 35 U.S.C. § 101.

²⁴ *Id.*

²⁵ Mark Patrick, *The Federal Circuit and Ultramercial: Software and Business Method Patents Tumble Further Down the Rabbit Hole*, 64 AM. U.L. REV. 1089, 1093 (2015).

²⁶ See *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

²⁷ 35 U.S.C. § 103.

²⁸ *Id.* (emphasis added).

²⁹ *Hotchkiss v. Greenwood*, 11 How. 248 (1851).

³⁰ *KSR Intern Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966)).

³¹ 14 How. 156, 175 (1852).

³² *Id.*

Le Roy's famous quote is often viewed as the holding of the case,³³ but it is simply dicta in a case where the Court chose to ignore the patent eligibility issue and focus on novelty, a separate patentability issue.³⁴

A year after *Le Roy* was decided, the Court decided *O'Reilly v. Morse*³⁵, which scholars and courts have incorrectly viewed as focusing on patentability of abstract ideas.³⁶ Although the Court addresses the validity of the claims, it was not under eligibility of abstract ideas.³⁷ The patentee in *O'Reilly* was attempting to claim all modes and processes, even those not described by him in any manner, for motive power.³⁸ This is not a conversation on laws of nature or abstract ideas. Instead, it is simply a conversation on preemption: when is a claim too broad?³⁹

In a blog post, Robert Sachs, a patent attorney with a concentration in software technologies,⁴⁰ keeps a running tally, shown in the table below, of the historical cases addressed above and whether they support the current section 101 propositions.⁴¹

§ 101 Proposition	Yes	No
A newly discovered law of nature, or abstract idea, when simply "applied," is not patent eligible.	0	2
A court should always determine patent eligibility as gateway question.	0	2
A court can determine patent eligibility based on a "plain English" gist, without claim construction.	0	2
Preemption of "basic tools" of science, commerce, and communication means that a claim is not patent eligible.	0	1

This table clarifies that *LeRoy* and *O'Reilly* do not compare with the current

³³ See e.g., John Clizer, *Exploring the Abstract: Patent Eligibility Post Alice Corp v. CLS Bank, Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014), 80 Mo. L. REV. 537, 542 (2015) (referencing the famous statement as the Court's holding).

³⁴ *Le Roy*, 14 How. at 177; see also *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (quoting the famous dicta from *Le Roy*).

³⁵ 56 How. 62 (1853).

³⁶ See e.g., Clizer, *supra* note 33, at 542 ("[T]he court decided the case of *O'Reilly v. Morse*, which discussed in detail the problems associated with patenting abstract ideas.").

³⁷ *O'Reilly*, 56 How. at 113.

³⁸ *Id.* at 120 ("Now, in this case, there is no description but one, of a process by which signs or letters may be printed at a distance. And yet he claims the exclusive right to any other mode and any other process, although not described by him . . .").

³⁹ *Id.* at 113.

⁴⁰ ROBERT R. SACHS, FENWICK & WEST LLP, <http://www.fenwick.com/professionals/Pages/bobsachs.aspx> (last visited October 17, 2016).

⁴¹ Robert R. Sachs, *Patent Eligibility: The Historical Cases*, BILSKIBLOG (May 23, 2013), <http://www.bilskiblog.com/blog/2013/05/the-historical-cases.html>.

focus of patent eligibility. As Sachs points out, the cases “support a more restrained and limited approach to patent eligibility, one that does not imbue the analysis with a normative overlay of what ‘ought’ to be patentable . . . but instead relies on more discrete and focused analysis of what is claimed.”⁴²

2. The Abstract Idea Exception Under Section 101: Case Law

The first mention of “abstract ideas” is in the dissent of *Parker v. Flook*.⁴³ Justice Stewart references *Le Roy* and *O’Reilly* when he states: “A patent could not issue . . . on the law of gravity, or the multiplication tables, or the phenomena of magnetism, or the fact that water at sea level boils at 100 degrees centigrade and freezes at zero—even though newly discovered.”⁴⁴ “Notably, this reference by the dissent . . . seems to equate the term with *physical or natural laws*,” rather than giving any examples of abstract ideas.⁴⁵

The patent in *Flook* was directed at “a method of updating alarm limits.”⁴⁶ The three-step process for updating alarm limits had existed before the patent.⁴⁷ But the patent changed the second conventional step of the known process by adding a mathematical formula.⁴⁸ However, “[t]he patent application does not purport to explain how to select the appropriate margin of safety, the weighing factor, or any other variables.”⁴⁹ Thus, “[t]he question in this case is whether the identification of a limited category of useful, though conventional, post-solution applications of such a formula makes respondent’s method eligible for patent protection.”⁵⁰ And the answer is no because the practices are well known.⁵¹ The Court understands mathematical formulas to be “one of the ‘basic tools of scientific and technological work.’”⁵² Whether it is known or unknown, the formula “is treated as though it were a familiar part of the prior art.”⁵³ Thus, the method does not fall under patent eligible subject matter.

Interestingly enough, the Court’s rationale of the patentee’s invention being well known and a part of the prior art did not lead the Court to analyze the patent under section 103. Rather, *Flook* initiates the amalgam of obviousness language with the analysis of patent eligibility. Although the respondent argued

⁴² *Id.*

⁴³ 437 U.S. 584, 598 (1978) (Stewart, J., dissenting) (“It is a commonplace that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter.”).

⁴⁴ *Id.* at 598–99.

⁴⁵ Vyas, *supra* note 3, at 9.

⁴⁶ 437 U.S. at 585.

⁴⁷ *Id.*

⁴⁸ *Id.* at 586.

⁴⁹ *Id.*

⁵⁰ *Id.* at 585.

⁵¹ *Id.* at 594.

⁵² *Id.* at 591 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

⁵³ *Id.* at 592.

similarly to this observation, the Court ignored him.⁵⁴ The Court correctly rationalized that “[t]he obligation to determine what type of discovery is sought to be patented must precede the determination of whether that discovery is, in fact, new or obvious.”⁵⁵ But, as shown in the preceding paragraph, the Court’s language suggests an obviousness analysis within its analysis of patent eligibility by merging the discussion of what is a patentable invention with the dicta that “an inventive application of the principle may be patented.”⁵⁶ The dissent seems to agree with this issue, clarifying: “Section 101 is concerned only with subject-matter patentability. Whether a patent will actually *issue* depends upon the criteria of §§ 102 and 103.”⁵⁷ Justice Stewart claimed that the majority’s analysis is a “damaging blow [to the] basic principles of patent law by importing its inquiry under 35 U.S.C. § 101 the criteria of novelty and inventiveness.”⁵⁸

As the dissent’s opinion shows, *Flook* is the beginning of the struggle to maintain separation between obviousness and patent eligibility. Justice Stewart also touches on the second issue that arises through *Alice*: Whether a claim can be dissected into its components when analyzing patent eligibility with obviousness language.⁵⁹ The issue of patent eligibility arose in *Flook* because “one step in the process would not be patentable subject matter if considered in isolation.”⁶⁰ However, the dissent points out that “thousands of processes and combinations have been patented that contained one or more steps that themselves would have been unpatentable subject matter.”⁶¹ It is acceptable to invalidate a patent for containing no new inventive feature *as a whole*, as the majority concluded here.⁶² However, the Court cannot dissect the patent into its components and use an obviousness analysis on only one of those components as the Court implies.⁶³

The Court briefly leads away from this issue in *Diamond v. Diehr*.⁶⁴ In this case, the Court was “determin[ing] whether a process for curing synthetic rubber which includes in several of its steps the use of a mathematical formula and a programmed digital computer is patentable subject matter.”⁶⁵ The Court concluded that the claims were “drawn to an industrial process for the molding of rubber products” and were not “attempt[ing] to patent a mathematical formula.”⁶⁶ The

⁵⁴ *Id.* (“Respondent argues that this approach improperly imports into § 101 the considerations of ‘inventiveness’ which are the proper concerns of §§ 102 and 103.”).

⁵⁵ *Id.* at 593.

⁵⁶ *Id.* at 594.

⁵⁷ *Id.* at 600 (Stewart, J., dissenting).

⁵⁸ *Id.*

⁵⁹ *Id.* at 599.

⁶⁰ *Id.*

⁶¹ *Id.* at 599–600.

⁶² *Id.* at 594 (majority opinion).

⁶³ *Id.* at 594 (the “inventive application”).

⁶⁴ 450 U.S. 175 (1981).

⁶⁵ *Id.* at 177.

⁶⁶ *Id.* at 192–93.

Court came to this conclusion by considering the patentability of the process as a whole.⁶⁷

Shown in the lower courts' struggle to distinguish between *Flook* and *Diehr*,⁶⁸ the Court does not clarify why *Flook* is patent ineligible while *Diehr* maintained eligibility. Both cases involved patents with steps of a process, where one or more steps involved a mathematical formula and the rest of the process was already known. The only difference seen is that *Diehr* clarifies that “only the question of whether respondents' claims fall within the § 101 categories of possibly patentable subject matter” was before the Court,⁶⁹ while the dissent in *Flook* points out that the majority failed to separate patent eligibility and obviousness in its analysis.⁷⁰

Abstract ideas were not again addressed by the Supreme Court until 2010, almost thirty years later. In *Bilski v. Kappos*,⁷¹ the claims at issue “were directed to a process of hedging risk in commodities trading by investing in other segments of the energy industry.”⁷² The Court invalidated the claims because they were directed to an unpatentable abstract idea.⁷³ There are two “clarifications” drawn from *Bilski*. First, the underlying concern of patenting abstract ideas is preemption.⁷⁴ Second, the “machine-or-transformation test” is not an “exhaustive test” for patentable abstract ideas, but it “is a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under § 101.”⁷⁵

But these clarifications also leave the lower courts with more questions. First, although the justices unanimously agreed that the claims constituted an abstract idea, there is still no definitional or categorical understanding for what constitutes an abstract idea.⁷⁶ The Court simply states that “it is clear that petitioners' application is not a patentable ‘process.’”⁷⁷ The Court mentions that “[h]edging is a fundamental economic practice long prevalent in our system of commerce and

⁶⁷ *Id.* at 192.

⁶⁸ *See e.g.*, *State St. Bank & Tr. Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368, 1373 (Fed. Cir. 1998) (holding that the transformation of data constitutes a patent eligible invention because it produces a useful, concrete, and tangible result) *abrogated by* *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (“[W]hile looking for ‘a useful, concrete, and tangible result’ may in many instances provide useful indications of whether a claim is drawn to a fundamental practical application of such a principle, that inquiry is insufficient to determine whether a claim is patent-eligible under § 101.”).

⁶⁹ 450 U.S. 175, 191 (1981).

⁷⁰ 42 U.S. 584, 600 (Stewart, J., dissenting).

⁷¹ 561 U.S. 593 (2010).

⁷² Patrick, *supra* note 25, at 1096.

⁷³ *Bilski*, 561 U.S. at 612–13.

⁷⁴ *Id.* at 611–12 (“Allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.”).

⁷⁵ *Id.* at 604.

⁷⁶ *Id.* at 611.

⁷⁷ *Id.*

taught in introductory finance class” and “[a]llowing petitions to patent risk hedging would pre-empt use of this approach in all fields . . . effectively grant[ing] a monopoly over an abstract idea.”⁷⁸ In other words, the Court does not clarify what an abstract idea is, but only states that it is not something humans have been doing for a long period of time and it is not something that preempts use of the idea in all fields. Second, although the “machine-or-transformation test” is an important tool for analyzing processes under Section 101, the Court does not develop a clear test for patents claiming abstract ideas.

Although *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*⁷⁹ involves laws of nature, the test developed from the case is adopted for patentability of abstract ideas under *Alice*.⁸⁰ In *Mayo*, the patent is directed at methods “that help doctors who use thiopurine drugs to treat patients with autoimmune diseases determine whether a given dosage level is too low or too high.”⁸¹ The test developed by the Supreme Court to determine eligibility of this patent consists of two steps. First, the Court determines if the patent at issue is directed at a law of nature.⁸² If the answer is yes, the Court moves on to step two and asks: “[D]o the patent claims add *enough* to their statements of the correlations to allow the processes they describe to qualify as patent-eligible processes that *apply* natural laws?”⁸³ If the answer is no, then the patent claims are directed to patent ineligible subject matter and the claims are invalidated.

The Court unanimously concludes that the patent at issue in *Mayo* claimed a law of nature and was unpatentable because “the steps in the claimed processes (apart from the natural laws themselves) involve well-understood, routine, conventional activity” and “upholding the patents would risk disproportionately tying up the use of underlying natural laws.”⁸⁴ Essentially, the Court reasons that step two is not met because the claims are obvious and would preempt other inventions using the law of nature. The concern of preemption of unpatentable subject matter is reasonable.⁸⁵ However, a search for obviousness in the analysis of the additional elements to the law of nature is not.⁸⁶ By looking at the steps individually and assessing whether the steps are conventional or obvious, *Mayo* improperly shifts a section 103 analysis, which requires claims to be looked at as a

⁷⁸ *Id.* at 611–12 (internal quotations & citations omitted).

⁷⁹ 132 S. Ct. 1289 (2012).

⁸⁰ *Id.* at 1297.

⁸¹ *Id.* at 1294.

⁸² *Id.* at 1296–97.

⁸³ *Id.* at 1297.

⁸⁴ *Id.* at 1294.

⁸⁵ *Id.* at 1297 (“If a law of nature is not patentable, then neither is a process reciting a law of nature, unless that process has additional features that provide practical assurance that the process is more than a drafting effort designed to monopolize the law of nature itself.”).

⁸⁶ *Id.* at 1298 (internal quotations omitted) (“Purely conventional or obvious[pre]-solution activity is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law.”).

whole, into the section 101 analysis.⁸⁷ *Mayo* relies on the same rationale as *Flook*, which, as discussed previously, is misguided.⁸⁸ “Returning to the analysis in *Flook* only muddied the waters because in order to pass the § 101 patent-eligibility threshold, a computer-implemented invention must now contain an ‘inventive concept’ beyond the mere application of a mathematical . . . formula and beyond concepts already in practice by those in the field.”⁸⁹

The Federal Circuit has cautioned against using the “‘inventive concept’ language found in *Mayo*” because it “will conflate §101 with the other conditions of patentability.”⁹⁰ And in a concurring opinion after *Mayo*, Judge Lourie advised that the correct test would focus on preemption.⁹¹ However, the Supreme Court did not heed Judge Lourie’s warnings or the conflicting understandings of the patent eligibility analysis in the lower courts. Instead, the Supreme Court adopted the framework in *Mayo* in order to determine the patentability of abstract ideas.⁹²

II. ALICE AND HER AFTERMATH

A. The Alice Decision

Alice v. CLS Bank reached the Supreme Court in 2014 after the Federal Circuit could not reach a majority opinion.⁹³ “Including former Chief Judge Rader’s additional reflections, the court released seven different opinions,” illustrating just how convoluted the analysis can be for patent eligibility.⁹⁴

The patents at issue in *Alice* “disclose a computer-implemented scheme for mitigating ‘settlement risk’ (*i.e.*, risk that only one party to a financial transaction will pay what it owes) by using a third-party intermediary.”⁹⁵ In determining whether the claims were patent eligible under Section 101, the Supreme Court adopted the two-step test in *Mayo* regarding laws of nature.⁹⁶ The first step

⁸⁷ 35 U.S.C. § 103.

⁸⁸ Patrick, *supra* note 25, at 1101.

⁸⁹ *Id.* at 1102.

⁹⁰ *Id.* at 1104.

⁹¹ *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1355 (Fed. Cir. 2013) (“[W]e must determine whether the claim poses ‘any risk of preempting an abstract idea.’ To do so we must first ‘identify and define whatever fundamental concept appears wrapped up in the claim . . .’ Then proceeding with the preemption analysis, the balance of the claim is evaluated to determine whether ‘additional substantive limitations . . . narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself.’”).

⁹² *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014).

⁹³ *CLS Bank Int’l v. Alice Corp.*, 717 F.3d 1269, 1270 (Fed. Cir. 2013) (listing the opinions).

⁹⁴ Patrick, *supra* note 25, at 1105.

⁹⁵ 134 S. Ct. at 2351–52.

⁹⁶ *Id.* at 2350.

requires the Court to “determine whether the claims at issue are directed to” an abstract idea.⁹⁷ The Court concludes that the patents at issue are directed to patent ineligible subject matter: that is, the “claims are drawn to the abstract idea of intermediated settlement.”⁹⁸ But, the Court adds very little clarification as to how it reached its conclusion. There are three statements the Court makes that add some “clarity.” First, the Court insists that “[l]ike the risk hedging in *Bilski*, the concept of intermediated settlement is ‘a fundamental economic practice long prevalent in our system of commerce.’”⁹⁹ Second, the Court explains that an abstract idea can be “a method of organizing human activity.”¹⁰⁰ And third, the Court tells us what an abstract idea is not. In other words, the abstract idea category includes more than just “preexisting, fundamental truth[s].”¹⁰¹ Beyond these three vague statements, the Court explicitly refuses to define an abstract idea, simply stating: “we need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case.”¹⁰²

The second step asks the court to “examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent eligible application.”¹⁰³ A claim that is directed to an abstract idea must have “additional features” to prevent the monopolization of a patent ineligible subject matter.¹⁰⁴ The Court makes a few specific points about the second step of the *Alice* framework. First, the claim must do more than instruct one “to apply the applicable laws.”¹⁰⁵ Also, “computer implementation [does] not supply the necessary inventive concept.”¹⁰⁶ And finally, merging the two to say “apply it with a computer” has “the same deficient result.”¹⁰⁷ The Court concludes that “the claims here do [nothing] more than simply instruct the practitioner to implement the abstract idea of intermediated settlement on a generic computer.”¹⁰⁸ In its analysis, the Court notes that it analyzes “the claim elements separately”¹⁰⁹ and “as a whole.”¹¹⁰ Because the Court answered no to step two, the Court held there was “not ‘enough’ to transform an abstract idea into a patent-eligible invention,” and the Court invalidated the patents at issue in *Alice*.¹¹¹

⁹⁷ *Id.* at 2355.

⁹⁸ *Id.*

⁹⁹ *Id.* at 2356.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.* at 2357.

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 2358.

¹⁰⁸ *Id.* at 2359.

¹⁰⁹ *Id.* (“In short, each step does no more than require a generic computer to perform generic computer functions.”).

¹¹⁰ *Id.* (“Viewed as a whole, petitioner’s method claims simply recite the concept of intermediated settlement as performed by a generic computer.”).

¹¹¹ *Id.* at 2360 (emphasis original).

1. A Few Interesting Observations

Before diving into the analysis, Justice Thomas quoted the numerous cases that have come before the Court on patent eligibility.¹¹² An important theme arising from these paragraphs is preemption.¹¹³ However, beyond raising this theme in his policy considerations, there is very little analysis of the patents at issue for preemption concerns. Rather, the Court simply avoids defining abstract idea in step one and focuses on the inventive concept language in step two.¹¹⁴

When Justice Thomas clarified that an abstract idea is not limited to “preexisting, fundamental truths that exist in principle apart from any human action,” he gave no reason why.¹¹⁵ Instead, he simply explained that *Bilski* was not about a “preexisting, fundamental truth,” so the claims in the patents at issue in *Alice* did not need to involve preexisting, fundamental truths either.¹¹⁶ This analysis is quite lacking. Although precedent is a great starting point, the Court’s rejection of the patentee’s argument is incomplete.

Lastly, the Court’s analysis of the abstract idea includes a list of references to exemplify that the abstract idea of intermediated settlement “was long standard in the industry.”¹¹⁷ The court references a comparable precedent¹¹⁸ and a couple articles¹¹⁹ to conclude that intermediated settlement falls under an unpatentable abstract idea because it has been around for a long enough time period. However, these references are equivalent to prior art references, which are intended to be analyzed under Section 103 for obviousness.¹²⁰

These three observations illustrate that the opinion in *Alice* left large gaps in the analysis for patentability of abstract ideas. This is concerning because it does not leave the lower courts with the proper guidance needed for Section 101

¹¹² *Id.* at 2354.

¹¹³ *Id.* at 2354–55 (“We have described the concern that drives this exclusionary principle as one of pre-emption.”) (“[T]hose that integrate the building blocks into something more . . . pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws.”).

¹¹⁴ *See id.* at 2357 (“In any event, we need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case.”).

¹¹⁵ *Id.* at 2356.

¹¹⁶ *Id.*

¹¹⁷ Vyas, *supra* note 3, at 14.

¹¹⁸ *Alice*, 134 S. Ct. at 2356 (referencing *Bilski v. Kappos*, 561 U.S. 593 (2010)).

¹¹⁹ *See id.* (citing “Emery, Speculation on the Stock and Produce Exchanges of the United States, in 7 Studies in History, Economics and Public Law 283, 346–356 (1893) (discussing the use of a ‘clearing-house’ as an intermediary to reduce settlement risk);” Yadav, *The Problematic Case of Clearinghouses in Complex Markets*, 101 GEO. L.J. 387, 406–412 (2013) (“The use of a third-party intermediary (or ‘clearing house’) is also a building block of the modern economy.”)).

¹²⁰ Vyas, *supra* note 3, at 14.

inquiries. Additionally, the prior art references mentioned in the analysis for step one of *Alice* will create confusion, particularly because the Court refused to define an abstract idea. Because prior art references are made in step one and the inventive concept language used in step two indicates an obviousness analysis, it is unclear how to separate Section 101 and Section 103 under *Alice*, as demonstrated in the lower courts after *Alice* was decided.¹²¹

B. *The Aftermath of Alice*

Since the Court's decision in *Alice*, hundreds of patents have been invalidated for failure to claim sufficiently more than an unpatentable abstract idea.¹²² Unfortunately, the majority of the cases decided in the lower courts are not clearly analogous to *Bilski*, as the patents in *Alice* were.¹²³ Without guidance on how to determine what is an abstract idea, it is unclear how the courts will also be able to determine what elements could be more than an abstract idea. And this issue is illustrated in the inconsistencies of cases throughout the lower courts. There are cases where minimal analysis exists for evaluating the patent under *Alice*.¹²⁴ There are cases that skip step one of the *Alice* framework.¹²⁵ There are cases where the *Alice* framework has been ignored.¹²⁶ And there are cases where the majority opinion relies on Section 103 for obviousness while the concurring opinion relies

¹²¹ See *infra* note 122.

¹²² See e.g., *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (invalidating Patent No. 7,644,019); *Versata Software, Inc. v. Netbrain Technologies, Inc.*, No. 13–676–LPS–CJB, 2015 WL 5768938, at *7, *12, *15, *18, *21 (D. Del. Sept. 30, 2015) (invalidating Patent Nos. 6,834,282, 6,907,414, 7,363,593, 7,426,481, and 7,082,454); *Bascom Research, LLC v. LinkedIn, Inc.*, 77 F. Supp. 3d 940, 954 (D. Cal., N.D. 2015) (invalidating Patent Nos. 7,389,241, 7,111,232, 7,139,974, and 7,158, 971); *Every Penny Counts, Inc. v. Wells Fargo*, No. 8:11–cv–2826–T–23TBM, 2014 WL 4540319, at *5 (D. Fla., M.D. Sept. 11, 2014) (invalidating Patent Nos. 7,571,849 and 8,025,217).

¹²³ *Alice*, 134 S. Ct. at 2356 (“It is enough to recognize that there is no meaningful distinction between the concept of risk hedging in *Bilski* and the concept of intermediated settlement at issue here. Both are squarely within the realm of ‘abstract ideas’ as we have used that term.”).

¹²⁴ See e.g., *Intellectual Ventures I LLC v. Mfrs. and Traders Trust Co.*, 76 F. Supp. 3d 536, 546 (D. Del. 2014) (The Court states that “the claims are directed to generic computing functions,” but does not extend its analysis beyond this.).

¹²⁵ See e.g., *DDR Holdings v. Hotels.com*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (“[I]dentifying the precise nature of the abstract idea is not as straightforward as in *Alice* or some of our other recent abstract idea cases . . . under any of these characterizations of the abstract idea, the ‘399 patent’s claims satisfy *Mayo/Alice* step two.”).

¹²⁶ See e.g., *Paone v. Broadcom Corp.*, No. 15Civ.0596(BMC)(GRB), 2015 WL 4988279, at *4 (D. N.Y.E.D. Aug. 19, 2015) (There is no analysis under the *Alice* framework, except a few references to cases that have cited *Alice*, and relies on cases that were decided before *Alice*. “Having so defined the broad subject matter of the patent, the case that is most instructive applying the § 101 analysis, *TQP Dev., LLC v. Intuit Inc.*, No. 12–cv–180, 2014 WL 651935 (E.D. Tex. Feb. 19, 2014). . . is one that somewhat conflates the two steps for *Mayo*.”).

on Section 101 for patent eligibility.¹²⁷ In other words, very little clarity, if any at all, has risen from *Alice* in determining what is patentable. This section examines post-*Alice* cases that demonstrate some of the issues listed above.

1. Skipping Step One of Alice

“[T]he Federal Circuit found itself divisively split [again] regarding abstract idea jurisprudence” in *DDR Holdings v. Hotels.com*.¹²⁸ The patent at issue was directed to “systems and methods of generating a composite web page that combines certain visual elements of a ‘host’ website with content of a third-party merchant.”¹²⁹ The patent’s asserted claims did not fall under the few categories that the Supreme Court has confirmed are abstract ideas, including mathematical algorithms and fundamental economic or longstanding commercial practices.¹³⁰ The Court recognized the difficulty in identifying the abstract idea.¹³¹ And rather than classifying the abstract idea, “the Court maintained that however the abstract idea was defined, step two of the *Alice* framework . . . would be satisfied, no matter what the abstract idea was.”¹³²

The Federal Circuit essentially eliminated step one of the *Alice* framework because it was clear that there was an inventive concept regardless of how the abstract idea was defined. Interestingly enough, the Supreme Court has admitted that at some level, all inventions embody patent ineligible subject matter.¹³³ This concept leads to the inquiry of whether step one is necessary, as discussed below, if the courts are able to conclude on step two without analyzing step one.

Although the Federal Circuit majority concluded there was an inventive concept without reaching any clarity on the abstract idea, the dissent insisted that the patent claims were directed to an abstract idea— “that an online merchant’s sales can be increased if two web pages have the same ‘look and feel.’”¹³⁴ The dissent concluded that the patent did nothing more than instruct the user to “apply that concept using a generic computer.”¹³⁵

As illustrated from this case, there are concerns with how to apply both steps

¹²⁷ See e.g., *I/P Engine, Inc. v. AOL Inc.*, 576 Fed. Appx. 982, 983 (Fed. Cir. 2014) (“Because the asserted claims of the ‘420 and ‘664 patents are invalid for obviousness, we reverse.”); *id.* at 992 (Meyer, J. concurring) (“Because the claims asserted by I/P Engine, Inc. . . . disclose no new technology . . . they fall outside the ambit of 35 U.S.C. § 101.”).

¹²⁸ Vyas, *supra* note 3, at 16 (referencing *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014)).

¹²⁹ *DDR Holdings*, 773 F.3d at 1248.

¹³⁰ *Id.* at 1257.

¹³¹ *Id.*

¹³² Vyas, *supra* note 3, at 17 (referencing *DDR Holdings*, 773 F.3d at 1257).

¹³³ *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012).

¹³⁴ *DDR Holdings*, 773 F.3d at 1263 (Mayer, J., dissenting).

¹³⁵ *Id.*

of the test for patentability of abstract ideas. Where the majority saw so clearly that there was an inventive concept, it is surprising to see such a bright-line split between the majority and dissenting opinions.

2. Use of Section 103 or Section 101?

In *I/P Engine, Inc. v. AOL Inc.*, the Federal Circuit invalidated the asserted claims of Patent Nos. 6,314,420 and 6,775,664 for obviousness.¹³⁶ Although Judge Mayer agreed with the invalidation of the patents, he rested his analysis on patent ineligibility.¹³⁷ Judge Mayer concluded that there was no disclosure of new technology, and the claims “simply recite the use of a generic computer to implement a well-known and widely-practiced technique for organizing information.”¹³⁸

The claims “relate to a method for filtering Internet search results that utilizes both content-based and collaborative filtering.”¹³⁹ “Google Defendants argue that I/P Engine’s claimed invention is obvious as a matter of law because it simply combines content-based and collaborative filtering, two information filtering methods that were well-known in the art.”¹⁴⁰ Google did not make an argument under Section 101. The Court held that the patent was invalidated for obviousness because “[t]he record is replete... with prior art references recognizing that content-based and collaborative filtering are complimentary techniques that can be effective combined.”¹⁴¹

Judge Mayer disagreed with an obviousness approach because “fail[ure] to address at the very outset whether claims meet the strictures of section 101 is to put the cart before the horse.”¹⁴² He insisted that a Section 101 analysis is necessary before addressing “subordinate validity issues such as non-obviousness under 35 U.S.C. § 103.”¹⁴³ Although patent eligibility may be at issue in this case, neither party claimed the issue, and the patents at issue were already invalidated under Section 103.

This case illustrates that it is still unclear whether a Section 101 or Section 103 analysis should be applied. It is particularly difficult to separate the opinions because Judge Mayer still analyzes the inventive concept under the obviousness analysis. He even cites Judge Wallach’s opinion on obviousness in his analysis for lack of inventive concept, stating that “the use of search engines was well-established and the clear advantages of combining content-based and collaborative

¹³⁶ 576 Fed. Appx. 982, 983 (Fed. Cir. 2014).

¹³⁷ *Id.* at 992 (Mayer, J., concurring).

¹³⁸ *Id.*

¹³⁹ *Id.* at 983 (majority opinion).

¹⁴⁰ *Id.* at 986.

¹⁴¹ *Id.*

¹⁴² *Id.* at 995 (Mayer, J., concurring).

¹⁴³ *Id.*

filtering were widely recognized at the time of the claimed invention.”¹⁴⁴ Even if Section 101 should be analyzed before Section 103 at all times, referencing an obviousness analysis within Judge Mayer’s Section 101 analysis confuses the process and order for invalidity claims.

III. ISSUES ARISING FROM *ALICE*

Although the issues have been scattered through the discussion above, the following section will briefly discuss the issues arising from *Alice*. First, it is unclear why step one of the *Alice* framework, *i.e.*, determining whether the claims are directed to an abstract idea and identifying the abstract idea, is necessary. Second, it is difficult to distinguish between the inventive concept language in the test for Section 101 and the obviousness language for Section 103. And third, if the inventive concept language is left as is, it unclear whether the language of Section 103, *i.e.*, the claim must be analyzed *as a whole*, should be implemented into the inventive concept analysis.¹⁴⁵

A. *Is Step One of Alice Necessary?*

In *Mayo*, the Court admitted that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.”¹⁴⁶ But the process may be patentable even though it contains an unpatentable abstract idea, as long as there is an inventive concept that transforms the unpatentable abstract idea into a patent-eligible application of the abstract idea.¹⁴⁷ If all inventions rely on a form of patent ineligible subject matter, then it seems that step two of the *Alice* framework, *i.e.*, the inventive concept, should be the only inquiry in determining whether a patent’s claims go beyond the patent ineligible subject matter.

Indeed, in *DDR Holdings*, that is exactly what the Federal Circuit did. After acknowledging the difficulty in identifying the abstract idea, the Federal Circuit justified that the inventive concept was so apparent that there was no need to analyze step one.¹⁴⁸ It seems counterintuitive to be able to analyze step two without analyzing step one because step two requires there to be an inventive concept of the abstract idea identified. However, if the underlying idea in every patent is unpatentable, then an analysis of what transforms the idea beyond the patent ineligible matter is sufficient.

B. *The Inventive Concept Language*

¹⁴⁴ *Id.*

¹⁴⁵ 35 U.S.C. § 103.

¹⁴⁶ *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012).

¹⁴⁷ *Id.* at 1294.

¹⁴⁸ *DDR Holdings v. Hotels.com*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).

Although “the plurality [at the Federal Circuit level] in *CLS Bank* goes to great lengths to specify that ‘inventive’ under section 101 has a markedly distinct meaning from inventiveness under section 103,”¹⁴⁹ this has not been illustrated in the lower courts since *Alice* was decided at the Supreme Court, as discussed earlier.¹⁵⁰ Besides acknowledging “the quest for ‘something more,’” the Supreme Court does not clarify what the inventive concept is.¹⁵¹ Rather, the Court only clarifies what it is not. “For instance, the Court focused on the idea that implementation of a generic computer is not enough.”¹⁵²

“[D]espite the Supreme court’s insistence that the phrase ‘inventive concept’ does not conflate a section 103 analysis into a section 101 inquiry,”¹⁵³ step two of the *Alice* framework engages the court to determine if the other elements of the claims are “well-understood, routine, conventional activit[ies].”¹⁵⁴ “[M]eanwhile the obviousness inquiry under section 103 exists to prevent the patent monopoly from being granted on well-understood, routine, or conventional activity.”¹⁵⁵ Although the Court admits that there may be overlap between the patent eligibility inquiry and other patent inquiries,¹⁵⁶ there is too much overlap here for the courts to be able to separate the patent eligibility issue and the obviousness issue. As discussed above, the issue of conflation has been a concern since 1978 when the dissent in *Flook* warned the Court of this very problem.

C. Analyzing the Claim as a Whole Versus Individually

If the Court determines that the claims at issue are directed to an abstract idea, “the Court then asks whether the claim’s elements, considered both *individually* and ‘as an ordered combination,’ ‘transform the nature of the claim’ into a patent-eligible application.”¹⁵⁷ As discussed above, the second step of the *Alice* framework conflates Section 101 for patent eligibility and Section 103 for obviousness. This is problematic because the statutory language for Section 103 requires that the claimed invention *as a whole* be analyzed for obviousness against

¹⁴⁹ Vyas, *supra* note 3, at 22 (citing *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1268, 1297 (Fed. Cir. 2013)).

¹⁵⁰ *I/P Engine, Inc. v. AOL Inc.*, 576 Fed. Appx. 982, 995 (Fed. Cir. 2014) (arguing that there was no inventive concept because the methods were well-established and widely recognized at the time of the claimed invention).

¹⁵¹ *Clizer*, *supra* note 33, at 553.

¹⁵² *Id.*

¹⁵³ Vyas, *supra* note 3, at 22.

¹⁵⁴ *Alice*, 134 S. Ct. at 2359 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1298 (2012) (alteration in original)).

¹⁵⁵ Vyas, *supra* note 3, at 22.

¹⁵⁶ *Mayo*, 132 S. Ct. at 1304 (“We recognize that, in evaluating the significance of additional steps, the § 101 patent-eligibility inquiry, and, say, the § 102 novelty inquiry might sometimes overlap.”).

¹⁵⁷ *Alice*, 134 S. Ct. at 2350 (quoting *Mayo*, 132 S. Ct. at 1297) (emphasis added).

the prior art.¹⁵⁸ The inventive concept language incorporates an obviousness analysis and allows the courts to analyze the individual claims of the invention for the inventive concept.¹⁵⁹ By allowing a claimed invention to be dissected into its individual components for step two of the *Alice* framework, the Court is allowing Section 101 to do what is not an option under Section 103, *i.e.*, look at the individual claims of an invention for obviousness.

IV. RESOLVING THE ISSUES

The abstract idea category is exactly that: abstract. And because the Court has explicitly refused to define what an abstract idea is,¹⁶⁰ it is unlikely that the *Alice* framework will provide any more clarity before unnecessarily invalidating more computer software patents for patent ineligibility. As argued in Annal D. Vyas’s *Alice in Wonderland*, the category of abstract idea could all together be eliminated by adding the following phrase to Section 101 of the Patent Act: “The abstractness of an idea shall not serve as a bar to its eligibility.”¹⁶¹ In other words, step one of the *Alice* framework should be eliminated. As referenced earlier, the Court has already admitted that all inventions embody patent ineligible subject matter at some level.¹⁶² Rather than continuing to acknowledge that abstract ideas are a patent ineligible category, the Court should only focus on the second step of the *Alice* framework to determine if an invention is patent eligible.

The earliest cases on patent eligibility focused on the proper issue: when is a claim too broad? The underlying foundation for the holdings in the previously discussed patent eligibility cases is preemption.¹⁶³ However, the focus on preemption has been lost under the obviousness language since 1978 when the dissent in *Flook* warned the Court of the potential conflation of Section 101 for patent eligibility and Section 103 for obviousness.¹⁶⁴ The Court should be reminded of its decision in *Diehr*, where the Court said, “[t]he ‘novelty’ of any

¹⁵⁸ 35 U.S.C. § 103.

¹⁵⁹ See *e.g.*, *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333 (Fed. Cir. 2015) (“[A]fter considering the limitations of each claim individually and as an ordered combination, none of the claims have sufficient additional limitations to transform the nature of any claim into a patent-eligible application of an abstract idea. Taking the claim limitations separately, the function performed by the computer at each step is purely conventional.”).

¹⁶⁰ *Alice*, 134 S. Ct. at 2357 (“[W]e need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case”).

¹⁶¹ Vyas, *supra* note 3, at 18.

¹⁶² *Mayo*, 132 S. Ct. at 1293.

¹⁶³ *LeRoy v. Tatham*, 55 U.S. 156 (1853); *O’Reilly v. Morse*, 56 U.S. 62 (1854); *Parker v. Flook*, 437 U.S. 584 (1978); *Diamond v. Diehr*, 450 U.S. 175 (1981); *Bilski v. Kappos*, 561 U.S. 593 (2010); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014).

¹⁶⁴ 437 U.S. at 600 (Stewart, J., dissenting) (claiming that the majority’s analysis is a “damaging blow [to the] basic principles of patent law by importing its inquiry under 35 U.S.C. § 101 the criteria of novelty and inventiveness”).

element or steps in a process, or even the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.”¹⁶⁵

Although the Court may have intended a distinction between inventiveness under Section 101 and Section 103, the lower court cases superseding *Alice* illustrate that the term has caused patent eligibility and obviousness to merge into one analysis.¹⁶⁶ For this reason, the “inventive concept” language must transition back to preemption.

LeRoy and *O’Reilly* did not focus on what should be patent eligible. Instead, the cases looked at exactly what was being claimed, and asked whether the claims were too broad. If the claims preempt other inventors from building on an underlying principle, then the claims are too broad and should be invalidated. Going back to the purpose of the Progress Clause, patents are intended to promote industrialism and incentive inventors to continue inventing.¹⁶⁷ Rather than analyzing a patent’s claims for an inventive concept under Section 101, the Court should return to the analysis in *O’Reilly* and save the question of inventiveness for a later review of obviousness under Section 103. Thus, the patent eligibility inquiry should ask and evaluate whether a claim is so broad as to preempt other inventors from building on the underlying principle.

However, if the *Alice* framework upholds and the patent inquiries are conflated, the Court must adopt a bright-line rule to prevent an improper analysis of obviousness. The statutory language of Section 103 specifically requires one to analyze the invention *as a whole* when determining whether an invention is obvious.¹⁶⁸ Through *Alice*, the Court has blurred this statutory constraint by authorizing the lower courts to dissect a patent’s claims into its components for patent eligibility purposes while using obviousness language in the analysis.¹⁶⁹ The lower courts have analyzed the claims separately to determine the conventionality of the whole invention.¹⁷⁰ If the conflation of patent eligibility and obviousness is maintained in the two step *Alice* framework, then the claims may not be dissected in order to determine if the additional steps are conventional.

¹⁶⁵ 450 U.S. at 188–89.

¹⁶⁶ *Ameritox, Ltd. v. Millennium Health, LLC*, 88 F. Supp. 3d 885, 915 (W.D. Wis. 2015) (“[T]here is certainly nothing in the art that demonstrates that such a combination was well-known.”).

¹⁶⁷ *Vyas*, *supra* note 3, at 4.

¹⁶⁸ 35 U.S.C. § 103 (2012).

¹⁶⁹ *Alice*, 134 S. Ct. at 2350 (quoting *Mayo*, 132 S. Ct. at 1297) (“[T]he Court then asks whether the claim’s elements, considered both *individually* and ‘as an ordered combination,’ ‘transform the nature of the claim’ into a patent-eligible application.”) (emphasis added).

¹⁷⁰ *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333 (Fed. Cir. 2015) (“Taking the claim limitations separately, the function performed by the computer at each step is purely conventional.”).

Instead, the Court should be reminded of *Diehr*, where it looked at the process as a *whole* to determine whether the invention was patentable.¹⁷¹ Although the patent inquiries may overlap at times,¹⁷² there must be boundaries to prevent the statutory language and purposes from getting lost in the analysis. Section 103 is not intended to be dissected because there are times when, for example, it may not be obvious to combine two different patented methods together to form a new, patentable method. If the obviousness language stays incorporated into the patent eligibility inquiry, then the purpose of Section 103 must also be incorporated and the patent cannot be dissected into its components to determine whether the additional elements are conventional. Instead, it must be analyzed as a whole to determine whether the claims are intended to patent a particular process or the underlying principle.¹⁷³

CONCLUSION

Since the birth of the abstract ideas concept, the judiciary has struggled to define abstract idea and analyze what is patentable under this exception to Section 101. The Supreme Court's decision in *Alice* has not clarified the complexities that have arisen from the abstract ideas category. Instead, it falls in line with the warnings of the dissent in *Flook*, where Justice Stewart advises against the majority's use of "inventive application" because it conflates the Section 101 and Section 103 inquiries.¹⁷⁴ In order to avoid such conflation, the *Alice* framework cannot be adopted. Step one of the framework should be eliminated because all inventions embody patent ineligible matter at some level, and it is too difficult to identify an abstract idea without a definitional or categorical understanding of what an abstract idea is. Step two of the framework must be reworked to prevent the courts from adopting an obviousness analysis under Section 101. Rather than using the "inventive concept" language, the Court should address step two as a question of preemption, asking whether the claims in the patent are overly broad and prevent other inventors from building upon the underlying principle. If this suggestion is not possible, the Court should create a bright line rule, at a minimum, to prevent the statutory constraint on the obviousness analysis from being ignored. That is, the courts should not be allowed to break down the claim to determine whether it is conventional. The courts must analyze the claim as a whole to determine if the claim adds enough to transform the underlying idea into a patentable claim.

¹⁷¹ *Diamond v. Diehr*, 450 U.S. 175, 192 (1981).

¹⁷² *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1299 (2012).

¹⁷³ *Diehr*, 450 U.S. at 192–93.

¹⁷⁴ *Parker v. Flook*, 437 U.S. 584, 599–600 (1978) (Stewart, J., dissenting).