The authors review decisions since the Supreme Court’s Alice decision and offer practice tips for litigators involved in patent eligibility challenges.

**How Deep Does This Rabbit Hole Go? What We Learned About Patent-Eligibility from Alice in 2014**

**By Andrew C. Cooper and James B. Devaney**

Lawyers seldom agree on any particular point, but patent practitioners would be hard-pressed to describe, in recent memory, a more impactful development in patent law than the U.S. Supreme Court’s ruling in *Alice v. CLS Bank*. Federal judges around the country expended significant resources contending with the scope of *Alice* and working late into the holiday season issuing judgments seeking to clarify the contours of patent eligibility under 35 U.S.C. § 101. Some jurists, such as Judge Otis D. Wright (S.D. Tex.) and Judge Keith P. Ellison (C.D. Cal.), issued patent eligibility rulings as late as two days before Christmas. Accordingly, patent lawyers have been busy with counseling activities and early motion analysis as clients seek to determine patent portfolio eligibility in the wake of Alice and its progeny.

The perennial question raised by in-house clients: How deep does this rabbit hole go? In layman’s terms: are my (software) patents/claims eligible under Section 101? Or, more importantly, what are my chances of defeating the other guy’s patent by disposing of this case cheaply through early motion practice?

“*When the Supreme Court leaves questions open, lower courts have a duty to offer their views and develop the law. Lower courts have endeavored to fulfill this responsibility with regard to § 101.*”

—Judge Mariana R. Pfaelzer

At bottom, Alice is a good (not great) decision that affirms software eligibility while simultaneously providing another tool for defendants to short-circuit frivolous litigation. Indeed, a world of possibilities is available to savvy intellectual property attorneys who understand the developing case law on patent eligibility and its implications.

**The Principal Test: Mayo**

*Alice* essentially punctuated and revived nearly a hundred years of Supreme Court precedent, and principally affirmed the Court’s patent eligibility test as ar-
ticated in Mayo v. Prometheus. Commentators sometimes refer to the test in Alice and Mayo interchangeably based on the same approach affirmed in each case. The Mayo test establishes a two-step framework relevant to any analysis of patent eligibility under 35 U.S.C. § 101:

Step One—“First [] determine whether the claims at issue are directed to [a] patent-ineligible concept.”

To accomplish this we must “look[] past the text of the claims to the underlying concept.”

Step Two—Determine if there is an “inventive step.”

 “[C]on consider the elements of each claim . . . to determine whether the additional elements transform the nature of the claim into a patent-eligible application.”

 “[A]n element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.”

 “[R]eciting the use of a generic computer [is] not sufficient to make an idea patent eligible.”

Additionally, Alice did not revise other important tests of patent eligibility, such as the machine or transformation test, but rather provided context for the application of such tests. For example, the machine or transformation test may still be considered in determining patent eligibility. Ultimately, “[t]he use of the machine must impose meaningful limits on claim’s scope.”

Five Lessons from Alice with Love

Various post-Alice decisions create a minefield of potential considerations when addressing patent eligibility. The only way to adequately address all of the issues is to consult an intellectual property attorney. Though the lessons are too many to enumerate here, below are five takeaways from recent Alice decisions.

1) Software is patent eligible. Prognosticators foretelling the end of the age of software patents could not be more wrong. Judge Mariana R. Pfaelzer, in upholding the eligibility of patent claims under Section 101, outlines a compelling rationale supporting the patentability of software in Cal. Tech. v. Hughes. Judge Pfaelzer explains:


3 Alice, 134 S. Ct. at 2355.


5 Alice, 134 S. Ct. at 2355.

6 Id. (emphasis added).

7 See, e.g., id. at 2357.

8 See Mayo, 132 S. Ct. at 1296 (noting the machine or transformation test is “not a definitive test of patent eligibility, but only an important and useful clue.”); see also McRO, Inc. v. Capcom, Inc., No. CV 12-10337 (C.D. Cal. Sept. 22, 2014) (finding claims ineligible despite satisfying the machine or transformation test).


(a) Although the Supreme Court has never declared that software is patentable subject matter, “software must be eligible under § 101. A bright-line rule against software patentability conflicts with the principle that ‘courts should not read into the patent laws limitations and conditions which the legislature has not expressed.’”

(b) The America Invents Act (“AIA”) contemplates the existence of software patents explicitly in Section 14, which states in relevant part: “...this section does not apply to that part of an invention that (1) is a method, apparatus, technology, computer program product, or system ...” Thus, “by excluding computer programs from subsection (a), Congress contemplated that some computer programs were eligible for patent protection. Courts should not read § 101 to exclude software patents when Congress has contemplated their existence.”

(c) The Supreme Court has implicitly endorsed the patentability of software. Notably, Alice seems to acknowledge that software may be patentable if it improves the functioning of a computer. Further, “[t]he Supreme Court could have resolved Alice and provided clarity to patent law by declaring all software patents ineligible. However, the Supreme Court did not do this. This is some evidence of the continuing eligibility of software.”

Our esteemed colleague, Bart Eppenauer (Microsoft’s former Chief Patent Counsel and the managing partner of Shook’s Seattle office) was among the first to temper the hysteria over exaggerated claims regarding the death of software patents in the United States, and continues to provide sage advice on the development of the law in this area. The fight in 2015, and years to come, will be over the proper scope of software patentability—not whether software is patentable fundamentally.

2) District courts are experimenting with the scope of Alice. Probably the most painfully obvious fact of Alice case law is that district courts approach the Section 101 analysis in dissimilar and evolving ways. Accordingly,
judges (even in the same court) disagree on the application of the two-part Mayo test.\textsuperscript{17}

For example, some judges understand the approach prescribed in Alice as one big, amorphous consideration similar to that employed by the Supreme Court in pornography cases.\textsuperscript{18}

Alternatively, some courts break down Alice’s two-part inquiry into several small steps.\textsuperscript{19} The key takeaway from the various developing approaches is to “know thy judge.” Though the aforementioned is a truism of good lawyering, it is even more essential when addressing patent eligibility determination because dispositional outcomes lay in the balance. Counseling in-house lawyers on Alice should include an examination into the proclivities and rulings of judges in the potentially relevant jurisdictions as different results may be obtained depending on the concerns emphasized in the court’s approach in applying the Mayo test.\textsuperscript{20}

3) “Look past” the claims to determine the abstract idea. District courts, rightly or wrongly, have jettisoned the virtually every pre-Alice Federal Circuit case on Section 101—choosing instead to rely on older Supreme Court precedent. This is the safest approach for the time being. One common theme developing from the Supreme Court’s Bilski decision is that a proper patent eligibility determination need not be confined by the patent claims, but rather requires an inquiry into the specification to determine the fundamental concept to which the patent is directed. To accomplish this, we must “look[] past the text of the claims to the underlying concept.”\textsuperscript{21} When counseling clients, a thorough examination of the claims and specification will help discern the abstract idea. This is essential. Identifying the correct abstract concept serves two functions. First, it satisfies a burden in certain procedural contexts. For example, failure to identify the proper abstract idea could result in a litigation catastrophe on summary judgment.\textsuperscript{22} Second, it provides the court competing positions from which to determine the scope of the claims.\textsuperscript{23}

4) Complete preemption is a redline. An oft-cited maxim by judges in Alice cases is that “[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas; thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept.”\textsuperscript{24} There is some measure of logical dissonance between the patent owner’s monetary expectations and judicially-created notions of preemption. Clients will ask: what incentive is there to file a patent if a monopoly, and its attendant prices, cannot be extracted through the patent grant? While rhetorically compelling, there are actually limits. A patentee’s ability to preempt all innovation is limited only to the derivatives of the basic tools necessary to innovate.\textsuperscript{25}

Impermissible preemption occurs when an inordinate portion of the abstract idea is encompassed by the claims. Thus, the desired scope of patent claims should occupy a large portion but not unavoidably all of the preempted technological field. To date, district courts have uniformly rejected claims that occupy the full scope of the defined “abstract idea.” This underscores the significance of point #3 hereinabove. When a patentee identifies the abstract idea, the court will seek to determine if the identified abstract idea is wholly embraced by the claims, or whether there are non-infringing ways to practice the abstract idea. As Judge George H. Wu aptly explained “[s]ection 101 motions can place parties in unfamiliar and uncomfortable positions: here it is to the patentee’s advantage to identify noninfringing alternatives, and it is the accused infringer’s advantage to posit the lack of any; the reverse of their positions at the infringement and damages stages of the case.”\textsuperscript{26} Thus, clients must be counseled in patent litigation, and prosecution, to avoid redline arguments that could cost them the full scope of the patent. Alice motions present the rare occasion where restraint in overly broad arguments and (a less aggressive approach in claim drafting), may be more desirable.

5) General purpose computer claims are suspect. Generic computer recitals in claims are prime targets to fall under Alice. Claims that recite: “processing,” “comparing,” “calculating,” “receiving,” “recognizing,” “storing” and other generic recitals are increasingly targets of court skepticism primarily because they “add nothing” beyond what a typical computer can accomplish.\textsuperscript{27}

\textsuperscript{17} See McRO; but see Hughes, 2014 BL 313254, at *12 (McRO offers an interesting but problematic interpretation of Section 101).

\textsuperscript{18} See, e.g., McRO, No. 12-10337-GW, slip op. at *7-8 (“Describing this as a two-step test may overstate the number of steps involved . . . [t]he test may be more like a one-step test evocative of Justice [Potter] Stewart’s most famous phrase . . . ”) (characterizing test as one-step or two-step).

\textsuperscript{19} Id.

\textsuperscript{20} See, e.g., Tuxis Technologies, LLC v. Amazon.com Inc., No. 13-1771-RGA, 2014 BL 243738, at *3-6 (D. Del. Sept. 3, 2014) (applying Alice in smaller steps: (1) fundamental concept analysis, (2) preemption analysis, and (3) inventive step analysis).

\textsuperscript{21} See, e.g., Intellectual Ventures I LLC v. Manufacturers Traders Trust Co., No. 13-1274, 2014 BL 357212, at *9 (D. Del. Dec. 18, 2014) (“[T]he inquiry on preemption is whether the patent ‘would risk disproportionately tying up the use of the underlying ideas.’”)

\textsuperscript{22} Id.

\textsuperscript{23} Alice, 134 S. Ct. at 2354.

\textsuperscript{24} See Intellectual Ventures I LLC v. Manufacturers & Traders Trust Co., No. CV 13-1274-SLR, 2014 BL 357212, at *9 (D. Del. Dec. 18, 2014) (“[T]he inquiry on preemption is whether the patent ‘would risk disproportionately tying up the use of the underlying ideas.’”)

\textsuperscript{25} Id.

\textsuperscript{26} Alice, 134 S. Ct. at 2354.

\textsuperscript{27} See, e.g., Buysafe, Inc. v. Google, No. 2013-1575, 765 F.3d 1350 (Fed. Cir. 2014) (89 PTCJ 523, 12/14/14) (examining claims of U.S. Pat. No. 6,944,019; Planet Bingo, LLC v. VKGS LLC, 576 Fed. Appx. 1005 (Fed. Cir. 2014) (88 PTCJ 1112, 8/29/14) (examining claims of U.S. Pat. No. 6,398,646 & 6,656,045); Content Extraction and Transmission LLC v. Wells Fargo Bank, N.A., No. 2013-1588, 113 U.S.P.Q.2d 1354 (Fed. Cir. 2014) (89 PTCJ 523, 1/2/15) (examining claims of U.S. Pat. Nos. 5,258,855; 5,369,508; 5,625,465; and 5,768,416); but see
Ultimately, patent claims are weak when they are like the Buysafe and Planet Bingo line of cases, and strong when they are more like DDR Holdings. The key is to argue that the subject claims enable a process, method, or system in an unexpected, novel, or abnormal manner despite implementation in a known environment (like a computer). Similarly, strong claims do not rely on such things as numerosity of limitations.

**The patent system is being cleansed of bad patents.**

Owners of software patents should be encouraged as we turn the page on 2014. Bad patents are being demolished in the courts. Meanwhile, good patent claims are getting their day in court. Indeed, in view of DDR Holdings, and other Federal Circuit cases, the narrative is shifting. The slew of district court cases finding patent claims ineligible was a function of the patent system being flushed of bad patents. But, like any pipeline, the initial extraction of rubbish should instill confidence that good matter will soon traverse the system, and even better matter will enter the system at the outset. Everyone wins when stronger patents are affirmed at all stages of the patent process.

**Recent PTO Guidance**

The U.S. Patent and Trademark Office (PTO) prepared updated Interim Eligibility Guidance for determining subject-matter eligibility under Section 101 for patent examiners. Like the previous interim guidelines, the new interim guidelines do not constitute substantive rulemaking or have the force of law, but rather are in-the-round examples. The new interim guidelines supplement the previous interim guidelines and supersede the March 4, 2014, guidelines for laws of nature/natural principles, natural phenomena and/or natural products; and set forth an analytical framework for examination based on the two-part Mayo test. Particularly useful, the guidelines provide sample analyses using representative claims from Supreme Court cases on subject matter eligibility so that examiners can apply the holdings of these cases for analysis of similar claims.

The new guidelines also streamline the eligibility analysis. Although a complete examination (e.g., 35 U.S.C §§ 102, 103, 112 and 101, etc.) is still required for every claim, for the sake of efficiency, the PTO recognizes that it is unnecessary to perform a full subject matter eligibility analysis in all situations. Essentially, the subject matter eligibility analysis may be abbreviated based on an examiner’s determination of the risk of preemption by a judicial exception recited in the claim. In particular, in situations where a claim merely involves the judicial exception, but when viewed as a whole, “clearly” does not seek to tie up the judicial exception such that others cannot practice it.

The new guidance includes nearly 20 pages of examples and explanations, representing a significant evolution from the previous four-page interim guidance issued in June 2014 shortly after the Alice decision. Notably, the new interim guidelines reflect the PTO’s interpretation of Section 101 requirements in view of Supreme Court subject matter eligibility case law and recent decisions by the Federal Circuit. The new guidance includes nearly 20 pages of examples and explanations, representing a significant evolution from the previous four-page interim guidance issued in June 2014 shortly after the Alice decision. Notably, the new interim guidelines supplement the previous interim guidelines and supersede the March 4, 2014, guidelines for laws of nature/natural principles, natural phenomena and/or natural products; and set forth an analytical framework for examination based on the two-part Mayo test. Particularly useful, the guidelines provide sample analyses using representative claims from Supreme Court cases on subject matter eligibility so that examiners can apply the holdings of these cases for analysis of similar claims.

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The new guidance also provides greater clarity of the “significantly more” step of the eligibility analysis (step two of the Mayo framework). Notably, the guidelines provide additional positive examples of limitations that may qualify as significantly more and often occur in claims directed to software-related technologies. These include claim elements satisfying the transformation prong of the machine or transformation test (e.g., “effecting a transformation or reduction of a particular article to a different state or thing” and claims elements that include a specific limitation other than what is well-understood, routine, and conventional in the field. In the previous interim guidelines, an example of what does not qualify as significantly more ("requiring no more than a generic computer to perform generic computer functions that are well-understood, routine, and conventional activities...") was sometimes misunderstood as requiring claimed process steps to be performed by non-generic hardware regardless of whether the functions performed were generic (i.e., “well-understood, routine, or conventional...”). The PTO is seeking additional examples to use for examiner training along with public comments about the new interim guidance. It has launched a website for the interim guidance, which will provide additional abstract idea examples.

**Conclusion**

Notably, the holding in Alice is necessarily in conflict with the desire to obtain the most expansive scope of patent claims in some ways. Inventors want to obtain a patent grant as broad as possible, perhaps even as close to the line of abstraction (without crossing it) as possible. Courts, however, want clarity and limits such that conceivable boundaries are established. To borrow from classic property law, “abstraction” in intellectual property is consequently like the coordinates where the metes and bounds of the patentee’s property line and the public trust are indistinguishable.

These lines are becoming clearer for software. What Alice rejected is the prior analysis of the Federal Circuit
and PTO that seemingly allowed for the patenting of systems and processes whose inventors relied upon only an iota of hardware to separate the patented invention from an underlying abstract idea or law of nature. Recent litigation affirms that software, like any subject-matter, is patent eligible, however, software must be drafted (and litigated) in such a way as to respect pre-emption considerations and prior case law, and to thoroughly establish the boundaries of the invention.

**Practice Tips**

1. **Use Alice as an offensive weapon in litigation.** Assert Alice early even at the pleading stage. Use Alice in your early letters to add bass to arguments and initial meetings with opponents.

2. **If on the defensive, use Alice’s affirmation of Mayo to insist upon claim construction even if the idea appears facially abstract.**

3. **Steer clear of concessions regarding an invention’s ability to be used on a generic computer.**

4. **Extract a concession that the method or process cannot be performed by a human alone.** See Helios.

5. **Complicate the inventions explanation, insist upon technology tutorials and utilize the most intricate embodiments.**

6. **Avoid arguments using descriptors in briefing such as “basic concept,” “fundamental” and “simple” these militate toward abstractness.**

7. **Use CyberSource in summary judgment—focus on human work/mental impression arguments to defeat abstract claims.**

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37 See Every Penny, 2014 BL 252750.
40 See DDR Holdings, 2014 BL 342453 (Fed. Cir. 2014).