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IS ALICE TEN FEET TALL?¹
NEW GUIDE FOR 'UNPATENTABLE' COMPUTER-ENABLED INVENTIONS

*Alice Corp. Pty. Ltd. v. CLS Bank International*² might be either a dream ruling for accused infringers or a nightmare for owners of computer-enabled patents. Relying on the Supreme Court's holding that merely requiring generic computer implementation fails to transform an abstract idea into a patent-eligible invention, more than 20 lower court opinions have invalidated patents in just six months. If the trend continues, *Alice* will certainly seem to be 10-feet tall.

Patentable Subject Matter and Exceptions to Patentability

Section 101 of the Patent Act defines patent-eligible subject matter as including "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof."³

For more than 150 years, the Court has interpreted § 101 to recognize an "implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable."⁴ This exception applies "no matter how groundbreaking, innovative, or even brilliant" the non-patentable invention may be.⁵

The driver of "this exclusionary principle [is] one of pre-emption."⁶ Laws of nature, natural phenomena, and abstract ideas are the "basic tools of scientific and technological work."⁷ Upholding a patent on a basic tool pre-empts use of that tool in all fields, effectively granting a monopoly and impeding innovation.⁸

The exclusion is not, however, as all-encompassing as it may sound. Even though an invention may use an abstract concept, it may be eligible for patent protection if it puts the concept to a "new and useful" end.⁹ Thus, in applying § 101, courts must distinguish between claims that seek to patent the building blocks of human ingenuity and those that integrate those building blocks "into something more" thus making them patentable.¹⁰

In its 2012 *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* opinion, the Court developed a two-step framework for distinguishing patents claiming unpatent-



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1 JEFFERSON AIRPLANE, *WHITE RABBIT, ON SURREALISTIC PILLOW*, (RCA VICTOR RECORDS, 1967) ("GO ASK ALICE, WHEN SHE'S TEN FEET TALL.")
2 ___ U.S. ___, 134 S. Ct. 2347 (2014) ("*Alice Corp.*").
3 35 U.S.C. § 101; see *Alice Corp.*, 134 S. Ct. at 2354.
4 *Alice Corp.*, 134 S. Ct. at 2354 (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. ___, 133 S. Ct. 2107, 2116 (2013) ("*Myriad*").
5 *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352 (Fed. Cir. 2014) (quoting *Myriad*, 133 S. Ct. at 2117).
6 *Alice Corp.*, 134 S. Ct. at 2354 (citing *Bilski v. Kappos*, 561 U.S. 593, 611-12 (2010) ("*Bilski*").
7 *Alice Corp.*, 134 S. Ct. at 2354 (quoting *Myriad*, 133 S. Ct. at 2116).
8 *Alice Corp.*, 134 S. Ct. at 2354 (citing *Bilski*, 561 U.S. at 611-12, and *Myriad*, 133 S. Ct. at 2116).
9 *Alice Corp.*, 134 S. Ct. at 2354 (citing *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972), and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. ___, ___, 132 S. Ct. 1289, 1293-94 (2012) ("*Mayo*").
10 *Alice Corp.*, 134 S. Ct. at 2354 (citing *Mayo*, 132 S. Ct. at 1303).

Patents at issue in *Alice Corp.* disclosed a computer-implemented scheme that uses an intermediary to mitigate the “settlement risk” that only one party to a transaction will pay what it owes.

In an opinion authored by Justice Clarence Thomas, a unanimous Court affirmed the Federal Circuit and “held that the claims at issue are drawn to the abstract idea of intermediated settlement, and that merely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention.”

able subject matter from those that claim innovative, patent-eligible applications of those concepts.¹¹

Under the *Mayo* framework, the court first determines whether the claims at issue are drawn to patent-ineligible laws of nature, natural phenomena or abstract ideas.¹² Then the court examines the claim’s elements to decide whether they embody “inventive concepts” sufficient to transform the claimed (and otherwise unpatentable) abstract idea into a patent-eligible application.¹³ This process for determining § 101 patent eligibility thus becomes a question of law for the courts.¹⁴ Though desirable, claim construction is not a prerequisite to a validity determination under § 101.¹⁵

Alice Corp. Applies and Clarifies *Mayo* in Computer Applications

Patents at issue in *Alice Corp.* disclosed a computer-implemented scheme that uses an intermediary to mitigate the “settlement risk” that only one party to a transaction will pay what it owes.¹⁶ The patents-in-suit claimed (1) a *method* for exchanging obligations to mitigate risk, (2) a computer *system* to carry out the method, and (3) computer-readable *media* with program code for performing the method.¹⁷ A computer implemented all of the claims.

District Court Opinion – Applying pre-*Mayo* law, the district court ruled that all of the claims-in-suit were patent ineligible because they were drawn to the abstract idea of “employing a neutral intermediary to facilitate simultaneous exchange of obligations in order to minimize risk.”¹⁸

Federal Circuit Opinion – On appeal, and shortly after the Court decided *Mayo*, a divided panel of the Federal Circuit Court of Appeals reversed the district court, finding that the claims were all directed to statutory subject matter under § 101.¹⁹ The Federal Circuit granted rehearing *en banc*. In a one-paragraph *per curiam* opinion, the divided court vacated the panel opinion and affirmed the district court.²⁰ The Supreme Court subsequently granted *Alice Corp.*’s petition for *writ of certiorari*.²¹

Supreme Court Affirms – The question the Court faced was whether the patents-in-suit were eligible under 35 U.S.C. § 101 or were instead drawn to an ineligible abstract idea.²² In an opinion authored by Justice Clarence Thomas, a unanimous Court affirmed the Federal Circuit and “held that the claims at issue are drawn to the abstract idea of intermediated settlement, and that merely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention.”²³ The Court analyzed the claims by applying the two-step *Mayo* test.

Abstract Idea Claimed

The Court determined that the claims-in-suit were based on the abstract idea of intermediated settlement.²⁴ To reach this conclusion, the Court highlighted key concepts:

11 *Mayo*, 132 S. Ct. 1289 (2012); *Alice*, 134 S. Ct. at 2355.

12 *Mayo*, 132 S. Ct. at 1296-97; *Alice Corp.*, 134 S. Ct. at 2355.

13 *Mayo*, 132 S. Ct. at 1294; *Alice Corp.*, 134 S. Ct. at 2357.

14 *Cyberfone Sys., LLC v. CNN Interactive Group, Inc.*, 558 F. App’x 988 (Fed. Cir. 2014).

15 *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1273 (Fed. Cir. 2012).

16 *Alice Corp.*, 134 S. Ct. 2351-52.

17 *Id.* at 2353.

18 *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 768 F. Supp. 2d 221, 252 (D.D.C. 2011).

19 *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341, 1356 (Fed. Cir. 2012).

20 *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1273 (Fed. Cir. 2013).

21 *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, ___ U.S. ___, 134 S. Ct. 734 (2013).

22 *Alice Corp.*, 134 S. Ct. at 2352.

23 *Id.*

24 *Id.* at 2355.

The Court characterized an “inventive concept” as “an 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.”

Merely incorporating a generic computer “cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”

- The exclusion of “abstract ideas” embodies the rule that “an idea of itself is not patentable.”²⁵ For example, in *Benson*, the Court rejected patent claims involving an algorithm for converting binary-coded decimal numerals into pure binary form, holding that the patent was “in practical effect . . . a patent on the algorithm itself.”²⁶
- A fundamental truth, original cause or motive simply cannot be patented.²⁷
- Where a claim involves a fundamental economic concept long prevalent in our economic system and taught in introductory finance courses, it involves an abstract idea.²⁸
- An abstract idea need not be a pre-existing, fundamental truth that stands apart from any human action.²⁹ A method for organizing human activity, even though not a “truth” about the natural world, is an abstract idea if it is a fundamental economic practice.³⁰
- The Court did not, however, “labor to delimit the precise contours of the ‘abstract ideas’ category.”³¹

No Inventive Concept

Because the claims at issue were directed to an abstract idea, the Court applied the *Mayo* framework’s second step and concluded that the claims, “which merely recite generic computer implementation, fail to transform that abstract idea into a patent-eligible invention.”³² In reaching this decision, the Court highlighted additional key concepts:

- At *Mayo* step two, the court examines the elements of the claim to determine whether it contains an “inventive concept.”³³ The Court characterized an “inventive concept” as “an 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.”³⁴
- Introducing a computer into the claims does not alter the analysis under *Mayo* step two. Merely incorporating a generic computer “cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”³⁵
- Stating an abstract idea then adding the words “apply it” is not enough for patent eligibility. Similarly, stating an abstract idea then adding the words “apply it with a computer” or “implement [an abstract idea] on . . . a computer” leads to the same result.³⁶
- In *Diamond v. Diehr*, the Court found a computer-implemented process patent eligible.³⁷ The claim in *Diehr* employed a well-known mathematical equation, but then used the equation in a novel technological process for curing rubber. This process was “something the industry had not been able to obtain.”³⁸

²⁵ *Id.* (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

²⁶ *Gottschalk*, 409 U.S. at 71-72.

²⁷ *Alice Corp.*, 134 S. Ct. at 2355 (citation omitted).

²⁸ *Id.* (citing *Bilski v. Kappos*, 561 U.S. 593, 611 (2010)).

²⁹ *Id.* at 2356.

³⁰ *Id.* (citation omitted).

³¹ *Id.* at 2357.

³² *Id.* at 2357.

³³ *Id.*

³⁴ *Id.* at 2355 (citing *Mayo*, 132 S. Ct. at 1294) (internal quotation marks omitted) (emphasis added).

³⁵ *Id.* at 2357, 2358.

³⁶ *Id.* at 2358 (citations omitted).

³⁷ 450 U.S. 175 (1981).

³⁸ *Diamond v. Diehr*, 450 U.S. at 185-88 (explanatory word “otherwise” added).

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Lower Courts Apply *Alice*³⁹

In the six months since the Court's *Alice Corp.* decision, the Federal Circuit and numerous district courts have invalidated more than 20 patents claiming computer-implemented ideas using generic computer components. Key post-*Alice Corp.* decisions by the Federal Circuit include:

- *Planet Bingo, LLC v. VKGS LLC*⁴⁰ – Claims drawn to computer-aided methods and systems for managing the game of bingo could be performed manually, were directed to an abstract idea, recited a generic computer implementation of the abstract idea, and where thus not patentable under 35 U.S.C. § 101.
- *buySAFE, Inc. v. Google, Inc.*⁴¹ – A method to perform steps for guaranteeing a party's performance of an online sales transaction was "squarely about creating a contractual relationship" and "beyond the question of ancient lineage." It was "straightforward" to conclude that the claim was not patent eligible.
- *Digitech Image Techs., LLC v. Electronics for Imaging, Inc.*⁴² – A method claim for generating a device profile in a digital image reproduction system claims an abstract idea "so abstract and sweeping as to cover any and all uses of a device profile" and is not patent eligible.

Representative post-*Alice Corp.* district court opinions include:

- *McRo, Inc. v. Valve Corp.*⁴³ – Claims to a method for automatically animating lip synchronization and facial expression of animated characters were invalid under 35 U.S.C. § 101.
- *Helios Software, LLC v. SpectorSoft Corp.*⁴⁴ – The court granted a motion for summary judgment on a defense of lack of patentable subject matter when the accused infringer failed to provide support for its argument that were drawn to an abstract idea. In addition, the claims satisfied the machine-or-transformation test.
- *Wolf v. Capstone Photography, Inc.*⁴⁵ – A process patent for providing event photos for inspection and distribution via a computer network was directed to patent ineligible abstract ideas and lacked an inventive concept.

Conclusions

Alice Corp. and its progeny have already altered patent litigation. Wise litigators will:

- Recognize that virtually every computer-driven patent will likely relate to an "abstract idea."
- Undertake a detailed *Mayo* analysis to identify—or demand identification of—an "inventive concept" before asserting or defending against claims of infringement of computer-powered patents. Many of the foregoing cases were decided on Rule 12(b) motions.
- Understand that a § 285 finding of an "exceptional case" becomes a distinct possibility if a patentee initiates or pursues litigation on a fatally flawed claim.
- If not already completed, immediately evaluate patents-in-suit to determine whether the patents could survive a § 101 challenge.
- Consult with prosecution colleagues to discuss strategies for drafting stronger patent-eligible claims.

³⁹ Many thanks to my colleague Andrew Cooper for sharing the fruits of his research on post-*Alice Corp.* cases with me.

⁴⁰ No. 2013, 1663, 2014 WL 4195188, *1-3 (Fed. Cir. Aug 26, 2014).

⁴¹ 765 F.3d 1350, 1351-55 (Fed. Cir. 2014).

⁴² 758 F.3d 1344, 1351 (2014) (internal citations omitted).

⁴³ No. CV 13-1874-GW, 2014 WL 4772200, *1-13 (C.D. Cal. Sept. 22, 2014).

⁴⁴ No. 12-081-LPS, 2014 WL 4796111, *16-18 (D. Del. Sept. 18, 2014).

⁴⁵ No. 2:13-CV-09573, slip op. at 1-25 (C.D. Cal. Oct. 28, 2014).