

CASE UPDATE

ALICE CORP. V. CLS BANK INT'L

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Congress has the power “to promote the Progress of Science and useful Arts.”¹ Patent law subject matter eligibility under 35 U.S.C. section 101 creates a balance between incentivizing inventors to publicly disclose their knowledge and protecting the public from monopolies on ideas. Allowing inventors to monopolize the basic tools of scientific and technological work might “tend to impede innovation more than it would tend to promote it.”² “Laws of nature, natural phenomena, and abstract ideas” constitute unpatentable subject matter under section 101.³ The section 101 inquiry serves as a threshold test to determine if the subject matter of the patent is directed to a general idea or a “new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.”⁴ The 2014 *Alice Corp. v. CLS Bank Int'l*⁵ (“*Alice*”) decision became the first Supreme Court decision since *Bilski v. Kappos*⁶ to address the section 101 subject matter analysis for software.⁷

In May 2007, CLS Bank International and CLS Services Ltd. (“CLS”) filed suit against Alice Corp. in the U.S. District Court for the District of Columbia, seeking a declaratory judgment that CLS was not infringing Alice Corp.’s patents and that the patents in question were unenforceable.⁸ The patents at issue were directed to 1) a method for financial exchange, 2) a computer system used as a third-party intermediary, and 3) “a computer-readable

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¹ U.S. CONST., art. I, § 8, cl. 8.

² *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1293 (2012).

³ *Assn. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013).

⁴ 35 U.S.C. § 101 (2012).

⁵ *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2349-50 (2014).

⁶ *Bilski v. Kappos*, 561 U.S. 593, 601 (2010).

⁷ Timothy B. Lee, *Will the Supreme Court Save Us from Software Patents?*, WASH. POST (Feb. 26, 2014), <http://www.washingtonpost.com/blogs/the-switch/wp/2014/02/26/will-the-supreme-court-save-us-from-software-patents/> (archived at <http://perma.cc/5JK9-3ANW>).

⁸ *CLS Bank Int'l v. Alice Corp.*, 768 F. Supp. 2d 221, 255 (D.D.C. 2011).

medium containing program code for performing the method of exchanging obligations.”⁹ CLS contended that all of Alice Corp.’s patents were invalid under section 101 for lack of patent-eligible subject matter.¹⁰ Alice Corp. filed a cross-motion for partial summary judgment, asking the court to find that the claims at issue were directed to patent-eligible subject matter.¹¹ The district court granted CLS’s motion for summary judgment in full, finding that all claims at issue were directed to unpatentable subject matter.¹² The court invalidated Alice’s patent claims under section 101, maintaining that the patents represented “merely the incarnation of [an] abstract idea on a computer, without any further exposition or meaningful limitation.”¹³ According to the court, Alice’s patented methodology of minimizing risk represented a “basic business or financial concept” that “remains a fundamental, abstract concept.”¹⁴

Alice appealed the decision to the United States Court of Appeals for the Federal Circuit.¹⁵ In 2012, that court reversed the district court’s decision in a two-to-one vote, finding that the process and product claims constituted patent-eligible subject matter under section 101.¹⁶ The court acknowledged that “mere computer implementation cannot render an otherwise abstract idea patent eligible.”¹⁷ The court found that the district court ignored the claim limitations, treating the claims at issue “as encompassing nothing more than fundamental truths.”¹⁸ The court emphasized that subject-matter eligibility under section 101 considers “the limitations of the *claims as a whole*” rather than the computer implementation component standing alone.¹⁹ The court of appeals said that unless it is “manifestly evident that the claims are patent ineligible under [section] 101,” the subject matter at issue is patent-eligible.²⁰

CLS successfully petitioned for an en banc hearing. Seven judges from the ten judge panel affirmed the district court’s ruling that the patents at issue were not directed to patent-eligible subject matter.²¹ The panel issued no majority opinion, nor did the panel declare a rule to determine if a computer-implemented invention is directed to patentable subject matter.²²

⁹ *Alice Corp.*, 134 S. Ct. at 2349.

¹⁰ *CLS Bank Int’l*, 768 F. Supp. 2d at 223.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.* at 252.

¹⁴ *Id.* at 243-44.

¹⁵ *CLS Bank. Int’l v. Alice Corp.*, 685 F.3d 1341, 1343 (Fed. Cir. 2012).

¹⁶ *Id.*

¹⁷ *Id.* at 1353.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.* at 1356.

²¹ *CLS Bank Int’l v. Alice Corp.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc).

²² *Id.*

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In 2013, Alice Corp. petitioned the U.S. Supreme Court for a writ of certiorari.²³ The Court granted certiorari on the question “whether claims to computer-implemented inventions – including claims to systems and machines, processes, and items of manufacture – are directed to patent-eligible subject matter within the meaning of section 101.”²⁴ The Supreme Court unanimously upheld the en banc determination that the patents were directed to a patent-ineligible abstract idea.²⁵

The Court determined that the claims concerning settlement risk mitigation were “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.”²⁶ The unanimous decision rested on the concern of pre-emption, in that allowing Alice Corp. to hold patents on mitigating settlement risk would “effectively grant a monopoly over an abstract idea.”²⁷

The Court used the *Mayo Collab. Service v. Prometheus Labs.* framework to distinguish patent eligible and ineligible subject matter under section 101.²⁸ First, the Court looked to “whether the claims at issue [were] directed to . . . a law of nature, natural phenomena, or abstract idea.”²⁹ Second, the Court asked “what else is there in the claims,” looking to “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.”³⁰

The Court found that the claims at issue were directed to a patent-ineligible concept of intermediated settlement.³¹ Comparing the claims to those in *Bilski v. Kappos*, the Court determined that the “method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk” were a “fundamental economic practice long prevalent in our system of commerce.”³² The third party intermediary was a “building block of the modern economy,” and therefore intermediated settlement was patent-ineligible subject matter.³³ The Court rejected Alice Corp.’s contention that an abstract idea is confined to “preexisting fundamental truths that exist in

²³ *CLS Bank Int’l v. Alice Corp.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc), cert granted, (U.S. Dec. 6, 2013) (No. 13-298).

²⁴ *Id.*

²⁵ *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2352 (2014).

²⁶ *Id.*

²⁷ *Id.* (citing *Bilski v. Kappos*, 561 U.S. 593, 611-12 (2010)).

²⁸ *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1293 (2012)).

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.* (citing *Bilski v. Kappos*, 561 U.S. 593, 611-12 (2010)).

³³ *Id.*

principle apart from any human action,”³⁴ determining that there was “no meaningful distinction” between the risk-hedging process in *Bilski* and Alice Corp.’s intermediated settlements patents.³⁵ Still, the Supreme Court refused to “delimit the precise contours of the ‘abstract ideas’ category in this case.”³⁶

This finding paralleled the Google, Amazon.com, and Netflix amicus brief in support of respondents.³⁷ The companies advocated for invalidating Alice Corp.’s patents for abstract subject matter.³⁸ They compared the abstract ideas found in the Alice Corp. patents to subject matter that would be patent-eligible: “designing, analyzing, building, and deploying the [computer] interface, software, and hardware to implement that idea in a way that is useful in daily life.”³⁹ Alice Corp.’s patents foreclose the manufacture and use of different applications of the abstract idea by “broadly claiming an idea when done on a computer or over the Internet.”⁴⁰ The abstract idea doctrine requires that the inventor limit their patent to “a specific set of practical applications of an idea” such that subsequent inventors can improve upon the basic invention and profit from that improvement.⁴¹ Referencing the high cost of patent litigation and the growth of the software industry, the amici argued that the abstract claims were “impairing and taxing innovation in the high-tech sector.”⁴²

The Court then turned to the second prong of the *Mayo* inquiry: whether the claim contains “an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.”⁴³ The Court asked whether Alice Corp.’s patents included “‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’”⁴⁴ Pursuant to the *Mayo* decision, the Court explained that “simply appending conventional steps specified at a high level of generality” does not constitute an inventive concept.⁴⁵

To explain why Alice Corp.’s patents do not sufficiently transform the concept of intermediated settlement into patentable subject matter, the Court

³⁴ Brief for Petitioner at 23, *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (No. 13-298).

³⁵ *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2357 (2014).

³⁶ *Id.* at 2357.

³⁷ Brief for Google Inc., et al. as Amici Curiae Supporting Respondents, *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (No. 13-298).

³⁸ *Id.* at 8.

³⁹ *Id.* at 41.

⁴⁰ *Id.* at 42.

⁴¹ *Id.* at 43 (citing Mark A Lemley et al., *Life after Bilski*, 63 STAN. L. REV. 1315, 1317 (2011)).

⁴² *Id.* at 41-53.

⁴³ *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2357 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1294 (2012)).

⁴⁴ *Id.* (citing *Mayo Collaborative Servs.*, 132 S. Ct. at 1291).

⁴⁵ *Id.*

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looked to its previous holdings in *Benson*, *Flook*, and *Diehr*. In *Benson*, the Court found that implementing an algorithm on a “general-purpose digital computer” did not constitute a new and useful application of the idea, such that it became patent-eligible under section 101.⁴⁶ Similarly, the *Flook* Court held that “implement[ing] a principle in some specific fashion” will not “automatically [fall] within the patentable subject matter of [section] 101.”⁴⁷ Limiting the use of an abstract idea within a specific technological environment does not transform the idea into patent-eligible subject matter.⁴⁸ Comparatively, the *Diehr* Court determined that a process for curing rubber was patent eligible, despite dependency on the Arrhenius Equation.⁴⁹ This process was deemed patent-eligible because it “improved an existing technological process” and not because of its computer implementation.⁵⁰

The *Alice* Court determined that the patented claims amounted to nothing more than implementation of an abstract idea on a computer.⁵¹ “[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”⁵² To avoid determining patent eligibility on the skill of a draftsman, the Court could not hold that reciting a computer system that implemented a physical or social science concept was always patent eligible simply because computers “necessarily exist in the physical, rather than the purely conceptual realm.”⁵³

The Court analyzed each claim element separately and “as an ordered combination.”⁵⁴ When analyzed separately, the Court determined that the individual computer functions were “purely conventional.”⁵⁵ The Court found that “each step does no more than require a generic computer to perform generic functions.”⁵⁶ When the Court later analyzed the claim language “as an ordered combination,” the Court agreed with Judge Lourie of the Court of Appeals for the Federal Circuit that the claimed methods “simply recite the

⁴⁶ *Alice Corp.*, 134 S. Ct. at 2357 (citing *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972)).

⁴⁷ *Parker v. Flook*, 437 U.S. 584, 593 (1978).

⁴⁸ *Bilski v. Kappos*, 561 U.S. 593, 610 (2010).

⁴⁹ *Diamond v. Diehr*, 450 U.S. 175, 177 (1981).

⁵⁰ *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2358 (2014).

⁵¹ *Id.* (citing *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1301 (2012)).

⁵² *Id.* This is a test advocated in Brief for Balsam Hill LLC, et al. as Amici Curiae in Support of Neither Party, *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014) (No. 13-298) (“The Retailers do not seek to pick a winner or loser in this litigation, but rather to urge the Court to adopt a threshold test for patentability under 35 U.S.C. [section] 101, namely, that computer-implementation cannot create patentable subject matter.”).

⁵³ *Id.* at 2358-59.

⁵⁴ *Id.* at 2359.

⁵⁵ *Id.* (citing *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1298 (2012)).

⁵⁶ *Id.*

concept of intermediated settlement as performed by a generic computer.”⁵⁷ The use of an unspecified generic computer to apply intermediated settlement is not sufficient to “transform an abstract idea into a patent-eligible invention.”⁵⁸ Furthermore, the Court found that “the system claims are no different from the method claims in substance.”⁵⁹

Justices Sotomayor, Ginsburg, and Breyer joined the majority opinion, but wrote separately that business methods should be categorically barred from patent eligibility under section 101.⁶⁰ This echoed the arguments in the *Microsoft Corp., et al.* amicus brief, which stating that, though software-implemented technologies are patent-eligible, the *Alice Corp.* patents were directed to unpatentable business methods.⁶¹ In the introduction, the amici explained that the patents in question are not a true computer-implemented invention, but “rather a business method posing as one.”⁶² They further argued that, due to economic issues and potential unforeseen impacts, the Court should not address the patentability of computer-implemented inventions and software as a whole.⁶³

The Court appeared to follow this advice, in that the *Alice* decision never mentioned the word “software.”⁶⁴ Furthermore, the Court never addressed the argument that the *Alice* patents are invalid under 35 U.S.C. sections 102 (anticipation) or 103 (obviousness).⁶⁵ Additionally, though many requested the Court to articulate a clear, specific rule of patentability with respect to software or computer-implemented processes, the Supreme Court simply stated that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.”⁶⁶ Justice Thomas explicitly refused to write a more specific test, stating “we need not labor to delimit the precise contours of the “abstract ideas” category in this case. 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.”⁶⁷ However, Justice Thomas did explain that subject matter eligibility analysis

⁵⁷ *Id.* (citing *CLS Bank Int’l v. Alice Corp.*, 717 F.3d 1269 (Fed. Cir. 2013) (en banc) (Lourie, J., concurring)).

⁵⁸ *Id.* at 2360 (citing *Mayo Collaborative Servs.*, 132 S. Ct. at 1298).

⁵⁹ *Id.*

⁶⁰ *Id.* (*Bilski v. Kappos*, 561 U.S. 593, 614 (2010)).

⁶¹ Brief for Microsoft Corp., et al., Amici Curiae in Support of Affirmance, *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (No. 13-298), U.S. S. Ct. Briefs Lexis 780 (Feb. 27, 2014) 2-14.

⁶² *Id.* at 7-8.

⁶³ *Id.*

⁶⁴ *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014).

⁶⁵ Margo Livesay, Ph.D., as Amicus Curiae Supporting Neither Party and Suggesting Reversal, *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (No. 13-298).

⁶⁶ *Alice Corp.*, 134 S. Ct. at 2358.

⁶⁷ *Id.* at 2357.

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under section 101 must evaluate the “risk of pre-emption” to distinguish between abstract ideas and those that transform those abstract ideas into patent-eligible inventions.⁶⁸

Many intellectual property attorneys and scholars were not satisfied with the Court’s decision.⁶⁹ Scott Alter, Chair of the American Bar Association’s Post-*Alice* Task Force, has said that “if [an entity’s] primary interest is in a strong patent system that protects and rewards innovation, [*Alice*] is arguably not a good decision.”⁷⁰ Professor Robert Merges, Director of the Berkeley Center for Law & Technology, opined: “To say we did not get an answer is to miss the depth of the non-answer we did get.”⁷¹ The Supreme Court did not invalidate the patent eligibility of all software or business methods.⁷² Many have called the case overbroad, though this characterization may be based on the Federal Circuit’s application of the decision, rather than the text itself.⁷³

While the Court cautioned lower courts to “tread carefully in construing [the] exclusionary principle” outlined in *Alice*, lower courts have applied the *Alice* decision to many technological fields, including business methods, digital image management, and medical records.⁷⁴ Between June 2014 and January 2015, the Federal Circuit has invalidated 344 of 377 claims related to business method patents and computerization under *Alice*.⁷⁵ Similarly, district courts have invalidated approximately three-fourths of all claims under the *Alice* decision.⁷⁶ District courts invalidated all claims in ten patents under a Rule 12 motion, finding there was no plausible interpretation of the claims that would create a valid patent.⁷⁷

The Federal Circuit seems to ignore the Court’s preemption analysis, looking just to whether there were additional articulated limitations to modify a “process that employs mathematical algorithms to manipulate existing

⁶⁸ *Id.* at 2354-55.

⁶⁹ Gene Quinn, *The Road Forward for Software Patents Post-Alice*, IPWATCHDOG (Feb. 25, 2015), <http://www.ipwatchdog.com/2015/02/25/the-road-forward-for-software-patents-post-alice/id=55142/> (archived at <http://perma.cc/2928-TZCY>).

⁷⁰ *Id.*

⁷¹ Robert Merges, *Symposium: Go Ask Alice – What Can You Patent after Alice v. CLS Bank?*, SCOTUSBLOG (June 20, 2014, 12:04 PM), <http://www.scotusblog.com/2014/06/symposium-go-ask-alice-what-can-you-patent-after-alice-v-cls-bank/> (archived at <http://perma.cc/Q7VR-7BPU>).

⁷² Quinn, *supra* note 69 (stating “so it could have been worse . . . but I don’t know if that makes it a good decision.”).

⁷³ *Id.*

⁷⁴ Robert R. Sachs, *A Survey of Patent Invalidations Since Alice*, LAW360 (Jan. 13, 2015, 10:25 AM), <http://www.law360.com/articles/604235/a-survey-of-patent-invalidations-since-alice> (archived at <http://perma.cc/WJ58-6Z4V>).

⁷⁵ *Id.*

⁷⁶ *Id.* (invalidating 1,488 claims and upholding 535 claims).

⁷⁷ *Id.*

information.”⁷⁸ Some district courts are following suit.⁷⁹ Ignoring the preemption analysis can allow courts to “reach any patentability outcome it desires” by allowing the court to decide significant limitations, as opposed to the marketplace where the invention is used.⁸⁰ Furthermore, the Federal Circuit has used limitations to invalidate patents, such as “mental steps,” that the Court never articulated, in *Alice* or in any preceding patent case.⁸¹ Still, some district courts correctly identify that, under *Alice*, software remains patentable and courts must conduct a preemption analysis to protect this status.⁸²

The U.S. Patent and Trademark Office issued the 2014 Interim Guidance on Patent Subject Matter Eligibility for “USPTO personnel to use when determining subject matter eligibility under section 101.”⁸³ This synthesized the decision in *Alice*, providing examples and explanations distinguishing patent-eligible subject matter from abstract ideas. The Guidance explained that an examiner must first determine if a claim is “directed to a law of nature, natural phenomenon, or abstract idea.”⁸⁴ If so, the claim as a whole should amount “to significantly more than the exception” to be patent-eligible.⁸⁵

Though the *Alice* decision still does not specifically articulate examples of claims that would be patent-eligible, patent applicants can use the post-*Alice* decision of *DDR Holdings, LLC v. Hotels.com, LP* as a reference.⁸⁶ The *DDR* method patent articulated a method of “generating a composite website page that combines . . . visual elements of a ‘host’ website with content of a third-party merchant,” so that a third-party advertisement would “retain the host website’s ‘look and feel.’”⁸⁷ The Federal Circuit found that this method was

⁷⁸ Sachs, *supra* note 74; see *Digitech Image Tech., LLC, v. Elecs. for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014); *Planet Bingo, LLC v. VKGS, LLC*, 2014 WL 4195188 (C.A. Fed. Mich., Aug. 26, 2014).

⁷⁹ Sachs, *supra* note 74.

⁸⁰ *Id.*

⁸¹ *Id.*; see also *Planet Bingo*, 2014 WL 4195188.

⁸² *Enfish, LLC v. Microsoft Corp.*, 2014 WL 5661456 (C.D. Cal. Nov. 3, 2014).

⁸³ 2014 Interim Guidance on Subject Matter Eligibility, U.S. PATENT & TRADEMARK OFFICE, available at <http://www.uspto.gov/patent/laws-and-regulations/examination-policy/2014-interim-guidance-subject-matter-eligibility-0> (archived at <http://perma.cc/B7GD-RYDD>).

⁸⁴ 2014 Interim Eligibility Guidance Quick Reference Sheet, U.S. PATENT & TRADEMARK OFFICE, available at http://www.uspto.gov/patents/law/exam/2014_eligibility_qrs.pdf (archived at <http://perma.cc/5VEL-6D8C>).

⁸⁵ *Id.*

⁸⁶ Jim Singer, *Patent-eligibility after Alice: a Summary of Decisions that Found Software Inventions Eligible for Patenting*, IP SPOTLIGHT (Nov. 25, 2014), <http://ipspotlight.com/2014/11/25/patent-eligibility-after-alice-a-summary-of-decisions-that-found-software-inventions-eligible-for-patenting/> (archived at <http://perma.cc/76QG-TWA6>).

⁸⁷ *DDR Holdings, LLC v. Hotels.com*, 733 F.3d 1245, 1248 (Fed. Cir. Dec. 5, 2014)

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not “[reciting] a mathematical algorithm [or] a fundamental economic or longstanding economic practice.”⁸⁸ Instead, the solution “is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”⁸⁹ Furthermore, the Patent Trial and Appeal Board has issued *U.S. Bancorp v. Solutran, Inc.*, determining that the method of processing checks and check transactions “is more akin to a physical process than an abstract idea” and the claim elements “are not fundamental economic practices, mathematical algorithms, or basic tools of scientific and technological work.”⁹⁰ It remains to be seen whether the *Alice* decision will become clearer or murkier over time. For now, many software and computer-implemented inventions remain in patent limbo under section 101.

⁸⁸ *Id.* at 1257.

⁸⁹ *Id.*

⁹⁰ *U.S. Bancorp v. Solutran, Inc.*, No. CBM2014-00076, 2014 WL 3943913, *7 (PTAB Aug. 7, 2014).