ELECTRONIC FRONTIER FOUNDATION

COMMENTS OF THE ELECTRONIC FRONTIER FOUNDATION REGARDING GUIDANCE PERTAINING TO PATENT-ELIGIBLE SUBJECT MATTER

Docket No. PTO–P–2014–0036

The Electronic Frontier Foundation ("EFF") is grateful for this opportunity to respond to the request by the United States Patent and Trademark Office ("PTO") for comments regarding the Supreme Court's decision in *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014) ("*Alice*") and patent-eligible subject matter.

EFF is a nonprofit civil liberties organization that has worked for more than 20 years to protect consumer interests, innovation, and free expression in the digital world. EFF and its more than 27,000 dues-paying members have a strong interest in helping the courts and policy-makers in striking the appropriate balance between intellectual property and the public interest. As an established advocate for consumers and innovators, EFF has a perspective to share that might not be represented by other persons and entities who submit comments in this matter, where such other commentators do not speak directly for the interests of consumers or the public interest generally.

I.   Introduction

EFF welcomes the PTO's call for public comment regarding patentable subject matter. The Supreme Court's decision in *Alice* radically alters the standards for computer-implemented inventions. Under some prior Federal Circuit authority, a programed general purpose computer was a patent-eligible machine. Thus, eligibility questions rarely arose for computer-implemented inventions. Under *Alice,* however, a conventional computer "configured" to achieve nothing more than a particular function should be found to be directed to a patent-ineligible abstract idea. This will likely lead to many claims being rejected. The PTO's guidance should reflect this change and ensure that examiners properly implement the new legal standard.

II.   The PTO should clarify that *Alice* significantly changes the law of patent eligibility.

Some commentators have misinterpreted the PTO's preliminary instructions as stating that *Alice* made no meaningful change to how subject matter eligibility should be evaluated.[1] In particular, these commentators have focused on the PTO's statement that "the basic inquires to determine subject matter eligibility remain the same." In context, it is clear that this language was referring only to the first step of the inquiry (determining whether the claim is directed to one of the four statutory categories) as described at MPEP 2106(I). But this language has still been misinterpreted, whether willfully or not, as an instruction that *Alice* made no substantive difference.

The PTO should clarify and explain that *Alice* establishes a markedly different substantive framework. For example, the MPEP previously cited *Alappat*[2] for the principle that a general purpose computer becomes "a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software." MPEP 2106(II)(B)(1)(a). The MPEP also cited the now vacated decision in *Ultramercial v. Hulu*, 657 F.3d 1323, 1329 (Fed. Cir. 2011) for a similar proposition. After *Alice*, these statements are no longer good law.

When the Federal Circuit considered Alice's patent *en banc*, the judges debated whether *Alappat* remained good law. *See CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, *passim* (Fed. Cir. 2013). In his concurrence in part, Chief Judge Rader argued that the Federal Circuit should continue to follow *Alappat* and therefore should hold the system claims patentable. *See id.* at 1305, 1316 (urging that "the Supreme Court has never cast doubt on the patentability of claims such as those at issue in *In re Alappat* or the system claims at issue in this case"). In contrast, five judges voted to invalidate the system claims, reasoning that, in light of subsequent Supreme Court authority, they could no longer rely on *Alappat*. Judge Lourie wrote:

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[1] *See, e.g.*, Gene Quinn, *Examiners Begin Issuing Alice Rejections for Software*, IPWatchdog (July 14, 2014), http://www.ipwatchdog.com/2014/07/14/examiners-begin-issuing-alice-rejections-for-software/ (claiming that the June 25, 2014 preliminary examination instructions "told patent examiners that while the framework of the analysis had changed the substance of the analysis had not changed").

[2] *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (en banc).

We are faced with abstract methods coupled with computers adapted to perform those methods. And that is the fallacy of relying on *Alappat*, as the concurrence in part does. Not only has the world of technology changed, but the legal world has changed. The Supreme Court has spoken since *Alappat* on the question of patent eligibility, and we must take note of that change.

Id. at 1305.

The Supreme Court's decision in *Alice* confirmed that Judge Lourie's concurrence was correct. As Chief Judge Rader noted, if *Alappat* remained good law then Alice's system claims would have been upheld. To the contrary, the Supreme Court held that "generic computer components" do *not* become patent eligible simply upon being "configured" to perform "specific computerized functions." *Alice*, 134 S. Ct. at 2360. This is an express rejection of *Alappat*'s holding. The PTO's guidance should reflect this change and clearly state that a programmed general purpose computer implementing abstract ideas does not satisfy 35 U.S.C. § 101.

III.   The PTO should expand its preliminary guidance to include the full scope of *Alice*'s holding.

A.   The PTO should explain that functionally-described results implemented on a general purpose computer are abstract ideas (*Mayo* step one).

The first step under *Mayo* involves determining whether the claims are directed to a patent-ineligible concept such as a law nature, natural phenomena, or an abstract idea. *See Alice,* 134 S. Ct. at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). The PTO's preliminary examination instructions briefly list four categories of abstract ideas mentioned in *Alice*. While this list is correct, the PTO should expand this discussion to help examiners identify patent-ineligible abstract ideas implemented in conventional computers.

The *Alice* decision clarifies that abstract ideas are not limited to universal or foundational truths. In its briefing before the Supreme Court, petitioner Alice Corporation argued at length that the judicial exception for abstract ideas only extended to preexisting, fundamental truths equivalent to a law of nature. *See* Brief for Petitioner at 19-29, *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, No. 13-298, 2014 WL 262088 (Jan 21, 2014). The Supreme Court soundly rejected this

argument. *See Alice*, 134 S. Ct. at 2356-57. The Court made it clear that concepts such as a way of doing business—like the economic practice at issue in *Bilski*[3]—were abstract ideas. *Id.*

Furthermore, the Supreme Court made it clear that conventional computer processes were not sufficient to render a claim on an abstract idea non-abstract. *Alice*, 134 S. Ct. at 2360. While this guidance is directed to *Mayo* step two (discussed further below), it also provides a very important guide for determining when a claim is likely to be directed to an abstract idea: if a claim recites only conventional computer processes it is highly likely to be directed to an abstract idea. Indeed, such claims—considered as a whole—are essentially of the form "do X with a computer" where X is the abstract idea.

Diligently applying this standard will likely lead examiners to conclude that many computer-related patent claims are directed to patent-ineligible subject matter. As commentators have noted, many patent applications present a wish-list of functions that the applicant suggests might be performed by a computer. *See generally* Mark A. Lemley, *Software Patents and the Return of Functional Claiming,* 2013 Wis. L. Rev. 905, 908 (2013); *cf.* Oral Argument at 8:22-23, *Alice Corporation Pty. Ltd. v. CLS Bank International*, No. 13-298, available at http://www.supremecourt.gov/oral_arguments/argument_transcripts/13-298_869d.pdf (Justice Sotomayor noting that "all I'm seeing in this patent is the function of reconciling accounts"). When claims recite only generic computer components—such as a memory or a processor—for their conventional operations, such claims are almost certainly invalid.

B.   The PTO should clarify that computer-implementation does not mean that a claim amounts to more than an abstract idea (*Mayo* step two).

To apply *Mayo*'s second step, examiners must determine whether any element or combination of elements is sufficient to ensure that the claim amounts to *significantly more* that the abstract idea itself. As already discussed, the key holding of *Alice* is that generic computer components or operations, alone or in combination, will *not* be enough to ensure the claim is not abstract. The PTO should expand its guidelines to help examiners identify patents where the claims are directed to no more than a configured general-purpose computer.

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[3] *Bilski v. Kappos*, 130 S. Ct. 3218 (2010).

In *Alice*, the Supreme Court lists a number of examples of limitations that would not be sufficient to make a claim patent-eligible. As the PTO's preliminary instruction note, these examples were non-exclusive. Nevertheless, the examples provide a clear roadmap—essentially mapping a zone of unpatentable subject matter with configured conventional computers at its core. The first example in *Alice* is also the easiest case. This is the patent claim that describes an abstract idea and them merely adds language to the effect of "apply it with a computer." *Alice*, 134 S. Ct. at 2358. Such claims are plainly invalid under *Alice* and examiners should be encouraged to promptly reject them.

The Supreme Court makes it clear that its holding extends beyond this most basic case. Rather than simply saying, "apply it with a computer," many patent claims list a variety of steps and functions to be performed a computer. Indeed, this was the case in *Alice*. As the Supreme Court explained:

> Taking the claim elements separately, the function performed by the computer at each step of the process is "[p]urely conventional." Using a computer to create and maintain "shadow" accounts amounts to electronic recordkeeping—one of the most basic functions of a computer. … The same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are "well-understood, routine, conventional activit[ies]" previously known to the industry. … In short, each step does no more than require a generic computer to perform generic computer functions.

Alice, 134 S. Ct. at 2359 (internal citations omitted); *see also Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012), *cert denied*, 134 S. Ct. 2870 (Jun 30, 2014) (holding that the "use of a computer in an otherwise patent-ineligible process for no more than its most basic function—making calculations or computations—fails to circumvent the prohibition against patenting abstract ideas and mental processes."). Following this approach, examiners should be directed to evaluate whether each step of a patent claim requires only conventional computer operations. Conventional computers have many well-known components and operations. These components include: input and output devices, screens and displays, processors, fixed and removable storage media, and cloud storage. Conventional computer operations include: retrieving data, responding to requests, calculating data, displaying data, transmitting data, storing data, and processing data. Examiners should also be directed to look for cases where an applicant has invented a synonym for a conventional computer feature. *See,*

e.g., Joel Spolsky, *Victory Lap for Ask Patents*, July 22, 2013, *available at* http://www.joelonsoftware.com/items/2013/07/22.html (discussing a patent application that "used terms like 'pixel density' for something that every other programmer in the world would call 'resolution'."). Many claims, considered as a whole, are likely to recite a series of conventional operations performed by a general purpose computer.

Other examples listed in *Alice* provide further guidance. Perhaps most significant are the Court's direction to consider whether the claimed invention "improve[s] the functioning of the computer itself" or includes limitations that move the invention "beyond generally linking the use of an abstract idea to a particular technological environment." *Alice*, 134 S. Ct. at 2358-59. An improvement as to how to use an existing computer, for example by programming it for a new purpose, is not an improvement to the functioning of the computer itself. Similarly, a claim that limits conventional computer operations to a particular field, for example by making calculations regarding real estate data[4], bulk sales of consumer goods[5], advertising data[6], or image data[7], does not improve the working of a computer. Indeed, such patents simply link the application of an abstract idea to a particular business environment. The PTO should make clear that any claimed invention that takes data as its input and has data as its output should be invalid under the *Alice* standard.

IV. The PTO should devote additional resources to ensure that all pending applications, including those where a notice of allowance has been sent, are reviewed under *Alice*.

The PTO should ensure that all pending applications are reviewed under *Alice*. EFF has noted patents issuing post-*Alice* that we believe are plainly ineligible under the Supreme Court's ruling. For example, U.S. Patent No. 8,762,173, titled "Method and Apparatus for Indirect Medical Consultation," issued on June 24, 2014 *after* the decision in *Alice* (the notice of allowance was sent prior to *Alice* on May 2, 2014). The claims in that patent are directed to a routine telephone interaction between a patient and medical clinic. After describing six abstract

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[4] *See, e.g.*, U.S. Patent No. 8,630,974.

[5] *See, e.g.*, U.S. Patent No. 5,970,470.

[6] *See, e.g.*, U.S. Patent No. 7,346,545.

[7] *See Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.*, -- F.3d. --, 2014 WL 3377201 (Fed. Cir. July 11, 2014).

steps (such as "recording" and "transmitting" information), claim 1 of this patent concludes with the language: "providing a computer, the computer performing [the] steps." It is difficult to imagine language more clearly improper under *Alice*. This patent should have been rejected. Given the extraordinary cost of invalidating improperly-issued patents in post-grant review or litigation, it is far more efficient for the PTO to review pending applications to ensure *Alice* is applied.

V.   Conclusion

EFF again thanks the PTO for the opportunity to comment regarding *Alice* and patent-eligible subject matter. A diligent application of *Alice* will likely prevent thousands of invalid, abstract patents from issuing. While this result will be unpopular with some accustomed to the pre-*Alice* standards, the PTO should not hesitate to faithfully apply the law.

Respectfully submitted,

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