ELECTRONIC FRONTIER FOUNDATION

COMMENTS OF THE ELECTRONIC FRONTIER FOUNDATION REGARDING REQUEST FOR COMMENTS REGARDING SUBJECT MATTER ELIGIBILITY

Docket No. PTO–P–2016–0041

The Electronic Frontier Foundation ("EFF") is grateful for this opportunity to respond to the request by the United States Patent and Trademark Office ("USPTO") for comments regarding the USPTO's Request for Comments Related to Patent Subject Matter Eligibility. EFF is a nonprofit civil liberties organization that has worked for more than 25 years to protect consumer interests, innovation, and free expression in the digital world. EFF and its more than 33,000 dues-paying members have a strong interest in helping the courts and government agencies ensure that intellectual property policy promotes the public interest.

I. Introduction

EFF welcomes the USPTO's call for public comment regarding its guidance on patentable subject matter. EFF has previously submitted three sets of comments regarding subject matter eligibility.[1] The present comments address two topics.

First, we do not believe legislative reform is merited in the wake of *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). Evidence regarding the performance of software companies, employment growth for software developers, and R&D spending on software all show a thriving sector. Under *Alice*, courts and the PTAB have invalidated many abstract software patents that had no value except as litigation weapons. Far from harming the software industry, *Alice* has allowed the industry to thrive.

Second, we address how the USPTO can improve its guidance on patent eligibility for software-related applications. The call for comments asks how the USPTO can best incorporate

[1] Available at: https://www.uspto.gov/sites/default/files/documents/2015ig_a_eff_28oct2015.pdf (Oct. 28, 2015); http://www.uspto.gov/sites/default/files/documents/2014ig_a_eff_2015apr02.pdf (March 16, 2015); and http://www.uspto.gov/sites/default/files/patents/law/comments/al-a-eff20140731.pdf (July 31, 2014).

recent rulings into its guidance but seems to focus only on rulings finding claims eligible. The USPTO must give as much weight to decisions finding claims ineligible. Moreover, any guidance should clearly explain that *Alice* effectively overruled earlier decisions, such as *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (en banc), that held that any specially programed general purpose computer was patent eligible. The USPTO must effectively communicate this change in the law to ensure that *Alice* is properly applied.

II. There Is No Reason To Amend the Patent Act After The *Alice* Decision.

A. The Software Industry Is Thriving.

The patent system exists to serve the constitutional purpose of "promot[ing] the Progress of Science and useful Arts." The system does not exist to provide work for patent prosecutors, examiners, or litigators. Thus, if a field is thriving with fewer patents, there is no reason to impose more patenting upon it. A look at the big picture following *Alice* shows that software development is booming and suggests no need for legislative meddling.

When the patent claims in *Alice* were being considered by the courts, some suggested that, if all of the claims were to found invalid, this would have a severe impact on the software industry. For example, Judge Moore wrote:

> Let's be clear: if all of these claims, including the system claims, are not patent-eligible, this case is the death of hundreds of thousands of patents, including all business method, financial system, and software patents as well as many computer implemented and telecommunications patents.

CLS Bank Int'l v. Alice Corp. Pty., 717 F.3d 1269, 1313 (Fed. Cir. 2013) (Moore, J. dissenting). More significantly, Judge Moore claimed that this "would decimate the electronics and software industries." *Id.* at 1313 n.1. This prophesy of doom turned out to be very distant from reality. To see this we can consider the real world evidence regarding growth of the software industry, employment, and R&D spending since *Alice* was decided.

First, software companies have outperformed the rest of the market since *Alice.* For example, a person who invested $10,000 in an exchange traded fund of software companies on the day *Alice* was decided could have grown that amount to $13,534 by January 13, 2017

compared to $12,212 if the money had been invested in the S&P 500.[2] The exchange traded fund includes software companies with very active patenting strategies, such as Microsoft and Oracle, as well as software companies less involved in patenting, such as Red Hat.[3] In the aggregate, these companies have performed very well since *Alice* and have handily outperformed the rest of the market.

Employment projections also support the conclusion that software development is booming, not struggling, in the post-*Alice* environment. As of December 17, 2015, the Bureau of Labor Statistics projected 17% growth in employment for "software developers" from 2014-2024. *See* https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm. In this context, software developers are the "creative minds behind computer programs" who "develop the applications that allow people to do specific tasks on a computer or … develop the underlying systems that run the devices or that control networks." *Id.* Seventeen percent growth is "much faster than the average for all occupations." *Id.*

Research and development spending tells the same story. In the 12 months leading up to the *Alice* decision, growth in R&D spending on "software & Internet" was strong at 16.5 percent. *See* PwC, *The 2014 Global Innovation 1000* at 3.[4] In the following year, growth was even stronger. During the year ending June 30, 2015 (*i.e.* approximately the 12 months immediately following the *Alice* decision), "[s]oftware & internet grew at over 27%, far greater than the growth of all other industries from 2014 to 2015." *See* PwC, *2015 Global Innovation 1000: Innovation's New World Order* at14, October 2015.[5] This trend continued in the next year, when R&D spending in the software & Internet sector overtook the R&D spend in the automotive sector. *See* PwC, *Companies shifting more R&D spending away from physical products to*

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[2] This was calculated using the "growth of $10,000 tool" at https://www.ishares.com/us/products/239771/ishares-north-american-techsoftware-etf#/. S&P 500 return calculated using http://dqydj.com/sp-500-return-calculator/.

[3] *See* https://www.ishares.com/us/literature/fact-sheet/igv-ishares-north-american-tech-software-etf-fund-fact-sheet-en-us.pdf

[4] Available at: http://www.strategyand.pwc.com/media/file/The-2014-Global-Innovation-1000_media-report.pdf

[5] Available at: http://www.strategyand.pwc.com/media/file/2015-Global-Innovation-1000-Fact-Pack.pdf

software and services: 2016 Global Innovation 1000 Study, October 15, 2016.[6] Moreover, "companies in North America are making the strongest shift to software offerings—from 15 percent of total R&D spending in 2010 to 24 percent in 2020." *Id.*

EFF urges the USPTO to consider this real world evidence ahead of simplistic arguments that assume that an industry will be harmed when fewer patents are issued. Software is characterized by constant iterative improvement where developers build on the work of others. Many economists have suggested that an overly strong patent regime can be harmful in this context. *See, e.g.*, Miller, Shawn, & Alexander Tabarrok, *Ill-Conceived, Even If Competently Administered: Software Patents, Litigation and Innovation-A Comment on Graham and Vishnubhakat*, Econ Journal Watch 11 (1): 2014.[7] *Alice* has effectively been a natural experiment that has shown these economists are likely correct and dispelled concerns to the contrary. In short, patent protection for software was weakened and the software industry thrived.

B. Other Provisions of the Patent Act Are Insufficient To Prevent Abuse.

Alice is an essential tool for Internet and software companies to strike down patents that should not have issued. While the USPTO, and the courts, could do more to diligently apply other provisions of the Patent Act,[8] *Alice* provides essential protection for software innovators attacked by weak patents. *Alice* has been especially valuable as a tool to promptly resolve weak cases where a defendant would otherwise be subject to settlement pressure created by the cost of litigation. Many district courts have found claims ineligible under *Alice* on the pleadings and this practice has been affirmed by the Federal Circuit. *See, e.g., OIP Techs., Inc. v. Amazon.com, Inc*., 788 F.3d 1359, 1362 (Fed. Cir. 2015); *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1349 (Fed. Cir. 2014); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 717 (Fed. Cir. 2014); *buySAFE, Inc. v. Google, Inc*., 765 F.3d 1350, 1352 (Fed. Cir. 2014).

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[6] Available at: http://www.pwc.com/us/en/press-releases/2016/pwc-2016-global-innovation-1000-study-press-release.html

[7] Available at: econjwatch.org/file_download/795/MillerTabarrokJan2014.pdf

[8] For example, EFF has urged the USPTO to improve its prior art searches so it is more likely to locate relevant non-patent art such as open source software projects. *See* https://www.eff.org/deeplinks/2014/03/why-patent-office-so-bad-reviewing-software-patents

III. Improving Guidance Regarding Patent Eligibility For Software-Related Inventions.

A. The USPTO Must Give Equal Weight To Rulings Finding Claims Ineligible.

EFF is concerned that the USPTO may be approaching its subject matter guidance in a manner that puts a thumb on the scale in favor of eligibility. For example, this call for comments asks for "[s]uggestions on how best to make examiners aware of newly issued judicial decisions, and how best to incorporate recent decisions holding claims eligible, such as *Enfish*, *Bascom*, *Rapid Litigation*, *Management*, and *McRO*, into the Office's subject matter eligibility guidance." EFF notes that all four of these decisions found claims eligible. Since these decisions were handed down, courts have issued dozens of rulings holding claims ineligible including many decisions of the Federal Circuit. For example, the Federal Circuit held software-related claims ineligible in both *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1139 (Fed. Cir. 2016), *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1092 (Fed. Cir. 2016), *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307 (Fed. Cir. 2016), *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016), and *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 609 (Fed. Cir. 2016). Those decisions must also be followed by examiners and it is just as important that USPTO incorporate these decisions into guidance. If the USPTO focuses only on decisions finding claims eligible, it will not adequately educate examiners about the law.

B. USPTO Guidance Must Clearly Explain How *Alice* Changed the Law.

We urge the USPTO to adopt guidance that explains how *Alice* changed the law of patent eligibility. In particular, MPEP § 2106 should include a clear explanation of how *Alice* overruled prior authority such as *Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (en banc). *Alappat* held that a specially programmed general purpose computer is patent eligible under § 101. *Alappat* was a key part of pre-*Alice* guidance regarding software-related inventions.[9] Now that it is no longer good law the MPEP should include a clear statement of that fact.

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[9] MPEP § 2106 previously cited *Alappat* for the proposition that "programming creates a new machine because a general purpose computer, in effect, becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software."

Although *Alice* did not mention *Alappat* there can be no doubt that it is no longer good law. When the Federal Circuit considered Alice's patent *en banc*, the judges debated whether *Alappat* should still be followed. *See CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, *passim* (Fed. Cir. 2013). Chief Judge Rader insisted that the case had not yet been overruled and thus the system claims at issue in *Alice* must therefore be held eligible. *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 follow *Alappat*. The Supreme Court's decision in *Alice* confirmed that this was correct. The PTO's guidance should thus reflect this change and clearly state that a programmed general purpose computer implementing abstract ideas does not satisfy § 101.

EFF also believes that MPEP § 2106 could be improved by including more of the language of *Alice* itself. Specifically, it should at least include *Alice*'s holding that "mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." 134 S. Ct. at 2358. This language is helpful in reorienting examiners away from the now-rejected approach of *Alappat* and should preclude applicants from arguing for eligibility based on outdated law.

IV. Conclusion

EFF again thanks the USPTO for the opportunity to comment regarding its patent eligibility guidance.

Respectfully submitted,

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