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Andrew Hirshfeld  
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Re: USPTO Docket No.: PTO-P-2014-0036  
Comments on Alice Corp. Preliminary Instructions

Dear Deputy Under Secretary Lee and Deputy Commissioner Hirshfeld:

We appreciate this opportunity to comment on the Alice Corp. Preliminary Instructions. Muskin & Farmer is a law firm focusing on intellectual property matters and represents a variety of clients nationwide including many startups and small companies.

I. THE ALICE CASE AND INTERPRETATION IN GENERAL

Small companies and startups commonly rely on patent protection in order to obtain venture capital funding and licensing arrangements for their technology. Even when patents are in pending status, I have seen many investments made and licenses signed because of the potential for patent protection. If entire categories of subject matter are practically foreclosed under 35 U.S.C. § 101, this would have a disruptive effect of how startups and small companies are funded and compensated.

I can appreciate the difficulty of determining clear guidelines for examiners to apply when examining claims involving computer software for compliance with 35 U.S.C. § 101. Congress of course has not enacted a statute which clearly identifies the boundaries of patentable subject matter like some other countries have. We should also be able to look to the Court of Appeals for the Federal Circuit for guidance, however the Federal Circuit cases on statutory subject matter are inconsistent and mostly depend on the particular panel of judges selected. One would expect the Supreme Court to come to the rescue in this situation and provide clear guidance. However,
there is only a modest number of Supreme Court cases involving statutory subject matter with many being from a different technological era. In the more recent cases, the Supreme Court has made focused rulings directed to only the claims in question but declined to provide a comprehensive definition or test for “abstract idea.” Hopefully one day either Congress will pass a clear patent statute or the Supreme Court will finally provide us a clear and inclusive definition for “abstract idea.” Until such time, it is important that the USPTO interpret the precedent for what it is.

The opinion in *Alice Corporation Pty. Ltd v. CLS Bank International* states:

The "abstract ideas" category embodies "the longstanding rule that `[a]n idea of itself is not patentable." *Benson*, supra, at 67 (quoting *Rubber-Tip Pencil Co. v. Howard*, 20 Wall. 498, 507 (1874)); see also *Le Roy*, *supra*, at 175 ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right")… On their face, the claims before us are drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk. Like the risk hedging in *Bilski*, the concept of intermediated settlement is "a fundamental economic practice long prevalent in our system of commerce." *Ibid.*; see, e.g., Emery, Speculation on the Stock and Produce Exchanges of the United States, in 7 Studies in History, Economics and Public Law 283, 346-356 (1896) (discussing the use of a "clearing-house" as an intermediary to reduce settlement risk). The *use of a third-party intermediary (or "clearing house") is also a building block of the modern economy*. See, e.g., *Yadav*, The Problematic Case of Clearinghouses in Complex Markets, 101 Geo. L. J. 387, 406-412 (2013); J. Hull, Risk Management and Financial Institutions 103-104 (3d ed. 2012). Thus, intermediated settlement, like hedging, is an "abstract idea" beyond the scope of § 101. (emphasis added).

One old saying many lawyers learned in law school is “bad facts make bad law.” Due to the overbroad nature of Alice’s claims, the *Alice* case is a poor case to shed light on the patentability of software and electronic business methods. Indeed, CLS Bank processes trillions of dollars of transactions per day, so if Alice’s patents were to stand they would (as noted by the Supreme Court) preempt “a building block of the modern economy.” In fact if Alice’s patents stood valid, it is conceivable that Alice Corp. could disrupt our nation’s entire banking system. Preemption fears surely helped lead the Supreme Court to the conclusion that the claims in *Alice* were directed to an abstract idea.

In addition to “fundamental economic principles” (*Alice* and *Bilski v. Kappos*, 561 US 593 (2010)), the Supreme Court also defines “abstract ideas” to include claims applying a formula without much substance (*Parker v. Flook* 437 U.S. 584 (1978)) and claims to a computer algorithm without an application (*Gottschalk v. Benson* 409 U.S. 63 (1972)). Other types of claims can be directed to abstract ideas as well (e.g., a claim that merely defines legal relationships), however the USPTO should be cautious when expanding what qualifies as an abstract idea without clear guidance from the judicial branch.
The opinion in *Alice* stated, “In any event, we need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case.” Thus, *Alice* declined the opportunity to expand upon the definition of abstract idea. The word “software” (no doubt intentionally) was not even mentioned in the *Alice* opinion. David Kappos, in his article entitled, “Symposium: Supreme Court Leaves Patent Protection for Software Innovation Intact” stated, “Despite the loud and sometimes shrill calls from various quarters to curtail ‘software patenting,’ the decision is deafening in its declination to do so. The Justices clearly chose not to condemn software to the realm of abstraction, or otherwise express any manner of discrimination against software patents as a class.”

Nevertheless, in what surprised many in this field, in response to the *Alice* decision the USPTO is now running wild with the “abstract idea” exception and applying it to all sorts of claims (in various art units) that are not directed as a whole to “abstract ideas” as identified by the precedent. In these new Section 101 rejections, examiners currently appear to be creatively identifying abstract ideas in claims and discounting any structure as “conventional” and concluding claims are directed to “abstract ideas.” Any claim (whether directed to software or not) can be rejected under Section 101 using this approach.

Apparently there is a difference in opinion as to how the *Alice* case should be applied and what is and is not an “abstract idea.” Consider the square below to represent all conceivable inventions:

![Invention Zones Diagram](image)

Inventions with claims that are clearly non-statutory (due to *Alice* or any other binding precedent) fall into the top zone as there is nothing to debate. Inventions falling in the middle zone are the ones where there is currently a reasonable difference in opinion or ambiguity as to whether they should be statutory or not (e.g., based on differences in opinion over what comprises an “abstract idea” and what is considered “significantly more.”) If and when a future Supreme Court case clearly dictates how to address the middle zone (which would be desirable), then the middle zone would no longer exist and this whole issue becomes moot.

If the USPTO maintains a restrictive Section 101 interpretation precluding most or all application falling in the middle zone, then this would be fundamentally unfair to change the rules midstream (especially after applicants have already paid their filing fees). An inventor who invents an invention falling in the middle zone may have to forgo filing his/her patent application (which probably means whatever venture he/she was involved in is going to be a non-starter).
Most troubling about this scenario is if a later court ruling renders this inventor’s invention statutory, the inventor has been deprived of the patent opportunity. Alternatively, an inventor can file his/her application, appeal the expected 101 rejection to the Patent Trial and Appeal Board (which would be unlikely to go against USPTO interpretation), thus leaving an appeal to the Federal Circuit (and possible the Supreme Court) as his/her only option. Of course, appealing to the Federal Circuit is not a practical option for most inventors. A further problem with the USPTO pursuing a restrictive § 101 interpretation is that many pending applications are continuation applications of issued patents with similar claims. It seems fundamentally unfair to now start rejecting claims that were previously found statutory and issued into a patent based on a Supreme Court case that does not mandate such a change. Patents are a property right and some would view such rejections as a taking of property.

On the other hand, if the USPTO adopts a less-restrictive Section 101 interpretation which limits issuing Section 101 rejections to only those applications to which the precedent clearly requires it to do so (thus finding statutory most or all applications in the middle zone), then inventors can potentially get their patent (and continue their business venture) knowing that their patent may end up being invalid if a future Supreme Court case (or Congress) issues an unfavorable rule. This approach serves to meet expectations (especially those who have already filed applications and paid their filing fees). Patent lawyers will have the ethical obligation to inform their clients that while their patent application can be filed and potentially granted, the rules regarding statutory subject matter will evolve and the patent could one day become invalid.

Therefore, while Alice holds that a claim directed to a patent-ineligible abstract idea combined with a generic computer is non-statutory under Section 101, where the line is drawn as to what qualifies as a patent-ineligible abstract idea is still a debatable question. Until there is more clarity regarding this issue, the USPTO should not aggressively reject applications under Section 101 in situations where it is not mandated (e.g., where the claims are not clearly directed to an abstract idea).

II. SPECIFIC COMMENTS ON THE PRELIMINARY INSTRUCTIONS

With regard to the “Preliminary Examination Instructions in View of the Supreme Court Decision in Alice Corporation Pty. Ltd. v. CLS Bank International, et al.”, we have the following comments which we hope you will consider when preparing the final instructions.

A) Part 1 correctly states, “Determine whether the claim is directed to an abstract idea.” However, towards the bottom of Part 1 it states, “Claims that include abstract ideas like these should be examined under Part 2 below…” The test set forth in Alice is whether the claims are “directed to” an abstract idea, not whether it includes one. Alice states:

In Mayo Collaborative Services v. Prometheus Laboratories, Inc., 566 U. S. ___ (2012), we set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. Id., at ___ (slip
op., at 8). If so, we then ask, "[w]hat else is there in the claims before us?"
(emphasis added)

The language of “directed to” an abstract idea with regard to the Part 1 inquiry is found in numerous other places in Alice as well.

Further down at the end of Part 1 it states, “If an abstract idea is present in the claim, proceed to part 2 below.” Again, the proper language should be “If the claim is directed to an abstract idea…” Part 2 also contains this issue in numerous places (e.g., “if an abstract idea is present in the claim…”)

This is an important distinction because all claims will include some type of abstract idea, but not all claims will be directed to an abstract idea. If a claim is not directed to an abstract idea, then there would be no need to proceed to Part 2.

B) It is important that Part 1 instruct the examiner to consider each claim as a whole when determining whether it is directed to an abstract idea. Alice states (in footnote 3):

Because the approach we made explicit in Mayo considers all claim elements, both individually and in combination, it is consistent with the general rule that patent claims “must be considered as a whole.” Diamond v. Diehr, 450 U. S. 175, 188 (1981); see Parker v. Flook, 437 U.S. 584, 594 (1978) (“Our approach . . . is . . . not at all inconsistent with the view that a patent claim must be considered as a whole”).

Examiners currently seem to be breaking a claim into its “parts” and then are identifying multiple abstract ideas.

C) When determining whether a claim is directed to an abstract idea, the examiner should be instructed to consider the preemptive effect of the claim. In all of the Supreme Court cases where the claims were held to be an abstract idea, the preemptive effect was grave. The claims in Alice and Bilski were held to be directed to fundamental economic principle and thus these principles could have been preempted if their claims were valid. The claim in Flook was directed to little more than applying a mathematical equation and the court therein was concerned about preempting the equation. In Benson, the claim was directed to an algorithm for converting binary coded decimal numerals into binary form. It is conceivable that an introductory course in computer science in that era might have required students to program such an algorithm as an assignment. Thus, the algorithm in Benson could have preempted commercial and academic uses of computer technology. On the other hand, the court found that the claims in Diehr did not preempt the use of the equation used therein and thus the Diehr claims were not found to be directed to an abstract idea.

Thus, the preemptive effect appears to be critical in the determination of whether a claim is directed to an abstract idea or not. The final instructions regarding Alice should instruct the examiners to envision the effect on commerce if the claim was granted and whether the claim would just be limited to the invention at hand or if it would cover and affect other uses of the
technology. If there is no significant preemptive effect of the claim, then this weighs heavily that
the claim is not directed to an abstract idea and step 2 can be avoided.

In conclusion, the USPTO is currently taking a very restrictive view of Section 101 which is not
mandated by Alice or other precedent. Please consider the negative effects that this
interpretation is having on those who fund and participate in our patent system. Thank you for
considering these comments. The comments and opinions stated herein are not made on behalf
of any particular client.

Sincerely,

Jon H. Muskin