From: RICK NEIFELD < EMAIL ADDRESS REDACTED>

Sent: Thursday, July 31, 2014 1:38 PM To: alice\_2014; myriad-mayo\_2014

Subject: Comments on Examination Instruction and Guidance Pertaining to Patent-

Eligible Subject Matter

To: USPTO

From: Rick Neifeld, Patent Attorney

I am a patent attorney. I have been registered to practice since about 1992. I am the founder of Neifeld IP Law, PC, located in Alexandria, VA.

I comment on the memorandum (herein after "memo") from Mr. Hirshfeld, Deputy Commissioner for Patent Examination Policy, to the Patent Examining Corps, dated June 25, 2014, titled "Preliminary Examination Instructions in view of the Supreme Court Decision in Alice Corporation Ply. Ltd. v. CLS Bank International, et al."

The memo states:

The purpose of this memorandum is to provide preliminary instructions effective today to the Patent Examining Corps relating to subject matter eligibility of claims involving abstract ideas, particularly computer-implemented abstract ideas, under 35 U.S.C. § 101. The USPTO is continuing to study Alice Corp. in the context of existing precedent and will seek public feedback on the instructions. Further guidance will be issued after additional consideration of the decision and public feedback in the context of the existing law under 35 U.S.C. § 101.

What follows that paragraph is an algorithm for examination. The memorandum lacks anything putting that algorithm into a context explaining the basis for the 101 eligibility determination. Alice provides that context. Alice states:

"We have long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." Association for Molecular Pathology v. Myriad Genetics, Inc., 569

U. S. \_\_\_\_, \_\_\_ (2013) (slip op., at 11) (internal quotation marks and brackets omitted). We have interpreted §101and its predecessors in light of this exception for more than 150 years. Bilski, supra, at 601–602; see also O'Reilly v. Morse, 15 How. 62, 112–120 (1854); Le Roy v. Tatham, 14 How. 156, 174–175 (1853).

We have described the concern that drives this exclusionary principle as one of preemption. See, e.g., Bilski, supra, at 611–612 (upholding the patent "would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea"). Laws of nature, natural phenomena, and abstract ideas are " "the basic tools of scientific and technological work."" Myriad, supra, at \_\_\_\_ (slip op., at 11). "[M]onopolization of those tools through the grant of a patent might tend to impede innovation more than it would tend to promote it," thereby thwarting the primary object of the patent laws. Mayo, supra, at \_\_\_\_ (slip

op., at 2); see U. S. Const., Art. I, §8, cl. 8 (Congress "shall have Power . . . To promote the Progress of Science and useful Arts"). We have "repeatedly emphasized this . . . concern that patent law not inhibit further discovery by improperly tying up the future use of " these building blocks of human ingenuity. Mayo, supra, at \_\_\_\_ (slip op., at 16) (citing Morse, supra, at 113).

At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. Mayo, 566 U. S., at \_\_\_\_ (slip op., at 2). At some level, "all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." Id., at \_\_\_\_ (slip op., at 2). Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept. See Diamond v. Diehr, 450 U. S. 175, 187 (1981). "[A]pplication[s]" of such concepts "to a new and useful end," we have said, remain eligible for patent protection. Gottschalk v. Benson, 409 U. S. 63, 67 (1972).

Accordingly, in applying the §101 exception, we must distinguish between patents that claim the "'buildin[g] block[s]'" of human ingenuity and those that integrate the building blocks into something more, Mayo, 566 U. S., at \_\_\_\_ (slip op., at 20), thereby "transform[ing]" them into a patent-eligible invention, id., at \_\_\_\_ (slip op., at 3). The former "would risk disproportionately tying up the use of the underlying" ideas, id., at \_\_\_\_ (slip op., at 4), and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws.

I suggest you update the guidance to Patent Examining Corps by providing the context that explains the basis for the 101 eligibility determination.

## The memo states:

1) Alice Corp. establishes that the same analysis should be used for all types of judicial exceptions, whereas prior USPTO guidance applied a dilTerent analysis to claims with abstract ideas (Bilski guidance in MPEP 2106(1I)(B)) than to claims with laws of nature (Mayo guidance in MPEP 2106.01).

That statement is not correct. It conflates the framework with the analysis. Mayo contained an analysis whether claims were directed to laws of nature, whereas Alice contained an analysis whether claims were no more than abstract ideas.

## As stated in Mayo:

It is undisputed that Myriad did not create or alter any of the genetic information encoded in the BRCA1 and BRCA2 genes. The location and order of the nucleotides existed in nature before Myriad found them. Nor did Myriad create or alter the genetic structure of DNA. Instead, Myriad's principal contribution was uncovering the precise location and genetic sequence of the BRCA1 and BRCA2 genes within chromosomes 17 and 13. The question is whether this renders the genes patentable.

Thus, Mayo contained an analysis "whether this renders the genes patentable." As stated in

## Alice:

It follows from our prior cases, and Bilski in particular, that the claims at issue here are directed to an abstract idea. \*\*\* In any event, we need not labor to delimit the precisecontours 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. Both are squarely within the realm of "abstract ideas" as we have used that term.

Thus, Alice contained an analysis whether "the claims at issue here are directed to an abstract idea." There is a difference between the meaning of the words "framework" and "analysis". A definition of "framework" is a "set of principles, ideas, etc. that you use when you are forming your decisions and judgments". http://www.onelook.com/?w=framework&ls=a. A definition of "analysis" is "a process of studying or examining something in detail in order to understand it or explain it." Alice stated that Mayo set forth a framework:

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 claimpatent-eligible applications of those concepts.

The court in Alice did not state that Mayo set for an analysis. Each step of substep of the framework may require an analysis in view of the framework and the facts of any particular case, but the analysis will differ depending upon those facts. You should revise your guidance to carefully track the language of Alice, in order to avoid giving inaccurate guidance to the Patent Examining Corps.

The memo states:

2) Alice Corp. also establishes that the same analysis should be used for all categories of claims (e.g., product and process claims), whereas prior guidance applied a different analysis to product claims involving abstract ideas (relying on tangibility in MPEP 2106(II)(A)) than to process claims (Bilski guidance).

That is not what the Alice stated. Alice stated: "Petitioner's claims to a computer system and a computer readable medium fail for substantially the same reasons." The Court went on to note the following. First, that "Petitioner conceded below that its media claims rise or fall with its method claims." Accordingly, the issue of whether the media claims were patent eligible was disposed of by admission. Second, the Court did not state "the same analysis should be used for" the system claims. Instead, the court analyzed petitioner's "specific hardware" limitation arguments, and concluded that those hardware limitations were " purely functional and generic" and:

As a result, none of the hardware recited by the system claims "offers a meaningful limitation

beyond generally linking 'the use of the [method] to a particular technological environment,' that is, implementation viacomputers." Id., at 1291 (quoting Bilski, 561 U. S., at 610–611).

From that analysis, the Court concluded that "the system claims are no different from the method claims in substance." However, contrary to the memo, and as just noted, the analysis of the method, computer readable medium, and system claims, was not the same. You should update the guidance to the Patent Examining Corps accordingly.

In the section of the memo dealing with the second step of the framework, the memo states:

Limitations referenced in Alice Corp. that are not enough to qualify as "significantly more" when recited in a claim with an abstract idea include, as non-limiting or non-exclusive examples: \*\*\*

• Requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.

I believe that guidance is substantially insufficient because it fails to provide the context according meaning to the terms "generaic computer" and "generic computer functions." The analysis of the system claims in Alice contains this passage whith provides essential context:

But what petitioner characterizes as specific hardware—a"data processing system" with a "communications controller" and "data storage unit," for example, see App. 954,958, 1257—is purely functional and generic. Nearly everycomputer will include a "communications controller" and "data storage unit" capable of performing the basic calculation, storage, and transmission functions required by the method claims. See 717 F. 3d, at 1290 (Lourie, J., concurring). As a result, none of the hardware recited by the system claims "offers a meaningful limitation beyond generally linking 'the use of the [method] to a particular technological environment,' that is, implementation viacomputers." Id., at 1291 (quoting Bilski, 561 U. S., at 610–611).

This passage provides the following context. First, the "purely function and generic" conclusion relates to specific claim language of system claims. That claim language is not reproduced in Alice, but is only referenced to the joint appendix, at 954, 958, 1257. Your guidance should be limited to specifying that specific claim language, whatever it may be, is purely functional and generic. You need to review the joint appendix. However, the concurring opinion of Court below, CLS Bank Intern. v. Alice Corp. Pty. Ltd., 685 F. 3d 1341 (Fed. Cir. 2012) (en bank)( LOURIE, Circuit Judge, concurring, with whom Circuit Judges DYK, PROST, REYNA, and WALLACH joined) specified the following representative system claim:

Claim 1 of the '720 patent is representative of the contested system claims:

- 1. A data processing system to enable the exchange of an obligation between parties, the system comprising:
  - a data storage unit having stored therein information about a shadow credit record

and shadow debit record for a party, independent from a credit record and debit record maintained by an exchange institution; and

a computer, coupled to said data storage unit, that is configured to (a) receive a transaction; (b) electronically adjust said shadow credit record and/or said shadow debit record in order to effect an exchange obligation arising from said transaction, allowing only those transactions that do not result in a value of said shadow debit record being less than a value of said shadow credit record; and (c) generate an instruction to said exchange institution at the end of a period of time to adjust said credit record and/or said debit record in accordance with the adjustment of said shadow credit record and/or said shadow debit record, wherein said instruction being an irrevocable, time invariant obligation placed on said exchange institution.

Finally, you should take care to clarify in your guidance to the Patent Examining Corps that Alice specifically relied upon the lack of any express language to define the computer's participation in the method claims and corresponding system claims, and emphasized the word "any". See specifically the following passages from Alice:

Considered "as an ordered combination," the computercomponents of petitioner's method "ad[d] nothing . . . thatis not already present when the steps are consideredseparately." Id., at \_\_\_\_ (slip op., at 10). Viewed as a whole, petitioner's method claims simply recite the concept of intermediated settlement as performed by a generic computer. See 717 F. 3d, at 1286 (Lourie, J., concurring) (noting that the representative method claim "lacks any express language to define the computer's participation"). \*\*\* Under our precedents, that is not "enough" to transform an abstract idea into a patent-eligible invention. Id., at \_\_\_\_ (slip op., at 8).

That passage quotes from Judge Lourie's concurrence in the decision below. The full paragraph in Judge Lourie's concurrence, in which the quote appears, reads as follows:

First, the requirement for computer implementation could scarcely be introduced with less specificity; the claim lacks any express language to define the computer's participation. In a claimed method comprising an abstract idea, generic computer automation of one or more steps evinces little human contribution. There is no specific or limiting recitation of essential, see SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1332-33 (Fed.Cir.2010), or improved computer technology, see Research Corp. Techs., Inc. v. Microsoft Corp., 627 F.3d 859, 865, 868-69 (Fed.Cir.2010), and no reason to view the computer limitation as anything but "insignificant post-solution activity" relative to the abstract idea, see Fort Props., Inc. v. Am. Master Lease LLC, 671 F.3d 1317, 1323-24 (Fed.Cir.2012). Furthermore, simply appending generic computer functionality to lend speed or efficiency to the performance of an otherwise abstract concept does not meaningfully limit claim scope for purposes of patent eligibility. Bancorp, 687 F.3d at 1278; Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333 (Fed. Cir.2012); Fort Props., 671 F.3d at 1323-24. That is particularly apparent in this case. Because of the efficiency and ubiquity of computers, essentially all practical, real-world applications of the abstract idea implicated here

would rely, at some level, on basic computer functions — for example, to quickly and reliably calculate balances or exchange data among financial institutions. At its most basic, a computer is just a calculator capable of performing mental steps faster than a human could. Unless the claims require a computer to perform operations that are not merely accelerated calculations, a computer does not itself confer patent eligibility. In short, the requirement for computer participation in these claims fails to supply an "inventive concept" that represents a nontrivial, non-conventional human contribution or materially narrows the claims relative to the abstract idea they embrace.

Both the court in Alice and Judge Lourie's concurrence below italizized "any". Italics indicates particular significance. Accordingly, your guidance should point out that Alice attributed particular significance to the fact that "the claim lacks any express language to define the computer's participation," noting the emphasis on "any". Failure to provide that guidance to the Patent Examining Corps may result in misunderstanding that claim that contain any express language to define the computer's participation may be patent eligible.

Rick Neifeld, Patent Attorney Neifeld IP Law, PC 4813-B Eisenhower Avenue Alexandria, VA 22304