From: Blankstein, Michael [mailto:REDACTED]
Sent: Thursday, July 31, 2014 9:56 AM
To: alice_2014
Subject: Comments concerning the Preliminary Alice Corp. Instructions

Attached are proposed edits to the Preliminary Alice Corp. Instructions (added text and endnotes in underlined green text and deletion in strikethrough red text). The proposed edits are intended to give due consideration to the exclusionary/pre-emption principle set forth in section II of the Supreme Court's opinion and driving the second step in Mayo's framework. The proposed edits are reproduced below.

A. Add the following paragraph (and associated endnotes) to Part 2 of the instructions after the first paragraph ending with "...individually and in combination":

Alice Corp. instructs that the concern driving the exclusionary principle is "one of pre-emption"⁵ and that "we tread carefully in construing this exclusionary principle lest it swallow all of patent law".⁶ *Alice Corp.* cautions that, at some level, "all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas."⁷

New endnotes for above three quotes:

- Id., slip op. at 5-6 (*citing, e.g., Bilski v. Kappos*, 561 U. S. 593, 611–612 (2010)(upholding the patent "would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea"; *see also Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S., at (slip op., at 16) (*citing O'Reilly v. Morse*, 15 How. 62, 112-113 (1854)).
- Id., slip op. at 6 (citing Mayo Collaborative Services v. Prometheus Laboratories, Inc., 566 U.
 S., at , (slip op., at 2)).
- 7. Id.
- B. Add the following fourth bullet (and associated endnote) to Part 2 of the Instructions after the bullet ending with "...technological environment":
 - Limitations that integrate the abstract idea into something more that does not disproportionately pre-empt use of the abstract idea.¹¹

New endnote:

- 11. Whereas claims that integrate "building blocks" of human ingenuity "into something more" can be patent-eligible when they "pose no comparable risk of pre-emption," claims that merely recite the "building blocks" themselves "would risk disproportionately tying up" the use of the underlying ideas. *Id.*, slip op. at 6 (*citing Mayo*, slip op. at 3-4).
- C. Revise original endnote 7 to read as follows (added text is underlined and deleted text is stricken through):

Id., slip op. at 16: noting <u>recitation of "a handful of generic computer components," wherein that</u> none of the hardware recited "offers a meaningful limitation beyond generally linking 'the use of the [method] to a particular technological environment,' that is, implementation via [generic] computers" (citing *Bilski*, 561 U.S. at 610, 611).

D. Renumber original endnotes to accommodate any new endnotes

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Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usto.gov

MEMORANDUM

DATE: June 25, 2014

TO: Patent Examining Corps

FROM: Andrew H. Hirshfeld Deputy Commissioner For Patent Examination Policy

SUBJECT: Preliminary Examination Instructions in view of the Supreme Court Decision in *Alice Corporation Ply. Ltd. v. CLS Bank International, et al.*

Last week, in a unanimous decision, the Supreme Court held that the patent claims in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.* ("*Alice Corp.*") are not patent-eligible under 35 U.S.C. § 101. The patents at issue disclose a scheme for mitigating "settlement risk," *i.e.*, the risk that only one party to an agreed-upon financial exchange will satisfy its obligation, in which a computer system is used as a third-party intermediary between the parties to the exchange. The patent claims are styled as a method for exchanging financial obligations, a computer system configured to carry out the method, and a computer-readable storage medium containing program code for causing a computer to perform the method.

The Court determined that Alice Corp.'s claims to methods were ineligible because "the claims at issue amount to 'nothing significantly more' than an instruction to apply the abstract idea of intermediated settlement using some unspecified, generic computer." Alice Corp.'s claims to computer systems and computer-readable storage media were held ineligible for substantially the same reasons, *e.g.*, that the generically-recited computers in the claims add nothing of substance to the underlying abstract idea. Notably, *Alice Corp.* neither creates a *per se* excluded category of subject matter, such as software or business methods, nor imposes any special requirements for eligibility of software or business methods.

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.

Preliminary Instructions for Analyzing Claims with Abstract Ideas

The Supreme Court made clear in *Alice Corp.* that it applies the framework set forth in *Mayo* Collaborative Services v. Prometheus Laboratories, Inc., 566 U.S. (2012) (Mayo), to analyze all claims directed to laws of nature, natural phenomena, and abstract ideas for subject matter eligibility under 35 U.S.C. § 101. This framework is currently being used by the USPTO to examine claims involving laws of nature, but had not been used for claims involving abstract ideas. Therefore, the following instructions differ from prior USPTO guidance in two ways:

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

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).

Despite these changes, the basic inquiries to determine subject matter eligibility remain the same as explained in MPEP 2106(1). First determine whether the claim is directed to one of the four statutory categories of invention, *i.e.*, process, machine, manufacture, or composition of matter. If the claim does not fall within one of the categories, reject the claim as being directed to nonstatutory subject matter. Next, if the claim does fall within one of the statutory categories, determine whether the claim is directed to a judicial exception (*i.e.*, law of nature, natural phenomenon, and abstract idea) using Part I of the two-part analysis detailed below, and, if so, determine whether the claim is a patent-eligible application of an exception using Part 2. This two-part analysis supersedes MPEP 2106(II)(A) and 2106(II)(B).

For purposes of this preliminary instruction memo, only claims that involve abstract ideas are addressed, since the USPTO's current guidance for claims that involve laws of nature/natural phenomena already uses the Mayo framework. See Guidance For Determining Subject Matter Eligibility Of Claims Reciting Or Involving Laws of Nature, Natural Phenomena, & Natural Products (March 4, 2014).

Two-part Analysis for Abstract Ideas

Following Alice Corp., now analyze all claims (product and process) having an abstract idea using the following two-part analysis set forth in *Mayo*:

Part 1: Determine whether the claim is directed to an abstract idea.

As emphasized in *Alice Corp.*, abstract ideas are excluded from eligibility based on a concern that monopolization of the basic tools of scientific and technological work might impede innovation more than it would promote it. At the same time, the courts have tread carefully in 15078493.1 2

construing this exclusion because, at some level, all inventions embody, use, reflect, rest upon or apply abstract ideas and the other exceptions. Thus, an invention is not rendered ineligible simply because it involves an abstract concept. In fact, inventions that integrate the building blocks of human ingenuity into something more by applying the abstract idea in a meaningful way are eligible.

Examples of abstract ideas referenced in Alice Corp. include:

- Fundamental economic practices¹;
- Certain methods of organizing human activities²;
- "[A]n idea of itself"³ and,
- Mathematical relationships/formulas⁴

Claims that include abstract ideas like these should be examined under Part 2 below to determine whether the abstract idea has been applied in an eligible manner.

If an abstract idea is present in the claim, proceed to <u>Part 2</u> below. If not, proceed with examination of the claim for compliance with the other statutory requirements for patentability.

<u>**Part 2</u>**: If an abstract idea is present in the claim, determine whether any element, or combination of elements, in the claim is sufficient to ensure that the claim amounts to **significantly more** than the abstract idea itself. In other words, are there other limitations in the claim that show a patent-eligible application of the abstract idea, *e.g.*, more than a mere instruction to apply the abstract idea? Consider the claim as a whole by considering all claim elements, both individually and in combination.</u>

<u>Alice Corp.</u> instructs that the concern driving the exclusionary principle is "one of pre-emption"⁵ and that "we tread carefully in construing this exclusionary principle lest it swallow all of patent law".⁶ Alice Corp. cautions that, at some level, "all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas."²

Limitations referenced in *Alice Corp.* that may be enough to qualify as "significantly more" **when recited in a claim with an abstract idea** include, as non-limiting or non-exclusive examples:

- Improvements to another technology or technical field⁸;
- Improvements to the functioning of the computer itself⁹;
- Meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment¹⁰.

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• Limitations that integrate the abstract idea into something more that does not disproportionately pre-empt use of the abstract idea¹¹;

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

- Adding the words "apply it" (or an equivalent) with an abstract idea, or mere instructions to implement an abstract idea on a computer¹²;
- Requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry¹³.

If there are no meaningful limitations in the claim that transform the exception into a patent eligible application such that the claim amounts to significantly more than the exception itself, the claim should be rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter (use Form7.05.01).

After conducting the two-part analysis, proceed with examination of the claim, regardless of whether a rejection under § 101 has been made, to determine patentability in accordance with the other requirements of 35 U.S.C. § 101 (utility and double patenting), non-statutory double patenting, and §§ 112, 102, and 103.

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¹ Alice Corp., slip op. at 7-9: *e.g.*, intermediated settlement, *i.e.*, the use of a third party intermediary to mitigate settlement risk.

² Id., slip op. at 10: e.g., a series of steps instructing how to hedge risk (citing Bilski v. Kappos, 561 U.S. 593, 599 (2010)).

³ *Id.*, slip op. at 7-8: *e.g.*, a principle, an original cause, a motive (citing *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) and *LeRoy v. Tatham*, 14 How. 156, 175 (1853)).

⁴ Id., slip op. at 8: *e.g.*, a mathematical formula for computing alarm limits in a catalytic conversion process (Parker v. Flook, 437 U.S. 584, 594-595 (1978)), or a formula for converting binary-coded decimal numerals into pure binary form (Benson, 409 U.S. at 71-72).

⁵ Id., slip op. at 5-6 (citing, e.g., Bilski v. Kappos, 561 U. S. 593, 611–612 (2010)(upholding the patent "would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea"; see also Mayo Collaborative Services v. Prometheus Laboratories, Inc., 566 U.S., at (slip op., at 16) (citing O'Reilly v. Morse, 15 How. 62, 112-113 (1854)).

⁶ *Id.*, slip op. at 6 (*citing Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U. S., at (slip op., at 2)).

⁷ Id.

⁸ *Id.*, slip op. at 15: *e.g.*, a mathematical formula applied in a specific rubber molding process (citing Diamond v. Diehr, 450 U.S. 175, 177-178 (1981)).

⁹ *Id.*, slip op. at 15.

¹⁰ *Id.*, slip op. at 16: noting <u>recitation of "a handful of generic computer components," wherein that</u> none of the hardware recited "offers a meaningful limitation beyond generally linking 'the use of the [method] to a

particular technological environment,' that is, implementation via [generic] computers'' (citing *Bilski*, 561 U.S. at 610, 611).

- ¹¹ Whereas claims that integrate "building blocks" of human ingenuity "into something more" can be patenteligible when they "pose no comparable risk of pre-emption," claims that merely recite the "building blocks" themselves "would risk disproportionately tying up" the use of the underlying ideas. *Id.*, slip op. at 6 (*citing Mayo*, slip op. at 3-4).
- ¹² *Id.*, slip op. at 12, 13: *e.g.*, simply implementing a mathematical principle on a physical machine, namely a computer (citing *Mayo*, slip op., at 16).
- ¹³ *Id.*, slip op. at 15: *e.g.*, using a computer to obtain data, adjust account balances, and issue automated instructions.