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March 16, 2015

Mail Stop Comments – Patents
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313 -1450

Attn: Raul Tamayo
Michael Cygan
Office of Patent Legal Administration

Via email: 2014_interim_guidance@uspto.gov

Re: Comments regarding the *2014 Interim Guidance on Patent Subject Matter Eligibility*

Microsoft is pleased to submit this response to the Federal Register Notice published on December 16, 2015, soliciting comments on the *2014 Interim Guidance on Patent Subject Matter Eligibility*, 79 Fed. Reg. 74618 (Dec. 16, 2014) (hereinafter "*Guidance*" or "Interim Guidance").

Microsoft commends the U.S. Patent and Trademark Office ("USPTO" or "Office") for its diligent efforts to provide clear and timely guidance to examiners regarding the rapidly-evolving case law on eligibility. We also appreciate the Office's responsiveness to requests for additional materials and welcomed the recently-published examples illustrating the analysis of abstract idea claims under the revised guidelines.

Overall, the *Interim Guidance* incorporates meaningful improvements to the preliminary instructions and appears to address a number of the suggestions and concerns identified in previous public comments. In particular, we believe the sample analyses and case law summaries clarify and illustrate the application of the eligibility analysis in a manner that will prove valuable in guiding eligibility determinations. The streamlined eligibility option is also a welcome addition that provides examiners appropriate discretion and will improve the efficiency of examination.

While we appreciate these improvements, Microsoft believes that additional changes are necessary to ensure the guidance accurately reflects judicial precedents and provides additional clarity, allowing eligibility determinations to be made in a more accurate, predictable, and consistent manner. To achieve these goals, we believe that changes are necessary to the *Interim Guidance's* description of "abstract ideas" to clarify its meaning and ensure it accurately reflects the case law. In addition, there are also a number of other minor,

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targeted changes and corrections that Microsoft believes would improve the *Interim Guidance*, which are summarized in the appendix to these comments.

Correct application of the *Alice* test hinges on an examiner's ability to recognize when a claim is directed to one or more of the judicial exclusions. This requires examiners to have a clear understanding of the scope and meaning of each of the judicial exceptions. As a result, it is critical that the *Interim Guidelines* contain meaningful definitions (or, at least, descriptions) of the exceptions that are both accurate and clear.

The description of "abstract ideas" in the *Interim Guidelines*, however, could be substantially improved in both respects. It states that: "Abstract ideas have been identified by the courts by way of example, including fundamental economic practices, certain methods of organizing human activities, an idea `of itself,' and mathematical relationships/formulas." As discussed below, the inclusion of "certain methods of organizing human activities" is not supported by the case law, and this language should be removed in the interests of accuracy. Apart from its inaccuracy, the language quoted above also lacks clarity and fails to adequately describe what abstract ideas – as a class – actually are or to suggest what distinguishes abstract ideas from eligible inventions falling outside the exception's scope. This lack of sufficient guidance should be addressed by replacing the current sentence with one that provides an actual definition – as opposed to listing a few examples of what the exception includes – similar to the one provided for "laws of nature."

1. **References to "Certain Methods of Organizing Human Activities" Are Not Supported by the Case Law and Should Be Removed.**

While it is clearly true that certain methods of organizing human activities are abstract ideas, the sentence quoted above implies that this phrase represents a defined category of methods that has been "identified" by courts as an example of abstract ideas. This is incorrect.

Although the phrase "certain methods of organizing human activities" does appear in the Supreme Court's majority opinion in *Alice v. CLS Bank*, it is mentioned once, in passing, and without any indication that the Court intended to identify it as a distinct category abstract ideas. In responding to petitioner's argument that the abstract ideas exception includes only natural and mathematical truths exist that exist apart from any human action, the Court noted that the hedging method in *Bilski* was not this type of fundamental truth: "Although hedging is a longstanding commercial practice, it is a method of organizing human activity, not a 'truth' about the natural world 'that has always existed.'" *Alice Corp. Pty. Ltd.* v. *CLS Bank Int'l*, 134 S. Ct. 2347, 2356 (2014) (internal citations and quotation marks omitted). As is clear from this sentence, the Court was merely describing Bilski's claimed method, rather than making any sort of declaration about methods of organizing human activities. This is confirmed by its statement – found in the same paragraph – that "the Court [in *Bilski*] grounded its conclusion that all of the claims at issue were abstract ideas in the understanding that risk hedging was a 'fundamental economic practice.'" *Id.* (internal citations and quotation marks omitted). Thus, the Court explicitly indicated its reasoning was *not* based on the fact that the claims involved a method of organizing human activities, but instead held that they were directed to abstract ideas because they recited a "fundamental economic practice." In going on to reach the conclusion that Alice's claims were

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also directed to abstract ideas, the Court does mention "organizing human activities" but bases it (again) on "fundamental economic practices."

Nor is "organizing human activities" announced as a category of abstract ideas elsewhere in the case law. The phrase (or variants like "process for organizing human activities") appears in only a handful of other opinions. For example, it is used in Justice Stevens' concurrence in *Bilski v. Kappos*, where the term appears to be equated with methods of doing business. *561 U.S. 593, 603 (2010)*. However, it is referred to only once in the majority opinion, and it used in a passage *rejecting* Justice Stevens' argument that such methods should be considered categorically ineligible. *Id.* at 593 ("Concerns about attempts to call any form of human activity a 'process' can be met by making sure the claim meets the requirements of § 101."). Read in context, this statement does not indicate that the Court recognized or endorsed such a category, but rather suggests the opposite.

The term also appears in Judge Dyk's concurring opinion in the decision below, where he made the same argument as Justice Stevens and met with a similar lack of success in persuading the majority to adopt it. Judge Dyk's concurrence is likely where the term originated. It doesn't appear to have been used in previous cases and Judge Newman criticizes the phrase as "a vague term created by the concurrence." *In re Bilski*, 545 F.3d 943, 988 (Fed. Cir. 2008) (Newman, J., dissenting).

In sum, "methods of organizing human activities" is a newly-minted phrase that has been used only in a handful of appellate opinions,[1] and in the very few instances where it appears in a majority opinion (rather than concurrence), it has been used either in passing or in reference to its use in another opinion. The term has never been cited as the basis for concluding the claims at issue are an abstract idea, and there is no indication that the Court intended to announce this as a distinct category of abstract ideas. It is not the case, therefore, that the "courts" have "identified" them as such.

Given the lack of case law support for the notion that "methods of organizing human activities" is a recognized category or a term that has any legal or practical relevance to the determination of eligibility, Microsoft respectfully submits that, at a minimum, it should be removed from the description of "abstract ideas" in the *Interim Guidance*.

2. The Description of "Abstract Ideas" as a Whole Is Unhelpful and Should Be Clarified or Replaced.

While there is some ambiguity about the scope of the "laws of nature" and "natural phenomena," the *Interim Guidance* provides a concise (and helpful) definition: "Laws of nature and natural phenomena, as identified

[1] As far as we are aware, the only other use of the term an appellate decision is in the Federal Circuit's non-precedential opinion in *Planet Bingo, LLC v. VKGS LLC*, 576 Fed. Appx. 1005, 1008 (Fed. Cir. 2014) ("This is similar to the kind of 'organizing human activity' at issue in Alice.") (internal citation omitted). In the wake of *Bilski*, it also appeared in several District Court decisions which quoted the Supreme Court opinion.

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by the courts, include naturally occurring principles/substances and substances that do not have markedly different characteristics compared to what occurs in nature."

In contrast, the corresponding discussion of abstract ideas does not define the category based on its nature or distinguishing characteristics, but merely states that abstract ideas have been "identified by way of example, including fundamental economic practices, certain methods of organizing human activities, an idea 'of itself,' and mathematical relationships/formulas."

This description is problematic on more than one front, but as a definition its most basic problem is that it tells the examiner or practitioner little or nothing about the scope and attributes of "abstract ideas," which is precisely the information needed to determine whether a claim is directed to the judicial exclusion. The problem is compounded because two of the four illustrative examples don't communicate anything useful about "abstract ideas" as a category, and are more likely to confuse than to assist examiners.

The first of these is "certain methods of organizing human activities." Beyond being unsupported in the case law, as discussed above, the term is itself too ambiguous to be helpful in defining abstract ideas. Because the phrase is not a defined or recognized term of art, it fails to enhance clarity or provide useful guidance to examiners. It doesn't describe any obviously-identifiable group or category of methods, and its meaning has not been defined (or even been the subject of any significant, illuminating discussion) in the case law. Nor does the phrase have a plain, accepted meaning outside the reported cases.

Moreover, any meaning the phrase may have is rendered more ambiguous by putting "certain" in front of it. The implication is that some methods are abstract ideas and others are not. In other words, whatever makes something an abstract idea (which is the information needed to make an accurate determination), isn't inherent in all methods of organizing human activities, but is only present in some. Without greater clarity as to what might make a method one of the "certain" methods or what distinguishes the "certain" methods from other "methods of organizing human activities," the guidance provides very little help to examiners in understanding the term's meaning or scope.

Similarly, including an "idea of itself" as an example of an abstract idea, doesn't allow any useful inference about the attributes of abstract ideas. As with "methods of organizing human activities," there is no consensus as to what exactly an "idea of itself" means. Additionally, citing ideas of themselves as an *example* of "abstract ideas" (rather than just a variation of the term that has the same meaning) could be read to suggest that the exception includes more than purely mental subject matter, potentially encompassing not only ideas but also their application or embodiment in the physical world. Although an "idea of itself" seems somewhat less likely to cause significant confusion than the reference to "certain methods of organizing human activities," it similarly introduces unnecessary ambiguity while failing to provide guidance or clarity in describing abstract ideas as a category.

We appreciate that the Office's goal is to provide clear guidance to examiners in making accurate, consistent eligibility determinations. We are concerned that introducing a vague new term prefaced by the word "certain" and providing no clear indication of the intended meaning of either will, at best, create confusion and quite possibly will result in at least some examiners incorrectly rejecting claims because they mistakenly

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believe them to be among the "certain" subgroup of methods of organizing human activities that is ineligible. Similarly, defining the term with a phrase using the same operative word ("idea") does nothing to aid examiners in accurately determining whether claims are directed to an abstract idea, while creating some risk of confusion about the scope of the exception.

In Microsoft's view, it is essential that the guidance provide a more coherent definition of "abstract ideas" that more clearly communicates the basic characteristics the courts have attributed to this judicial exception. Over the years, courts have described what falls within the exception using various terms, including "[a] principle, in the abstract," "abstract intellectual concepts," "mental processes," and "abstract ideas." These (and many other) descriptions used in the case law consistently have the following attributes in common:

- They are products of, and exist only in, the human mind rather than the physical world (i.e., ideas, principles, concepts, mental processes).
- They are not specific, practical, or detailed, but are described as general, abstract, theoretical, fundamental, or intellectual.

Defining the scope of the abstract ideas exception in these terms would not only more accurately reflect the judicial precedents, but would also be easier to understand. This would make it much more likely to be applied accurately and consistently. Accordingly, we would urge the USPTO to replace the existing description of abstract idea in the *Interim Guidance* with a short definition similar to the one provided for laws of nature based on the attributes discussed above. For example:

> *Abstract ideas, as identified by the courts, are products of the human mind, including "abstract intellectual concepts," "principles," mathematical formulas and relationships, and "fundamental economic concepts," that exist only in the mind, apart from any practical application or embodiment in the natural world.*

Alternatively, the Office should – at a minimum – replace the terms "certain methods of organizing human activity" and "idea of itself" with other, more representative, phrases drawn from the case law (e.g., "abstract intellectual concepts" and "mental processes").

Conclusion

In conclusion, Microsoft would again like to applaud the Office its efforts to provide clear guidance to examiners regarding the standards and appropriate analysis for determining patent eligibility, and for its steadfast commitment to enhancing both the quality and the efficiency of examination. We commend the USPTO for its openness to receiving feedback from stakeholders and appreciate the opportunity to provide these comments.

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Respectfully Submitted,

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Appendix:
Additional Suggestions Regarding *the Interim Guidance* and Examples

1. Interim Guidance

   A. The *Guidance* and Examples reference "preemption" and the risk of "tying up" subject matter and preventing others from it. The Courts have cited this concern is the principal justification for the judicial exceptions. Given the strong link between preemption and the operation of the judicial exceptions, we would suggest adding a sentence in the *Guidance* indicating that where the prior art of record discloses alternative implementations to carrying out the abstract idea, this is a strong indication that the claims do not pose a preemption risk and may be appropriate candidates for streamlined 101 analysis.
   B. Page 13: The *Guidance* identifies abstract ideas that were found by both the Supreme Court and the Federal Circuit based on cases that are both before and after the *Alice* decision, but does not cite *RCT vs. Microsoft* where the Federal Circuit found that the claims in question were not directed to an abstract idea. We suggest adding an appropriate reference to this case. (Additionally, the discussion of this case in the Examples indicates that the Federal Circuit determined the claims were directed to an abstract idea. We read the decision as concluding the opposite.)
   C. Page 14: The description of *Digitech* case is incomplete and should include the underlined text in the following: "organizing information through mathematical correlations <u>without ties to a specific structure or machine</u>." See *DDR* opinion, page 11
   D. We suggest adding the following two bullets to the list of what courts have said could qualify as "significantly more":
      i. Resolving a particular Internet-centric problem and yielding a result that overrides the routine and conventional sequence of events. See *DDR* opinion, page 22-23.
      ii. Functional and palpable applications in the field of computer technology that address a need in the art. See *RCT* opinion, page 15.
   E. The Guidance should replace (not supplement) the June 25, 2014 Preliminary Examination Instructions.
   F. In Step 2A, we suggest emphasizing that claims that are merely <u>based on</u> or <u>involve</u> an abstract idea are not <u>directed to</u> an abstract idea.
   G. The Guidance should emphasize that the examiners should not disregard claim elements that they deem conventional before conducting the analysis in Step 2A.
      i. The Guidance instructs that claims should be examined as a whole. However, in our experience, examiners often disregard computing elements when conducting Step 2A of the eligibility analysis.
      ii. If the computer elements are ignored, the analysis often misses the point that the invention is directed to providing novel functions specific to the field of computer and internet technologies.

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iii. For example, if the examiner takes out computer elements in the claims of the second abstract idea example (DDR Holding), then the claims would have failed Step 2A, which is the wrong result according to the analysis.