

March 8, 2019

Via Electronic Mail
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IBM Corporation Comments in Response to "Request for Comments On 2019 Revised Patent Subject Matter Eligibility Guidance", 84 Fed. Reg. 50 (January 7, 2019).

IBM thanks the United States Patent and Trademark Office ("Office") for the opportunity to provide comments on the Office's 2019 Revised Patent Subject Matter Eligibility Guidance ("Revised Guidance"). Patent eligibility under 35 U.S.C. § 101 and the judicially-created "abstract idea" exception continue to be of paramount importance to innovators and patentees, who rely on the patent system as means to protect their investment in computer-related innovations.

The Revised Guidance is Helpful, but Legislation is Still Needed

IBM commends the Office for recognizing that application of the *Alice* test has proven to be "difficult" and caused "uncertainty." In fact, it is worse than that. The Supreme Court's "abstract ideas" test is fundamentally and fatally flawed. The only real solution to provide consistent and predictable results during the patent examination process and during litigation is for Congress to amend §101.¹

IBM recognizes that the Office cannot wait for Congress to act because patent examiners desperately need guidance to navigate the "murky morass that is §101 jurisprudence."² The Office's consistent interpretation and application of §101 case law, necessary for examining patent applications and reviewing issued patents, is critical for promoting innovation and maintaining a balanced patent system.

The Office's effort to distill into the Revised Guidance the reasoning administered in relevant judicial decisions is the right approach for the Office. IBM believes the Revised Guidance represents a constructive improvement over prior, more case-specific guidance, which relied on vague formulations and often contradictory results from courts struggling to apply the Supreme Court's test. The prior approach forced applicants and examiners to generalize claimed inventions to try to make them fit into the specific fact patterns of prior cases. This methodology led to subjective, often inconsistent results and provided little clarity and guidance to patent examiners and applicants.

¹See IBM Corporation's Comments on "Notice of Roundtable's and Request for Comments Related to Patent Subject Matter Eligibility," 81 Fed. Reg. 71485 (October 17, 2016); Intellectual Property Owners, Board Resolution Amending 35 U.S.C. § 101 (Adopted January 24, 2018) (<https://www.ipo.org/index.php/board-resolutions/2018-board-resolutions/>).

² *MySpace v. GraphOn Corp.*, 672 F.3d 1250, 1260 (Fed. Cir. 2012).

We believe the new framework in the Revised Guidance is a step forward, but we are concerned about how the evolving and inconsistent analysis among courts will comport with the Office's framework. If courts view the eligibility analysis differently from the Office, the Revised Guidance will fail to provide more certain patent rights.

The Office Should Clarify the Revised Guidance

IBM appreciates the Office inviting the public to suggest improvements to the Revised Guidance. We believe that certain changes to the Revised Guidance, as described below, would enhance its clarity and precision, and would significantly benefit examiners, applicants, and innovators as means to provide consistent and predictable results across applications, art units, and technology fields. While legislation is the only real solution, the clarifications requested below would help the Office provide, to the entire patent community, including the courts, leadership in the application of the law of subject matter eligibility.

1. "recited as such" – The Revised Guidance states that "the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation(s) (that is, when recited on their own or per se)." It is unclear what it means for subject matter to be recited "as such," recited "on their own," and recited "per se." The Office should provide examples of subject matter that is recited in the claim, but that is not recited "as such." As the Supreme Court has recognized "[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,"³ and thus establishing an understanding of what it means to recite an abstract idea "as such" would be very instructive.
2. "mathematical concepts" – Math has been called the "language of the universe" because it can be used to describe everything in the physical world. The steps of any method claim, and the steps of any process that is executed on a conventional computer, can be viewed in mathematical terms. Thus, it is important that the Office explain how examiners can determine if a particular process claim recites a mathematic concept as such, as compared to simply resting upon or reflecting mathematical concepts. We recommend the Office provide examples that illustrate this distinction because the current examples do not offer such guidance.
3. "certain methods of organizing human activity" – The prefatory word "certain" suggests that this category applies to *some* methods of organizing human activity, and not to others, but there is no guidance as to which fall into this category and which would not. Does this category only include the three subgroups listed in the Revised Guidance – i.e., fundamental economic principles or practices; commercial or legal interactions; and managing personal behavior or relationships or interactions between people? If not, what else qualifies as a "method of organizing human activity"? Most inventions — particularly process inventions — can be described as involving human activity. Without clearer explanations and limitations, this category could "swallow" all process inventions. The Office should further define what qualifies as a "fundamental economic principle." What

³ *CLS Bank v. Alice*, 573 U.S. 208, 216 (2014).

does it mean to be “fundamental”? Can a principal that is not fundamental later become fundamental?

4. “mental processes” – The Revised Guidance indicates that a process which could be performed in the mind is in the “mental process” category unless the claim cannot “practically” be performed in the mind. But this formulation is confusing and oversimplifies certain technology, such as computer technology. For example, some algorithms performed by computers can, given enough time, be performed in the human mind. The Office should explain how an examiner is to determine if a process cannot practically be performed in the mind. For example, are there factors that an examiner should consider?

5. “integrated into a practical application” – The Revised Guidance states that a claim that integrates a judicial exception into a practical application is one that “will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” While this language may track the case law, this statement is conclusory and provides no guidance to examiners or applicants. The Office should indicate to examiners that they should not reject claims merely because they determine that the claim does not impose a “meaningful limit” (which is highly subjective) or is nothing more than a drafting effort (which is just as subjective). IBM believes the Office should rely on specific examples to ensure objectivity, rather than the general definition of “practical application,” unless this can be more precisely defined. We appreciate the examples provided with the Revised Guidance and we have provided suggestions for improving those as described below.

IBM cautions that much of the discussion regarding a “practical application” could be interpreted as involving requirements for patentability found elsewhere in the statute. While we understand that much of the case law appears to conflate some of these requirements, we note that subject matter eligibility analysis should not consider novelty, obviousness, claim definiteness, or disclosure issues. Rather, those issues should be evaluated as independent requirements under 35 U.S.C. § 102, 103, and 112, respectively.

6. “improvement in the functioning of a computer” – The Office should explain what it means to improve the “functioning of a computer.” Software typically consists of instructions that a computer performs to achieve a desired outcome. Strictly speaking, all software specifies (and thus improves) the way a computer functions. Without software, a conventional computer will not function at all. The Office should provide examiners with a test – or at least additional examples – to separate innovations that improve the functioning of a computer from the few that do not.

7. “machine . . . that is integral to the claim” – The Revised Guidance indicates that an abstract idea is integrated into a practical application if it is used with a machine that is integral to the claim. The Office should provide guidance on what it means for a machine to be integral to a claim.

8. “generally linking . . . to a particular technological environment” or “field of use” – The Office should define what is meant by a “technological environment” and “field of use.” In

one sense, every claim element limits the claim to a particular environment and to a particular field. For example, if the first element of a claim was “a database,” that limits the claim to the environment and field of databases. In addition, the Office should explain what it means to “generally link” a claim to an environment or field of use.

9. Step 2A(2) vs. Step 2B – The Revised Guidance indicates that a claim that might contain “significantly more” than an abstract idea would be patent eligible under Step 2B, even though the abstract idea is not integrated into a practical application under prong 2 of Step 2A. The example given is a claim with data gathering steps that are deemed to be insignificant post-solution activity (and thus not enough to integrate the idea into a practical application) but that are unconventional and thus constitutes an inventive concept that is “significantly more.” The Office should explain how unconventional steps that do not limit an abstract idea to a practical application could still be enough to render the claim statutory subject matter. Given that the inquiries under Step 2A(2) overlap with those considered under Step 2B, as the Revised Guidance acknowledges, it is important that the Office clarify how the tests differ. Is the only difference that the latter, but not the former, does not give weight to claim elements that are conventional? If it will be rare for an applicant who cannot establish patent subject matter under prong 2 of Step 2A to be able to succeed under Step 2B, the Office should signal this so that applicants can avoid bringing hopeless Step 2B arguments.

The Office Should Provide Further Examiner Training, Issue More Examples, and Monitor Examiner Compliance

IBM appreciates that the Office created an exception process for claim limitations that do not fall within the enumerated groups of abstract ideas, but still may nonetheless be treated as an abstract idea. We recognize that it would be impossible for the Office to anticipate every possible abstract idea especially in view of the challenging patent eligibility landscape. IBM is grateful that the Office has specified that use of this exception process will be rare and requires the Technology Center Director’s approval and signature. We respectfully request that the Office monitor use of this exception process within each Technology Center, evaluate inconsistencies in application of this exception process among the various Technology Centers, and provide further guidance and education to the examiners and the public alike. For example, if the Office determines that there are exceptions outside the delineations of the Revised Guidance, the Office should not only communicate those exceptions to the examiner and applicant, but to the public as well. Moreover, IBM requests guidance as to how a patentee can overcome a rejection outside the enumerated groups of abstract ideas that is approved by the Technology Center’s Director.

Further, we urge the Office to continue to educate examiners and amend form paragraphs, as necessary, to make clear the evidentiary and explanatory requirements for eligibility rejections under the Revised Guidance to establish a *prima facie* case. It is critical that the Office instruct examiners to clearly communicate and specifically articulate the reasoning and supporting evidence behind a subject matter eligibility rejection to allow an applicant to effectively respond to such a rejection. Given the amorphousness of the abstract idea inquiry, which tempts examiners to engage in *ipso facto* reasoning, the

Office should explore ways to improve the clarity of the examiner's explanations, such as through quality control targeted to this issue.

Finally, IBM welcomes the addition of subject matter eligibility examples thirty-seven through forty-two, which provide helpful claim analyses under the Revised Guidance. We urge the Office to publish an analysis of the previously issued examples, one through thirty-six, under the framework of the Revised Guidance. Doing so will serve the public by promoting further clarity and understanding of how the Revised Guidance represents the beginnings of a shift in the current trajectory of subject matter eligibility towards more consistent and predictable results, making it worthwhile for applicants to rely on the patent system to protect their innovations.

Conclusion

While IBM agrees with the spirit of the guidance, we believe that confusion surrounding subject matter eligibility will remain until Congress acts on a legislative approach. We applaud the Office for continuing its efforts to improve eligibility guidance for the examiners and the public in the absence of such legislation. We urge the Office to continue to monitor changes in case law to ensure the Revised Guidance remains workable and reflects the developing law.

IBM is grateful for the opportunity to comment on the Revised Guidance. The Office's continuing collaboration with the public and attention to feedback is critical in developing workable subject matter eligibility guidelines.

Respectfully submitted,

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