

PATENT DOCS

USPTO Publishes Update to Its Subject Matter Eligibility Guidance

By Michael Borella -- October 17, 2019

Early today, the U.S. Patent and Trademark Office released an update to its January 2019 Subject Matter Eligibility Guidance. Unlike the January Guidance, which represented a significant change in how the USPTO applies § 101 in examination and PTAB proceedings, this October Update is primarily an effort to clarify issues brought up by public comments on the January Guidance. While not exactly much ado about nothing, the October Update provides few changes to USPTO's stance on § 101.

The October Update discusses five areas of § 101 analysis and procedure in detail, and is accompanied by four new hypothetical § 101 examples, an index of all such examples published since early 2015, and an updated spreadsheet of § 101 court cases. The October Update itself is discussed below, with emphasis on the abstract idea judicial exclusion, and the new examples will be covered in future articles.

The backdrop to the § 101 guidance is 2014's *Alice Corp. vs. CLS Bank Int'l* Supreme Court holding. Therein, the Court set forth a two-part test to determine whether claims are directed to patent-eligible subject matter under § 101. These parts are denoted by the USPTO as steps 2A and 2B, respectively (step 1 is to determine whether the claimed invention is one of the four statutory categories of subject matter set forth in § 101, and is rarely at issue in practice).

Under step 2A, one must decide whether the claim at hand involves a judicially-excluded law of nature, a natural phenomenon, or an abstract idea. If so, then under step 2B one further decides whether any element or combination of elements in the claim is sufficient to ensure that the claim amounts to significantly more than the judicial exclusion. Elements or combinations of elements that are well-understood, routine, and conventional will not lift the claim over the § 101 hurdle. While this inquiry is generally carried out as a matter of law, factual issues can come into play when determining whether something is well-understood, routine, and conventional.

The January Guidance breaks the first part of the *Alice* test into two sub-steps (let's call them 2A(i) and 2A(ii) for purposes of clarity). In the former, one determines whether the claim recites a judicial exception, such as an abstract idea. In the latter, one determines further "whether the recited judicial exception is integrated into a practical application of that exception."

To focus the analysis, the January Guidance indicates that, under step 2A(i), all abstract ideas should fall into one of three categories: mathematical concepts, certain methods of organizing human activity, and mental processes. Think of these as the "Three M's" -- math, money, and mental steps.

If the analysis moves on to sub-step 2A(ii), one determines "whether the claim as a whole integrates the recited judicial exception into a practical application of the exception." Such a claim "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."

And now, on to the guts of the October Update

When Does a Claim Recite a Judicial Exception?

Given the use of the vague term "recite" in step 2A(i), it is not surprising that some have taken issue with how this sub-step is to be applied in practice. The USPTO attempts to clarify what it meant in the January Guidance:

*[A] claim recites a judicial exception when the judicial exception is "set forth" or "described" in the claim. While the terms "set forth" and "describe" are thus both equated with "recite," their different language is intended to indicate that there are two ways in which an exception can be recited in a claim. For instance, the claims in *Diamond v. Diehr* clearly stated a mathematical equation in the repetitively calculating step, such that the claims "set forth" an identifiable judicial exception, but the claims in *Alice Corp. v. CLS Bank*, "described" the concept of intermediated settlement without ever explicitly using the words "intermediated" or "settlement."*

The USPTO goes on to state that multiple judicial exceptions can be recited in a claim, and if they are of different types (*e.g.*, an abstract idea and a law of nature), then MPEP 2106.05(II) controls ("If . . . the claim clearly recites a plurality of discrete exceptions, then for purposes of examination efficiency, examiners should select one of the exceptions and conduct the eligibility analysis for that selected exception."). For multiple abstract ideas recited by the same claim (*e.g.*, a mental process and a mathematical concept), the USPTO strongly recommends that these exceptions also be analyzed together.

The Grouping of Abstract Ideas

As noted above, the January Guidance places all abstract ideas into one of three categories (with rare exceptions). The October Update further clarifies the scope of these categories.

Regarding mathematical concepts, the USPTO writes:

When determining whether a claim recites a mathematical concept (i.e., mathematical relationships, mathematical formulas or equations, and mathematical calculations), examiners should consider whether the claim recites a mathematical concept or merely includes limitations that are based on or involve a mathematical concept. A claim does not recite a mathematical concept (i.e., the claim limitations do not fall within the mathematical concept grouping), if it is only based on or involves a mathematical concept. For example, a limitation that is merely based on or involves a mathematical concept described in the specification may not be sufficient to fall into this grouping, provided the mathematical concept itself is not recited in the claim. (Emphasis added.)

Applying this determination involves some rather thin bacon slicing, and was illustrated in § 101 example 38. We have previously discussed how the USPTO's analysis of example 38 provided more questions than answers and needed clarification. Unfortunately, the October Update does not address the problems with example 38, and even suggests the opposite outcome.

The USPTO does clarify, however, that "[a] mathematical relationship may be expressed in words or using mathematical symbols." The same holds for mathematical formulas or equations and mathematical calculations. Particularly, "a claim does not have to recite the word 'calculating' in order to be considered a mathematical calculation . . . a step of 'determining' a variable or number using mathematical methods or 'performing' a mathematical operation may also be considered mathematical calculations."

Regarding certain methods of organizing human activity, the USPTO indicates that "not all methods of organizing human activity are abstract ideas (e.g., a defined set of steps for combining particular ingredients to create a drug formulation is not a certain method of organizing human activity)." Nonetheless, this category has proven to be used quite expansively by examiners. While the USPTO indicates that "this grouping is limited to activity that falls within the enumerated sub-groupings of fundamental economic principles or practices, commercial or legal interactions, managing personal behavior, and relationships or interactions between people, and is not to be expanded beyond these enumerated sub-groupings," this definition remains broad. The USPTO goes on to provide examples of these sub-groupings, but there are no surprises therein.

Regarding mental processes, the USPTO's definition thereof reflects a legal fiction set forth by the Federal Circuit. Notably, "claims do recite a mental process when they contain limitations that can practically be performed in the human mind, including for example, observations, evaluations, judgments, and opinions," but "[c]laims can recite a mental process even if they are claimed as being performed on a computer." The justification for this non-literal interpretation is that "[t]he courts have found claims requiring a generic computer or nominally reciting a generic computer may still recite a mental process even though the claim limitations are not performed entirely in the human mind."

Nonetheless, "[c]laims do not recite a mental process when they do not contain limitations that can practically be performed in the human mind, for instance when the human mind is not equipped to perform the claim limitations." Examples include "calculating an absolute position of a GPS receiver and an absolute time of reception

of satellite signals," "detecting suspicious activity by using network monitors and analyzing network packets," "a specific data encryption method for computer communication involving a several-step manipulation of data," and "rendering a halftone image of a digital image by comparing, pixel by pixel, the digital image against a blue noise mask."

The distinction between mental and non-mental processes under this rubric is that "merely using a computer as a tool to perform the [otherwise mental] concept" fails to lift an invention out of the mental realm, and examiners are encouraged to look to the applicant's specification in order to make this determination. Furthermore, "[t]he use of a physical aid (i.e., the pen and paper) to help perform a mental step (e.g., a mathematical calculation) does not negate the mental nature of this limitation."

When is a Judicial Exception Integrated into a Practical Application?

In practice, we have found that most § 101 disputes with the USPTO examiners or PTAB turns on sub-step 2A(ii) -- is the claimed invention integrating a judicial exception into a practical application? While the USPTO writes many words about this issue in the October Update, little new is said. As before, the USPTO is looking for the integration to be an improvement to the functioning of a computer or another technology. It is important to understand that a device or system must be improved -- an invention that uses technology to improve how humans perform (*e.g.*, a data analysis system that does little more than crunch numbers to recommend a course of action to be taken by a person) is likely going to fail at this sub-step.

The USPTO reiterates that the applicant's specification "must describe the invention such that the improvement would be apparent to one of ordinary skill in the art" and not in a conclusory manner. Further, "the claim itself [must] reflect[] the disclosed improvement," but need not explicitly recite the improvement.

The October Update, however, does clarify that "the 'improvements' analysis in Step 2A determines whether the claim pertains to an improvement to the functioning of a computer or to another technology without reference to what is well-understood, routine, conventional activity." But this is followed by the somewhat confusing

statement that "the claimed invention may integrate the judicial exception into a practical application by demonstrating that it *improves the relevant existing technology* although it may not be *an improvement over well-understood, routine, conventional activity*." (Emphasis added.) The distinction here is not perfectly clear and the USPTO does not expound further upon it.

Nonetheless, the USPTO does prescribe that:

[T]he Prong Two analysis considers the claim as a whole. That is, the limitations containing the judicial exception as well as the additional elements in the claim besides the judicial exception need to be evaluated together to determine whether the claim integrates the judicial exception into a practical application. The additional limitations should not be evaluated in a vacuum, completely separate from the recited judicial exception. Instead, the analysis should take into consideration all the claim limitations and how those limitations interact and impact each other when evaluating whether the exception is integrated into a practical application.

This language is welcome and likely to be a point that applicants repeat to examiners during § 101 discussions.

The *Prima Facie* Case

The USPTO received comments on the January Guidance suggesting that it re-emphasize the examiner's burden of establishing the ineligibility of claims under § 101. The October Update does so, but with a pair of caveats.

In short, the USPTO states that an examiner should "identify the judicial exception . . . by referring to what is recited . . . in the claim and explaining why it is considered to be an exception." Notably, "[f]or abstract ideas, the rejection should explain why a specific limitation(s) recited in the claim falls within one of the enumerated groupings of abstract ideas." Then, the examiner "should identify any additional elements recited in the claim beyond the judicial exception and evaluate the integration of the judicial exception into a practical application." This involves "explain[ing] why the additional

elements, taken individually and in combination, do not result in the claim, as a whole, amounting to significantly more than the exception."

The first of the aforementioned caveats is that neither the January Guidance nor the October Update address the problem of conclusory § 101 rejections. These are unfortunately common, and when challenged, examiners that issue conclusory rejections often write more words defending their non-analysis than explaining why the claims are rejected. The second is that the October Update should have reiterated that examiners need to evaluate the patent eligibility of all dependent claims separately. Far too often an examiner will provide detailed reasoning for rejecting an independent claim and then reject all dependent claims in a single sentence. Examiners need to be educated that doing so is an improper burden shifting that requires that wrongly places the onus on the applicant to first establish the eligibility of the claims.

Educating the Examining Corps

The USPTO concludes the October Update with a discussion of how it is helping examiners obtain cognizance of the § 101 guidance. This involves publishing the examples (including new interpretations of examples published before the January Guidance), examiner training, and a reiteration that examiners are expected to follow the January Guidance.

But this section -- and the October Update as a whole -- ends with a point of irony.

The USPTO states that:

[E]very applicant whose claims have been twice rejected, may appeal from the decision of the examiner to the Patent Trial and Appeal Board, and an applicant may rely upon the 2019 PEG in support of his or her argument that a rejection under § 101 is in error. It is the rejection under § 101, and not any alleged failure to comply with the 2019 PEG, that is reviewed by the Patent Trial and Appeal Board.

The PTAB is much more likely than examiners to base its § 101 reasoning on a combination of the January Guidance and relevant case law. Thus, appealing an examiner's rejection may effectively require arguing the case law as well as the January Guidance that supposedly replaces it.