

**Comments in response to
Request for Comments on Examination Instruction and
Guidance Pertaining to Patent-Eligible Subject Matter
79 FR 36786 (June 3, 2014)**

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Introduction

The “Preliminary Examination Instructions in view of the Supreme Court Decision in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*” issued by the USPTO on June 25, 2014, give a good overview of the recent Supreme Court opinion, but do not provide the detailed procedural instructions for examiners to develop the record necessary for the informed appeals that will flesh out the new rule for determining whether a claimed invention is statutory subject matter. Because the Supreme Court did not provide a clear test (“In any event, we need not labor to delimit the precise contours of the “abstract ideas” category in this case,” slip Opinion at 10), it is important that clear appeals be brought expeditiously to the Patent Trial and Appeal Board (PTAB), Court of Appeals for the Federal Circuit, and possibly the Supreme Court to provide the guidance needed by examiners.

This is the first instance where a substantive determination of patentability is not based on what the applicant claims to be the invention, but instead a caricature of the invention created by the examiner. This is in stark contract to the Section 103 requirement that obviousness be determined by considering “the claimed invention as a whole.” Instead, the Supreme Court explicitly ignored key parts of some of the *Alice* claims. Even though claim 1 of the ‘720 patent covered a “data processing system” and recited both a “data storage unit” and a “computer,” the Court ignored those portions of the claim, finding that “the system claims are no different from the method claims in substance.” (Slip opinion at 16.) Even when a machine is claimed, for the *Alice* analysis it is not a statutory machine but instead should be treated as a method.

Furthermore, the Supreme Court did not follow the language of the claim in determining whether what was claimed was an “abstract idea” and whether what was

beyond that abstract idea was not enough to warrant patentability. While the Supreme Court can get by with that (perhaps because it was not a close call in *Bilski* or *Alice*), in order to refine the law of statutory subject matter on appeal, it is important that the examiner justify the determination of the “abstract idea” and whether a claim does more than just recite that abstract idea. While the instruction letter tells the examiner to do this, it does not say how this should be done to produce the necessary record for appeal or to avoid arbitrary determinations by the examiner.

The Court could have noted that “hedging” (in *Bilski*) or “intermediated settlement” are old techniques and implementing a known technique on a computer is clearly obvious today. It did not. Instead, it created a new ground for rejection whose boundary will only be known after a number of appeals. Beyond instructing examiners on how to build a suitable record for those appeals, the USPTO should develop policies that expedite the development of the law in this area.

Problems with the current instructions

There are two substantial problems with the current instructions. First, there are essentially no concrete examples given for what should be allowed and what should be rejected. Second, they do not give any details for the procedure that the examiner is to follow.

The lack of concrete examples

Besides the example of *Diehr* (footnote 5), there is no guidance given for when something will pass the test of the instructions. That is not surprising, given the lack of guidance from the Supreme Court in *Alice*, but it provides no help to applicants trying to present claims that will be accepted.

Certainly, the Office can come up with an example or two of “improvements to the functioning of the computer itself,” even though the Supreme Court did not. Since the instructions do not specifically require that the examiner make a prima facie case that the claimed invention *does not* improve the functioning of the computer itself, it seems that office actions might just say that the claimed invention makes no improvement to the computer, if it mentions that part of the test in the instructions at all, leaving the applicant to try to convince the examiner that there is an improvement without any guidance about how substantial the improvement needs to be.

But the USPTO needs to be conservative in its examples. Only the applicant, who presumably wants a broader rule of what is patentable, is allowed to appeal the decision of the USPTO not to allow the patent. This means that appeals of claim rejections have the ratcheting effect of either maintain the status quo or broaden what is patentable. It is not until after a patent has issued and it is litigated and appealed that the Federal Circuit or the Supreme Court that the courts can say that something really is not patentable, even if the examples say it is.

What the USPTO needs to do is review the opinions as the law of “abstract ideas” develops, and revise the examples accordingly, not avoid giving the examples that would help the examiners and applicants trying to determine what an acceptable claim may be.

The lack of rigorous procedures

Although the instructions purport to establish a procedure for an examiner to follow in making the statutory subject matter determination, they do not contain the necessary safeguards against examiners making arbitrary decisions with little reasoning that can be challenged on appeal.

Without knowing why the examiner is putting forth a particular “abstract idea,” it will be impossible to counter the examiner's view both before the examiner and on appeal. And yet, the guidelines does not specifically require the examiner to state and justify his or her determination of the claims “abstract idea.”

Without that, it is likely that some examiners will simply parrot the language of the claim's preamble (in *Bilski*, "A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price"; in *Alice*, "A method of exchanging obligations as between parties) or one of the example abstract ideas listed in the instructions (such as “fundamental economic practice”). Because “at some level, all inventions embody, use, reflect, rest upon, or apply, laws of nature, natural phenomena, or abstract ideas” (slip opinion at 6), one has to be careful that the examiner's characterization is demonstrably related to claimed invention.

The best way to do that is to require that any determination of the “abstract idea” be made explicit by the examiner in the office action and justified in light of the teaching of the application and the language of the particular claim. Even similar claims may require separate analysis, since the applicant may be trying to determine the acceptable boundary through a series of different claims.

As an example of the problems that result from an examiner not making his reasoning explicit, consider this form language that reportedly is being used by some examiners:

Claims XXXX are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter, specifically an abstract idea.

Claims are directed to a judicial exception (i.e., law of nature, natural phenomenon, or abstract idea), specifically, the abstract idea of [INSERT INVENTION HERE]. After considering all claim elements, both individually and in combination, it has been determined that the claim does not amount to significantly more than the abstract idea itself. Further, while the claims recite [hardware or software elements, such as processors or modules], these limitations are not enough to qualify as “significantly more” being recited in the claim along with the abstract idea. Therefore, since there are no 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 is rejected under 35 USC § 101 as being directed to non-statutory subject matter.

Indeed, the claims fail to recite any improvements to another technology or technical field, improvements to the functioning of the computer itself, and/or

meaningful limitations beyond generally linking the use of an abstract idea to a particular environment. Although the claims do recite the use of a computer, nothing more than a generic computer, performing generic, well-understood and routine computer functions, would be required to implement the aforementioned abstract idea.

Therefore, because 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 is rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

This is exactly what the Supreme Court cautioned about in *Alice*, when it stated: “At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law.” (Slip opinion at 6.) If the examiner characterized the abstract idea in *Diehr* (which we know is statutory subject matter, slip opinion at 12-13) as “using a computer to determine when rubber in a tire mode was cured,” then the language above could be used to improperly reject the *Diehr* invention.

The problem is that in the language above, there is no justification for the examiner’s selection of the “abstract idea” to be plugged into the form language, nor that it is something that was a fundamental economic practice, a way of organizing human activities, the “idea of itself,” or a mathematical relationship or formula. That makes it difficult, if not impossible, to appeal the examiner’s view of the “abstract idea,” or to determine what elements of the claim were considered in deciding that they were not “significantly more” than the “abstract idea.”

There is also no place in the language above where the examiner explains why the limitations of the claim beyond the “abstract idea” are listed, with a reason why they are not considered “significant.” Would the use of a common thermocouple inside the rubber mold (something that is not even part of *Diehr*’s claim 1) be considered significant by an examiner using the language above for an easy rejection? Again, without the reasoning why the examiner feels something is not part of the “abstract idea” but isn’t “significantly more,” a well-argued appeal is impossible.

Already, we have examiners who simply regurgitate the claim and point to snippets in the prior art for the elements (something ignoring important limitations), then say it would be obvious to combine them with no real justification. But at least they have to follow the language of the claim, rather than their own view of what the invention may be, and indicate specific portions of a prior art reference that corresponds to a particular claim element.

Conclusory language as in the example above, and not explicit fact finding and clear reasoning by the examiner, will make the appellate decisions necessary to understand the boundaries of the *Alice* test very difficult, time-consuming, and expensive for applicants. The Supreme Court made in clear, in *KSR v. Teleflex*, that “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of

obviousness.” The same should be true for supporting the legal conclusion that a claim is not drawn to statutory subject matter.

The use of a form subject matter rejection, with the examiner simply making conclusory remarks with no references or reasoning given as in the language above, will inevitably lead to form appeals. It would not be surprising to see essentially the same appeals brief being used by applicants who have received such a rejection. Because the rejection states no facts or justification, there is no need to rebut anything in such a brief, instead simply saying that the examiner has not met the requirements for a prima facie case, and so the applicant is entitled to a patent because the initial burden is always on the examiner.

Appeals from a large number of form language rejections will substantially fill the pipeline of the PTAB, negating all the efforts to reduce the pendency of appeals that are just starting to show results. Either the PTAB will reverse and remand to the examiner for the justification that should have been there in the beginning, or the PTAB will have to do the work of the examiner and specify for the first time the justification for the rejection, with the applicant most likely asking for reconsideration because that will be the first time the rejection is properly made.

Presumably “formula” in the instructions means something like the Arrhenius equation in *Diehr*, and not a computer program that may look like a formula but is really just a way of specifying the particular operations to be performed. The Supreme Court, from *Benson* on, has repeatedly stated that its rulings should not be seen as saying that all software-based inventions are unpatentable. As a simple example of the difference between a formula and a computer program statement, the program statement $N=N+1$ is a common way to increment the value of the variable N but mathematical nonsense as long as N does not equal infinity. (In some programming language, the statement $N=N+1$ can be replaced with $N++$, with the second no longer looking like an unpatentable formula.) On the other hand, the formula $E=mc^2$ expresses the relationship between mass and energy.

Justifying that something is a “fundamental economic practice” or a “mathematical relationship or formula” is much like the Section 102 determination that a claim is novel. It requires the citation of prior art, or at least some justification that it is well-known (see Rule 104(c)(2) and (d)(2)), which should not be difficult if the economic practice is really “fundamental” to the field.

A possible approach

There are a number of ways for providing a rigorous determination of whether a claimed invention is statutory subject matter in light of the Supreme Court’s *Alice* opinion in a way that builds the proper record for the appeals that will be necessary to refine the boundaries, and prevents an examiner from simply giving a “word processor rejection” in order to get a count.

Here is one claim-based way of doing it, using much of the language of the current examiner instructions:

1. Consider each independent claim, since differences in their language may be an attempt on the part of the applicant to determine the boundary of acceptability. If it is a method claim, apply the procedure below to it. If it is a machine or manufacture claim, justify why it is equivalent to a particular method claim when the machine or manufacture is ignored, or if there is no corresponding method claim, create one from the language of the claim.
2. Determine which elements of each claim define its “abstract idea.” (It may be parts of one or more elements, rather than whole elements.) For a method claim as in *Bilski* or *Alice*, this may be the entire claim. Avoid simply calling what is recited in the preamble as the general purpose of the invention the claims “abstract idea,” since that will make the claim statutory if it contains any meaningful limitations in its body.
3. Search prior art to show that the abstract idea just determined is a “fundamental economic principle,” “mathematical relationship or formula” (as opposed to a way of expressing how the operations that a computer should perform), or an existing “method for organizing human activities.” This should be similar to the examination for novelty, except that it is performed on the subset of the claim language that corresponds to the abstract idea as determined in the previous step. If prior art cannot be found or the examiner cannot otherwise justify a determination that the abstract idea of the claim is a fundamental economic principle, mathematical relationship, method for organizing human behavior, law of nature, or physical phenomena, the claim recites statutory subject matter.
4. The remaining language in the claim is the “improvement” over the abstract idea. Unless the examiner can show that claim limitations in the remaining language are not an improvement to another technology or technical field or to the functioning of the computer itself, or a meaningful limitations beyond generally linking to use of the abstract idea as previously determined to a particular technological environment, the claim recites statutory subject matter.
5. For any dependent claim, the examiner must provide a reason why its additional limitation, alone and in combination with the other improvement limitations of its parent claims, does not meaningfully go beyond merely linking the abstract idea of its independent claim to a technological environment.
6. Regardless of the determination in the previous step, examine each claim’s language taken as a whole in accordance with the other requirements of utility, novelty, nonobviousness, adequate disclosure, etc.

For all steps, the office action must be sufficiently detailed to establish a prima facie case that the claim does not recite statutory subject matter.

This procedure is essentially the examiner rewriting the claim into a Jepson-type format while preserving all the language of the claim (except that machine and manufacture claims are rewritten as method claims), with the preamble to that rewritten

claim being the prior art “abstract idea,” and the remaining limitations of the claim then being examined to determine if they provide the “inventive concept” called for by the Supreme Court in *Alice*. But the examiner needs to examine both the rewritten claim if he or she is going to make an *Alice* rejection and the original claim to determine whether it meets the other statutory requirements for a patent.

Note that because each and every part of the claim is ultimately considered during this procedure, it satisfies the requirement that the Federal Circuit recently restated that “we must examine the claim as a whole.” (*Digitech Image Technologies v. Electronics for Imaging, Inc.*, July 11, 2014, at 11.)

Because the division of each claim into its “abstract idea” and its remaining limitations is done by the examiner and not the applicant, there should not be a final rejection made if the applicant disagrees with the examiner’s determination and presents a convincing argument to the examiner, even if that requires new searches on the part of the examiner in light of the new “abstract idea” and remaining limitations. The examiner may wish to contact the applicant before issuing the office action to get agreement, or at least hear the applicant’s position, on the portion of each claim that constitutes the “abstract idea” to avoid the need for additional searches.

Other policies

Because the boundaries of the *Alice* test will only be determined as appeals are brought from examiner decisions, and it is important that that be done as expeditiously as possible to remove the current uncertainties, there are a number of policies beyond the examiner instructions that the USPTO should adopt.

The instructions, because they are directed to examiners, do not indicate whether the determination of the “abstract idea” is a finding of fact or law. However, because it is similar to a claims construction, it is reasonable to consider it a conclusion of law to be reviewed *de novo* on appeal until the Federal Circuit says otherwise, although deference should be given to any explicit fact-finding by the examiner.

On appeals to the Federal Circuit, until a decision to the contrary, the Office should claim *Zurko* court/agency review only for its findings of fact and use the less-deferential court/court standard for its ultimate decision of what constitutes the “abstract idea.” During the development of this area of patent law, it is important that the Federal Circuit say where the boundaries are because of its interpretation of the Supreme Court’s *Alice* opinion, not because it has to defer to the USPTO position. (Of course, the ultimate question of whether a claim is valid under Section 101 is reviewed by the Federal Circuit with no deference to the examiner or the PTAB.)

This will not only encourage the examiner or the PTAB establishing a clear factual record for appeal, but will remove the incentive for an unsuccessful applicant to file a civil action under Section 145 to obtain the patent so that the Federal Circuit would review the construction of the claim to determine its “abstract idea” with little or no deference.

In addition, the Office should establish a special expedited procedure for the appeal of the determination that a claim is not statutory under the new Supreme Court *Alice* test. It is unreasonable for the law to be uncertain because there is a two- to three-year backlog before there is an opinion from the PTAB, especially when it is serving as an intermediate step to the necessary clarification of *Alice*'s boundary by the Federal Circuit.

In fairness to applicants, the Office should also establish a way for *Alice* rejections can be reviewed by supervisory examiners or Quality Control if the examiner is still providing what seems like improper conclusory statements and no real rationale after the applicant has traversed the first office action's rejection and now is allowed to appeal because of a second rejection. It makes no sense to require an applicant to pay the \$800 appeals fee in order to get something like a pre-appeal brief conference, especially when the examiner is just used a form rejection consisting only of conclusory statements.