

Alice: the fallout continues

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The US Supreme Court's Alice decision does not provide a bright line test for subject matter eligibility, and patent applicants are therefore advised to follow several steps when drafting applications, say Marina Portnova and Dmitry Andreev of Lowenstein Sandler.

The *Alice v CLS Bank* decision on patentability of subject matter has resulted in the opening of a floodgate of rejections of subject matter eligibility by the US Patent and Trademark Office (USPTO) alleging that the applicant's claims are directed to an abstract idea. However, many patent practitioners feel that the office may have overreached itself in its efforts to follow the US Supreme Court's guidance.

In *Alice*, the Supreme Court held that claims directed to an electronic escrow service for facilitating financial transactions were ineligible for patent protection since the claims were directed to an abstract idea, and implementing those claims on a computer was not enough to transform the abstract idea into patentable subject matter. Since the Alice decision did not provide a bright line test

for what should be an abstract idea, the office responded by issuing examination guidelines and various training materials for the patent examining corps.

These examination guidelines and training materials have subsequently been updated several times to reflect numerous post-*Alice* decisions on subject matter eligibility by the US Court of Appeals for the Federal Circuit.

In *Alice*, the court essentially followed the *Mayo v Prometheus* framework for subject matter eligibility analysis:

- I. Determine whether the claims at issue are directed to one of those patent-ineligible concepts; and
- II. If so, ask what else is there in the claims before us? Consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim into a patent-eligible application”.

In performing Mayo step I analysis, the *Alice* decision relies on the *Association for Molecular Pathology v Myriad’s* ruling of laws of nature, natural phenomena, and abstract ideas not being patentable. The *Alice* court explained that “the concern that drives this exclusionary principle is one of pre-emption”. Upholding such patent claims “would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea”. The court has repeatedly emphasised the concern that patent law should “not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity”.

The role of pre-emption

However, the corresponding USPTO implementation guidelines appear to dramatically downplay the role of pre-emption by disregarding the court’s definition of pre-emption as the driving concern behind the *Alice* exclusionary doctrine. While recognising that “the Supreme Court has described the concern driving the judicial exceptions as pre-emption”, the July 2015 update effectively discounts the role of pre-emption in evaluating the subject matter eligibility.

The following excerpt from the July 2015 update is illustrative of the office’s proffered interpretation of the pre-emption aspect of the exclusionary doctrine:

“Clarification was requested about the role of pre-emption in the eligibility analysis, and suggestions were made as to where examiners should consider pre-emption, including in the streamlined analysis. After full consideration of the proposed alternatives, the current analysis as set forth in steps 2A and 2B will be retained, since it already incorporates many aspects of pre-emption at a level that is consistent with the case law precedent ... The 2014 [interim guidance] already incorporates preemption where appropriate.”

In order to appreciate the magnitude of downplaying the role of pre-emption by the office, suffice to say that the last quoted sentence appears to be on the fringe of plain accuracy, since the section of the 2014 interim guidance describing part I of the Mayo framework (“determining whether the claims

at issue are directed to one of those patent-ineligible concepts”) has exactly one occurrence of the word “pre-emption”:

“A claim is directed to a judicial exception when a law of nature, a natural phenomenon, or an abstract idea is recited (ie, set forth or described) in the claim. Such a claim requires closer scrutiny for eligibility because of the risk that it will ‘tie up’ the excepted subject matter and pre-empt others from using the law of nature, natural phenomenon, or abstract idea.”

The very fact that the above excerpt is the only reference to pre-emption in the 2014 interim guidance speaks for itself. The authors believe that the treatment of the pre-emption doctrine in the guidance falls well below the “driving concern” level accorded to the pre-emption doctrine by the Supreme Court. Moreover, the July 2015 update appears to deepen the apparent gap effectively established by the 2014 interim guidance between the court’s “driving concern” approach and the office’s proffered treatment of the pre-emption aspect, by stating that “the absence of complete pre-emption does not guarantee that a claim is eligible”.

The office relies upon the following passage of Alice: “Stating an abstract idea while adding the words ‘apply it’ is not enough for patent eligibility. Nor is limiting the use of an abstract idea ‘to a particular technological environment’. Stating an abstract idea while adding the words ‘apply it with a computer’ simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to ‘implemen[t]’ an abstract idea ‘on ... a computer’, that addition cannot impart patent eligibility. This conclusion accords with the pre-emption concern that undergirds our §101 jurisprudence.”

“Patent examiners, as frequently observed by the authors, generally ignore an applicant’s assertion of a claim involving an abstract concept rather than being directed to an abstract idea.”

However, neither the above-quoted passage nor the Alice decision in its entirety may be reasonably interpreted as supporting the above-quoted office’s assertion of “the absence of complete preemption not guaranteeing that a claim is eligible”. Conversely, the last sentence of the above-quoted passage of Alice relied on by the office reiterates the court’s view of pre-emption as the driving concern for the exclusionary treatment. The office, nevertheless, does not address the importance of pre-emption and instructs the examining corps:

“If applicant argues that the claim is specific and does not pre-empt all applications of the exception, an appropriate response would be to explain that pre-emption is not a standalone test for eligibility ... Moreover, while a pre-emptive claim may be ineligible, the absence of complete pre-emption does not demonstrate that a claim is eligible.”

This instruction effectively forecloses any avenues that may have been otherwise pursued by applicants in traversing subject matter eligibility rejections by arguing that the “driving concern” of preemption is absent from the applicant’s claims. In view of the above-quoted office guidelines, even if the applicant prevails in demonstrating the lack of pre-emption, the examiner would summarily

the applicant prevails in demonstrating the lack of pre-emption, the examiner would summarily dispose of an applicant's argument by quoting the above passage of the May 4, 2016 memorandum.

This approach does not appear to be well aligned with the court's mandate to distinguish between patents that claim "building blocks" of human ingenuity and those that integrate the building blocks into something more (pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under the patent laws).

Ideas and concepts

Another aspect of the Alice exclusionary doctrine that appears to be nearly overlooked by the office's guidelines for the examining corps is differentiating between claims involving an abstract concept and claims being directed to an abstract idea. The Alice court reasoned that "at some level, all inventions embody, use, reflect, rest upon or apply laws of nature, natural phenomena, or abstract ideas". Therefore, "an invention is not rendered ineligible for patent simply because it involves an abstract concept". Applications of such concepts to a new and useful end ... remain eligible for patent protection.

In the absence of a bright line test provided by the court for distinguishing claims that "involve an abstract concept" from claims that are directed to an abstract idea, patent practitioners would not be unreasonable in expecting the office to issue at least some guidance to the examining corps. However, the office, in the pertinent part of the June 2014 preliminary examination instructions, merely quotes the above-referenced passage of Alice. In the absence of further guidance by the office, patent examiners, as frequently observed by the authors, generally ignore an applicant's assertion of a claim involving an abstract concept rather than being directed to an abstract idea.

Finally, a third aspect of the Alice exclusionary doctrine that appears to be all but discounted by the office's guidelines is the "fundamental" and "long-prevalent" characterisation of the applicant's claims by the court in support of the finding of the claims being directed to an abstract idea. The "fundamental" and "long-prevalent" language first appeared in *Bilski v Kappos*'s holding that claims describing "the basic concept of hedging or protecting against risk" are ineligible.

The *Bilski* opinion explained that "[h]edging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class". The Alice decision reiterates that in *Bilski* "the court grounded its conclusion that all of the claims at issue were abstract ideas in the understanding that risk-hedging was a fundamental economic practice".

The office's interpretation, however, while falling short of directly contradicting the above-quoted passages from *Bilski*, appears to downgrade the fundamental and long prevalent characterisations as providing the ground for holding the claims ineligible:

"When identifying abstract ideas, examiners should keep in mind that judicial exceptions need not be old or long-prevalent, and that even newly discovered judicial exceptions are still exceptions, despite their novelty."

With respect to the "fundamental" aspect, the office limited its guidance to a vocabulary lesson explaining that "[t]he term 'fundamental' is used in the sense of being foundational or basic, and not

in the sense of necessarily being ‘old’ or ‘well-known’”. In the absence of further guidance by the office, the sense of necessarily being ‘old’ or ‘well-known’”. In the absence of further guidance by the office, patent examiners, as frequently observed by the authors, generally dispose of an applicant’s assertion of a claim lacking an involvement of a fundamental or long-prevalent concept by quoting the above-reproduced passage from the July 2015 update.

To summarise, the above-described aspects of the office’s guidelines to the examining corps appear to overlook the Alice court’s caution against the overreaching of the exclusionary principle: “We tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, all inventions embody, use, reflect, rest upon or apply laws of nature, natural phenomena, or abstract ideas.”

Recent Federal Circuit decisions, such as *Enfish v Microsoft* in May, purport to clarify certain aspects of subject matter eligibility in Alice, including those discussed in this article. In particular, the *Enfish* opinion explains that “[t]he ‘directed to’ inquiry ... cannot simply ask whether the claims involve a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions involves a law of nature and/or natural phenomenon—after all, they take place in physical world.”

The Federal Circuit further indicated that in the absence of a “definitive rule to determine what constitutes an ‘abstract idea’”, the claims at issue should be compared “to those claims already found to be directed to an abstract idea in previous cases”.

The *Enfish* opinion further explained that “the first step in the Alice inquiry ... asks whether the focus of the claims is on the specific asserted improvement in computer capabilities, or instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool”. Accordingly, the court held that the claims directed to a self-referential table for a computer database represent “an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity”.

Protective strategy

Based on the authors’ patent prosecution experience and analysis of Alice and its progeny, including *Enfish* and other recent opinions by the Federal Circuit, the authors would advise that in order to mitigate the risk of rejections based on subject matter eligibility in newly drafted applications, patent practitioners follow certain practices, including:

- Adding the problem statement and detailed solution statement(s) into the detailed description, while articulating the differences between the disclosed solution and a conventional or routine sequence of events of elements;
- Describing, in the specification, improvements and advantages over pertinent common approaches, including, eg, improvements to another technology or technical field or improvements to the functioning of the computer itself (eg, reducing latency, memory consumption, and/or bandwidth);

- Focusing on technical implementation details (eg, by describing peripheral devices and information exchange protocols, explaining how software/process elements are tied to particular underlying hardware, or describing input/output using a physical device);

underlying hardware, or describing input/output using a physical device);
- Including claim limitations directed to utilising the results produced by an otherwise abstract method in order to show a real-world implementation;
- Avoiding statements that would characterise the disclosed subject matter in a very broad, abstract manner; and
- Avoiding claiming data alone or manipulating data without additional imitations.

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