On January 7, 2019, the U.S. Patent and Trademark Office (USPTO) released Revised Patent Subject Matter Eligibility Guidance (including new patent-eligible examples) for patent examiners on how to evaluate patent-eligible subject matter under 35 U.S.C. § 101. The revised guidance is widely expected to lead to fewer patent applications being rejected on eligibility grounds. The revised guidance is expected to help improve and streamline the process for patent examiners to determine whether claims in an application recite patent eligible subject matter.

As set forth in 35 U.S.C. § 101, an inventor may obtain a patent on “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvements thereof.” However, this provision is subject to important exceptions that courts have historically found were inappropriate for
patenting—for example, to avoid granting an inventor a monopoly on the “basic tools of scientific and technological work” and thus impede innovation by preventing others from using the basic building blocks of human ingenuity. (See *Interval Licensing, LLC v. AOL, Inc.*, 896 F.3d 1335, 1343 (Fed. Cir. 2018).) These judicial exceptions include laws of nature, natural phenomena, and abstract ideas.

The topic of patentable subject matter eligibility under 35 U.S.C § 101 has recently been the subject of much attention since the Supreme Court handed down its decision in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208 (2014) which articulated a new framework/legal test for evaluating subject matter eligibility. This framework is referred to as the *Alice/Mayo* test and comprises a two-step analysis for determining patent eligible subject matter. The *Alice/Mayo* test is the current framework by which courts and the USPTO determine whether an applicant is attempting to obtain a patent on one of these judicial exceptions. Under the *Alice/Mayo* framework, an invention is determined to be patent eligible either because it is not directed to one of the judicial exceptions (step one, also referred to as Step 2A) or is an inventive application of the judicial exception (step two, also referred to as Step 2B). (See, e.g., *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).)

Consistent application of the *Alice/Mayo* test, however, has proven difficult for courts and patent examiners alike and has caused a great deal of uncertainty in this area of law. One of the main complaints is that the *Alice/Mayo* test has been increasingly difficult for examiners to apply in a predictable manner—particularly in the context of abstract ideas—and has raised concerns that the patent office is reaching inconsistent results. For example, claims in one application that may have been deemed to be directed to an abstract idea during examination, are determined to reflect a patent-eligible improvement in a different application containing slightly different claims directed to the same or similar subject matter. Under Step 2A of the prior guidance, for example, determination of what an abstract idea constitutes relied heavily on prior judicial examples. Specifically, under step 2A of the prior guidance, examiners were required to compare a concept in a patent claim to concepts in prior court decisions to determine if the claimed concept is similar to a court-identified abstract concept. Because the Federal Circuit has issued a large (and continuously growing) number of decisions identifying subject matter as abstract or not, it has become increasingly difficult for examiners to apply the *Alice/Mayo* test in a predictable manner. Additionally, due to the sheer volume of post-*Alice* case law that exists and the inconsistent application of the *Alice/Mayo* framework by courts, an examiner can easily pick and choose case examples to support a rejection under Section 101—raising concerns that different examiners within and between technology centers may reach inconsistent results. As a result, it has been argued by many stakeholders that something needed to be done to increase clarity and consistency in patent-eligible subject matter determinations.

To address these and other concerns, the USPTO’s revised guidelines provides modified examining procedures for the first step of the *Alice/Mayo* test (Step 2A of the USPTO’s Subject Matter Eligibility Guidance as incorporated into the Manual of Patent Examining Procedure (MPEP)) by focusing on two
aspects: (1) whether a claim recites a judicial exception; and (2) whether the judicial exception is integrated into a practical application. Only when a claim recites a judicial exception AND fails to integrate the exception into a practical application is the claim considered “directed to” a judicial exception under Step 2A, thereby triggering further analysis on the second step of the Alice/Mayo framework (Step 2B above).

Prong 1 of the revised Step 2A minimizes the prior guidance’s reliance on comparison to examples of what court have stated are abstract ideas because the revised guidance provides specific groupings of subject matter that is considered an abstract idea. In particular, examiners are directed to determine whether concepts recited in the patent claim fall within the following enumerated groupings of abstract ideas. Except in rare cases, patent claims not falling within any of these categories do not recite an abstract idea and are thus patent-eligible.

a) Mathematical concepts – mathematical relationships, mathematical formulas or equations, mathematical calculations

b) Certain methods of organizing human activity – fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions); and

c) Mental processes – concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

If a grouping applies, the analysis continues to Prong 2 of revised Step 2A. In Prong 2, the examiner evaluates the claim as a whole to determine whether the abstract idea is “integrated into a practical application.” Such evaluation includes (a) identifying whether there are any additional elements recited in the claim beyond the abstract idea; and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application, using one or more considerations laid out by the Supreme Court and the Federal Circuit. If it is so integrated, then the claim is patent-eligible. If the claim lacks such integration, then the examiner should evaluate the additional elements recited in the claim beyond the judicial exception, individually and in combination, to determine whether they provide an inventive concept under Step 2B.

The analysis in Prong 2 of Step 2A has many similarities to the unrevised Step 2B analysis of whether an inventive concept exists to render a recited judicial exception eligible. In line with this, the unrevised MPEP states that although the question of whether a claim improves computer-functionality or other technology may be considered in either Step 2A or 2B of the Alice/Mayo test, examiners are encouraged
to resolve this question as early as possible in the eligibility analysis. For example, MPEP § 2106.06(b) allows examiners to utilize a “streamlined eligibility” analysis. The streamlined eligibility analysis is used when the eligibility of the claim is self-evident, e.g., because the claim clearly improves a technology or computer functionality. If there is such an improvement, the claim qualifies as eligible subject matter under Section 101 without needing to undergo further analysis. On the other hand, Prong 2 of revised Step 2A appears to mandate that examiners use a similar streamlined analysis in Step 2A to avoid the need for further analysis under Step 2B.

The revised guidance’s addition of Prong 2 seems to formally implement a trend found in some post- *Alice* cases, where courts have seemed receptive to the proposition that a practical application of an abstract idea renders the claim eligible, for example, the application of the abstract idea, like a mathematical equation, to some sort of recited structure. In another example, reciting a specific implementation—rather than just a result—of a specific solution to a problem in the computer arts, or recitation of a particular improvement to computer functionality would be deemed patent eligible. These courts have also similarly stated that, due to the recitations of the specific implementation by the claims in question, it would be unnecessary to further proceed to the inventive concept step of *Alice*’s step 2. Therefore, a patentee should ensure that recited abstract ideas are applied in specific applications, for eligibility to be found at Step 2A.

The revised guidance also states that “in revised Step 2A[,] examiners should ensure that they give weight to *all additional elements, whether or not they are conventional*, when evaluating whether a judicial exception has been integrated into a practical application.” For patentees, this can be highly advantageous—in Prong 2 of Step 2A, the Examiner is required to consider all additional elements within the claim in question, individually and in combination, *irrespective of whether they are merely conventional elements* to evaluate whether the claim integrates the judicial exception into a practical application. In other words, the revised guidance explicitly specifies to examiners that a claimed combination of conventional elements is not directed to a judicial exception (and thus patent-eligible) if the claim integrates the judicial exception into a practical application.

In contrast, under Step 2B, the inventive concept analysis presents a higher bar. In Step 2B, examiners must consider whether the additional elements, individually and in combination, represent well-understood, routine, conventional activity, or whether they provide “significantly more” than the recited judicial exception. Step 2B’s analysis of what amounts to “significantly more” has often proved in the past to be a stumbling block for patentees. Some courts have ignored arguably unconventional aspects or technological improvements merely because their implementation had been carried out on a computer.

Overall, the revised guidance’s enumerating of what constitutes an abstract idea is likely to remedy examiners’ cherry-picking case law to support their rejections. The incorporation of Prong 2’s practical application requirement allows for more efficient resolution at an earlier stage. Patentees should ensure that
potentially abstract ideas are integrated into a practical application, whether through an improvement to computer technology or applying them to specific processes, machines or manufactures, etc. The ability for Section 101 eligibility to be resolved via evaluation of all additional elements regardless of their conventionality in Step 2A Prong 2 should be favorable to patentees. Therefore, the revised guidance is likely to diminish the number of patent applications that are rejected on eligibility grounds by reducing the number of things the USPTO can consider patent-ineligible abstract ideas under Prong 1 of Step 2A and incorporating the practical application requirement under Prong 2 of Step 2A.

1. See Thales Visionix, Inc. v. United States, 850 F.3d 1343, 1349 (Fed. Cir. 2017) (holding that the claims are not directed to an abstract idea because they “specify a particular configuration of inertial sensors and a particular method of using the raw data from the sensors in order to more accurately calculate the position and orientation of an object on a moving platform. The mathematical equations are a consequence of the arrangement of the sensors and the unconventional choice of reference frame in order to calculate position and orientation.”) (emphasis added).

2. See Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1339 (Fed. Cir. 2016) (describing the claimed self-referential table as a specific type of data structure designed to improve the way a computer stores and retrieves data in memory); Finjan, Inc. v. Blue Coat Sys., 879 F.3d 1299, 1305 (Fed. Cir. 2018) (describing the claimed security profile approach that allows access to be tailored for different users and ensures threats are identified before a file reaches a user’s computer).