

Patent Office Publishes Subject Matter Eligibility Guidance

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On July 16, 2024, the United States Patent and Trademark Office (“USPTO”) announced new guidance for examination of patent applications directed to critical and emerging technologies, including artificial intelligence (AI).

When examining patent applications, the USPTO considers whether patent claims are directed to eligible subject matter under 35 U.S.C. § 101. This includes evaluating whether a claim is directed to a “judicial exception,” such as an abstract idea, a law of nature, or a natural phenomenon, which courts have found are generally ineligible for patenting. The Supreme Court has explained that these judicial exceptions are “the basic tools of scientific and technological work,” and allowing patentees to monopolize these tools may impede innovation. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014); *see also Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012).

The USPTO applies the two-part *Alice/Mayo* test to determine whether a patent claim is eligible. Manual of Patent Examination Procedure (“MPEP”) § 2106(I). In Part One of the test, the USPTO determines whether the claim is directed to a judicial exception. *Id.* The USPTO breaks Part One into two prongs. MPEP § 2106.04. In Prong One, the USPTO determines whether the claim recites a judicial exception. *Id.* If the claim does not recite a judicial exception, then it is eligible without further analysis. *Id.* If the claim does recite a judicial exception, then analysis moves to Prong Two to determine if the judicial exception is integrated into a practical application. *Id.* If the judicial exception is integrated into a practical application, then the claim is not directed to the judicial exception and is eligible without further analysis. *Id.* If after Prong One and Prong Two, the claim is found to be directed to a judicial exception, then Part Two of the test requires the USPTO to determine whether the claim recites additional elements that amount to significantly more than the judicial exception. MPEP § 2106(I). If the claim provides significantly more than the judicial exception, then it is eligible at Part Two. *Id.* Otherwise, the USPTO will reject the claim as being directed to ineligible subject matter.

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The newly announced USPTO guidance seeks to clarify how the *Alice/Mayo* test is applied to emerging technologies, including AI-related technologies. The guidance indicates that the USPTO generally considers AI inventions to be a subset of computer-implemented inventions. While the guidance does not change the general analysis framework under the *Alice/Mayo* test, it provides examples and updated analysis from Federal Circuit decisions that issued after release of the USPTO's 2019 subject matter eligibility guidance.

The guidance provides greater clarity regarding how AI inventions can integrate judicial exceptions into practical applications. For example, the guidance states that “[m]any claims to AI inventions are eligible as improvements to the functioning of a computer or improvements to another technology or technical field.” The guidance indicates that claims that reflect a technological improvement described in the patent specification are eligible. Accordingly, an AI-related claim may be more likely to be found eligible for patenting when the specification provides a clear description of the technology and the improvements to the technology provided by the AI invention.

The guidance also emphasizes the difference between claims broadly reciting a desired outcome (which are not eligible) and claims directed to a particular way to achieve the outcome (which are eligible). The guidance indicates that claims to AI-related inventions should be found eligible when they “provide a particular way to achieve a desired outcome,” such as by claiming “a specific application of AI to a particular technological field (*i.e.*, a particular solution to a problem).” A claim directed to a particular way to achieve a desired outcome should be found eligible because it “amounts to more than merely ‘applying’ the judicial exception or generally linking the judicial exception to a field of use or technological environment.” Thus, the USPTO may be more likely to find AI-related claims eligible when the claims indicate how the AI invention achieves a particular improvement or desired outcome.

The USPTO has also published three new [Subject Matter Eligibility Examples](#) to provide in-depth discussion of how the *Alice/Mayo* test is applied to example AI-related claims. Each Subject Matter Eligibility Example includes illustrative claims that are eligible and illustrative claims that are ineligible. Example 47 relates to using an artificial neural network to identify or detect anomalies in received data. Example 48 relates to AI-based methods of analyzing speech signals (e.g., using a deep neural network) and separating desired speech from extraneous or background speech. Example 49 relates to an AI model designed to assist in personalizing medical treatment to individual characteristics of a patient. The Subject Matter Eligibility Examples will be a useful guide for drafting and prosecuting patent applications for AI-related technologies. Notably, the majority of the eligible claims in the new Subject Matter Eligibility Examples are found eligible because they integrate a judicial exception into a practical application, such as by providing an improvement to technology. As a result, examiners may be more likely to find AI-related claims eligible when they can link the AI invention to an improvement to technology that is clearly described in the specification.

While the guidance went into effect on July 17, 2024, the USPTO will accept written

comments on it through September 16, 2024. Further, even if the new guidance is later incorporated into the MPEP, it remains to be seen if future court decisions will align with the guidance. Dorsey attorneys will continue to monitor the latest developments in USPTO examination procedures and substantive patent laws.

Dorsey attorneys are experienced in drafting and prosecuting patent applications directed to a wide variety of technologies, including AI-related innovations. Dorsey has been recognized in the 2024 edition of Intellectual Asset Management (IAM) Patent 1000 for its capabilities in the areas of patent prosecution, patent transactions, and patent litigation. The IAM Patent 1000 identifies top patent firms and professionals globally.