

Cantor Colburn Client Alert: 2024 Guidance Update on Patent Subject Matter Eligibility, Including on Artificial Intelligence (AI)

Summary

On July 17, 2024, the United States Patent and Trademark Office (“USPTO”) issued the “2024 Guidance Update on Patent Subject Matter Eligibility, including on Artificial Intelligence” (the “Eligibility Guidance”). [89 F.R. 58128 \(July 17, 2024\)](#). The Eligibility Guidance aids USPTO personnel, patent practitioners, and patent applicants in evaluating subject matter eligibility of patent claims involving artificial intelligence (AI). The USPTO also issued three new examples for applying the Eligibility Guidance to AI inventions during examination, appeal, and post-grant proceedings. The USPTO issued the Eligibility Guidance in response to the Biden administration’s [“Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence”](#) (October 30, 2023).

The USPTO acknowledges that the Eligibility Guidance “does not constitute substantive rulemaking and does not have the force and effect of law” and that “[r]ejections will continue to be based on the substantive law.” (Eligibility Guidance at p. 58131).

The Subject Matter Eligibility Analysis

The framework of the existing subject matter eligibility analysis remains unchanged. (Eligibility Guidance at p. 58134). Following the Supreme Court decisions in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217-18 (2014), the USPTO promulgated a multi-step analysis for determining subject matter eligibility of a claim under 35 U.S.C. § 101. This test, known as the *Alice/Mayo* test, is as follows:

- Step 1 – Is the claim to a process, machine, manufacture or composition of matter?
- Step 2A – Is the claim directed to a law of nature, a natural phenomenon, or an abstract idea (judicially recognized exceptions)? Step 2A is a two-prong inquiry including (Prong One) a determination of whether a claim recites (e.g., is “described” or “set forth” in the claim) a judicial exception and (Prong Two) a determination of whether the claim integrates the alleged judicial exception into a practical application thereof.
- Step 2B – Does the claim recite additional elements that amount to significantly more than the judicial exception?

(MPEP 2106).



The Eligibility Guidance discusses, for AI inventions, how to evaluate whether a claim recites an abstract idea (e.g., mathematical concepts, certain methods of organizing human activity, or mental processes) in Step 2A, Prong One. The Eligibility Guidance also discusses Step 2A, Prong Two, regarding how to evaluate the improvements consideration for AI inventions, including how to demonstrate an improvement for AI inventions in view of recent case law. The Eligibility Guidance recognizes 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.” (Eligibility Guidance at p. 58137).

AI-Assisted Inventions and the Eligibility Guidance

The Eligibility Guidance acknowledges that whether an invention was created with the assistance of AI is not a consideration in how to apply the *Alice/Mayo* test or the Eligibility Guidance. The USPTO remarks “how an invention is developed is not relevant to the subject matter eligibility inquiry” but that the focus on the eligibility analysis is on the claimed invention itself. (Eligibility Guidance at p. 58138).

New Subject Matter Eligibility Examples

The USPTO issued [three new subject matter eligibility examples](#) that analyze hypothetical claims directed to AI inventions using the Eligibility Guidance.

- New Example 47 includes claims that recite limitations specific to AI, including the use of an artificial neural network to identify or detect anomalies. This example includes two eligible claims (i.e., no judicial exception and a judicial exception integrated into a practical application by improving network security) and one ineligible claim.
- New Example 48 includes claims directed to AI-based methods of analyzing speech signals and separating speech from background noise. This example includes one ineligible claim and two eligible claims (i.e., a judicial exception integrated into a practical application of separating speech and a judicial exception integrated into a practical application by improving speech-to-text transcription).
- New Example 49 includes claims directed to an AI model designed to assist in personalizing medical treatment to individual characteristics of a particular patient. This example includes one ineligible claim and one eligible claim (i.e., a judicial exception integrated into a practical application of a particular treatment for a medical condition).

These new examples are intended to aid understanding and applying the Eligibility Guidance when evaluating “whether a claim recites an abstract idea or whether a claim integrates the abstract idea into a practical application, because the claimed invention



improves the functioning of a computer or another technology or technical field.” (Eligibility Guidance at p. 58138)

Key Takeaways

The USPTO will continue to apply the existing *Alice/Mayo* test for analyzing whether claims to AI inventions are subject matter eligible under 35 U.S.C. § 101. However, the Eligibility Guidance provides considerations for evaluating claims directed to AI-inventions, particularly under Step 2A, Prong One and Prong Two. Further, the new subject matter eligibility examples highlight application of the *Alice/Mayo* test for hypothetical claims directed to AI inventions using the Eligibility Guidance. These Examples are intended to “provide exemplary subject matter eligibility analyses under 35 U.S.C. 101 of hypothetical claims” directed to AI inventions. (Eligibility Guidance at p. 58138)

For Further Information and Assistance

We welcome your questions regarding this matter and any other regarding your IP in general. Attorneys in Cantor Colburn’s [Artificial Intelligence Practice Group](#) have substantial experience representing clients in these types of matters.

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