

## A primer on the USPTO's 2024 updated patent eligibility guidance, including AI | IP Frontiers

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On July 17, 2024, the USPTO published its new “2024 Guidance Update on Patent Subject Matter Eligibility, Including on Artificial Intelligence” (the 2024 Updated PEG),

which became “effective” on that same day. This article will provide a review of the history leading to the 2024 Updated PEG, plus an overview of the updated guidelines, especially as it applies to AI Inventions, plus practice tips/suggestions for writing patent applications to avoid eligibility problems.

### HISTORY/BACKGROUND

Under 35 U.S.C. §101 the following four categories of invention are appropriate subject matter for a patent: processes, machines, manufactures and compositions of matter. However, Court precedent has long recognized the judicially created exceptions of “abstract ideas”, “laws of nature” and “natural phenomena” as being non-patentable subject matter because they are the “basic tools of scientific and technological work.” *Gottschalk v. Benson* 93 S. Ct. 253 (1972). The reason for these judicial exceptions is that they are considered to be “the basic tools of scientific and technological work”, and

“there is a danger that granting patents that tie up their use will inhibit future innovation.” *Mayo v. Prometheus* 132 S.Ct. 1289, 1292 (2012).

However, the Court has also recognized that too broad an interpretation of this exclusionary principle could potentially eviscerate patent law. This is because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* at 1293.

Finding the proper balance between too broad and too narrow an interpretation of this exclusionary principle has led to much litigation over the years. The foundational analysis for patent eligibility was, and still is, one of preemption. More specifically, a patent claim was analyzed to determine whether or not the claim would “wholly pre-empt” the judicial exception recited in the claim and in practical effect would be a patent on the judicial exception itself. *Gottschalk v. Benson*, 409 US 63 at 72 (1972). Over the years, many different approaches were used by the courts to determine such pre-emption.

### ALICE/MAYO TEST

In 2012, the Supreme Court created a more structured approach to the analysis of patentability in what has come to be known as the Alice/Mayo test. *Mayo v. Prometheus*, 132 S. Ct. 1289 (2012);

*Alice Corp. v. CLS Bank International*, 34 S. Ct. 2347 (2014).

The Alice/Mayo test has the following three basic steps: step 1) the statutory categories test, step 2A) the judicial exceptions test, and step 2B) the inventive concept test.

In step 1, a claim must be analyzed to determine if the claim is to one of the statutory categories of a process, machine, manufacture or composition of matter.

In step 2A the claim must be analyzed to determine whether the claim at issue is “directed to” a law of nature, a natural phenomenon or an abstract idea. The courts have stated that the “directed to” inquiry must be considered in light of the specification, and based on whether the character of the claim as a whole is directed to a judicial exception. *Enfish, LLC v. Microsoft Corp.*, 822 F. 3d. 1327, 1335 (2016).

In step 2B the elements of the claim must be examined to determine whether they contain an “inventive concept” sufficient to transform the claimed judicial exception into a patent-eligible application. The courts have said that, a claim that recites a judicial exception must include additional features to ensure that the claim is more than a drafting effort designed to monopolize the judicial exception. It should be noted that the courts have also said that an

inventive concept must do more than simply recite well-understood, routine, conventional activity.

## PROBLEMS APPLYING ALICE/MAYO CONSISTENTLY

Unfortunately, applying the Alice/Mayo test consistently has proven difficult for both the Federal Circuit and the USPTO. Some of the reasons for this difficulty are:

- Abstract ideas are not defined by the courts.
- The “directed to” inquiry in step 2A is a subjective test; and
- The courts have stated that WURC activity in step 2B is a question of fact for a jury to decide. *Berkheimer v. HP Inc.* 881 F.3d 1360 (2018).

## 2019 PEG – REVISED STEP 2A

In 2019, in an effort to be more consistent in the analysis of subject matter eligibility, the USPTO published its Revised Patent Subject Matter Eligibility Guidance (2019 PEG). The procedure set forth in the 2019 PEG changes how examiners apply the first step of the Alice/Mayo test (the “Revised Step 2A”). The Revised Step 2A is now a “two-prong inquiry.”

In “Prong One” a claim must be evaluated as to whether the claim “recites” a judicial exception. Recited abstract ideas, specifically, must be identified from the group of mathematical concepts, mental processes and certain methods of organizing human activity.

In “Prong Two”, if the claim recites a judicial exception, then the claim must be further evaluated as to whether the claim recites additional elements that integrate the exception into a practical application of that exception. The 2019 PEG further clarifies what is meant by a practical application when it states: “A claim that

integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.”

## 2024 UPDATED PEG

In October 2023, President Biden issued Executive Order 14110 on the “Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence” directing the USPTO to issue updated guidance on patent eligibility “to address innovation in AI and critical and emerging technologies (ET).” In accordance with that Executive Order, the USPTO has published the 2024 Updated PEG, in July of this year.

Among other guidance, 2024 Updated PEG recognizes that it is not uncommon for claims to AI inventions to recite abstract ideas, i.e., mathematical concepts, mental processes or certain methods of organizing human activity (Step 2A, prong 1). For that reason, Section III of the 2024 Updated PEG provides a comprehensive discussion of how to demonstrate integration of an abstract idea into a practical application (Step 2A, prong 2). One of the best ways to do this is “to show that the claimed invention improves the functioning of a computer or improves another technology or technical field.”

In showing such a technical improvement, the 2024 Updated PEG states that: “A key point of distinction to be made for AI inventions is between a claim that reflects an improvement to a computer or other technology described in the specification (which is eligible) and a claim in which the additional elements amount to no more than (1) a recitation of the words “apply it” (or an equivalent) or are no more than

instructions to implement a judicial exception on a computer, or (2) a general linking of the use of a judicial exception to a particular technological environment or field of use (which is ineligible).

The 2024 Updated PEG goes on to state that: “An important consideration in determining whether a claim improves technology is the extent to which the claim covers a particular solution to a problem or a particular way to achieve a desired outcome, as opposed to merely claiming the idea of a solution or outcome.” AI inventions may provide a particular way to achieve a desired outcome when they claim, for example, a specific application of AI to a particular technological field (i.e., a particular solution to a problem).

## PRACTICE TIPS

Accordingly, in drafting a patent application for an AI invention, it is important to:

- Draft the specification with substantial technical details, and avoid just describing functionality. In other words, describe not just what a system does, but how the system does it.
- Describe the technological improvements over the prior art.
- Avoid functional claims and add specific technical details to the claims.
- Recite the technical improvements (as described in the specification) in the claims.

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