

UNITED STATES
PATENT AND TRADEMARK OFFICE



2019 Revised Patent Subject Matter Eligibility Guidance

April 2, 2019

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INTRODUCTION

USPTO Strategic Plan

- Key goal is to optimize patent reliability
 - As the USPTO director has explained, “[r]eliable patent rights are key to economic growth. Providing high quality, efficient examination of patent applications will serve the American economy well.”
 - Initiatives to achieve this goal include:
 - Improving examiner access to prior art
 - Enhancing operations of the PTAB
 - Training and guidance initiatives to support high-quality examination

Section 101 initiative: Revised guidance

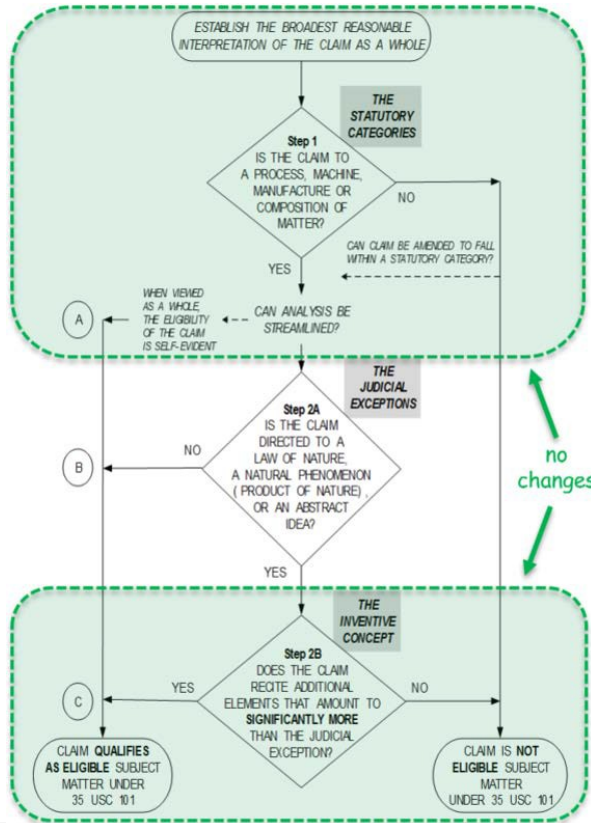
- The 2019 Revised Patent Subject Matter Eligibility Guidance (hereinafter “2019 PEG”) published in January 2019.
- The guidance was revised for several reasons:
 - Increase clarity, predictability and consistency in how Section 101 is applied during examination.
 - Enable examiners to more readily determine if a claim does (or does not) recite an abstract idea.

2019 PEG

Overview of 2019 PEG

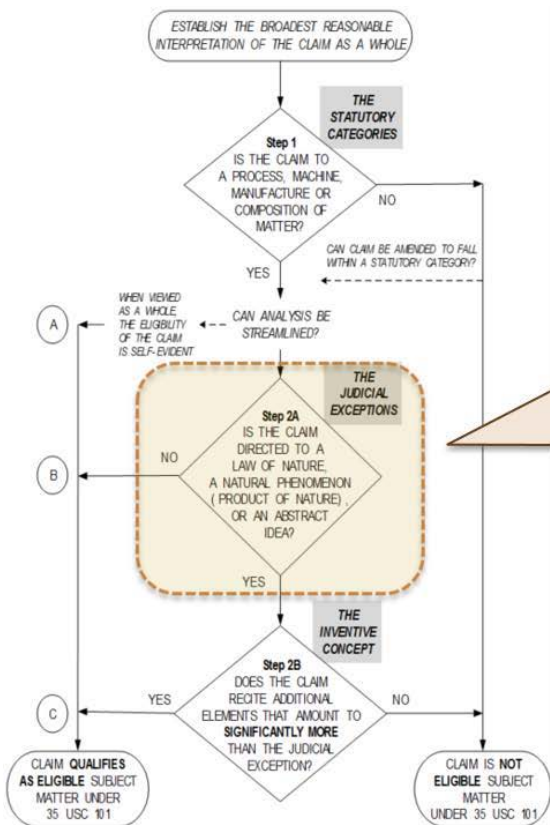
- Makes two changes in Step 2A:
 - Sets forth new procedure for Step 2A (called “**revised Step 2A**”) under which a claim is not “directed to” a judicial exception unless the claim satisfies a two-prong inquiry; and
 - For abstract ideas, **replaces the “Eligibility Quick Reference Sheet Identifying Abstract Ideas” with an identification of particular groupings of abstract ideas**

What remains the same



- No changes to:
 - Step 1 (statutory categories)
 - Streamlined analysis
 - Step 2B

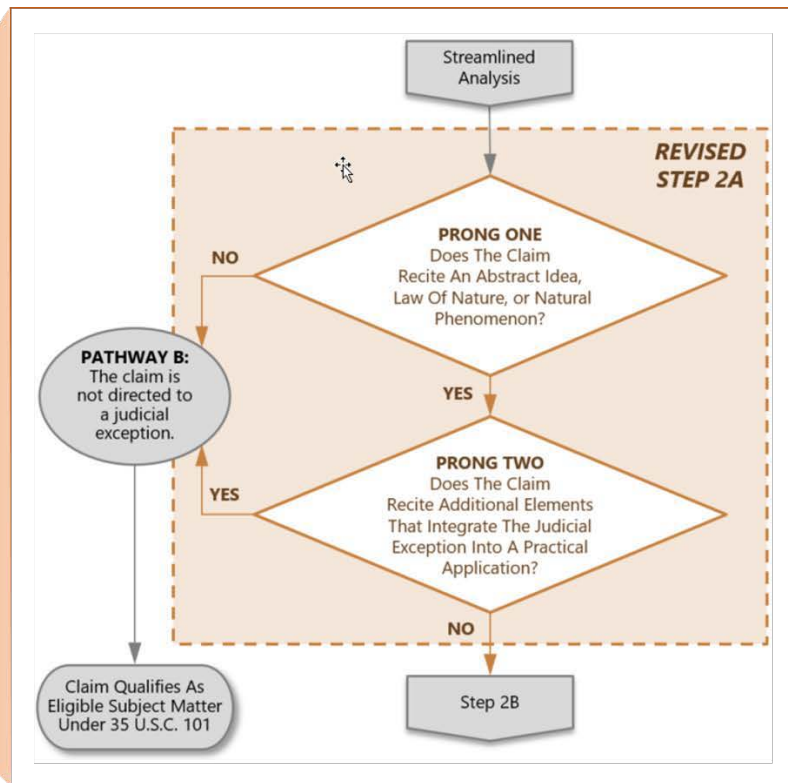
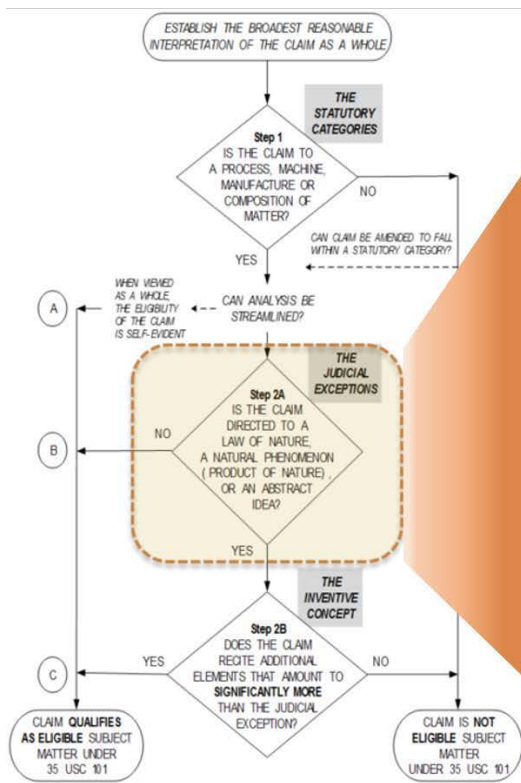
What has changed: Revised Step 2A



- 2019 PEG revises Step 2A:
 - Creates new two-prong inquiry for determining whether a claim is “directed to” an exception.
 - Groups abstract ideas.

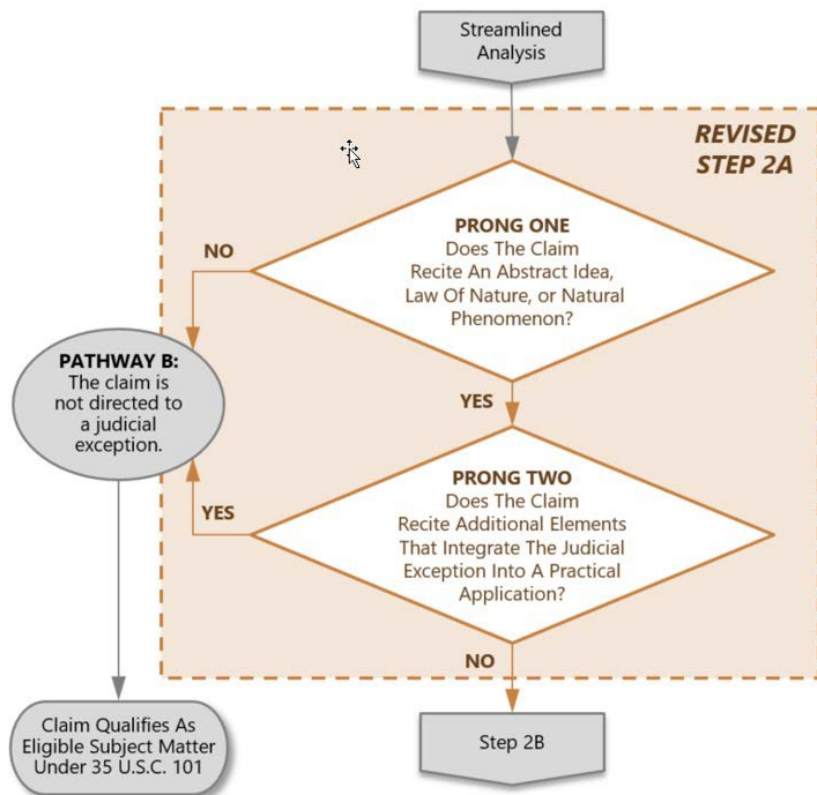
MPEP flowchart including revised Step 2A

MPEP flowchart



Revised Step 2A flowchart

What has changed: Revised Step 2A



- This flowchart depicts revised Step 2A.
- Under this new two-prong inquiry, a claim is now eligible at revised Step 2A unless it:
 - Recites a judicial exception and
 - The exception is not integrated into a practical application of the exception.

Revised Step 2A is a two-prong inquiry

- Prong One: Evaluate whether the claim recites a judicial exception (an abstract idea enumerated in the 2019 PEG, a law of nature, or a natural phenomenon).
 - If no exception is recited, the claim is **eligible**. This concludes the eligibility analysis.
 - If claim recites an exception, go to Prong Two.
- Prong Two: Evaluate whether the claim recites additional elements that integrate the exception into a practical application of the exception.
 - If the recited exception is integrated into a practical application, then the claim is **eligible**. This concludes the eligibility analysis.
 - If the exception is not integrated into a practical application, then the claim is “directed to” the exception. Go to Step 2B for further analysis.

Prong One: Overview

- Prong One vs. prior guidance
 - For **laws of nature and natural phenomena**, Prong One does not represent a change from prior guidance.
 - Continue to use the “recite” standard set forth in MPEP 2106.04(b) and (c), including the markedly different characteristics analysis, to determine if a claim recites a law of nature or natural phenomenon.
 - If the claim recites a law of nature or natural phenomenon (including a product of nature), the analysis proceeds to Prong Two.
 - For **abstract ideas**, Prong One represents a change from prior guidance
 - Now use groupings of abstract ideas.
 - **No longer use the “Eligibility Quick Reference Sheet Identifying Abstract Ideas” when determining whether a claim recites an abstract idea.**

Prong One: Abstract ideas

- Prong One procedure for determining whether a claim “recites” an abstract idea is:
 - Identify the specific limitation(s) in the claim under examination that the examiner believes recites an abstract idea, and
 - Determine whether the identified limitation(s) falls within at least one of the groupings of abstract ideas enumerated in the 2019 PEG.
- If the identified limitation(s) falls within any of the groupings of abstract ideas enumerated in the 2019 PEG, the analysis should proceed to Prong Two.
- Claim limitations that do not fall within the enumerated groupings should not be treated as abstract ideas except in rare circumstances (see slide 31 for more information).

Groupings of abstract ideas

Mathematical concepts

- Mathematical relationships
- Mathematical formulas or equations
- Mathematical calculations

Mental processes

- Concepts performed in the human mind (including an observation, evaluation, judgment, opinion)

NOTE: The recitation of generic computer components in a claim does not necessarily preclude that claim from reciting an abstract idea.

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)

Revised Step 2A: Prong Two

- New procedure not found in prior guidance:
 - Identifying whether there are any additional elements recited in the claim beyond the judicial exception(s), and
 - Evaluating those additional elements to determine whether they integrate the exception into a practical application of the exception.
- “Integration into a practical application”
 - Requires an additional element or a combination of additional elements in the claim to 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 exception.
 - Uses the considerations laid out by the Supreme Court and the Federal Circuit to evaluate whether the judicial exception is integrated into a practical application.

Prong Two considerations: Introduction

- Most of these considerations should be familiar to you.
 - As noted in the following slides, most of the considerations are discussed in MPEP 2106.05 and sub-sections 2106.05(a) through 2106.05(h) with respect to Step 2B.
 - Unless otherwise specified in the 2019 PEG, you should evaluate these considerations in Step 2A Prong Two the same way you have been evaluating them in Step 2B.
- The 2019 PEG modifies the considerations in two ways:
 - The improvements consideration is evaluated **differently** in Step 2A Prong Two than in the streamlined analysis or Step 2B.
 - Adds a **new** consideration based on case law including *Vanda*, for evaluation of particular treatment or prophylaxis limitations.

Prong Two considerations: Details

Limitations that are indicative of integration into a practical application:

- Improvements to the functioning of a computer or to any other technology or technical field - see MPEP 2106.05(a)
- Applying or using a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition – see *Vanda* memo
- Applying the judicial exception with, or by use of, a particular machine - see MPEP 2106.05(b)
- Effecting a transformation or reduction of a particular article to a different state or thing - see MPEP 2106.05(c)
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception - see MPEP 2106.05(e) and *Vanda* memo

Limitations that are **not** indicative of integration into a practical application:

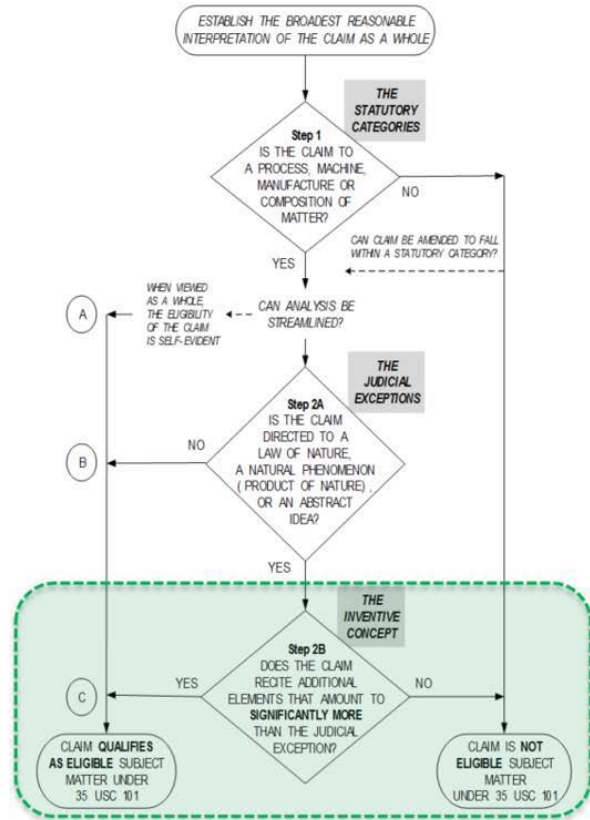
- Adding the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea - see MPEP 2106.05(f)
- Adding insignificant extra-solution activity to the judicial exception - see MPEP 2106.05(g)
- Generally linking the use of the judicial exception to a particular technological environment or field of use – see MPEP 2106.05(h)

Whether claim elements represent only well-understood, routine, conventional activity is considered at Step 2B and is not a consideration at Step 2A.

Prong Two excludes the “WURC” consideration

- As noted on the preceding slide, there is no evaluation of well-understood, routine, conventional (“WURC”) activity in Prong Two.
- Examiners should give weight to **all** of the claimed additional elements in Prong Two, even if those elements represent well-understood, routine, conventional (“WURC”) activity.
 - Because Step 2A **excludes** consideration of WURC, a claim that includes WURC elements may still integrate an exception into a practical application.
 - Do not evaluate WURC unless the analysis proceeds to Step 2B.

What remains the same: Step 2B



- Still analyze inventive concept (aka "significantly more") in 2B
- Even if claim ends up in Step 2B, it may still be eligible
 - E.g., claim recites an element or combination of elements that is unconventional

Still analyze for inventive concept in Step 2B

- In Step 2B, evaluate whether the claim recites additional elements that amount to an inventive concept (aka “significantly more”) than the recited judicial exception.
 - If the claim as a whole amounts to significantly more than the exception itself (there is an inventive concept in the claim), the claim is **eligible**.
 - If the claim as a whole does not amount to significantly more (there is no inventive concept in the claim), the claim is **ineligible**.
- Same procedure as in prior guidance:
 - Identifying whether there are any additional elements recited in the claim beyond the judicial exception(s), and
 - Evaluating those additional elements individually and in combination to determine whether they amount to significantly more, using the considerations discussed on the following slides.

Eligibility at Step 2B

- Revised Step 2A overlaps with Step 2B, and thus, many of the considerations need not be reevaluated in Step 2B because the answer will be the same.
- However, if an examiner had previously concluded under revised Step 2A that an additional element was insignificant extra-solution activity, they should reevaluate that conclusion in Step 2B.
 - If such reevaluation indicates that the element is unconventional or otherwise more than what is well-understood, routine, conventional activity in the field, this finding may indicate that an inventive concept is present and that the claim is thus eligible.
 - For example, when evaluating a claim reciting an abstract idea such as a mathematical equation and a series of data-gathering steps that collect a necessary input for the equation, an examiner might consider the data-gathering steps to be insignificant extra-solution activity in revised Step 2A, and therefore find that the judicial exception is not integrated into a practical application. However, when the examiner reconsiders the data gathering steps in Step 2B, the examiner could determine that the combination of steps gather data in an unconventional way and, therefore, provide an “inventive concept,” rendering the claim eligible at Step 2B.

Step 2B considerations overlap with Step 2A

Limitations that are indicative of an inventive concept (aka “significantly more”):

- Improvements to the functioning of a computer, or to any other technology or technical field - see MPEP 2106.05(a)
- Applying the judicial exception with, or by use of, a particular machine - see MPEP 2106.05(b)
- Effecting a transformation or reduction of a particular article to a different state or thing - see MPEP 2106.05(c)
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception - see MPEP 2106.05(e) and *Vanda* memo
- **Adding a specific limitation other than what is well-understood, routine, conventional activity in the field - see MPEP 2106.05(d)**

Limitations that are **not** indicative of an inventive concept (aka “significantly more”):

- Adding the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea - see MPEP 2106.05(f)
- Adding insignificant extra-solution activity to the judicial exception - see MPEP 2106.05(g)
- Generally linking the use of the judicial exception to a particular technological environment or field of use – see MPEP 2106.05(h)
- **Simply appending well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception - see MPEP 2106.05(d) and *Berkheimer* memo**

Procedure for tentative abstract ideas

- There may be rare circumstances in which an examiner believes a claim limitation should be treated as an abstract idea (“tentative abstract idea”) even though it does not fall within the enumerated groupings of abstract ideas
- In such circumstances, the examiner should evaluate the claim under the 2019 PEG:
 - If the claim as a whole integrates the tentative abstract idea into a practical application, the claim is **eligible**. This concludes the eligibility analysis. Otherwise, proceed to Step 2B.
 - In Step 2B, if the claim as a whole provides an inventive concept, the claim is eligible. This concludes the eligibility analysis. Otherwise, the examiner should bring the application to the attention of the TC director.
 - A rejection of a claim reciting a tentative abstract idea must be approved by the TC director (which approval will be indicated in the file record of the application), and must provide a justification for why such claim limitation is being treated as reciting an abstract idea.

Reminders and takeaways

- Treat the claim as a whole – consider **all** of the recited limitations when determining eligibility.
- **No longer use** the “Eligibility Quick Reference Sheet Identifying Abstract Ideas” when determining whether a claim recites an abstract idea.
- Whether claim elements represent only well-understood, routine, conventional activity is considered at Step 2B and is not a consideration at Step 2A.
- The key inquiry in revised Step 2A is whether a claim that recites a judicial exception is directed to the judicial exception itself, or is instead directed to a practical application of the judicial exception.
- Practice compact prosecution – this includes addressing all statutory requirements (not just eligibility) and pointing applicants to eligible subject matter in the specification when possible.

101-RELATED RESOURCES

Impact

- The 2019 PEG supersedes:
 - MPEP 2106.04(II) (Eligibility Step 2A: Whether a Claim Is Directed to a Judicial Exception)
 - All versions of the “Eligibility Quick Reference Sheet Identifying Abstract Ideas”
- A chart of affected MPEP sections is posted on the [subject matter eligibility webpage](#).

Note: Any claim considered eligible under prior guidance should still be considered eligible under the 2019 PEG.

Examples

- The USPTO has issued numerous examples showing how to apply its eligibility guidance to analyze various fact patterns.
 - New examples 37-42 present hypothetical claims that are analyzed under the 2019 PEG. These examples address abstract ideas, computer-related inventions, and software.
 - Existing examples 1-36 were issued prior to the 2019 PEG, and some of them present analyses that may not be entirely consistent with the 2019 PEG. Thus, although all the claims indicated as eligible in prior examples 1-36 are still eligible today, you should use these examples with caution.

New form paragraphs

- The 2019 PEG affects **some** of the eligibility-related form paragraphs.
 - Form paragraph 7.05.015 is superseded and replaced with new form paragraphs 7.05.016 and 7.05.017.
- For “Step 2B” rejections (claim is directed to a judicial exception without providing an inventive concept/significantly more), use existing form paragraphs 7.04.01, 7.05 **and** the following new form paragraph(s):
 - If the recited judicial exception is an **abstract idea enumerated in the 2019 PEG, a law of nature, or a natural phenomenon**, use new form paragraph 7.05.016; or
 - If the recited judicial exception is an **abstract idea that is not enumerated in the 2019 PEG**, use new form paragraph 7.05.016 and new form paragraph 7.05.017 because TC director approval is required.

Section 101 form paragraphs

Form Paragraph	Status
7.04.01 Statement of Statutory Basis, 35 U.S.C. 101	Unchanged (except for cross-references to other FP in the examiner notes)
7.05 Rejection, 35 U.S.C. 101, -Heading Only-	
7.05.01 Rejection, 35 U.S.C. 101, Nonstatutory (Not One of the Four Statutory Categories)	
7.05.015 Rejection, 35 U.S.C. 101, Nonstatutory (Directed to a Judicial Exception without Significantly More)	Deleted (use 7.05.016 instead)
7.05.016 Rejection, 35 U.S.C. 101, Nonstatutory (Directed to a Judicial Exception without an Inventive Concept/Significantly More)	New
7.05.017 Rejection, 35 U.S.C. 101, TC Director Approval for Non-Enumerated Abstract Idea	New

Applications in process

- If applicant argues in response to an office action that the claims are eligible—
 - Examiners should re-evaluate the eligibility of each claim previously rejected under 35 U.S.C. 101 in accordance with the 2019 PEG.
 - If the claim is now eligible, the rejection under 35 U.S.C. 101 should be withdrawn.
 - If the claim is still ineligible, examiners should:
 - Update the form paragraph(s) used, and
 - Ensure that the explanation of the rejection under 35 U.S.C. 101 addresses why the claim recites a judicial exception, fails to integrate the judicial exception into a practical application, and fails to provide an inventive concept
 - Examiners should also consider the patentability of each claim under 35 U.S.C. 102 (novelty), 103 (nonobviousness), and 112 (enablement, written description, definiteness)
- The FAQ document posted on the [webpage](#) provides additional guidance on how to handle applications in process, including when a rejection may be made final when updating or maintaining a rejection.

Resources

- Subject Matter Eligibility webpage
 - www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility
 - Includes the following resources:
 - ❖ Office guidance on subject matter eligibility
 - MPEP 2106 *et seq.* [except MPEP 2106.04(II), which has been superseded]
 - *Berkheimer* memo issued on April 20, 2018
 - 2019 PEG
 - ❖ Other materials
 - New form paragraphs
 - Chart of affected MPEP sections
 - Sample rejection under the 2019 PEG
 - Examples 37-42 demonstrating how to apply the 2019 PEG
 - Frequently Asked Questions (FAQ) document

