

Patent Eligibility, Duty to Disclose, and More: USPTO Manual of Patent Examining Procedure Guidance

THURSDAY, OCTOBER 13, 2022

1pm Eastern | 12pm Central | 11am Mountain | 10am Pacific

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Manual of Patent Examining Procedure (MPEP)

Ninth Edition, Rev. 10.2019, Last Revised June 2020

Searchable MPEP:

<https://mpep.uspto.gov/RDMS/MPEP/current>



A prosecution tool that can be a wealth of information to effectively and efficiently prosecute applications.

MPEP – June 2020 publication of Revision 10.2019 includes the following changes:

Ch. 100 (requirements for foreign filing licenses)	Ch. 900	Ch. 1900 (protests)
Ch. 200	Ch. 1000	Ch. 2100 (Oct. 2019 PEG Update)
Ch. 300 (assignments)	Ch. 1200	Ch. 2200 (ex parte reexam)
Ch. 400	Ch. 1300 (QPIDS)	Ch. 2300
Ch. 500	Ch. 1400 (CONs, DIVs, and reissues)	Ch. 2400
Ch. 600 (ADS's and IDS's)	Ch. 1500	Ch. 2500
Ch. 700	Ch. 1700	Ch. 2600
Ch. 800 (impact of PTE on OTDP)	Ch. 1800	Ch. 2700 (PTAs and PTEs)

Discussion Topics

- I. Patent eligibility
- II. Duty to disclose
- III. Other amendments
- IV. Best practices

- *How will examiners apply the most recent version of the MPEP?*
- *How can patent counsel use the revised MPEP to bolster their arguments when patents are being examined?*
- *How, if at all, can principles of the MPEP be used to bolster patents subject to AIA post-grant proceedings or litigation?*
- *How does the USPTO's disclosure standard differ from the courts' positions?*

Subject Matter Eligibility

- 35 U.S.C. § 101 sets forth the four categories of patentable subject matter:
 - Whoever invents or discovers any new and useful **process, machine, manufacture, or composition of matter**, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- Judicially-created exceptions to patentable subject matter: subject matter that the courts have found to be outside of, or exceptions to, the four statutory categories of invention, and are limited to **abstract ideas, laws of nature and natural phenomena (including products of nature)**. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (citing *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116, (2013)).

Section 101: Mayo/Alice Two Step

- **Step 1**: Does the claim as a whole fall within any statutory category?
 - **No** → End of analysis
 - **Yes** → Move to **Step 2**
- **Step 2**: Search for an **inventive concept**
 - Identify non-patent-ineligible elements of the claim.
 - Consider these elements both individually and as an ordered combination.
 - Do the additional elements “transform the nature of the claim” into a patent eligible-application?

Subject Matter Eligibility

- 2106.04 Eligibility Step 2A: Whether a Claim is Directed to a Judicial Exception [R-10.2019]
 - I. JUDICIAL EXCEPTIONS
 - Determining that a claim falls within one of the four enumerated categories of patentable subject matter recited in 35 U.S.C. 101 (i.e., process, machine, manufacture, or composition of matter) in Step 1 does not end the eligibility analysis, because claims directed to nothing more than abstract ideas (such as a mathematical formula or equation), natural phenomena, and laws of nature are not eligible for patent protection.
 - II. ELIGIBILITY STEP 2A: WHETHER A CLAIM IS DIRECTED TO A JUDICIAL EXCEPTION
 - Does the claim recite a law of nature, a natural phenomenon (product of nature) or an abstract idea? (directed to a judicial exception)
 - No -> end of analysis.
 - Yes -? Step 2B to determine if the claim as a whole amounts to significantly more than the exception itself.

Subject Matter Eligibility (con't)

- 2106.05 Eligibility Step 2B: Whether a Claim Amounts to Significantly More [R-10.2019]
 - I. THE SEARCH FOR AN INVENTIVE CONCEPT
 - II. ELIGIBILITY STEP 2B: WHETHER THE ADDITIONAL ELEMENTS CONTRIBUTE AN "INVENTIVE CONCEPT"
 - Step 2B asks: Does the claim recite additional elements that amount to significantly more than the judicial exception? Examiners should answer this question by first identifying whether there are any additional elements (features/limitations/steps) recited in the claim beyond the judicial exception(s), and then evaluating those additional elements individually and in combination to determine whether they contribute an inventive concept (i.e., amount to significantly more than the judicial exception(s)).

Subject Matter Eligibility (con't)

- 2106.05(d) Well-Understood, Routine, Conventional Activity [R-10.2019]
 - Another consideration when determining whether a claim recites significantly more than a judicial exception is whether the additional element(s) are well-understood, routine, conventional activities previously known to the industry. This consideration is only evaluated in Step 2B of the eligibility analysis.
 - Compare *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) (more than well-understood, routine conventional activities in the field) with *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 67 (2010) (additional elements that were not an inventive concept because they were merely well-understood, routine, conventional activity previously known to the industry, which were not by themselves sufficient to transform a judicial exception into a patent eligible invention).

Prong Two Analysis: Examples

- 2106.04(d) Integration of a Judicial Exception Into A Practical Application [R-10.2019]
 - III. EXAMPLES OF HOW THE OFFICE EVALUATES WHETHER THE CLAIM AS A WHOLE INTEGRATES THE JUDICIAL EXCEPTION INTO A PRACTICAL APPLICATION
 - *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161 (Fed. Cir. 2019)
 - *Finjan Inc. v. Blue Coat Systems, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018)

2019 Patent Eligibility Guidance (“2019 PEG”)

Published (and Effective) January 7, 2019

DEPARTMENT OF COMMERCE

**United States Patent and Trademark
Office**

[Docket No. PTO-P-2018-0053]

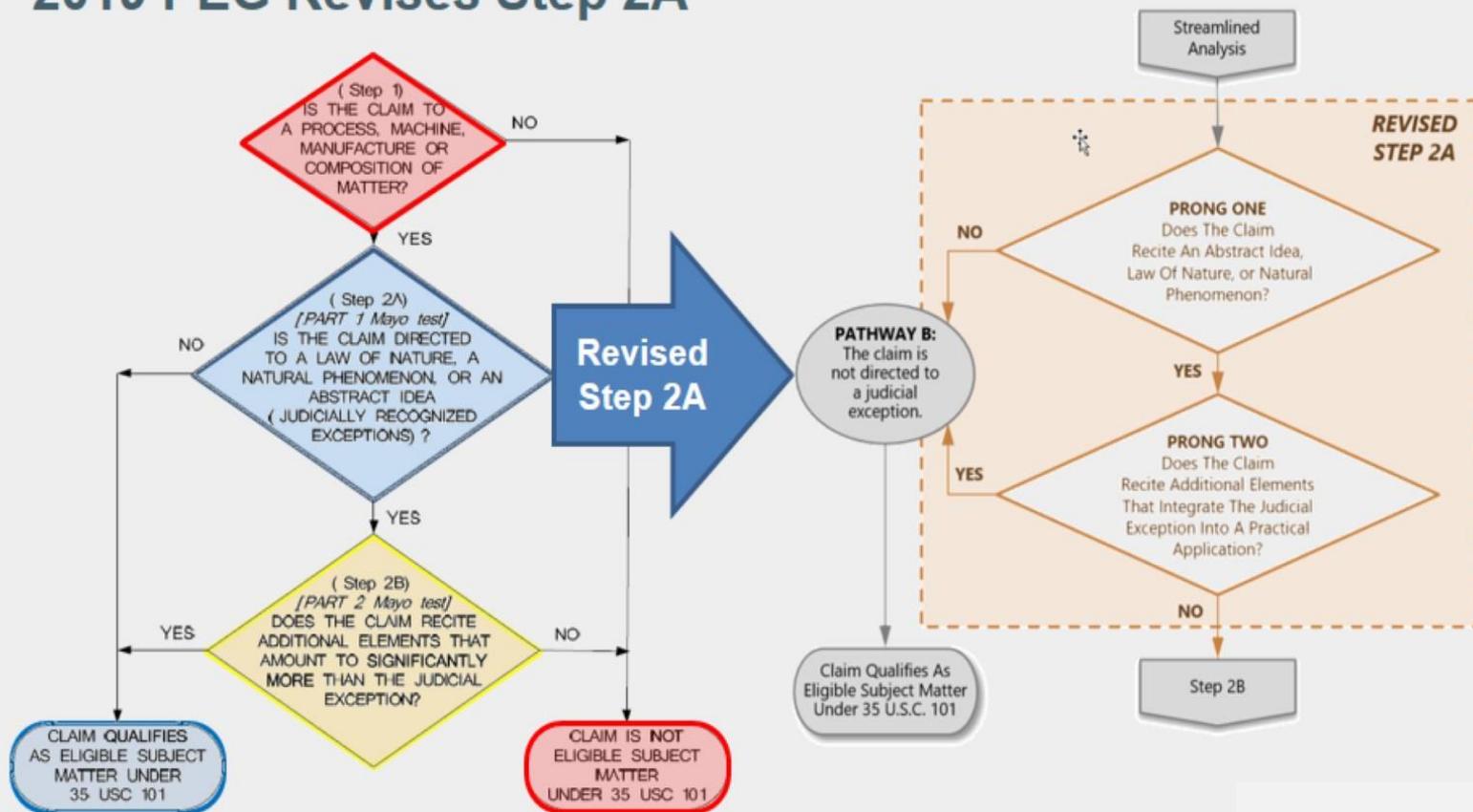
**2019 Revised Patent Subject Matter
Eligibility Guidance**

AGENCY: United States Patent and
Trademark Office, Commerce.

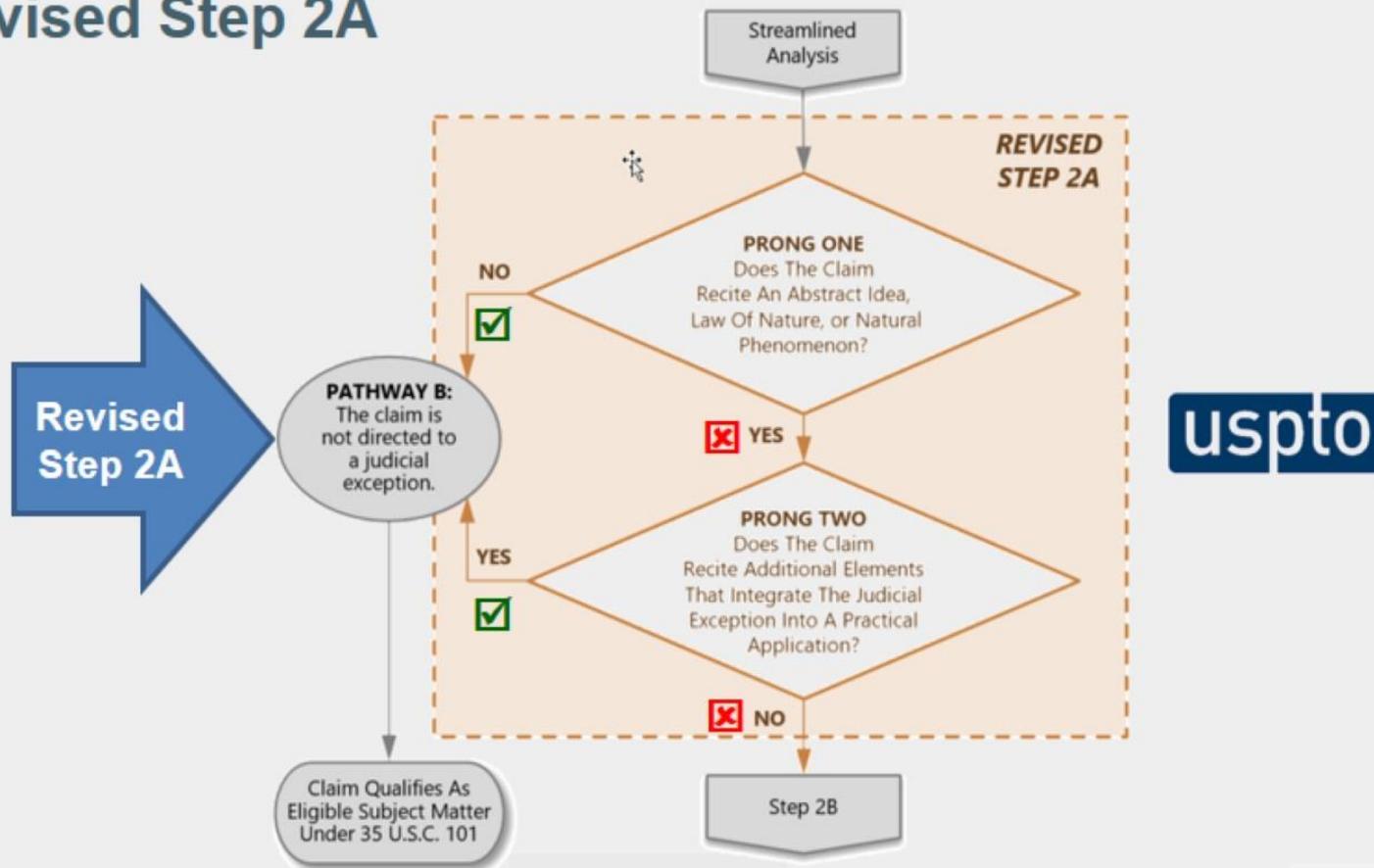
ACTION: Examination Guidance; Request
for comments.

<https://www.federalregister.gov/documents/2019/01/07/2018-28282/2019-revised-patent-subject-matter-eligibility-guidance>

2019 PEG Revises Step 2A



Revised Step 2A



2019 Patent Eligibility Guidance (2019 PEG)

- Admits that prior guidance requiring Examiners to compare the claims at issue to those previously found to be abstract “has ... become **impractical**.”
 - “*The growing body of precedent has become increasingly more **difficult for examiners to apply in a predictable manner**, and concerns have been raised that different examiners within and between technology centers may reach **inconsistent results**.*”
 - Accordingly, “*in an effort to **improve consistency and predictability**, the 2019 . . . Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to [clarify the 101 analysis].*”

84 Fed. Reg. 50 (Jan. 7, 2019)

Step 2A — Prong 1: *Recites a Judicial Exception?*

A claim recites an Abstract Idea **only if** it recites one of the following “**as such** ... (that is, ... **on [its] own** per se).”

- (a) **Mathematical Concepts:** mathematical relationships, formulas, equations, calculations;
- (b) **Methods of Organizing Human Activity:** fundamental economic principles / practices; commercial / legal interactions; managing personal behavior / relationships / interactions between people;
- (c) **Mental Processes:** concepts [capable of being] performed in the human mind (including observation, evaluation, judgment, opinion).

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Step 2A — Prong 2: *Integrated into Practical Application?*

Does the claim “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**”?

- When the exception **is** integrated (Prong 2: **Yes**), the claim is **not** “directed to” the judicial exception and is eligible
- Where the additional elements **do not** integrate the exception into a practical application (Prong 2: **No**), the claim **is** directed to the judicial exception
 - Claim still requires additional analysis under Step 2B to finally determine whether the claim is patent-eligible

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Step 2A — Prong 2: *Integrated into Practical Application?*

Importantly: In determining whether the alleged abstract idea is “integrated into a practical application”:

- Examiners **must give weight to all additional elements**, whether or not they are “well-understood, routine, or conventional.”
- Whether something is “well-understood, routine or conventional” is considered **only** under **Step 2B** (***Does the claim provide an Inventive Concept?***)



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4-Part Test Simpler than a 3-Part Test?

Step 1: *Falls within a statutory category?*

Yes

No

Step 2A: *Directed to a judicial exception?*

Prong 1: *Recites a judicial exception?*

No

Yes

Prong 2: *Integrated into a practical application?*

Yes

No

Step 2B: *Provides an inventive concept?*

Yes

No

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MPEP Sections Affected by the 2019 PEG

706.03(a)(II)

2104

2106

(several
subsections)

Note: “The 2019 PEG supersedes MPEP section 2106.04(II) along with any other portion of the MPEP that conflicts with the 2019 PEG.”

2019 PEG “Directed to”

- “[I]f a claim recites a judicial exception (a law of nature, a natural phenomenon, or an abstract idea as grouped in Section I, above), it must then be analyzed to determine whether the recited judicial exception is integrated into a practical application of that exception. A claim is not “directed to” a judicial exception, and thus is patent eligible, if the claim as a whole integrates the recited judicial exception into a practical application of that exception.”
- “If the claim does not recite a judicial exception, it is not directed to a judicial exception (Step 2A: NO) and is eligible. This concludes the eligibility analysis. If the claim does recite a judicial exception, then it requires further analysis in Prong Two of Revised Step 2A to determine whether it is directed to the recited exception[.]”
- “if a claim has been determined to be directed to a judicial exception under revised Step 2A, examiners should then evaluate the additional elements individually and in combination under Step 2B to determine whether they provide an inventive concept (*i.e.*, whether the additional elements amount to significantly more than the exception itself).”

2019 PEG “Abstract Ideas”

“To determine whether a claim recites an abstract idea in Prong One, examiners are now to:

- (a) Identify the specific limitation(s) in the claim under examination (individually or in combination) that the examiner believes recites an abstract idea; and
- (b) determine whether the identified limitation(s) falls within the subject matter groupings of abstract ideas enumerated in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance.

If the identified limitation(s) falls within the subject matter groupings of abstract ideas enumerated in Section I, analysis should proceed to Prong Two in order to evaluate whether the claim integrates the abstract idea into a practical application. When evaluating Prong One, examiners are no longer to use the USPTO’s “Eligibility Quick Reference Sheet Identifying Abstract Ideas,” which has been superseded by this document.”

2019 PEG “Significantly More”

- “if a claim has been determined to be directed to a judicial exception under revised Step 2A, examiners should then evaluate the additional elements individually and in combination under Step 2B to determine whether they provide an inventive concept (i.e., whether the additional elements amount to **significantly more than the exception itself**). If the examiner determines that the element (or combination of elements) amounts to significantly more than the exception itself (Step 2B: YES), the claim is eligible, thereby concluding the eligibility analysis. If the examiner determines that the element and combination of elements does not amount to significantly more than the exception itself, the claim is ineligible (Step 2B: NO) and the examiner should reject the claim for lack of subject matter eligibility.”

USPTO Examples 37-42 (New in 2019 PEG)

Subject Matter Eligibility Examples: Abstract Ideas

The following examples should be used in conjunction with the *2019 Revised Patent Subject Matter Eligibility Guidance (2019 PEG)*. The examples below are hypothetical and only intended to be illustrative of the claim analysis under the 2019 PEG. These examples should be interpreted based on the fact patterns set forth below as other fact patterns may have different eligibility outcomes. That is, it is not necessary for a claim under examination to mirror an example claim to be subject matter eligible under the 2019 PEG. All of the claims are analyzed for eligibility in accordance with their broadest reasonable interpretation.

Note that the examples herein are numbered consecutively beginning with number 37, because 36 examples were previously issued.

The examples are illustrative only of the patent-eligibility analysis under the 2019 PEG. All claims must be ultimately analyzed for compliance with every requirement for patentability, including 35 U.S.C. 102, 103, 112, and 101 (utility, inventorship and double patenting) and non-statutory double patenting. The analyses provided below do not address considerations other than subject matter eligibility under Section 101.

https://www.uspto.gov/sites/default/files/documents/101_examples_37to42_20190107.pdf

Considerations to Tackle the 2019 PEG . . .

- Attack application of Prongs One and Two
- Conduct **Examiner Interview**
- Analogize to USPTO Examples 37-42
- ***Argue 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.
- Step 2B: “significantly more”?
 - 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***.
- **Highly *claim(s)/element(s)* specific; no one size fits all**

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Examples of Exceptions Integrated as a Practical Application

- Improvement in functioning of a computer
- Improvement to other technology or technical field
- Effects a particular treatment or prophylaxis for disease/condition
- Uses judicial exception in conjunction with a particular machine or manufacture that is integral to the claims
- Transformation or reduction of a particular article to a different state
- Applies or uses judicial exception in some other meaningful way beyond generally linking the use of the exception to a particular technological environment
 - *“more than a mere drafting effort designed to monopolize the exception”*

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Judicial exception NOT integrated into a Practical Application

- Merely reciting “apply” the judicial exception
- Mere instructions to implement an abstract idea on a computer
- Adding insignificant extra-solution activity to the judicial exception
- Mere general link to a particular technological environment
- But must look to the **combination of elements**
- Consider claim **as a whole** to determine integration

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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; and
- **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); and
- **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.**

From USPTO: https://www.uspto.gov/sites/default/files/documents/2019peg_advanced_module_05mar2019.pptx

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Examples Unaffected by the 2019 PEG

Abstract idea/life sciences examples

1. Removing malicious code
2. Composite web page
5. Digital image processing
23. GUI for relocating obscured text (claim 1)
29. Julitis (claims 1 and 7)
31. Screening for gene alterations (claims 1, 75 and 85)
34. Filtering internet content

Streamlined analysis examples

19. Hip prosthesis
20. Robotic arm assembly
26. Internal combustion engine
27. System software - BIOS
32. Paper-making machine
33. Hydrolysis of fat

Product of nature examples

9. Gunpowder & fireworks
10. Pomelo juice
11. Amazonic acid
12. Purified proteins
13. Genetically modified bacterium
14. Bacterial mixtures
15. Nucleic acids
16. Antibodies
17. Cells
18. Food
28. Vaccines (claims 1, 2, and 4-6)
30. Dietary sweeteners (claims 1 and 3-6)

From USPTO: https://www.uspto.gov/sites/default/files/documents/2019peg_advanced_module_05mar2019.pptx

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Examples that are affected by the 2019 PEG

Examples with claims that are now eligible at Step 2A Prong Two

- 3. Digital image processing
- 4. Global positioning system
- 21. Stock quote data (claim 2)
- 23. GUI for relocating obscured text (claim 4)
- 25. Rubber manufacturing
- 29. Julitis (claims 5 and 6)

Examples where result is unchanged but that would require analysis under Step 2A Prong Two

- 6. Game of bingo
- 7. Transaction performance guaranty
- 8. Distribution of products over the internet
- 21. Stock quote data (claim 1)
- 22. GUI for meal planning
- 23. GUI for relocating obscured text (claims 2 and 3)
- 24. Updating alarm limits
- 28. Vaccines (claims 3 and 7)
- 29. Julitis (claims 2-4)
- 30. Dietary sweeteners (claim 2)
- 31. Screening for gene alterations (claims 70 and 80)
- 35. Verifying a bank customer's identity to permit an ATM transaction
- 36. Tracking inventory

From USPTO:
https://www.uspto.gov/sites/default/files/documents/2019peg_advanced_module_05mar2019.pptx

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Guidance and PTAB

- **Precedential**
 - *Ex parte Mewherter*, 2012-007692 (May 8, 2013) [machine readable storage medium]
- **Informative** (all applying 2019 revised guidance)
 - *Ex parte Hannun (formerly Ex parte Linden)*, 2018-003323 (April 1, 2019) [method for transcribing speech]
 - *Ex parte Smith*, 2018-000064 (Feb. 1, 2019) [method of trading derivatives]
 - *Ex parte Olson*, 2017-006489 (Mar. 25, 2019) [method of registering a catheter navigation system to a 3D image]
 - *Ex parte Kimizuka*, 2018-001081 (May 15, 2019) [fitting method of a golf club]
 - *Ex parte Savescu*, 2018-003174 (Apr. 1, 2019) [method of creating workflow for project]
 - *Ex parte Fautz*, 2019-000106 (May 15, 2019) [magnetic resonance tomograph apparatus]

About The Guidance

- Guidance ≠ law.
 - “This guidance does not constitute substantive rulemaking and does not have the force and effect of law.”
- Following Guidance does not guarantee that claims will be found patent eligible.
- Courts do not have to agree with the Guidance or the examiner’s (or PTAB’s) decision.

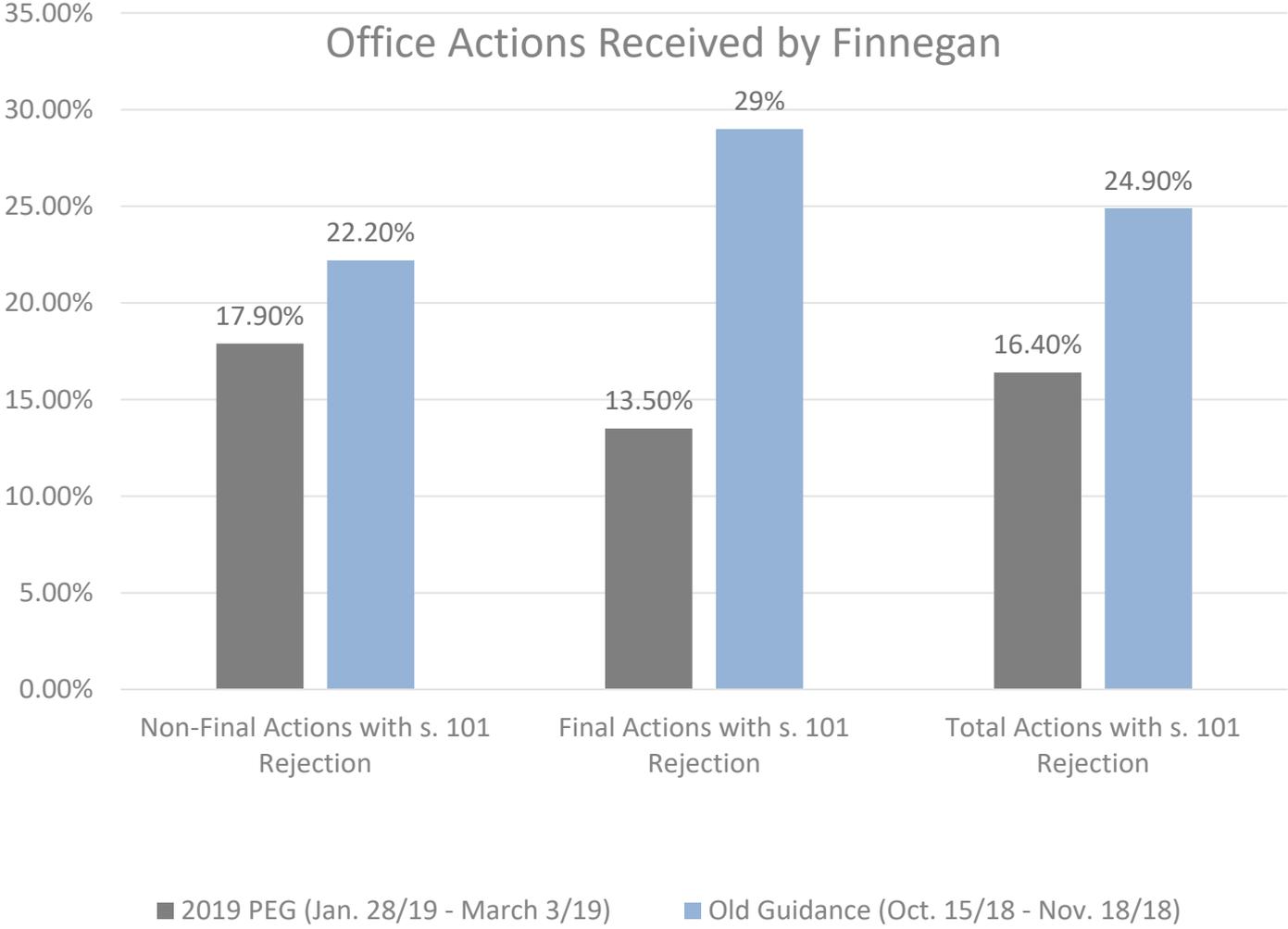
Guidance Still Helpful To Practitioners

- Use it to highlight **why applicant should succeed**.
- Use case law cited in the MPEP as starting point for legal research and reasoning.
- Cite both MPEP and case law.
 - Examiners receptive to MPEP citations, but then case law support is there if end up before PTAB or court.

Guidance Caveats

This guidance does not constitute substantive rulemaking and does not have the force and effect of law. The guidance sets out **agency policy** with respect to the USPTO's interpretation of the subject matter eligibility requirements of 35 U.S.C. 101 in view of decisions by the Supreme Court and the Federal Circuit. The guidance was developed as a tool for internal USPTO management and does not create any right or benefit, substantive or procedural, enforceable by any party against the USPTO. **Rejections will continue to be based upon the substantive law, and it is those rejections that are appealable to the Patent Trial and Appeal Board (PTAB) and the courts.** All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance. Failure of USPTO personnel to follow the guidance, however, is not, in itself, a proper basis for either an appeal or a petition.

Fewer §101 Rejections After 2019 PEG



Tech Center 1600 – Office Action

10. Claims 30-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Method claim(s) 30-37, directed to predicting patient's response to biglycan therapy and monitoring efficacy of treatment by biglycan therapy set forth laws of nature by reciting relationship between changes in the levels of naturally occurring factors and the pathology itself. The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception for reasons that follow.

Tech Center 1600 – Office Action (con't)

In the instant case, based upon an analysis with respect to the claim as a whole, claims 30-37 are determined to be directed to a judicial exception without significantly more. The rationale for this determination is explained below in view of controlling legal precedent set forth in *2014 Interim Guidance on Patent Subject Matter Eligibility* (79 FR 74618) dated December 16, 2014 and *2019 Revised Patent Subject Matter Eligibility Guidance* (84 FR 50) dated January 07, 2019.

The instant claims 30-37 encompass a process (Step 1: Yes).

Next, Step 2, is the two-part analysis from *Alice Corp.* (also called the *Mayo* test) to determine whether the claim is directed to laws of nature, natural phenomena, and abstract ideas (the judicially recognized exceptions). (In *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354

Tech Center 1600 – Office Action (con't)

The instant claims 30-37 are directed to determination of changes in the levels or activity of naturally occurring utrophin in a patient, which is a law of nature, natural phenomenon, and thus is a judicial exception. The changes in the amounts or activity of utrophin in human body occur naturally and apart from any human action. The relation between the levels and activity of utrophin and patient's response to biglycan therapy exist in principle and is a consequence of the ways these factors are metabolized by the body, **entirely natural process, a natural phenomenon, and thus a judicial exception (Step 2A: Yes)**.... the claims do not recite any elements, or combination of elements to ensure that the claim as a whole amounts to significantly more than the judicial exception because the claims 30-37 are limited to one step of measuring utrophin level in a patient by any means known to those skilled in the art with **no inventive improvement specifically disclosed in the specification as filed (Step 2B: No)**.

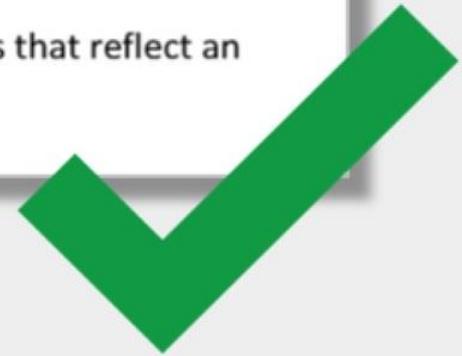
Tech Center 1700 – Office Action

When considering the claims under the 2019 Revised Patent Subject Matter Eligibility Guidance (January 2019), it is noted that the claims meet step 1 of the guidance since the claims are directed to one of the statutory categories of invention (i.e. are directed to a process). The claims meet prong one of revised step 2A since the claims recite a natural phenomenon between the lipid biomarkers TAG (46:1) and PC-O (28:0) and a risk of unhealthy ageing in a subject, which constitutes a judicial exception. The claims do not meet prong two of revised step 2A since the claims do not recite additional elements that integrate the judicial exception into a practical application. The step added to claim 1 concerning “providing a modified lifestyle to the subject if the sample from the subject has levels of lipid biomarkers indicative of an increased risk of developing age-related chronic inflammatory disease” does not apply or use the judicial exception to effect a particular treatment of prophylaxis for a disease or medical condition since “providing a modified lifestyle” is recited only generally and does not provide a particular and specific “treatment” to a subject. The step of “providing a modified lifestyle” to a subject is not particular, and is instead merely instruction to “apply” the exception in a generic way. Thus, the “providing a modified lifestyle” step does not integrate the mental analysis step into a practical application. The claims also do not meet step 2B of the guidance since the additional elements of the claims concerning obtaining a sample from a subject, determining the amounts of TAG(46:1) and PC-O(28:0) in the sample, and comparing the determined amounts to a predetermined reference value are all well-understood, conventional and routine sample analysis.

Tech Center 2400 – Office Action

Claim Rejections - 35 USC § 101

In light of the amendments filed on 5/16/218 and also in light of the 2019 Revised Subject Matter Eligibility Guidance, claim rejections under 35 U.S.C § 101 are withdrawn because, although the limitations still recite an abstract idea, the limitations include additional elements that reflect an improvement to a technology field (video programming).



Tech Center 2400 – Office Action (con't)

Step two: Are the claims directed to a law of nature, a natural phenomenon, or an abstract idea? In accordance with judicial precedent, and to increase consistency in examination practice, the 2019 Revised Patent Subject Matter Eligibility Guidance sets forth a procedure to determine whether a claim is "directed to" a judicial exception. The procedures for step two includes two sub-steps:

Step 2A: This is a two prong inquiry. In Prong One, examiners evaluate whether the claim recites a judicial exception.

In prong two, the examiners evaluate whether the claim, as a whole, integrates the recited judicial exception into a practical application. To do this, additional elements recited in the claim are identified. The additional elements recited in claim 1 include a server to receive and process the data, and determine and communicate the policy; a network monitoring device to transmit the data to the server; and a network, to communicate the policy.

The examiner concludes that the additional elements do not reflect an improvement in the functioning of a computer, or other technology or technical field (the devices, systems, and networks in the claim are simply there to transmit/receive and process information). Transmitting, receiving, and processing information could be performed by systems that are well-known in the art. See, for example,

Tech Center 3600 – Office Action

31. However, the presently pending claims are so broad that they impose no meaningful limit on the judicial exception, such that the claim is not more than a drafting effort designed to monopolize the judicial exception.

32. More specifically, all additional elements in the claims (that are added to the judicial exception) “no more than generally link the use of a judicial exception to a particular technological environment or field of use.”

33. For example, all the claims can be implemented as a mental process, thereby monopolizing the judicial exception.

34. Moreover, the claims 1-11 fail to even add the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement the abstract idea on a computer, as discussed in MPEP §2106.05(f).

35. In addition, all claims are directed to a field of use: commercial real estate prices, and whether they are more likely to rise or fall.

36. In regards to Step 2B of the *Alice* analysis, claims 1-11 do not include additional elements that are sufficient to amount to “significantly more” than the judicial exception.

37. The claims 1-11 fail to even add the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement the abstract idea on a computer, as discussed in MPEP §2106.05(f).

38. Moreover, as discussed in the first paragraph of MPEP §2106.05(a), in order to be patent eligible, examiners should consider whether the claim (emphasis added):

“purports to improve the functioning of the computer itself” or “any other technology or technical field.” *Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 124 S.Ct. 2347, 2359, 110 USPQ2d 1976, 1984 (2014). This consideration has also been referred to as the search for technological solution to a technological problem. See e.g., *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257, 113 USPQ2d 1097, 1105 (Fed. Cir. 2014); *Amdocs (Israel), Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300-01, 120 USPQ2d 1527, 1537 (Fed. Cir. 2016).

39. The present claims do not present “a technological solution to a technological problem.” Instead, the claims 1-11 are directed to a judicial exception (a claim to an abstract idea), and do not even require a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry, as discussed in *Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 124 S.Ct. 2347, 2359-60 (2014). (See MPEP §2106.05(l)(A) and MPEP §2106.05(d)).

Tech Center 3600 – Office Action (con't)

Step 2A, Prong One:	
Claim 1: Identification of Abstract Idea, using Broadest Reasonable Interpretation	
1. A system, comprising:	
a non-transitory memory storing instructions; and	
one or more hardware processors coupled to the non-transitory memory and configured to read instructions from the non-transitory memory to	
cause the system to perform operations comprising:	
monitoring a battery level of a primary electronic device;	But for the primary electronic device, this limitation includes the <u>mental process</u> of observing information.
determining that the monitored battery level of the primary electronic device has dropped below a threshold;	But for the primary electronic device, this limitation includes the <u>mental process</u> of evaluating data—i. e., evaluating whether a battery level has dropped below a threshold.
loading, in response to the determining, a first amount of funds electronically to a secondary electronic device for offline purchases, the secondary electronic device being communicatively coupled to the primary electronic device; and	But for the electronic devices, this limitation includes the <u>fundamental economic practice</u> of transferring funds.
processing an offline electronic transaction using the secondary electronic device based on the first amount of funds.	But for the electronic device, this limitation includes the <u>fundamental economic practice</u> of transferring funds.

Tech Center 3600 – Office Action (con't)

The judicial exception is not integrated into a practical application. The additional elements here are the non-transitory memory, processors, and electronic devices. These elements are recited at a high level of generality (i.e., as generic components performing generic computer functions of processing and transmitting data) such that they amount to no more than applying the exception using generic computing components. Accordingly, the additional elements do not integrate the abstract idea into a practical application because they do not impose any meaningful limits on practicing the abstract idea. Therefore, these claims are directed to an abstract idea.

Step 2B:

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception. As discussed above with respect to integration of the abstract idea into a practical application, the additional elements amount to no more than applying the exception using a generic computing components. Mere instructions to apply an exception using a generic computing component cannot provide an inventive concept.

Avoiding a § 101 Rejection: General Tips

- Strategize for patent eligibility under §§ 101 based on USPTO guidance documents.
- Anticipate eligibility rejections and plan a deliberate eligibility strategy to overcome.
- Utilize a variety of invention settings (method/kit claims not visibly parallel to other claims).
- Draft and prosecute narrow claims first?
 - Limit to practical application.
- Avoid elements that read on mental steps.
- Return of means-plus-function claims?

Drafting the Specification to Avoid/Overcome a § 101 Rejection

- Disclose practical applications (e.g., implementation beyond “mental step” diagnosis, such as diagnosis + treatment).
- Disclose concrete examples of broadly-claimed methods (e.g., suitable technologies for carrying out the method).
- Disclose why recited elements (e.g., compositions, steps in a method) are non-routine.
- *Disclose why the invention is an improvement over the prior art.
- *Disclose why one of skill in the art would not have reasonably expected success in making the invention.

** Though these elements are more appropriately § 103 considerations, they may also be helpful in overcoming a § 101 rejection.*

Drafting or Amending Method Claims to Avoid a § 101 Rejection

- Recite a practical application and/or tangible result.
- Recite at least one concrete/physical step.
- If possible, recite a *series* of steps.
- If possible, recite at least one non-routine element.
- Choose a clear preamble, and continue with language consistent with that preamble:
 - A method of treatment . . .
 - A method of preventing . . .
 - A method of [achieving X tangible/measurable result] . . .
 - A method of detecting X . . . comprising [physical detection step] . . .
- If claiming a method of diagnosis, include a non-routine element or a treatment step.

Drafting or Amending Kit Claims to Avoid a § 101 Rejection

- Distinguish kits as more than rephrased method claims.
- Similar to tips for method claims (practical application, tangible result, concrete elements, non-routine elements).

Arguments during Prosecution to Avoid/Overcome a § 101 Rejection

- Argue that the claims recite physical/tangible elements (point to support from specification).
- Argue that the claims recite non-routine elements.
- *Argue that the invention is an improvement over the prior art.
- *Argue that one of skill in the art would not have reasonably expected success in making the invention.
- *Argue that the prior art teaches away from the invention.

** Though these elements are more appropriately § 103 considerations, they may also be helpful in overcoming a § 101 rejection.*

Proposed Legislative Reform

- Patent Eligibility Restoration Act of 2022
- **Section 100:**
 - (b) Strike “includes a new use of a known process” and insert “includes a use, application, or method of manufacture of a known or naturally-occurring process”
 - (k) Add at the end “The term ‘useful’ means any invention or discovery, that the invention or discovery has a specific and practical utility from the perspective of a person of ordinary skill in the art to which the invention or discovery pertains.”

Proposed Legislative Reform

- Patent Eligibility Restoration Act of 2022
- **Section 101:**
 - (a) IN GENERAL. - Whoever invents or discovers any useful process, machine, manufacture, or composition of matter, or any useful improvement thereof, may obtain a patent therefor, subject only to the exclusions in subsection (b) and to the further conditions and requirements of this title.
 - (b) ELIGIBILITY EXCLUSIONS.-
 - (1) IN GENERAL.- Subject to paragraph (2), a person may not obtain a patent for any of the following, if claims as such:
 - (A) A mathematical formula, apart from a useful invention or discovery.
 - (B) A process that—
 - (i) is a non-technological economic, financial, business, social, cultural, or artistic process;
 - (ii) is a mental process performed solely in the human mind; or
 - (iii) occurs in nature wholly independent of, and prior to, any human activity.
 - (C) An unmodified human gene, as that gene exists in the human body.
 - (D) An unmodified natural material, as that material exists in nature.

Proposed Legislative Reform

- Patent Eligibility Restoration Act of 2022
- **Section 101:**
 - ***
 - (b) ELIGIBILITY EXCLUSIONS.-
 - (2) CONDITIONS.—
 - (A) CERTAIN PROCESSES.—Notwithstanding paragraph (1)(B)(i), a person may obtain a patent for a claimed invention that is a process described in such provision if that process is embodied in a machine or manufacture, unless that machine or manufacture is recited in a patent claim without integrating, beyond merely storing and executing, the steps of the process that the machine or manufacture perform.
 - (B) HUMAN GENES AND NATURAL MATERIALS.—For the purposes of subparagraphs (C) and (D) of paragraph (1), a human gene or natural material that is isolated, purified, enriched, or otherwise altered by human activity, or that is otherwise employed in a useful invention or discovery, shall not be considered to be unmodified.

Proposed Legislative Reform

- Patent Eligibility Restoration Act of 2022
- **Section 101:**
 - ***
 - (c) ELIGIBILITY.—
 - (1) IN GENERAL.—In determining whether, under this section, a claimed invention is eligible for a patent, eligibility shall be determined—
 - (A) by considering the claimed invention as a whole and without discounting or disregarding any claim element; and
 - (B) without regard to—
 - (i) the manner in which the claimed invention was made;
 - (ii) whether a claim element is known, conventional, routine, or naturally occurring;
 - (iii) the state of the applicable art, as of the date on which the claimed invention is invented; or
 - (iv) any other consideration in section 102, 103, or 112.
 - (2) INFRINGEMENT ACTION.—
 - (A) IN GENERAL.—In an action brought for infringement under this title, the court, at any time, may determine whether an invention or discovery that is a subject of the action is eligible for a patent under this section, including on motion of a party when there are no genuine issues of material fact.
 - (B) LIMITED DISCOVERY.—With respect to a determination described in subparagraph (A), the court may consider limited discovery relevant only to the eligibility described in that subparagraph before ruling on a motion described in that subparagraph.

Duty to Disclose

- Duties of Disclosure and Reasonable Inquiry During Examination, Reexamination, and Reissue, and for Proceedings Before the Patent Trial and Appeal Board
- Notice issued 87 Fed.Reg. 45,764 (July 29, 2022)
 - “This notice specifically addresses these duties as they relate to information and statements material to patentability including, but not limited to, those received from or submitted to the FDA and other governmental agencies.”
- For patent applications and reexaminations: 37 CFR 1.56(a) and 1.555(a).
- For PTAB proceedings: 37 CFR 42.11(a).
- MPEP 2004 Item 10: “When in doubt, it is desirable and safest to submit information. Even though the attorney, agent, or applicant doesn’t consider it necessarily material, someone else may see it differently and embarrassing questions can be avoided.”

From the Notice

- What Is the Duty of Reasonable Inquiry:
 - ...to ensure that the paper is not being presented for any improper purpose, the legal contentions are warranted by law, the allegations and other factual contentions have evidentiary support, and the denials of factual contentions are warranted on the evidence.
 - ...This reasonable inquiry may comprise reviewing documents that are submitted to or received from other Government agencies, including the FDA. If any reviewed document is material to the patentability of a pending matter before the Office, ..., the party has a duty to submit the information to the USPTO. 37 CFR 1.56, 1.555, 42.11(a); see 37 CFR 42.11(c), 11.18(b)(2).
 - ...Failing to inquire when the circumstances warrant it could result in sanctions or other action under 37 CFR 11.18(c), which may include: (1) striking the offending paper; (2) referring a practitioner's conduct to the Director of Enrollment and Discipline for appropriate action; (3) precluding a party or practitioner from submitting a paper, or presenting or contesting an issue; (4) affecting the weight given to the offending paper; or (5) terminating the proceedings in the Office.

From the Notice

- When the Duties of Disclosure and Reasonable Inquiry Arise in Dealings With Other Government Agencies:
 - Each individual with a duty to disclose, or party with a duty of reasonable inquiry, should ensure that the statements made to the USPTO and other Government agencies, or any statements made on their behalf to other Government agencies regarding the claimed subject matter, are consistent. [cite *Belcher Pharms., LLC v. Hospira, Inc.*, 11 F.4th 1345 (Fed. Cir. 2021)]
 - ... Furthermore, providing material information to other Government agencies, including the FDA, while simultaneously withholding the same information from the USPTO undermines both the intent and spirit of the duty of disclosure and violates those duties.
 - ...Activities or documents associated with market testing, marketing, or commercialization by the patent applicant can also be material to patentability, and therefore, when material, should be disclosed to the USPTO. [cite *GS Cleantech Corp. v. Adkins Energy LLC*, 951 F.3d 1310, 1330-1332 (Fed. Cir. 2020)]

From the Notice

- When the Duties of Disclosure and Reasonable Inquiry Arise in Dealings With Other Government Agencies:
 - ...By following the guidance in this notice, it is expected that patent applicants can obtain more reliable patent protection and avoid the findings of inequitable conduct and sanctions noted above.
 - Similarly, each individual with a duty to disclose, or party with a duty of reasonable inquiry, should review documents it receives from other Government agencies to determine whether the information should be submitted to the USPTO.
 - ...Deliberate schemes or established practices to prevent 37 CFR 1.56(c) individuals from obtaining knowledge of material information is not acting in accordance with candor and good faith under 37 CFR 1.56(a). For example, walling off the patent prosecution practitioners from the attorneys seeking FDA approval, as a way to prevent material information from being exchanged between the practitioners and attorneys, is inappropriate. The U.S. Supreme Court has refused to enforce patents where deliberate steps were taken to suppress material information.

From the Notice

- When the Duties of Disclosure and Reasonable Inquiry Arise in Dealings With Other Government Agencies:
 - ...Though the FDA compiles paragraph IV certifications and publishes a list on its website, submitting this list to the USPTO does not satisfy the duty of disclosure for any material information submitted with the paragraph IV certification. These lists do not include patent numbers, relevant claims, or an explanation of the basis for the certification. Therefore, information and documents submitted with the paragraph IV certification that are material to patentability or to issues in proceedings pending before the USPTO, including the PTAB, must be submitted directly to the USPTO and as described above, the examiner may appropriately require submission of information concerning the certifications in certain situations.

Materiality Standard under Current Rule 56

- **37 C.F.R. 1.56 Duty to disclose information material to patentability.**
 - b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - 1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - 2) It refutes, or is inconsistent with, a position the applicant takes in:
 - i. Opposing an argument of unpatentability relied on by the Office, or
 - ii. Asserting an argument of patentability.

Duty of Candor and Good Faith

- Broader than duty to disclose material information.
 - **37 C.F.R. 1.56**
 - a) ...Each individual associated with the filing and prosecution of a patent application has a **duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability** as defined in this section.... **no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct.**

USPTO Proposed Rule Change

- 76 Fed. Reg. 43,631 (July 21, 2011), Revision of the Materiality to Patentability Standard for the Duty To Disclose Information in Patent Applications” and then again 81 Fed. Reg. 74,987 (Oct. 28, 2016). Deadline for comments was Dec. 27, 2016.
- § 1.56 Duty to disclose information material to patentability.
 - b) Information is but-for material to patentability if the Office would not allow a claim if the Office were aware of the information, applying the preponderance of the evidence standard and giving the claim its broadest reasonable construction consistent with the specification.

USPTO Proposed Rule Change

- 76 Fed. Reg. 43,631 (July 21, 2011), Revision of the Materiality to Patentability Standard for the Duty To Disclose Information in Patent Applications” and then again 81 Fed. Reg. 74,987 (Oct. 28, 2016). Deadline for comments was Dec. 27, 2016.
- § 1.555 Information material to patentability in ex parte reexamination and inter partes reexamination proceedings.
 - b) Information is but-for material to patentability if, for any matter proper for consideration in reexamination, the Office would not find a claim patentable if the Office were aware of the information, applying the preponderance of the evidence standard and giving the claim its broadest reasonable construction consistent with the specification.

Duty of Disclosure

- Note about proposed changes to Rule 56
 - MPEP §2000.01 Introduction [R-08.2017]
 - “...On October 28, 2016, the Office issued a Notice of Proposed Rulemaking Specifically, the Office is considering harmonizing the materiality standard for the duty of disclosure to adopt the "but-for" materiality standard for inequitable conduct as set forth in *Therasense* and adopted in subsequent inequitable conduct cases, which will result in revisions to 37 CFR 1.56 and 37 CFR 1.555. **While these proposed rule changes have not yet been finalized, it is still important for Office stakeholders to recognize the split in how materiality may be considered within the Office and in the courts. Some of the more instructive recent cases on inequitable conduct have been incorporated in the discussion below to provide guidance on compliance with the duty of disclosure regardless of the materiality standard.**”

No Change To 37 C.F.R. §1.105(a)(1)

- Note, no change to 37 C.F.R. §1.105(a)(1):
 - “In the course of examining or treating a matter in a pending or abandoned application filed under 35 U.S.C. 111 or 371 (including a reissue application), in a patent, or in a reexamination proceeding, **the examiner** or other Office employee **may require the submission**, from individuals identified under § 1.56(c), or any assignee, **of such information as may be reasonably necessary to properly examine or treat the matter,...**”

- See MPEP 704.14

Duty of Disclosure

- MPEP §2001.06 Sources of Information under 37 CFR 1.56 [R-08.2017]
 - “Materiality controls whether information must be disclosed to the Office, not the circumstances under which or the source from which the information is obtained. If material, the information must be disclosed to the Office. **The duty to disclose material information extends to information such individuals are aware of prior to or at the time of filing the application or become aware of during the prosecution thereof.**
 - Individuals covered by 37 CFR 1.56 may be or become aware of material information from various sources such as, for example, co-workers, trade shows, communications from or with competitors, potential infringers, or other third parties, **related foreign applications (see MPEP § 2001.06(a)), prior or copending United States patent applications (see MPEP § 2001.06(b)), related litigation and/or post-grant proceedings (see MPEP § 2001.06(c))** and preliminary examination searches.”

Duty of Disclosure

- **MPEP §2001.06(b) Information Relating to or From Copending United States Patent Applications [R-08.2017]**
 - “The individuals covered by 37 CFR 1.56 have a duty to bring to the attention of the examiner, or other Office official involved with the examination of a particular application, information within their knowledge as to other copending United States applications which are ‘material to patentability’ of the application in question. This may include providing the identification of pending or abandoned applications filed by at least one of the inventors or assigned to the same assignee as the current application that disclose similar subject matter that are not otherwise identified in the current application. ...

Duty of Disclosure

- **MPEP §2001.06(b) (con't)**
 - ...cannot assume that the examiner of a particular application is necessarily aware of other applications which are ‘material to patentability’ of the application in question, but must instead bring such other applications to the attention of the examiner. See *Regeneron Pharm., Inc. v. Merus B.V.*, 144 F. Supp. 3d 530, 560 (S.D.N.Y. 2015), and *Dayco Prod., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1365-69, 66 USPQ2d 1801, 1806-08 (Fed. Cir. 2003). For example, if a particular inventor has different applications pending which disclose similar subject matter but claim patentably indistinct inventions, the existence of other applications must be disclosed to the examiner of each of the involved applications. Similarly, the prior art references from one application must be made of record in another subsequent application if such prior art references are ‘material to patentability’ of the subsequent application. See *Dayco Prod.*, 329 F.3d at 1369, 66 USPQ2d at 1808.”

Regeneron Pharm., Inc. v. Merus B.V.,
144 F. Supp. 3d 530 (S.D.N.Y. 2015)

- Claim 1. A genetically modified mouse.
- Merus: Regeneron's patent unenforceable for inequitable conduct because prosecutors withheld four documents during prosecution, .
 - Disclosed in related U.S. patent prosecution and European opposition, false and misleading statements, and false and misleading results.
- Regeneron: Admittedly knew of the withheld documents during prosecution but alleged that those documents were not but-for material and were cumulative of references PTO relied upon. Asserted no specific intent to deceive.

“But-for” Material

- *Regeneron Pharms., Inc. v. Merus N.V.*, 864 F.3d 1343 (Fed. Cir. 2017)(PROST, Wallach, Newman)(Newman dissenting), *reh’g denied* (Dec. 2017)
 - FC: Affirmed inequitable conduct.
 - Withheld references were, to the claims as construed, but-for material and not cumulative.
 - “the references both individually and in combination teach one of skill in the art to genetically modify mice by inserting exogenous, including human, variable region gene segments endogenously into a mouse immunoglobulin locus. The references, ...also provide the motivation to combine these references to develop the genetically modified mouse.”

Duty of Disclosure

- MPEP §2001.06(c) Information From Related Litigation and/or Trial Proceedings [R-08.2017]
 - “The America Invents Act (AIA) added trial proceedings to be conducted by the Patent Trial and Appeal Board (PTAB) including *inter partes* review proceedings, post-grant review, covered business method reviews, and derivation. In many instances, these trial proceedings yield information that may be considered material to pending related patent applications. Where the subject matter for which a patent is being sought is or has been involved in litigation and/or a trial proceeding, or the litigation and/or trial proceeding yields information material to currently pending applications, the existence of such litigation and any other material information arising therefrom must be brought to the attention of the examiner or other appropriate official at the U.S. Patent and Trademark Office.”

Duty of Disclosure

- MPEP §2001.06(c) (con't)
 - “In particular, material information that is raised in trial proceedings that is relevant to related applications undergoing examination should be submitted on an Information Disclosure Statement for the examiner’s consideration. **Examples of such material information include evidence of possible prior public use or sales, questions of inventorship, prior art, allegations of ‘fraud,’ ‘inequitable conduct,’ and ‘violation of duty of disclosure.’** Another example of such material information is any assertion that is made during litigation and/or trial proceeding which is contradictory to assertions made to the examiner. *Environ Prods., Inc. v. Total Containment, Inc.*, 43 USPQ2d 1288, 1291 (E.D. Pa. 1997). Such information might arise during litigation and/or trial proceeding in, for example, pleadings, admissions, discovery including interrogatories, depositions, and other documents and testimony.”

Reissue

- **MPEP §2001.06(c) (con't)**
 - “Where a patent for which reissue is being sought is, or has been, involved in litigation and/or trial proceeding which raised a question material to examination of the reissue application, such as the validity of the patent, or any allegation of ‘fraud,’ ‘inequitable conduct,’ or ‘violation of duty of disclosure,’ the existence of such litigation and/or trial proceeding must be brought to the attention of the examiner by the applicant at the time of, or shortly after, filing the application. Such information can be disclosed either in the reissue oath or declaration, or in a separate paper, preferably accompanying the application, as filed. Litigation and/or trial proceedings that begin after filing of the reissue application should be promptly brought to the attention of the Office. The details and documents from the litigation and/or trial proceedings, insofar as they are ‘material to patentability’ of the reissue application as defined in 37 CFR 1.56, should accompany the application as filed, or be submitted as promptly thereafter as possible. See *Critikon, Inc. v. Becton Dickinson Vascular Access, Inc.*, 120 F.3d 1253, 1258-59, 43 USPQ2d 1666, 1670-71 (Fed. Cir. 1997) (patent held unenforceable due to inequitable conduct based on patentee's failure to disclose a relevant reference and for failing to disclose ongoing litigation).”

A Purge Opportunity?

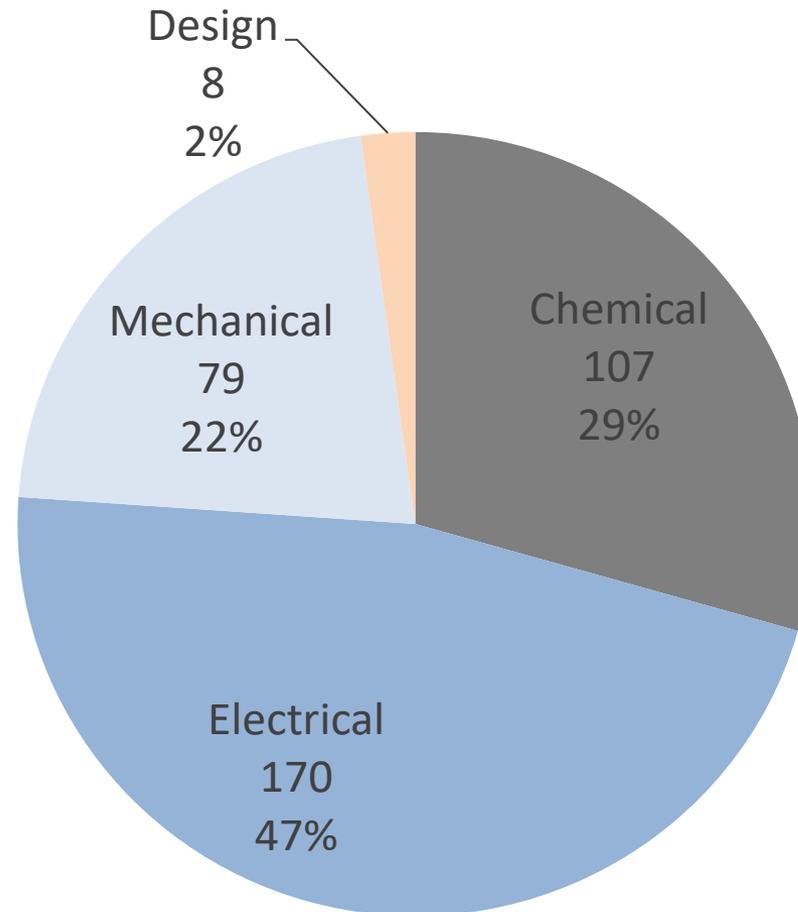
- Amendment to § 251, 253:
 - Whenever any patent is , through error ~~without any deceptive intention~~, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent....
 - The Federal Circuit has noted that inequitable conduct cannot be cured through reissue. But if the USPTO considers an item of information during a reissue proceeding and still reissues the patent, an accused infringer would be hard-pressed to argue that the item of information was “but for” material under the *Therasense* test for inequitable conduct.

Note: 37 CFR 1.16(e) Basic fee for filing each application for the reissue of a patent is **\$320!** (with small/micro entity reductions available)

Supplemental Examination To Clear The Path To Enforceability?

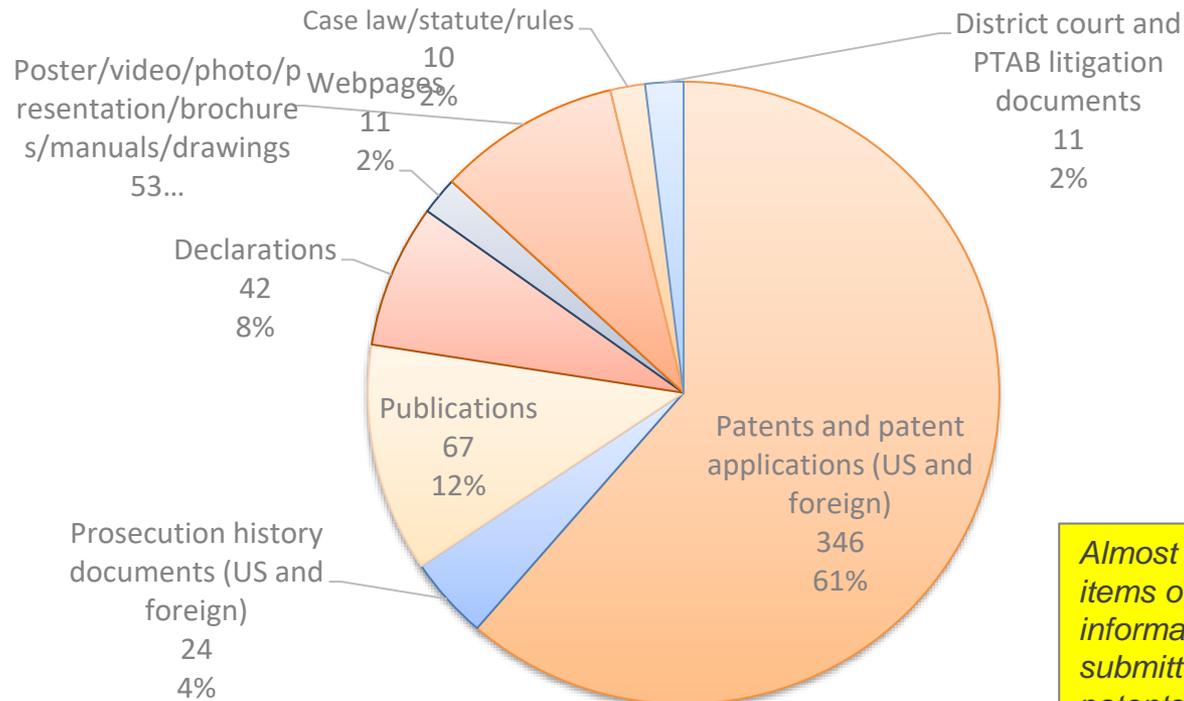
- 35 U.S.C. § 257(a): “A patent owner may request supplemental examination of a patent in the Office to consider, reconsider, or correct information believed to be **relevant** to the patent[.]”
- the “**patent shall not be held unenforceable on the basis of ... information ...considered, reconsidered, or corrected during a supplemental examination of the patent.**” (§ 257(c))
- Does not apply against allegations already raised in district court or ANDA notice para. IV before date of filing request (§257(c)(2)(A)), or any defenses raised in ITC litigation/district court litigation unless SE and any reexam ordered there from is finished before the date on which the action is brought (§257(c)(2)(B)).
- See MPEP §2800 et. seq.

Supplemental Examination Stats (FY2013-FY2021)



Source: USPTO Annual Reports

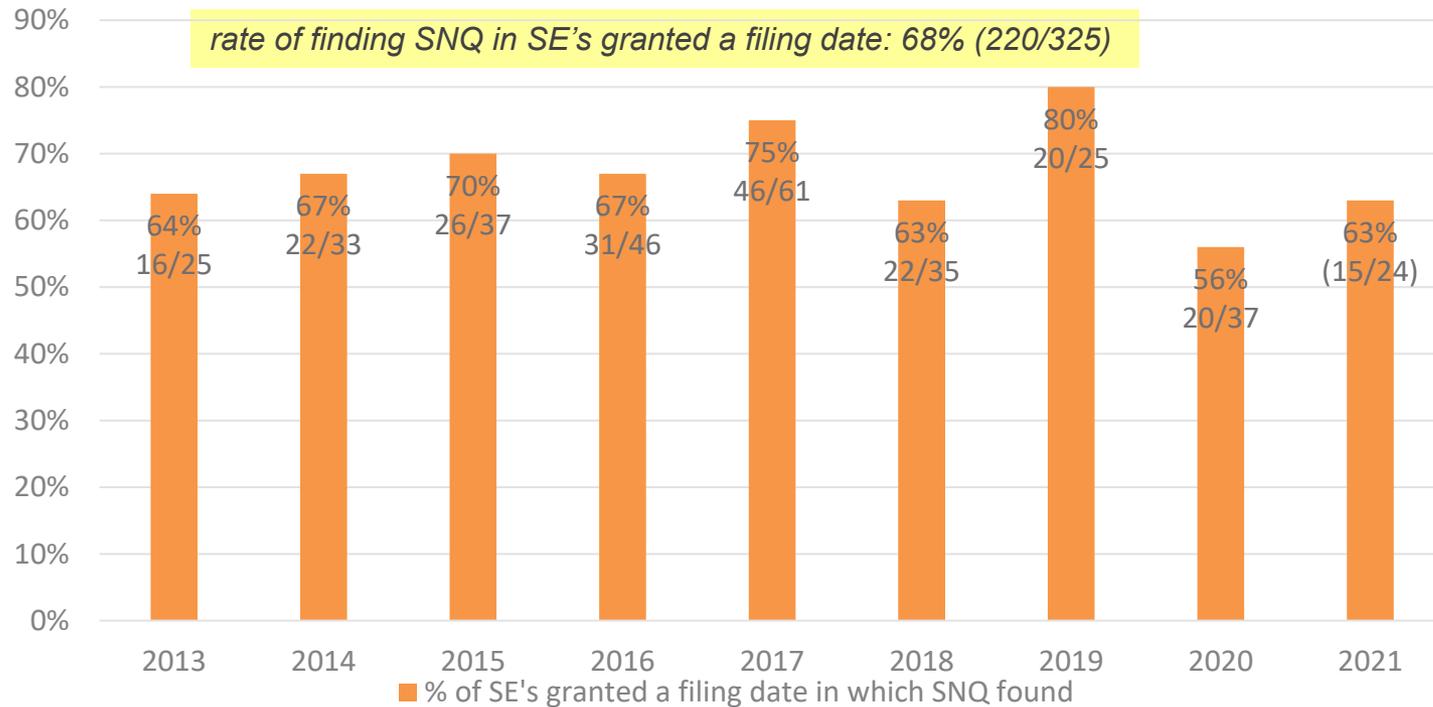
What “Items of Information” Were Submitted?



Almost 2/3 of items of information submitted are patents/patent applications

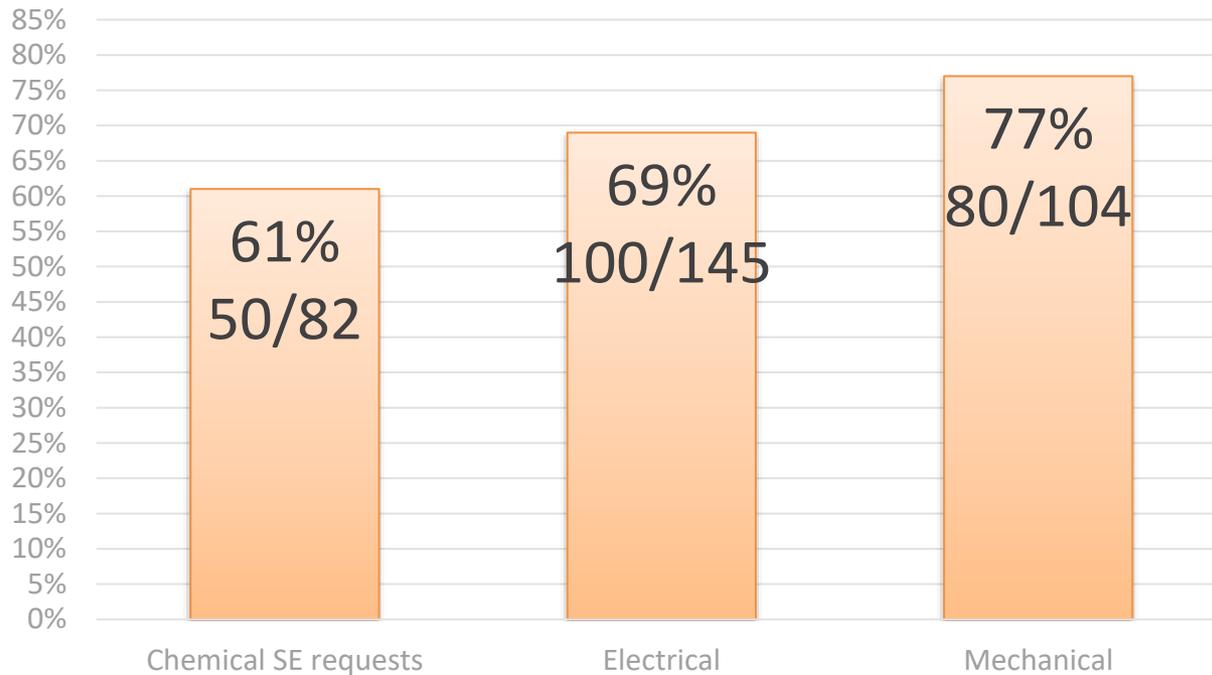
Source: Finnegan research using USPTO PAIR on 320 SE requests as of Sept. 20, 2021.

Supplemental Examination Stats (FY2013-FY2021)



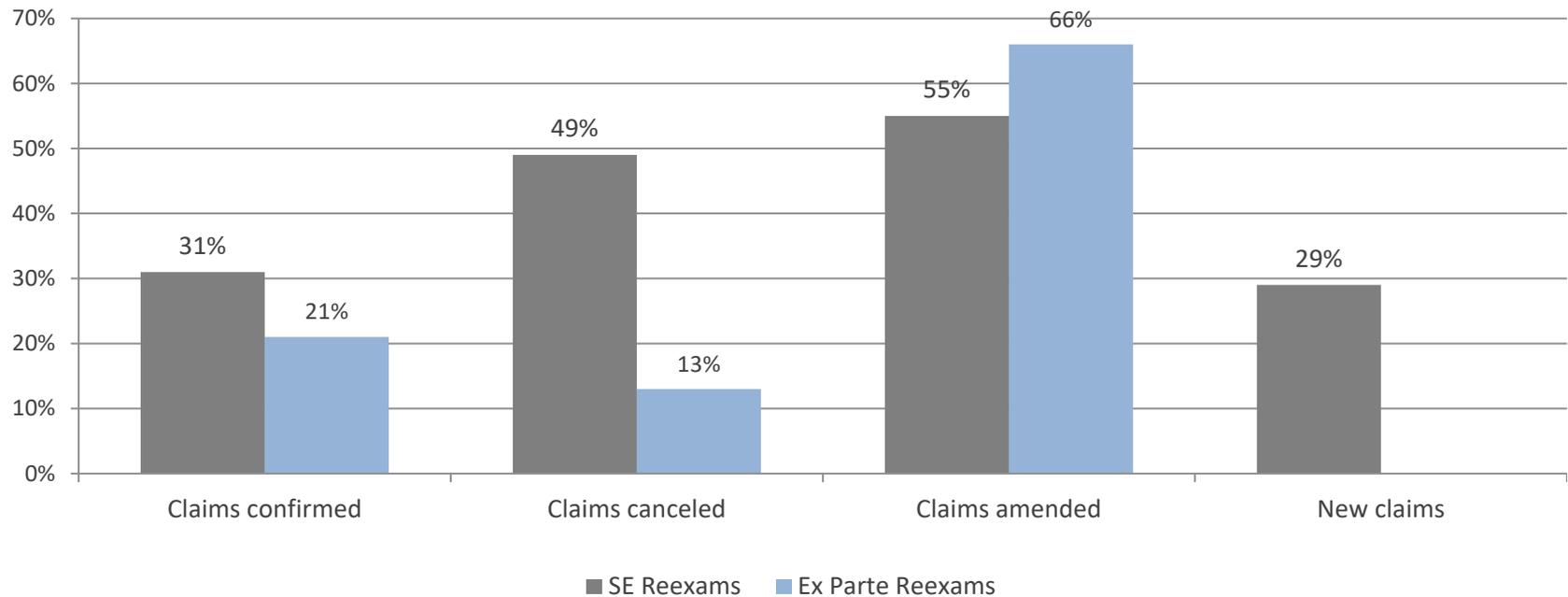
Source: USPTO Annual Reports

SNQ Found By Technology



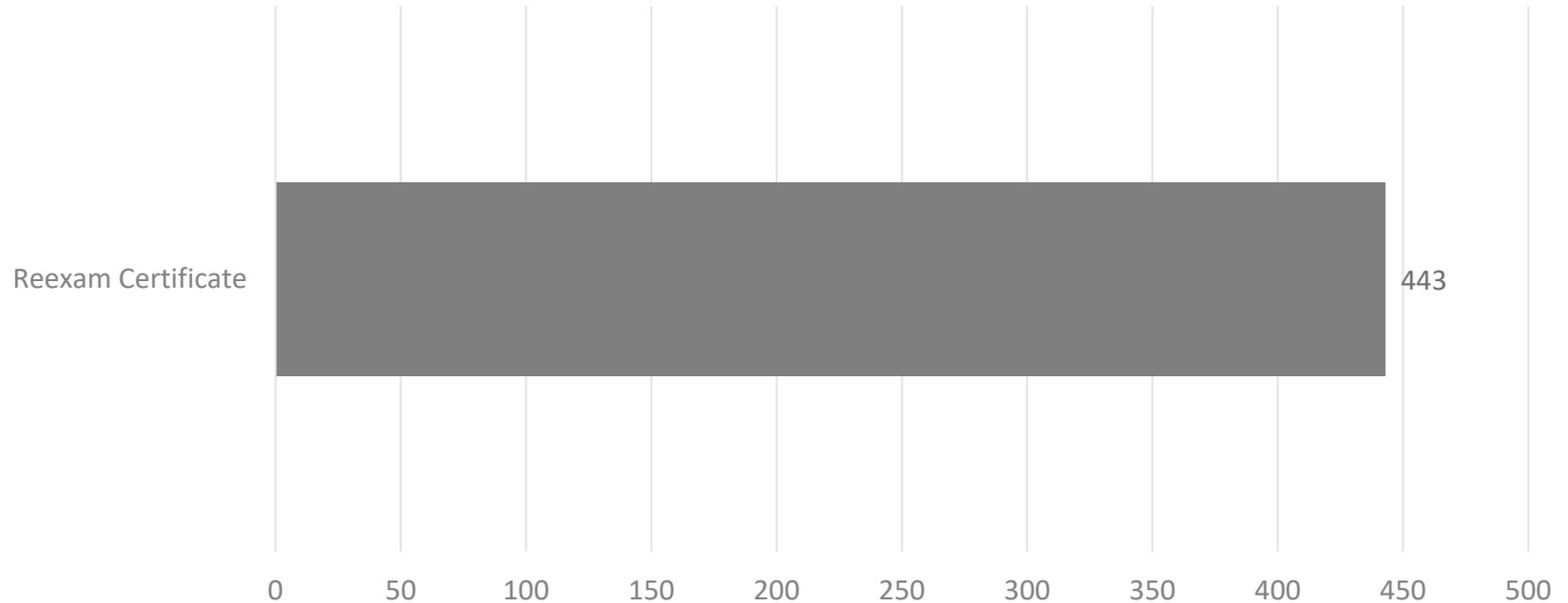
Source: Finnegan research using USPTO PAIR, as of Jan. 28, 2022.

Closer Look Where SNQ Found



Source: Finnegan research using USPTO PAIR on the resolved SE's as of Jan. 28, 2022. 230 SEs where a reexam certificate issued. More than one category may apply per SE. Also, in the 101 SE requests where no SNQ was found, the original claims remain. Ex parte reexam stats from www.uspto.gov July 1, 1981 – Sept. 30, 2020: "all claims confirmed, all claims canceled, claims changed")

Time from Filing to Reexamination Certificate



Source: Finnegan research Jan. 28, 2022

overall average duration from filing for termination in cases where SNQ found (reexam ordered): 443 days (1.2 years)

(sample size is 211 cases)

96/000,267: SE Request Filed to Address an Inadvertent Failure to Cite Prior Art

- U.S. Patent No. 8,859,504 includes 15 claims directed to compounds, crystalline forms, and a pharmaceutical composition.
- July 9, 2018: SE request only for crystalline form claims 6-14, in view of documents submitted by the applicant during prosecution (response to restriction requirement) and an expert declaration newly presented in the request for SE.
 - Expert declaration posited that crystalline form claims 6-14 recited a 5-membered ring, but, according to the declaration, the specification and by the peaks recited in the claims disclosed a 6-membered ring.
 - Millennium: the data discrepancies “may render the claims unclear, raising a potential indefiniteness issue[.]” and may also create a potential issue of written description support.

96/000,267 (con't)

- SNQ; ex parte reexamination ordered.
- Claims 6-14 rejected as indefinite, non-enabled, and lacking written description.
- Patent owner canceled claims 6-14 and also amended claims 1, 3, and 15, **even though those claims were not mentioned in the Request for SE and were not rejected.**
 - Corrected claim 3 to address an Office printing error and amended claims 1 and 5 “for clarity or to correct typographical error(s).”
- Dec. 20, 2018: Reexam Certificate issued; claims 1, 3, and 15 patentable as amended, confirmed patentability of claims 2 and 4-5, and canceled claims 6-14.
 - Cites MPEP 2816.01 as authorization to allow the Office to reexamine claims 1-5 and 15, despite not being the basis on which supplemental examination was requested.

96/000,267 Lessons Learned

- Try to avoid errors in the claims, either as originally filed or as introduced during prosecution.
- *Query - are the claims that remain in the '504 patent, i.e., claims 1, 3, and 15, as amended, as well as claims 2, and 4-5, insulated from a later finding of inequitable conduct based on the information submitted by the patent owner in its Request for Supplemental Examination?*
- Probably.
 - Reexamination expressly examined other claims and pointed to MPEP authority for doing so.
 - 35 U.S.C. 257(a) and (c)(1), clearly and literally recite Supplemental Examination is “of a patent,” not of claims of a patent.

96/000,185: Inadvertent Failure To Cite Prior Art During Original Prosecution

- Request for SE of U.S. Patent 9,428,647 claim 1-8.
 - Nine items of information, which the patent owner said “[t]hrough a clerical oversight, no Information Disclosure Citation was filed during prosecution of the original . . . application.”
 - *Note, no explanation of what exactly the clerical oversight was, how it occurred, or when it was discovered, and the USPTO did not request any explanation during the resulting reexamination proceeding.*
- SNQ found based on two of the items of information submitted (Reference A and Reference B), and ex parte reexamination ordered.

96/000,185: Inadvertent Failure To Cite Prior Art During Original Prosecution

- Non-final rejection of claims 2, 5, 6, and 7 based on § 112 and claims 1, 2, and 7 under §102(a)(1).
 - Claims had an effective filing date of April 9, 2013.
 - References A and B had publication dates before April 9, 2013, but not before the critical date of April 9, 2012.
 - The Office noted that claims 3-6 and 8 were free of the art. That meant that claims 3 and 4 were to remain unchanged because no §112 rejection of claims 3 and 4.
- Patent Owner canceled claim 5 and amended claims 1, 2, 6, and 7 to incorporate limitations of claim 5 into independent claim 1, as clarifications. (*to avoid Festo?*)
 - Inventor declaration to claim entitlement to §102(b)(1) prior art exception.
- Reexam Certificate issued.
 - Office sua sponte held that the claims were distinguishable over References A and B (demonstrating that the §102(b)(1)(A) exception was not even necessary):

96/000,185: Lessons Learned

- Do everything possible to ensure that all prior art documents/information that are even possibly material to patentability and are known to at least one person with a Rule 56 duty, are submitted to the USPTO during original prosecution.
- But be prepared for the unexpected.
 - May not expect type of amendments have to make.
 - May take risk of filing declaration when not necessary.
 - Perhaps interview before committing to any course of action.
- *Query - same result even if the decision not to cite was purposeful rather than inadvertent? 35 U.S.C § 257(a) does not, within its literal language, require inadvertence.*

SE as Tool

- A request for supplemental examination could provide a mechanism for such patent owners to strengthen their patents before litigation.
 - May be especially attractive for OB-listed patents because timing of Hatch-Waxman litigation may be predictable.

Note From *Intellect Wireless*: “Dancing Around The Truth” Not Good Enough

- *Intellect Wireless, Inc. v. HTC Corp.*, 732 F.3d 1339 (Fed. Cir. 2013)
 - DC: Patents unenforceable due to inequitable conduct.
 - Inventor submitted false Rule 131 declaration that claimed invention was reduced to practice.
 - “[N]o evidence that any of the false statements in any of the declarations were actually withdrawn, specifically called to the attention of the PTO or fully corrected.”
 - Intellect: Prosecuting attorney corrected false declaration, explained relying upon constructive reduction to practice, and Examiner relied upon constructive reduction to practice.

Note From Intellect Wireless: “Dancing Around The Truth” Not Good Enough

- *Intellect Wireless, Inc. v. HTC Corp.* (con’t)
 - Federal Circuit: Affirmed.
 - “[O]riginal declaration contains multiple unmistakably false statements.”
 - “Intellect argues that ...revised declaration...corrected these misrepresentations. We do not agree.
 - When an applicant files a false declaration, we require that the applicant ‘expressly advise the PTO...’ ...Finally, the applicant must ‘take the necessary action...openly. **It does not suffice that one knowing of misrepresentations in an application or in its prosecution merely supplies the examiner with accurate facts without calling his attention to the untrue or misleading assertions sought to be overcome[.]**”
 - cites *Rohm & Haas Co. v. Crystal Chem. Co.*, 722 F.2d 1556, 1572 (Fed. Cir. 1983), which was also cited in *Therasense*, with approval.

Need To Be Express

- Federal Circuit:
 - “At best, the revised declaration obfuscated the truth....it never expressly negated the false references to actual reduction to practice in the original declaration.”
 - “Nowhere did the declaration openly advise the PTO of Mr. Henderson’s misrepresentations, as our precedent clearly requires.”
 - Federal Circuit quotes from *Rohm & Haas*:
 - “When an applicant files a false declaration, we require that the applicant ‘expressly advise the PTO of [the misrepresentation’s] existence, stating specifically wherein it resides.’”
 - “if the misrepresentation is of one or more facts, the PTO [must] be advised what the actual facts are.”
 - “applicant must ‘take the necessary action...openly. it does not suffice that one knowing of misrepresentations in an application or in its prosecution merely supplies the examiner with accurate facts without calling his attention to the untrue or misleading assertions sought to be overcome, leaving him to formulate his own conclusions.’”

After Patent Granted

- **MPEP §2003.01 Disclosure After Patent Is Granted [R-08.2017]**
 - **I. BY CITATIONS OF PRIOR ART AND WRITTEN STATEMENTS UNDER 37 CFR 1.501**
 - “Where a patentee or any member of the public (including private persons, corporate entities, and government agencies) has certain information which they desire to have made of record in the patent file, they may file a citation of such information with the Office pursuant to **35 U.S.C. 301** and **37 CFR 1.501**. Such citations will be entered in the patent file without comment by the Office.”
 - Information “filed under **37 CFR 1.501** is limited to prior art patents, printed publications or written statements of the patent owner filed by the patent owner in a proceeding before a federal court or the Office in which the patent owner took a position on the scope of any patent claim.”

After Patent Granted

- **MPEP §2003.01 (con't)**
 - **II. BY EX PARTE REEXAMINATION**
 - **III. BY SUPPLEMENTAL EXAMINATION**
 - “35 U.S.C. 257(c)(1) states that “[a] patent shall not be held unenforceable on the basis of conduct relating to information that had not been considered, was inadequately considered, or was incorrect in a prior examination of the patent if the information was considered, reconsidered, or corrected during a supplemental examination of the patent.” Therefore, a patent owner may insulate the patent from being held unenforceable based on information submitted in a properly filed supplemental examination request.
 - “not limited to patents, printed publications, and patent owner written statements under 35 U.S.C. 301. The ‘information’ may include any information that the patent owner believes to be **relevant** to the patent.”

Error on the Side of Disclosure

- **MPEP §2004 Aids to Compliance With Duty of Disclosure [R-10.2019]**
 - “10. When in doubt, it is desirable and safest to submit information. Even though the attorney, agent, or applicant doesn’t consider it necessarily material, someone else may see it differently and embarrassing questions can be avoided. The court in *U.S. Industries v. Norton Co.*, 210 USPQ 94, 107 (N.D. N.Y. 1980) stated “[i]n short, the question of relevancy in close cases, should be left to the examiner and not the applicant.” See also *LaBounty Mfg., Inc. v. U.S. Int’l Trade Comm’n*, 958 F.2d 1066, 22 USPQ2d 1025 (Fed. Cir. 1992).”

JMM's

- **MPEP §2004 Aids to Compliance With Duty of Disclosure [R-10.2019] (con't)**
 - “15. Watch out for information that might be deemed to be prior art under pre-AIA 35 U.S.C. 102(f) and (g).”
 - “In addition, the AIA provides that the provisions of pre-AIA 35 U.S.C. 102(g) apply to each claim of an AIA application for patent if the patent application: (1) contains or contained at any time a claim to a claimed invention having an effective filing date as defined in 35 U.S.C. 100(i) that occurs before March 16, 2013; or (2) is ever designated as a continuation, divisional, or continuation-in-part of an application that contains or contained at any time a claim to a claimed invention that has an effective filing date before March 16, 2013.”

Duty of Disclosure During Reissue

- **MPEP §1418 Notification of Prior/Concurrent Proceedings and Decisions Thereon, and of Information Known To Be Material to Patentability [R-08.2017]**
 - “37 CFR 1.178(b) requires reissue applicants to call to the attention of the Office any prior or concurrent proceeding in which the patent (for which reissue is requested) is or was involved and the results of such proceedings. These proceedings would include interferences or trials before the Patent Trial and Appeal Board, reissues, reexaminations, and litigations. Litigation would encompass any papers filed in the court or issued by the court, which may include, for example, motions, pleadings, and court decisions. This duty to submit information is continuing, and runs from the time the reissue application is filed until the reissue application is abandoned or issues as a reissue patent.”

Lovenox[®]

- In re Reissue Application of Roger Debrie
 - Reissue Application No. 10/430,435
 - Mixtures of Particular LMW Heparinic Polysaccharides for the Prophylaxis Treatment of Acute Thrombotic Events
- Preliminary Amendment
 - “In the specification, please replace the paragraph beginning at ...with the following:
 - In addition, in humans, the mixtures of the invention display excellent bioavailability, as measured by the anti-Xa activity. Thus, this value is approximately 30 [IU] % for heparin but is approximately 90 [IU] % for the mixtures of the invention. This too is desirable in that it permits the doses administered to be reduced and the therapeutic potential to be improved.”

- *Aventis Pharma S.A. v. Amphastar Pharmaceuticals, Inc.*,

- Claim: mixtures of low molecular weight heparin (“LMWH”) used to prevent blood clots (Lovenox®)
- In Example 6, Aventis compared the half-life of a product allegedly covered by the ’618 patent (“Debie LMWH”) at a 40 mg dose to the half-life of a prior art product (“EP 40,144 LMWH” or “Mardiguian LMWH”) at a 60 mg dose.
- Initially did not disclose dosage of prior art product.
- DC (475 F.Supp.2d 970): Judgment of unenforceability for inequitable conduct.
- FC (525 F.3d 1334 (Fed. Cir. 2008): Affirmed.
 - Material: improved half-life as compared to the EP ’144 compound referred to at least four times during prosecution, including that the difference in mean half-life was statistically significant.
 - Intent: Failure to disclose dosage information “evidenced intent to deceive.”

Filing Protest in Reissue

- **MPEP §1441.01 Protest and Pre-issuance Submission in Reissue Applications [R-10.2019]**
- I. PROTESTS, BUT NOT PREISSUANCE SUBMISSIONS, ARE PERMITTED IN REISSUE APPLICATIONS
- “A protest pursuant to 37 CFR 1.291 may be filed throughout the pendency of a reissue application, before the date of mailing of a notice of allowance, subject to the timing constraints of the examination, as set forth in MPEP § 1901.04.”
 - MPEP § 1901.04: “...a protest may be filed in a reissue application throughout the pendency of the reissue application prior to the date of mailing of a notice of allowance subject to the timing constraint of the examination. A protest with regard to a reissue application should, however, be filed within the 2-month period following announcement of the filing of the reissue application in the Official Gazette.”
 - May petition and pay fee to submit after 2-month period.
- *May be way to raise patent owner estoppel?*

Reissue and Other Proceedings

- **MPEP §1442.01 Litigation-Related or PTAB Trial-Related Reissues [R-08.2017]**
 - “During initial review, the examiner should determine whether the patent for which the reissue has been filed is involved in litigation or a pending trial before the Patent Trial and Appeal Board (PTAB), and if so, the status of that litigation or pending trial before the PTAB.”
 - “If the examiner becomes aware of litigation involving the patent sought to be reissued during examination of the reissue application, the examiner should first check MPEP § 1442.02 to determine whether prosecution in the reissue application should be suspended. If prosecution will not be suspended, and applicant has not made the details regarding that litigation of record in the reissue application, the examiner, in the next Office action, will inquire regarding the specific details of the litigation.”

Reissue and Other Proceedings

- **MPEP §1442.02 Concurrent Litigation or Trial Before the Patent Trial and Appeal Board [R-08.2017]**
 - “To avoid duplicating effort, action in reissue applications in which there is an indication of concurrent litigation will generally be suspended sua sponte. Also, if there is a pending trial before the Patent Trial and Appeal Board (PTAB), the PTAB may suspend action in the reissue application. If it is evident to the examiner, or the applicant indicates, that any one of the following applies:
 - A. a stay of the litigation is in effect;
 - B. the litigation or trial before the PTAB has been terminated;
 - C. there are no significant overlapping issues between the application and the litigation or pending trial before the PTAB; or
 - D. it is applicant’s desire that the application be examined at that time;
- then the Office may or may not suspend the reissue application using its discretion based upon the facts of the situation.

Filing a Reissue with Copending IPR

- In *Greene's Energy Group, LLC v. Oil States Energy Services, LLC*, IPR2014-00216, PTAB noted that if the Patent Owner filed a reissue application, it had to inform PTAB:
 - “Patent Owner indicated that it was considering filing an application to reissue at least one of the patents involved in these inter partes reviews. **We reminded Patent Owner that, because the Board exercises jurisdiction over the patents, see 37 C.F.R. § 42.3(a), Patent Owner must contact the Board before filing any reissue application concerning the '053 or '993 patents.**”
 - 37 C.F.R. § 42.3(a) The Board may exercise exclusive jurisdiction within the Office over every involved application and patent during the proceeding, as the Board may order.

Filing a Reissue with Copending IPR

- In *Focal Therapeutics, Inc. v. Senorx, Inc.*, IPR2014-00116, during a conference call, the Patent Owner indicated it wanted to file a reissue application. PTAB stated:
 - “The Board explained that authorization or permission by the panel is not required in this regard. If it so wishes, Patent Owner may go through usual channels to request such action before the Office. We explained, however, that given our one year statutory deadline for completing an inter partes review, we would not grant a stay of this proceeding pending the outcome of a request for certificate of correction and/or reissue application. We also indicated that if Patent Owner takes such action, it shall keep the panel and Petitioner apprised of relevant events by filing a copy of relevant papers with the Board promptly.”

IPR Proceeding Can Impact The Reissue Application

- **35 U.S.C. §315(d):**
 - **(d) MULTIPLE PROCEEDINGS.**—Notwithstanding sections 135(a), 251, and 252, and chapter 30, during the pendency of an inter partes review [post grant review], if another proceeding or matter involving the patent is before the Office, the Director *may* determine the manner in which the inter partes review [post grant review] or other proceeding or matter may proceed, including providing for stay, transfer, consolidation, or termination of any such matter or proceeding.
- **37 C.F.R. §42.122**
 - **(a) Multiple proceedings.** Where another matter involving the patent is before the Office, the Board *may* during the pendency of the inter partes review [post grant review] enter any appropriate order regarding the additional matter including providing for the stay, transfer, consolidation, or termination of any such matter.

Improper Markush

- Note MPEP sections relating to Markush claims moved to 2117 Markush Claims [R-10.2019].
- **III. REJECTION BASED ON IMPROPER MARKUSH GROUPING**
 - When an examiner determines that the species of a Markush group do not share a single structural similarity or do not share a common use, then a rejection on the basis that the claim contains an “improper Markush grouping” is appropriate (see subsection II). **Note that this is a rejection on the merits and may be appealed to the Patent Trial and Appeal Board in accordance with 35 U.S.C. 134 and 37 CFR 41.31(a)(1).** Use Form Paragraph 8.40 to reject a claim on the basis that it includes an improper Markush grouping.

2117 Markush Claims [R-10.2019]

(con't)

- **Example: ¶ 8.40 Improper Markush Grouping Rejection**
 - “Claim [1] rejected on the basis that it contains an improper Markush grouping of alternatives. ...The Markush grouping of [2] is improper because the alternatives defined by the Markush grouping do not share both a single structural similarity and a common use for the following reasons: [3 [i.e., why the alternatives are not all members of the same recognized physical or chemical class or the same art-recognized class; and/or why the members are not considered to be functionally equivalent and have a common use; and/or why (if the Markush grouping describes alternative chemical compounds), the alternatives do not share both a substantial structural feature and a common use that flows from the substantial structural feature.]].”
 - “To overcome this rejection, Applicant may set forth each alternative (or grouping of patentably indistinct alternatives) within an improper Markush grouping in a series of independent or dependent claims and/or present convincing arguments that the group members recited in the alternative within a single claim in fact share a single structural similarity as well as a common use.”

Improper Markush

- **MPEP §2117 (III) (con't)**
 - “. . . In addition to a rejection based on an improper Markush grouping, the claim should also be rejected under 35 U.S.C. 112(b) if one skilled in the art cannot determine the metes and bounds of the Markush claim due to an inability to envision all of the members of the Markush grouping. In other words, if a boundary cannot be drawn separating embodiments encompassed by the claim from those that are not, the claim is indefinite and should be rejected under 35 U.S.C. 112(b). See also MPEP § 2173.05(h).”

Improper Markush

- More rejections of patent applications based on improper Markush grouping?
- An improper Markush grouping rejection can be overcome by
 - (1) amending the Markush group to include only members that share a single structural similarity and a common use;
 - (2) argue why the Markush grouping is not improper.
- “In addition, even if the applicant does not take action sufficient to overcome the improper Markush grouping rejection, when all of the claims are otherwise in condition for allowance the examiner should reconsider the propriety of the improper Markush grouping rejection. If the examiner determines that in light of the prior art and the record as a whole the alternatives of the Markush grouping share a single structural similarity and a common use, then the rejection should be withdrawn. **Note that no Markush claim can be allowed until any improper Markush grouping rejection has been overcome or withdrawn, and all other conditions of patentability have been satisfied.**”

Markush Grouping Examples

- MPEP §2117(IV)
 - *In re Harnisch*, 631 F.2d 716 (CCPA 1980): *Proper*; all of the compounds shared "a single structural similarity" which is the coumarin core.
 - Claim 1. Coumarin compounds which in one of their mesometric limiting structures correspond to the general formula...
 - wherein
 - X represents aldehyde, azomethine, or hydrazone,
 - R¹ represents hydrogen or alkyl,
 - Z¹ represents hydrogen, alkyl, cycloalkyl, aralkyl, aryl or a 2- or 3-membered alkylene radical connected to the 6-position of the coumarin ring and
 - Z² represents hydrogen, alkyl, cycloalkyl, aralkyl or a 2- or 3-membered alkylene radical connected to the 8-position of the coumarin ring
 - and wherein
 - Z¹ and Z² conjointly with the N atom by which they are bonded can represent the remaining members of an optionally benz-fused heterocyclic ring which, like the ring A and the alkyl, aralkyl, cycloalkyl and aryl radicals mentioned, can carry further radicals customary in dye-stuff chemistry.

Markush Grouping Examples

- MPEP §2117(IV) (con't)
 - *Ex parte Hozumi*, 3 USPQ2d 1059 (Bd. Pat. App. & Interf. 1984) Appeal No. 559-94, Application No. 06/257,771: *Proper*; all of the compounds shared "a single structural similarity."
 - Claim 1. A compound of the formula:...
 - wherein
 - wherein
 - n is an integer of 1 to 15;
 - R1 is C6-26 alkyl, C6-26 alkenyl or C6-26 alkynyl, each of said groups being unsubstituted or substituted by hydroxyl, mercapto, amino, oxo, carbamoyl, carboxyl, halogen, C3-7 cycloalkyl or phenyl; and
 - R2 , R3 and R4 are independently hydrogen or C1-5 alkyl, or ... e presents cyclic ammonio selected from the group consisting of pyridinio, oxazolio, thiazolio, pyridazinio, quinolinio, isoquinolinio, N-C1-4 alkylmorpholinio and N-C1-4 alkylpiperazinio, each of said groups being unsubstituted or substituted by C1-4 alkyl, hydroxyl, hydroxyethyl, aminoethyl, amino, carbamoyl or ureido,
 - or a pharmaceutically acceptable salt thereof.

Markush Grouping Examples

- MPEP §2117(IV) (con't)
 - D. *Based On PCT Search and Examination Guidelines Example 23*
 - Claim 1: A herbicidal composition consisting essentially of an effective amount of the mixture of (a) 2,4-D (2,4-dichloro-phenoxy acetic acid) and (b) a second herbicide selected from the group consisting of copper sulfate, sodium chlorate, ammonium sulfamate, sodium trichloroacetate, dichloropropionic acid, 3-amino-2,5-dichlorobenzoic acid, diphenamid (an amide), ioxynil (nitrile), dinoseb (phenol), trifluralin (dinitroaniline), EPTC (thiocarbamate), and simazine (triazine) along with an inert carrier or diluent.
 - Improper: “The claim sets forth an improper Markush grouping because the alternatives are not all members of the same recognized physical or chemical class or the same art-recognized class, nor do the alternative chemical compounds share both a substantial structural feature and a common use that flows from the substantial structural feature.”

Double Patenting

- **MPEP §804 Definition of Double Patenting [R-10.2019]**
 - **V. DOUBLE PATENTING REJECTIONS AND PRIOR ART EXCEPTION UNDER 35 U.S.C. 102(b)(2)(C) and 102(c)**
 - For AIA applications, a commonly assigned/owned patent or application may be excepted as prior art under 35 U.S.C. 102(a)(2). See 35 U.S.C. 102(b)(2)(C). Also, if the requirements of 35 U.S.C. 102(c) are met, common ownership can be established by a joint research agreement.
 - An examiner should make both a prior art rejection under either 35 U.S.C. 102(a)(2) or 103 and a double patenting rejection over the same reference when the facts support both rejections. ...Rejections under 35 U.S.C. 102(a)(2) or 103 should not be made or maintained if the reference is not prior art because of the exception under 35 U.S.C. 102(b)(2)(C). See MPEP § 717.02 [Prior Art Exception for Commonly Owned or Joint Research Agreement Subject Matter under AIA 35 U.S.C. 102(b)(2)(C)]....

Double Patenting

- **MPEP §804 VI. DOUBLE PATENTING REJECTIONS ONCE A JOINT RESEARCH AGREEMENT IS ESTABLISHED**
 - Under both pre-AIA and AIA law, until applicant establishes the existence of a joint research agreement, the examiner cannot apply a double patenting rejection based upon a reference that was made by or on behalf of parties to the joint research agreement. **If in reply to an Office action applying a prior art rejection, applicant disqualifies the relied upon reference as prior art under the joint research agreement provision of 35 U.S.C. 102(c) or pre-AIA 35 U.S.C. 103(c) and a subsequent nonstatutory double patenting rejection based upon the disqualified reference is applied, the next Office action may be made final even if applicant did not amend the claims** (provided the examiner introduces no other new ground of rejection that was not necessitated by either amendment or an information disclosure statement filed during the time period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p)). The Office action is properly made final because the new nonstatutory double patenting rejection was necessitated by the applicant's amendment of the application.

Common Inventors But Not Common Ownership -> No TD Option Available

In re Hubbell, 709 F.3d 1140 (Fed. Cir. 2013)

- Inventors Hubbell and Schense at CalTech
 - Research resulted in '509 application (earliest priority April 3, 1997), patent assigned to CalTech.
- Hubbell and Schense left CalTech to join ETHZ
 - Research resulted in '685 patent (earliest priority August 27, 1998), patent assigned to ETHZ and Universitat Zurich, and issued first.
- Examiner rejected '509 application based on ODP over '685 patent and Board affirmed.
- FC: Affirmed.
 - No common ownership or JRA, so terminal disclaimer not available.
 - No two-way obviousness analysis: Hubbell partially responsible for delay that caused '685 patent to issue first.

Thank You!



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Resources

<https://www.uspto.gov/patents/laws/examination-policy/subject-matter-eligibility>

- October 2019 Examples 43-46 (issued October 17, 2019)
- 2019 PEG Examples 37 through 42 (issued January 7, 2019)
- Examples 1-36 (issued between December 16, 2014 through December 15, 2016)
- Index of examples (<https://www.uspto.gov/sites/default/files/documents/ieg-example-index.pdf>) provides an overview of the relevance of Examples 1-46 under current guidance.
- Chart of Subject Matter Eligibility Court Decisions (updated October 17, 2019)
- Form paragraphs (posted January 8, 2019)
- Frequently Asked Questions (posted January 8, 2019)
- Sample Rejection (posted January 8, 2019)
- Training materials

Resources



- ***Patent Subject Matter Eligibility: A Global Guide***
 - September 2021
 - *Globe Law and Business*
- By Paul W. Browning, Ph.D.; Sara A. Leiman, Ph.D.; Christopher C. Johns; K. Victoria Barker, Ph.D.; Nicholas Fox; Yelena Morozova; Maeve O’Flynn; Harrison Chang, Ph.D.; Luigi Distefano
- <https://www.globelawandbusiness.com/books/patent-subject-matter-eligibility-a-global-guide>

USPTO Examples 37-42 (in numerical order)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
	3	Method	Y	Y	N	N	Ineligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	Y	N	N	Ineligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	Y	N	N	Ineligible

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 3. A method of ranking icons of a computer system, the method comprising:

determining, by a processor, the amount of use of each icon over a predetermined period of time; and

ranking the icons, by the processor, based on the determined amount of use.

Step 1: Falls within a statutory category?

Yes — Recites a process (series of steps)

Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 3. A method of ranking icons of a computer system, the method comprising:

determining, by a processor, the amount of use of each icon over a predetermined period of time; and

ranking the icons, by the processor, based on the determined amount of use.

Step 2A: Directed to a judicial exception?

Prong 1: Recites a judicial exception?

Yes

- But for “by a processor,” claim would encompass mental calculations
- Processor is only generically recited
- Therefore, the claim encompasses a mental process

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 3. A method of ranking icons of a computer system, the method comprising:

determining, by a processor, the amount of use of each icon over a predetermined period of time; and

ranking the icons, by the processor, based on the determined amount of use.

Step 2A: Directed to a judicial exception?

Prong 2: Integrated into a practical application?

No

- Generic processor limitation does not impose any meaningful limits
- Does not integrate the abstract idea into a practical application
- The claim is therefore directed to the abstract idea

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 3. A method of ranking icons of a computer system, the method comprising:

determining, by a processor, the amount of use of each icon over a predetermined period of time; and

ranking the icons, by the processor, based on the determined amount of use.

Step 2B: *Provides an inventive concept?*

No

- The sole additional element in the claim amounts to no more than a mere instruction to apply the exception using a generic computer
- Does not provide an inventive concept
- The claim is therefore ineligible

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USPTO Sample Rejection of Example 37 - Claim 3

[FP 7.05 and 7.05.016 with explanation provided]

Claim 3 is rejected under 35 U.S.C. 101 because the claimed invention is directed to an abstract idea without significantly more. The claim recites determining the amount of use of each icon over a predetermined period of time, and ranking the icons based on the determined amount of use.

https://www.uspto.gov/sites/default/files/documents/gui_sample_rejection_20190108.pdf

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most-used icons should be ranked higher than the least-used icons. If a claim limitation, under its broadest reasonable interpretation, covers performance of the limitation in the mind but for the recitation of generic computer components, then it falls within the “Mental Processes” grouping of abstract ideas. Accordingly, the claim recites an abstract idea.

This judicial exception is not integrated into a practical application. In particular, the claim only recites one additional element – using a processor to perform both the ranking and determining steps. The processor in both steps is recited at a high-level of generality (*i.e.*, as a generic processor

The claim does not include additional elements that are sufficient to amount to significantly more than the judicial exception. As discussed above with respect to integration of the abstract idea

USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 1. A method of ranking/rearranging icons on a graphical user interface (GUI) of a computer system, the method comprising:

receiving, via the GUI, a user selection to organize each icon based on a specific criteria, wherein the specific criteria is an amount of use of each icon;

determining, by a processor, the amount of use of each icon over a predetermined period; and

ranking/automatically moving the most used icons, by the processor, to a position on the GUI closest to the start icon of the computer system based on the determined amount of use.

Step 2A: Directed to a judicial exception?

Prong 1: Recites a judicial exception?

Yes

- But for “by a processor,” claim would encompass mental calculations

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 1. A method of ~~ranking~~ rearranging icons on a graphical user interface (GUI) of a computer system, the method comprising:

receiving, via the GUI, a user selection to organize each icon based on a specific criteria, wherein the specific criteria is an amount of use of each icon;

determining, by a processor, the amount of use of each icon over a predetermined period; and

~~ranking~~ automatically moving the most used icons, ~~by the processor,~~ to a position on the GUI closest to the start icon of the computer system based on the determined amount of use.

Step 2A — Prong 2: *Integrated into a practical application?*

Yes

- Combination of elements recites specific manner of automatically displaying icons based on usage, thus providing specific improvement over prior art
- Therefore, the claim is not directed to a judicial exception and is eligible

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 1. A method of ranking rearranging icons on a graphical user interface (GUI) of a computer system, the method comprising:

receiving, via the GUI, a user selection to organize each icon based on a specific criteria, wherein the specific criteria is an amount of use of each icon;

determining, by a processor, the amount of use of each icon over a predetermined period; and

ranking automatically moving the most used icons, by the processor, to a position on the GUI closest to the start icon of the computer system based on the determined amount of use.

Step 2B: Provides an inventive concept?

N/A since found eligible in Step 2A

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 2. A method of rearranging icons on a graphical user interface (GUI) of a computer system, the method comprising:

receiving, via the GUI, a user selection to organize each icon based on a specific criteria, wherein the specific criteria is an amount of use of each icon;

determining, ~~by a processor~~, the amount of use of each icon using a processor that tracks how much memory has been allocated to each application associated with each icon over a predetermined period of time; and

automatically moving the most used icons to a position on the GUI closest to the start icon of the computer system based on the determined amount of use.

Step 2A — Prong 1: *Recites a judicial exception?*

No

- “determining step” cannot be practically applied in the mind
- Thus, the claim is eligible because it does not recite a judicial exception

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Ex. 37 - Relocation of Icons on a GUI

Ex. 37 - Claim 2. A method of rearranging icons on a graphical user interface (GUI) of a computer system, the method comprising:

receiving, via the GUI, a user selection to organize each icon based on a specific criteria, wherein the specific criteria is an amount of use of each icon;

determining, ~~by a processor,~~ the amount of use of each icon using a processor that tracks how much memory has been allocated to each application associated with each icon over a predetermined period of time; and

automatically moving the most used icons to a position on the GUI closest to the start icon of the computer system based on the determined amount of use.

Step 2A — Prong 2: *Integrated into a practical application?*

Step 2B: *Provides an inventive concept?*

N/A since found eligible in Step 2A— Prong 1

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 38 - Simulating an Analog Audio Mixer

Ex. 38. A method for providing a digital computer simulation of an analog audio mixer comprising:

initializing a model of an analog circuit in the digital computer, said model including a location, initial value, and a manufacturing tolerance range for each of the circuit elements within the analog circuit;

generating a normally distributed first random value for each circuit element, using a pseudo random number generator, based on a respective initial value and manufacturing tolerance range; and

simulating a first digital representation of the analog circuit based on the first random value and the location of each circuit element within the analog circuit.

Step 2A — Prong 1: *Recites a judicial exception?*

No

- While based on mathematical concepts, *these concepts are not recited*

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Ex. 38 - Simulating an Analog Audio Mixer

Ex. 38. A method for providing a digital computer simulation of an analog audio mixer comprising:

initializing a model of an analog circuit in the digital computer, said model including a location, initial value, and a manufacturing tolerance range for each of the circuit elements within the analog circuit;

generating a normally distributed first random value for each circuit element, using a pseudo random number generator, based on a respective initial value and manufacturing tolerance range; and

simulating a first digital representation of the analog circuit based on the first random value and the location of each circuit element within the analog circuit.

Step 2A — Prong 2: *Integrated into a practical application?*

Step 2B: *Provides an inventive concept?*

N/A since found eligible in Step 2A — Prong 1

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 39 - Training a Neural Network for Facial Detection

Ex. 39. A computer-implemented method of training a neural network for facial detection comprising:
collecting a set of digital facial images from a database;

applying one or more transformations to each digital facial image including mirroring, rotating, smoothing, or contrast reduction to create a modified set of digital facial images;

creating a first training set comprising the collected set of digital facial images, the modified set of digital facial images, and a set of digital non-facial images;

training the neural network in a first stage using the first training set;

creating a second training set for a second stage of training comprising the first training set and digital non-facial images that are incorrectly detected as facial images after the first stage of training; and

training the neural network in a second stage using the second training set.

Step 2A — Prong 1: *Recites a judicial exception?*

No

- Mathematical concepts are not recited in the claims

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Ex. 39 - Training a Neural Network for Facial Detection

Ex. 39. A computer-implemented method of training a neural network for facial detection comprising:

collecting a set of digital facial images from a database;

applying one or more transformations to each digital facial image including mirroring, rotating, smoothing, or contrast reduction to create a modified set of digital facial images;

creating a first training set comprising the collected set of digital facial images, the modified set of digital facial images, and a set of digital non-facial images;

training the neural network in a first stage using the first training set;

creating a second training set for a second stage of training comprising the first training set and digital non-facial images that are incorrectly detected as facial images after the first stage of training; and

training the neural network in a second stage using the second training set.

Step 2A — Prong 2: *Integrated into a practical application?*

Step 2B: *Provides an inventive concept?*

☑ *N/A since found eligible in Step 2A — Prong 1*

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 40 - Adaptive Monitoring of Network Traffic Data

Ex. 40 - Claim 2. A method for monitoring of traffic data through a network appliance connected between computing devices in a network, the method comprising:

collecting, by the network appliance, traffic data relating to the network traffic passing through the network appliance, the traffic data comprising at least one of network delay, packet loss, or jitter; and

comparing, by the network appliance, at least one of the collected traffic data to a predefined threshold.

Step 2A — Prong 1: *Recites a judicial exception?*

Yes

- “comparing” step could be practically performed in the human mind
- But for “by the network appliance,” claim would encompass mental calculations
- Network appliance is only generically recited
- Therefore, the claim encompasses a mental process

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Ex. 40 - Adaptive Monitoring of Network Traffic Data

Ex. 40 - Claim 2. A method for monitoring of traffic data through a network appliance connected between computing devices in a network, the method comprising:

collecting, by the network appliance, traffic data relating to the network traffic passing through the network appliance, the traffic data comprising at least one of network delay, packet loss, or jitter; and

comparing, by the network appliance, at least one of the collected traffic data to a predefined threshold.

Step 2A — Prong 2: *Integrated into a practical application?*

No

- “collecting” step is generic data gathering (“insignificant extra-solution activity”)
- Generic “network appliance” merely automates comparison step
- Does not integrate the abstract idea into a practical application
- The claim is therefore **directed to the abstract idea and ineligible**

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Ex. 40 - Adaptive Monitoring of Network Traffic Data

Ex. 40 - Claim 2. A method for monitoring of traffic data through a network appliance connected between computing devices in a network, the method comprising:

collecting, by the network appliance, traffic data relating to the network traffic passing through the network appliance, the traffic data comprising at least one of network delay, packet loss, or jitter; and

comparing, by the network appliance, at least one of the collected traffic data to a predefined threshold.

Step 2B: *Provides an inventive concept?*

No

- Mere application using a generic computer cannot provide an inventive concept
- “collecting step” (considered insignificant in Step 2A) is re-evaluated in Step 2B:
 - But generic collection of data is ***well-understood, routine, and conventional***, as supported by Federal Circuit precedent
- Therefore, there is no inventive concept and the claim is ***ineligible***

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 40 - Adaptive Monitoring of Network Traffic Data

Ex. 40 - Claim 1. A method for adaptive monitoring of traffic data through a network appliance connected between computing devices in a network, the method comprising:

collecting, by the network appliance, traffic data relating to the network traffic passing through the network appliance, the traffic data comprising at least one of network delay, packet loss, or jitter; ~~and~~

comparing, by the network appliance, at least one of the collected traffic data to a predefined threshold; and

collecting additional traffic data relating to the network traffic when the collected traffic data is greater than the predefined threshold, the additional traffic data comprising Netflow protocol data.

Step 2A — Prong 1: *Recites a judicial exception?*

Yes

- Network appliance is still only generically recited

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Ex. 40 - Adaptive Monitoring of Network Traffic Data

Ex. 40 - Claim 1. A method for adaptive monitoring of traffic data through a network appliance connected between computing devices in a network, the method comprising:

collecting, by the network appliance, traffic data relating to the network traffic passing through the network appliance, the traffic data comprising at least one of network delay, packet loss, or jitter; ~~and~~

comparing, by the network appliance, at least one of the collected traffic data to a predefined threshold; and

collecting additional traffic data relating to the network traffic [only?] when the collected traffic data is greater than the predefined threshold, the additional traffic data comprising Netflow protocol data.

Step 2A — Prong 2: *Integrated into a practical application?*

Yes

- Although each of the “collecting” steps may be viewed *individually* as mere pre- or post-solution activity, claim as a whole is directed to an improvement in collecting traffic data

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Ex. 40 - Adaptive Monitoring of Network Traffic Data

Ex. 40 - Claim 1. A method for adaptive monitoring of traffic data through a network appliance connected between computing devices in a network, the method comprising:

collecting, by the network appliance, traffic data relating to the network traffic passing through the network appliance, the traffic data comprising at least one of network delay, packet loss, or jitter; ~~and~~

comparing, by the network appliance, at least one of the collected traffic data to a predefined threshold; and

collecting additional traffic data relating to the network traffic when the collected traffic data is greater than the predefined threshold, the additional traffic data comprising Netflow protocol data.

Step 2B: *Provides an inventive concept?*

N/A since found eligible in Step 2A

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 41 - Cryptographic Communications

Ex. 41. A method for establishing cryptographic communications between a first computer terminal and a second computer terminal comprising:

receiving a plaintext word signal at the first computer terminal;

transforming the plaintext word signal to one or more message block word signals M_A ;

encoding each of the message block word signals M_A to produce a ciphertext word signal C_A , whereby $C_A = M_A^e \pmod{n}$;

...; and

transmitting the ciphertext word signal C_A to the second computer terminal over a communication channel.

Step 2A — Prong 1: *Recites a judicial exception?*

Yes

- The claim explicitly recites a mathematical formula: $C_A = M_A^e \pmod{n}$

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Ex. 41 - Cryptographic Communications

Ex. 41. A method for establishing cryptographic communications between a first computer terminal and a second computer terminal comprising:

receiving a plaintext word signal at the first computer terminal;

transforming the plaintext word signal to one or more message block word signals MA;

encoding each of the message block word signals MA to produce a ciphertext word signal CA, whereby $CA=MA^e \pmod n$;

...; and

transmitting the ciphertext word signal CA to the second computer terminal over a communication channel.

Step 2A — Prong 2: *Integrated into a practical application?*

Yes

- Combination of (highlighted) elements sufficiently limits use of the mathematical concepts to practical application of transmitting the ciphertext word over a channel
- Therefore, the claim is not directed to the judicial exception, and is **eligible**

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Ex. 41 - Cryptographic Communications

Ex. 41. A method for establishing cryptographic communications between a first computer terminal and a second computer terminal comprising:

- receiving a plaintext word signal at the first computer terminal;
- transforming the plaintext word signal to one or more message block word signals MA;
- encoding each of the message block word signals MA to produce a ciphertext word signal CA, whereby $CA=MA^e \pmod n$;
- . . .; and
- transmitting the ciphertext word signal CA to the second computer terminal over a communication channel.

Step 2B: *Provides an inventive concept?*

N/A since found eligible in Step 2A

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 42 - Notifications When Medical Records Are Updated

Ex. 42 - Claim 2. A method comprising:

- a) storing information about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing access, by a content server, to users so that any one of the users can update the information about the patient's condition in the collection of medical records, and;
- c) storing the updated information about the patient's condition in the collection of medical records in the plurality of network-based non-transitory storage devices.

Step 2A — Prong 1: *Recites a judicial exception?*

Yes

- Claim as a whole recites a method of organizing human interactions
- “content server” and “*plurality of network-based non-transitory storage devices*” are only generically recited

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Ex. 42 - Notifications When Medical Records Are Updated

Ex. 42 - Claim 2. A method comprising:

- a) storing information about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing access, by a content server, to users so that any one of the users can update the information about the patient's condition in the collection of medical records, and;
- c) storing the updated information about the patient's condition in the collection of medical records in the plurality of network-based non-transitory storage devices.

Step 2A — Prong 2: *Integrated into a practical application?*

No

- “content server” and “network-based non-transitory storage devices” merely invoked as tools to perform an existing medical records update process
- Simply implementing abstract idea on a generic computer is not a practical application of the recited abstract idea

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Ex. 42 - Notifications When Medical Records Are Updated

Ex. 42 - Claim 2. A method comprising:

- a) storing information about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing access, by a content server, to users so that any one of the users can update the information about the patient's condition in the collection of medical records, and;
- c) storing the updated information about the patient's condition in the collection of medical records in the plurality of network-based non-transitory storage devices.

Step 2B: *Provides an inventive concept?*

No

- Claim as a whole merely applies concept of updating records in a computer environment
- “Thus, even when viewed as a whole, nothing in the claim adds significantly more (*i.e.*, ***an inventive concept***) to the abstract idea.”
- Therefore, the claim is **ineligible**

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USPTO Examples 37-42 (in order covered)

Example	Claim	Type	Step 1	Step 2A		Step 2B	Conclusion
				Prong 1	Prong 2		
37	3	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
	2	Method	Y	N	N/A	N/A	Eligible
38	(sole)	Method	Y	N	N/A	N/A	Eligible
39	(sole)	Method	Y	N	N/A	N/A	Eligible
40	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible
41	(sole)	Method	Y	Y	Y	N/A	Eligible
42	2	Method	Y	Y	N	N	Ineligible
	1	Method	Y	Y	Y	N/A	Eligible

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Ex. 42 - Notifications When Medical Records Are Updated

Ex. 42 - Claim 1. A method comprising:

- a) storing information in a standardized format about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing remote access, by a content server, to users over a network so that any one of the users can update the information about the patient's condition in the collection of medical records, and in real time through a graphical user interface, wherein the one of the users provides the updated information in a non-standardized format dependent on the hardware and software platform used by the one of the users;
- c) converting, by a content server, the non-standardized updated information into the standardized format,
- d) storing the standardized updated information about the patient's condition in the collection of medical records in the plurality of network-based non-transitory storage devices standardized format;
- e) automatically generating a message containing the updated information about the patient's condition by the content server whenever updated information has been stored; and
- f) transmitting the message to all of the users over the computer network in real time, so that each user has immediate access to up-to-date patient information.

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Ex. 42 - Notifications When Medical Records Are Updated

Ex. 42 - Claim 1. A method comprising:

- a) storing information in a standardized format about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing remote access, by a content server, to users over a network so that any one of the users can update the information about the patient's condition in the collection of medical records, and in real time through a graphical user interface, wherein the one of the users provides the updated information in a non-standardized format dependent on the hardware and software platform used by the one of the users;
- c) converting, by a content server, the non-standardized updated information into the standardized format,

....

Step 2A — Prong 1: *Recites a judicial exception?*

Yes

- Still recites a method for organizing human activity

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Ex. 42 - Notifications When Medical Records Are Updated

Ex. 42 - Claim 1. A method comprising:

- a) storing information in a standardized format about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing remote access, by a content server, to users over a network so that any one of the users can update the information about the patient's condition in the collection of medical records, and in real time through a graphical user interface, wherein the one of the users provides the updated information in a non-standardized format dependent on the hardware and software platform used by the one of the users;
- c) converting, by a content server, the non-standardized updated information into the standardized format,
- d) storing the standardized updated information about the patient's condition in the collection of medical records in the plurality of network-based non-transitory storage devices standardized format;
- e) automatically generating a message containing the updated information about the patient's condition by the content server whenever updated information has been stored; and
- f) transmitting the message to all of the users over the computer network in real time, so that each user has immediate access to up-to-date patient information.

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Ex. 42 - Claim 1. A method comprising:

- a) storing information in a standardized format about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing remote access, by a content server, to users over a network so that any one of the users can update the information about the patient's condition in the collection of medical records, and in real time through a graphical user interface . . . ;
- c) converting, by a content server, the non-standardized updated information into the standardized format,

...

Step 2A — Prong 2: *Integrated into a practical application?*

Yes

- The additional elements (highlighted) provide a specific improvement over prior art “by allowing remote users to share information in real time in a standardized format regardless of the format in which the information was input . . .”

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Ex. 42 - Claim 1. A method comprising:

- a) storing information in a standardized format about a patient's condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;
- b) providing remote access, by a content server, to users over a network so that any one of the users can update the information about the patient's condition in the collection of medical records, and in real time through a graphical user interface, wherein the one of the users provides the updated information in a non-standardized format dependent on the hardware and software platform used by the one of the users;
- c) converting, by a content server, the non-standardized updated information into the standardized format,

....

Step 2B: *Provides an inventive concept?*

N/A since found eligible in Step 2A

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