Patent Quality Chat
Subject Matter Eligibility: Guidance & Examination Resources

March 13, 2018

Email questions to PatentQuality@uspto.gov
To send in questions or comments during the webinar, please email:

**PatentQuality@uspto.gov**
http://www.uspto.gov/patentquality

Patent Quality

Providing high-quality, efficient examination of patent applications is paramount to our mission at USPTO. To ensure we continue to issue high-quality patents that will fuel innovation well into the future, the Office of the Deputy Commissioner for Patent Quality, along with our partners across the Patents organization, promotes and supports the continuous improvement of patent products, processes and services through collaboration with internal and external stakeholders of the intellectual property community.

Highlights

Patent Quality Chat
Tune into our next Patent Quality Chat on March 13th.

Quality Metrics
See our new metrics approach, categorizing into product, process and perception indicators.

Stakeholder Training on Examination Practice and Procedure (STEPP)
Sign up for an upcoming training developed for those interested in a better understanding of the examination process at the USPTO.

Areas of Focus
Collaboration with our stakeholders has directed our focus within three areas, where we can best improve patent quality.

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http://www.uspto.gov/patent/initiatives/patent-quality-chat

2018 Chat Series

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<td>Tuesday, February 13</td>
<td>eMod Update: Patent Center and Structured Text</td>
<td>Richard Fernandez, eMod Project Manager</td>
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<td>Tuesday, January 9</td>
<td>Unlocking Open Data for our Patent Customers</td>
<td>Thomas A. Beach, Chief Data Strategist</td>
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Future webinars will be held on topics such as: searching enhancements and Patents Ombudsman.

Previous Events


2017 Patent Quality Chat Series
Patent Quality Chat
Subject Matter Eligibility: *Guidance & Examination Resources*

Robert Bahr
Deputy Commissioner for Patent Examination Policy

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Eligibility Guidance Is Now In the MPEP

• The MPEP has been updated to incorporate the 2014 Interim Eligibility Guidance (IEG) and its updates

• MPEP now replaces the IEG and updates (as of August 2017)

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MPEP Organization

- Eligibility guidance is located in Chapter 2100
  - 2103 discusses how the eligibility analysis fits into the overall patent examination process
  - 2104 discusses the requirements of 35 U.S.C. § 101
  - 2105 discusses patentability of living subject matter
  - 2106 and its subparts discuss the subject matter eligibility analysis

- Additional information is located in Chapter 700
  - 706.03 and 706.03(a) discuss subject matter eligibility rejections and provide appropriate form paragraphs

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MPEP WALK-THROUGH
The Eligibility Analysis

- MPEP 2106 discusses the eligibility analysis
  
  I. Explains the two criteria for subject matter eligibility: the claimed invention must be to a statutory category (Step 1) and qualify as patent-eligible subject matter (Step 2 aka the Alice/Mayo test)
  
  II. Stresses the importance of establishing the broadest reasonable interpretation (BRI) of the claim prior to the eligibility analysis
  
  III. Provides guidance on the analysis as a whole and introduces the flowchart

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Flowchart

• Sets forth the only analysis for examination of subject matter eligibility under 35 U.S.C. 101
• MPEP 2106 includes updated flowchart that:
  – Adds labels for each step
  – Indicates three pathways to eligibility (including streamlined analysis)

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Step 1: Statutory Categories

- MPEP 2106.03 discusses Step 1
  
  I. Explains the four categories (process, machine, manufacture, & composition of matter)
    - Discusses how the courts have defined the categories
    - Provides examples of subject matter that doesn’t fall within any category (e.g., software *per se*, signals *per se*, and human organisms)
  
  II. Provides guidance on how to evaluate whether the claimed invention is to one of the four statutory categories

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Step 2A: Directed To A Judicial Exception

• MPEP 2106.04 discusses Step 2A
  I. Introduces the judicial exceptions and explains the Supreme Court’s concern about preempting basic tools of scientific and technological work
  II. Provides guidance on how to evaluate whether a claim is directed to a judicial exception

• Sub-sections 2106.04(a) through 2106.04(c) provide detailed information on the judicial exceptions
Identifying Abstract Ideas

• MPEP 2106.04(a) discusses abstract ideas
  – Explains that examiners identify abstract ideas by comparing claimed concepts to concepts previously identified as abstract ideas by the courts
  I. Discusses how an invention can be directed to an improvement in computer-related technology instead of an abstract idea
  II. Points examiners to additional information relevant to the evaluation of whether a claim is directed to an abstract idea

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What Is, And Isn’t, An Abstract Idea

• MPEP 2106.04(a)(1) provides more information about claims that are not directed to abstract ideas
  I. Claim may involve, but not recite, an abstract idea
  II. Claim may recite an abstract idea, but be directed to an improvement instead

• MPEP 2106.04(a)(2) provides examples of abstract ideas identified by the Supreme Court and Federal Circuit
  I. “Fundamental Economic Practices”
  II. “Certain Methods Of Organizing Human Activity”
  III. “An Idea ‘Of Itself’”
  IV. “Mathematical Relationships/Formulas”
Identifying Laws of Nature & Natural Phenomena

- MPEP 2106.04(b) discusses some concepts and products that the courts have identified as examples of laws of nature & natural phenomena
  
  I. Provides examples as well as explanation about how claims describing natural abilities/qualities are not necessarily “directed to” a judicial exception
  
  II. Explains “product of nature” exceptions and that they are identified using the markedly different characteristics analysis

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Identifying Products of Nature

- MPEP 2106.04(c) explains that the Markedly Different Characteristics (MDC) analysis is used to determine if a nature-based product is a “product of nature” exception
  
  I. Explains when to perform the MDC analysis and which claim limitation(s) are analyzed
  
  II. Provides information about how to perform the MDC analysis, including choosing appropriate naturally occurring counterparts for comparison

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Step 2B: Evaluating Significantly More

• MPEP **2106.05** discusses Step 2B
  I. Explains the Supreme Court’s analysis of significantly more (also called an “inventive concept”)
     A. Introduces the Step 2B considerations
     B. Walks through Alice and BASCOM to show how courts evaluate claims for an inventive concept
  II. Provides guidance on how to evaluate whether a claim encompasses an “inventive concept”

• Sub-sections **2106.05(a) through 2106.05(h)** provide detailed information on the Step 2B considerations

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Considerations Favoring Eligibility

- MPEP 2106.05(a) discusses improvements to the functioning of a computer or to any other technology or technical field.
- MPEP 2106.05(b) discusses applying the judicial exception with, or by use of, a particular machine.
- MPEP 2106.05(c) discusses effecting a transformation or reduction of a particular article to a different state or thing.
- MPEP 2106.05(d) discusses specific limitations other than what is well-understood, routine, conventional activity in the field, or adding unconventional steps that confine the claim to a particular useful application.
- MPEP 2106.05(e) discusses other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment.

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Considerations That Do Not Favor Eligibility

- MPEP 2106.05(d) discusses simply appending well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

- MPEP 2106.05(f) discusses adding the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer.

- MPEP 2106.05(g) discusses adding insignificant extra-solution activity to the judicial exception.

- MPEP 2106.05(h) discusses generally linking the use of the judicial exception to a particular technological environment or field of use.

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Streamlined Analysis

- MPEP 2106.06 discusses the Streamlined Analysis
  - Explains that the streamlined analysis is available for claims having self-evident eligibility, and that there is no difference in results between the streamlined analysis and the “full” analysis (Steps 2A and 2B)
  - Sub-section 2106.06(a) provides examples of claims having self-evident eligibility
  - Sub-section 2106.06(b) provides examples of claims that have self-evident eligibility because they are directed to unambiguous improvements to a technology or to computer functionality

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Formulating Eligibility Rejections

• MPEP 2106.07 discusses how examiners should formulate and support subject matter eligibility rejections
  – Sub-section 2106.07(a) directs examiners on best practices in formulating a subject matter eligibility rejection
  – Sub-section 2106.07(b) emphasizes the importance of considering applicant’s arguments and challenges to an eligibility rejection
  – Sub-section 2106.07(c) stresses the importance of clarifying the record both in rejections and when claims are found eligible
EXAMINATION RESOURCES

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MPEP Addresses Body of Case Law

- MPEP presents a comprehensive view of eligibility that incorporates teachings from the full body of relevant case law
- Expands discussion of recent case law from memoranda and other guidance documents
  - Cases confirming that software-based innovations can make non-abstract improvements to computer technology (e.g., Enfish, and McRO) are discussed in 2106.04(a), 2106.04(a)(1), and 2106.06(b)
  - Cases confirming that claims describing natural processes and properties are not necessarily directed to judicial exceptions (e.g., Rapid Litigation Mgmt. and Tilghman) are discussed in 2106.04(b)
  - 2106.05(a) through 2016.05(e) discuss several judicial decisions where the courts identified claims that provide an inventive concept
But There Are Always More Decisions...

Federal Circuit Eligibility Decisions Since Alice Corp.

- Digitech
- Planet Bingo *
- buySAFE
- Ultramercial
- DDR Holdings
- Ambry
- Content Extraction
- Allvoice *
- OIP Tech.
- Sequenom
- Internet Patents
- IV v. Cap. One Bank
- Versata *
- Vehicle Intelligence *
- Mortgage Grader
- In re Smith *
- Genetic Tech.
- In re Brown *
- Enfish
- TLI Comms.
- BASCOM
- Rapid Lit. Mgmt.
- Shortridge *
- Lendingtree *
- Electric Power Group
- In re Chorna *
- TDE Petroleum *
- Affinity Labs. v. Amazon
- In re Salwan *
- Clarilogic *
- FairWarning
- Synopsys
- Amdocs
- Transxion *
- Ameranth *
- Trading Tech. v. CQG *
- Evolutionary Intel. *
- Smartflash *
- IV v. Cap. One Financial
- IV v. Erie Indemnity I
- Thales Visionix
- RecogniCorp
- Easyweb *
- Credit Acceptance
- Cleveland Clinic
- Prism Tech. *
- Audatex *
- Visual Memory
- McRO
- Return Mail

Federal Circuit Eligibility Decisions Since MPEP edition

- Secured Mail
- Smart Systems
- Two-Way Media
- IV v. Erie Indemnity II *
- Inventor Holdings
- Finjan v. Blue Coat
- Core Wireless
- Move v. Real Estate Alliance *
- Berkheimer v. HP
- Ziuli v. Google LLC *
- Aatrix Software
- Automated Tracking Sol. *
- Exergen Corp. v. Kaz USA *

Bold text indicates decision identifying claims as eligible
* Case appealed from USPTO  † Non-precedential decision  (Rule 36 affirmances not shown)
QRS: Decisions Identifying Abstract Ideas

- Quick Reference Sheet (QRS) groups abstract ideas to help examiners identify pertinent cases and find related information in the MPEP.

- Many cases on the QRS are explained in further detail in the MPEP, for example:
  - *FairWarning* is discussed along with other cases concerning “idea of itself” and mental process concepts.
  - *Digitech* is discussed along with other cases concerning mathematical relationship concepts.
QRS: Decisions Holding Claims Eligible

• QRS also identifies court decisions that held claims eligible, along with citations to related sections in the MPEP
• Decisions are grouped by the court’s rationale for holding the claims eligible. For example:
  – *Finjan* and *Core Wireless* are listed with other cases holding that the claims at issue were not directed to abstract ideas
  – *BASCOM* is listed with other cases holding that the claims at issue recited an inventive concept

Click here for a copy of the Quick Reference Sheet

Email questions to PatentQuality@uspto.gov

![Click here for a copy of the Quick Reference Sheet](image-url)
Case Law Chart

- Case law chart provides additional information so examiners can look at the patent(s) and claim(s) at issue in the case
- QRS & Chart are updated periodically (usually monthly)

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Examples For Use With MPEP

- Six sets of examples were issued to explain how to apply the eligibility analysis to various fact patterns
- Cover technologies including biotechnology, pharmaceuticals, business methods, computer-related inventions, and software
- Include eligible and ineligible claims, in accordance with case law and based on hypothetical fact patterns

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Claims With Self-Evident Eligibility
(Pathway A: Streamlined Analysis)

- Example 19 (hip prosthesis)
- Example 20 (robotic arm assembly)
- Example 26 (internal combustion engine)
- Example 27 (BIOS software)
- Example 32 (*Eibel Process*: paper-making machine)
- Example 33 (*Tilghman*: hydrolysis of fat)
Claims Eligible In Step 2A
(Pathway B: Not Directed To An Exception)

- Example 1 (removing malicious code)*
- Example 9 (firework)
- Example 11 (methods of treatment)
- Example 23 (GUI)*
- Example 27 (BIOS software)*
- Example 29 (methods of diagnosis and/or treatment)
- Example 31 (methods of manipulating DNA sequences)

- Example 9 (gunpowder)†
- Example 10 (pomelo juice)†
- Example 11 (amazonic acid)†
- Example 12 (proteins)†
- Example 13 (bacterium)†
- Example 14 (mixtures of bacteria)†
- Example 15 (nucleic acids)†
- Example 16 (antibodies)†
- Example 17 (cells)†
- Example 18 (food)†
- Example 29 (vaccines)†
- Example 30 (dietary sweeteners)†

* Example where a claim is directed to an improvement in computer-related technology like in Enfish
† Example where a claim recites a nature-based product that demonstrates markedly different characteristics

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Claims Eligible In Step 2B  
(Pathway C: Inventive Concept)

- Example 3 (digital image processing)
- Example 4 (global positioning system)
- Example 17 (cells)
- Example 21 (business method)
- Example 23 (GUI)
- Example 25 (*Diehr*: rubber manufacturing)
- Example 28 (vaccines)

- Example 29 (methods of diagnosis and/or treatment)
- Example 31 (methods of manipulating DNA sequences)
- Example 34 (*BASCOM*: filtering content)
- Example 35 (verifying customer identity)
- Example 36 (tracking inventory)
Examiner Training

General Eligibility Analysis
- Overview of Analysis
- Step 1 Refresher
- Workshop III (Formulating Rejections & Evaluating Responses)

Abstract Ideas
- Abstract Idea Workshop I
- Abstract Idea Workshop II
- Exploring SME: Abstract Ideas CBT

Life Sciences
- Nature-Based Product Training
- Life Sciences Workshop

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Next Steps

• Feedback from the public and the examining corps
  – Public comment period open-ended
  – Comments are posted here: https://www.uspto.gov/patent/laws-and-regulations/comments-public-response-specific-requests-uspto

• Monitor judicial developments

• Focus on improving the consistent application of the guidance in the examining corps

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Resource Links

- **Subject Matter Eligibility**
  
  
  - Includes guidance documents, example sets, training materials, and information about relevant case law
  
  - Includes links to public comments
  
  - Any updates will be posted to this page

- **General examination guidance and training materials**
  

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Let’s Chat about 
Subject Matter Eligibility:  
*Guidance & Examination Resources*

Robert Bahr  
Deputy Commissioner for Patent Examination Policy

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Next Patent Quality Chat

Strengthening your IP Internationally using the expanded Collaborative Search Pilot

April 10, 2018

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### Other Patent Quality-Related Events

[https://www.uspto.gov/about-us/events](https://www.uspto.gov/about-us/events)

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<td>“Common Mistakes and Support After Filing”</td>
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<td>March 15</td>
<td><strong>2018 Business Methods Partnership Meeting</strong></td>
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<td>March 22</td>
<td><strong>Biotechnology, Chemical and Pharmaceutical Customer Partnership (BCP) Meeting</strong></td>
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Thank you for joining us today!

Patent Quality Chat
Webinar Series 2018
March 13, 2018

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