

IS THERE A COORDINATED MOVE IN B+ AND ELSEWHERE?

SUBJECT MATTER ELIGIBILITY IN THE U.S.

Sharon E. Crane, Ph.D. June 6, 2018



Part II — Standards concerning the availability, scope and use of Intellectual Property Rights

Section 5: patents

Article 27

Patentable Subject Matter

1. Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. ⁽⁵⁾Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.

35 U.S.C. § 101

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.





United States Court of Appeals for the Federal Circuit

AATRIX SOFTWARE, INC., Plaintiff-Appellant

 \mathbf{v}_{\bullet}

GREEN SHADES SOFTWARE, INC.,

Defendant-Appellee

2017-1452

Appeal from the United States District Court for the Middle District of Florida in No. 3:15-cv-00164-HES-MCR, Senior Judge Harvey E. Schlesinger.

ON PETITION FOR REHEARING EN BANC

LOURIE, Circuit Judge, with whom NEWMAN, Circuit Judge, joins, concurring in the denial of the petition for rehearing en banc.

I concur in the court's declining to rehear this case en banc. There is plausibility to the panel holding that there are fact issues potentially involved in this case concerning the abstract idea exception to patent eligibility. And the panel, and the court, are bound to follow the script that the Supreme Court has written for us in § 101 cases.

However, I believe the law needs clarification by higher authority, perhaps by Congress, to work its way out of what so many in the innovation field consider are § 101 problems. Individual cases, whether heard by this court or the Supreme Court, are imperfect vehicles for enunciating broad principles because they are limited to the facts presented. Section 101 issues certainly require attention beyond the power of this court.





U.S. Supreme Court Decisions relating to § 101

- Bilski et al. v. Kappos
- Mayo Collaborative Services v. Prometheus Laboratories, Inc.
- Association for Molecular Pathology v. Myriad Genetics, Inc.
- Alice Corporation Pty. Ltd. V. CLS Bank International et al.





Bilski et al. v. Kappos

- The subject matter was a method of "hedging" against the risk of price changes between commodity providers and commodity consumers.
- The Court held that the "machine-or-transformation" is not the sole test for patent eligibility under § 101, and while business methods may be patentable, these claims were merely reducing the concept of hedging to a mathematical formula that was merely an unpatentable abstract idea.





Mayo Collaborative Services v. Prometheus Laboratories, Inc.

- The subject matter was a method of optimizing the therapeutic efficacy for treatment of an immune-mediated gastrointestinal disorder by administering a drug to a subject, and determining the level of the drug in the subject, wherein a particular amount of the drug indicates a need to increase or decrease the amount of the drug administered.
- The Court held that the claims were nothing more than instructions that "add nothing specific to the laws of nature other than what is well-understood, routine, conventional activity, previously engaged in by those in the field."





Association for Molecular Pathology v. Myriad Genetics, Inc.

- The subject matter was isolated DNA related to the human BRCA1 and BRCA2 cancer susceptibility genes.
- The Court held that isolated DNA is not patent-eligible because claims to such subject matter read on isolated naturally-occurring DNA that is a "product of nature."
- The Court held that cDNA was not a product of nature and is patent eligible.





Alice Corporation Pty. Ltd. V. CLS Bank International et al.

- Methods and data processing systems for exchanging obligations between parties in financial transactions
- Court found that "the method claims, which merely require generic computer implementation, fail to transform that abstract idea into a patent eligible invention."





The Supreme Court has Warned Against the Over-application of their Holdings

- "Everything that happens may be deemed 'the work of nature'..." Funk Bros. Seed Co. v. Kalo Inoculant Co.
- "all inventions at some level embody, use, reflect, rest upon or apply laws of nature, natural phenomena, or abstract ideas" and "too broad an interpretation of this exclusionary principle could eviscerate patent law." - Mayo





The Supreme Court has Warned Against the Over-application of their Holdings (con't)

- Patent protection strikes a delicate balance between creating "incentives that lead to creation, invention, and discovery" and "imped[ing] the flow of information that might permit, indeed spur, invention." – Myriad
- "At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law." – Alice, citing Mayo





Past USPTO Guidance

- March 4, 2014: Guidance For Determining Subject Matter Eligibility OF Claims Reciting Or Involving Laws of Nature, Natural Phenomena, & Natural Products ("Guidance"), issued on March 4, 2014
- <u>December 16, 2014</u>: 2014 Interim Guidance on Patent Subject Matter Eligibility (Nature-based product examples 9-18)
- January 27, 2015: Abstract Idea Examples 1-8





Past USPTO Guidance (con't)

- March 6, 2015: Streamlined Examples 19 and 20
- July 30, 2015: Abstract Idea Examples 21-27
- May 4, 2016: Life Sciences Examples 28-33
- <u>December 15, 2016</u>: Business method examples 34-36





New USPTO Guidance

- March 14, 2018: Decisions identifying abstract ideas (Quick Reference Sheet [QRS])
- April 2, 2018: Memorandum Recent Subject Matter Eligibility Decisions: Finjan and Core Wireless
- April 19, 2018: Memorandum Revising 101 Eligibility Procedure in view of *Berkheimer v. HP, Inc.*
- April 20, 2018: Federal Register Notice requesting comments on the Berkheimer memorandum and other eligibility guidance





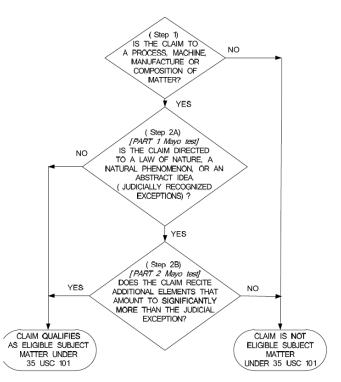
New USPTO Guidance (con't)

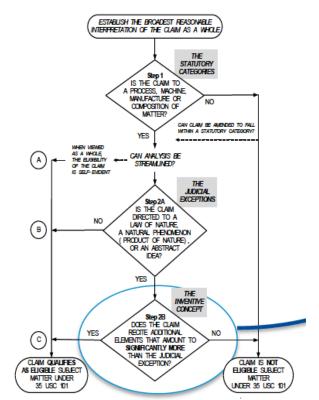
- May 3, 2018: Decisions holding claims eligible (QRS update)
- May 3, 2018: Chart of subject matter eligibility court decisions
- May 7, 2018: Training: Well-understood, Routine, Conventional Activity





Clarified Subject Matter Eligibility Test









MPEP 2106 – SUMMARY OF ANALYSIS AND FLOWCHART

- Pathway A: Claims taken as a whole that fall within a statutory category (Step 1: YES) and, which may or may not recite a judicial exception, but whose eligibility is self-evident can be found eligible at Pathway A using a streamlined analysis.
 See MPEP § 2106.06 for more information on this pathway and on self-evident eligibility.
- Pathway B: Claims taken as a whole that fall within a statutory category (Step 1: YES) and are not directed to a judicial exception (Step 2A: NO) are eligible at Pathway B. These claims do not need to go to Step 2B. See MPEP \security 2106.04 for more information about this pathway and Step 2A.
- Pathway C: Claims taken as a whole that fall within a statutory category (Step 1: YES), are directed to a judicial exception (Step 2A: YES), and recite additional elements either individually or in an ordered combination that amount to significantly more than the judicial exception (Step 2B: YES) are eligible at Pathway C. See MPEP § 2106.05 for more information about this pathway and Step 2B.



January 2018 MPEP Revisions

II. ELIGIBILITY STEP 2A: WHETHER A CLAIM IS DIRECTED TO A JUDICIAL EXCEPTION As described in MPEP § 2106, subsection III, Step 2A of the Office's eligibility analysis is the first part of the *Alice/Mayo* test...Like the other steps in the eligibility analysis, evaluation of this step should be made after determining what applicant has invented by reviewing the entire application disclosure and construing the claims in accordance with their broadest reasonable interpretation...





Proposed Rulemaking for PTAB Proceedings

83 Fed. Reg. 21221 (May 9, 2018) – USPTO Proposed Rulemaking: to change the claim construction standard in IPRs, PGRs and CBMs to replace BRI standard with district court/ITC standard as enumerated in *Philips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

Claim terms should be given their ordinary and customary meaning that the term would have to a person of ordinary skill in the art at the time of the invention in the context of the written description in the specification and the prosecution history; extrinsic evidence is less reliable than intrinsic evidence.





January 2018 MPEP Revisions (con't)

- •Step 1: The Four Categories of Statutory Subject Matter MPEP 2106.03
- •Step 2A: Whether a Claim is Directed to a Judicial Exception MPEP 2106.04
- •Step 2B: Whether a Claim Amounts to Significantly More MPEP 2106.05
 - 2106.05(a)-Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field
 - 2106.05(b)-Particular Machine
 - 2106.05(c)-Particular Transformation
 - 2106.05(d)-Well-Understood, Routine, Conventional Activity
 - 2106.05(e)-Other Meaningful Limitations
 - 2106.05(f)-Mere Instructions To Apply An Exception
 - 2106.05(g)-Insignificant Extra-Solution Activity
 - 2106.05(h)-Field of Use and Technological Environment





What is "significantly more"?

- Improvements to the functioning of a computer MPEP 2106.05(a);
- Improvements to any other technology or technical field *MPEP* 2106.05(a);
- Applying the judicial exception with, or by use of, a particular machine *MPEP 2106.05(b)*;
- Effecting a transformation or reduction of a particular article to a different state or thing MPEP 2106.05(c);
- Adding a specific limitation 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(d)*; or
- Other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment *MPEP* 2106.05(e).





What is NOT "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 MPEP 2106.05(f);
- 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(d);
- Adding insignificant extra-solution activity to the judicial exception *MPEP 2106.05(g)*; or
- Generally linking the use of the judicial exception to a particular technological environment or field of use MPEP 2106.05(h).





Berkheimer v. HP Inc., 881 F.3d 1360 (Fed. Cir. 2018)

- Invention related to digitally processing and archiving files in a digital asset management system
- Federal Circuit held that whether certain claim limitations represent activities that were wellunderstood, routine, and conventional to a skilled artisan at the time of the patent is a factual issue, precluding summary judgment that all of the claims at issue were not patent eligible.





What is "well-understood, routine, conventional"?

 Element must be widely known or in common use

 This question is meant to be distinct from a §§102 and 103 analysis





Memo re Berkheimer

- Examiner can rely on:
 - an express statement in a specification or during prosecution that an element was well-understood, routine and/or conventional;
 - a citation to one or more court decisions discussed in MPEP § 2106.05(d)(II) stating that an element was wellunderstood, routine and/or conventional;
 - a citation to a publication demonstrating that an element was well-understood, routine and/or conventional
 - a statement that the Examiner is taking official notice that an element was well-understood, routine and/or conventional – only if certain from his/her own personal knowledge





Memo re Berkheimer (con't)

- Elements of the claim must be considered individually and in combination to determine whether a claim includes significantly more than a judicial exception
- The combination must also be well-understood, routine and conventional





May 2018: Eligibility Quick Reference Sheet Decisions Holding Claims Eligible

- Elements of the claim must be considered individually and in combination to determine whether a claim includes significantly more than a judicial exception
- https://www.uspto.gov/sites/default/files/docume nts/ieg-qrs-elig-cases.pdf





May 2018: Eligibility Quick Reference Sheet Decisions Holding Claims Eligible – Step 2A

CLAIMS ELIGIBLE IN STEP 2A		
Claim is not directed to an abstract idea	Claim is not directed to a law of nature or natural phenomenon	Claim is not directed to a product of nature (because the claimed nature-based product has markedly different characteristics)
See MPEP 2106.04(a), 2106	See MPEP 2106.04(b)	See MPEP 2106.04(c)
Core Wireless DDR Holdings (Ex. 2) Enfish Finjan v. Blue Coat Sys. McRO Thales Visionix Trading Tech. v. CQG Visual Memory	Eibel Process (Ex. 32) Rapid Lit. Mgmt. v. CellzDirect Tilghman (Ex. 33) Vanda Pharm.	Chakrabarty (Ex. 13) Myriad (Ex. 15)





May 2018: Eligibility Quick Reference Sheet **Decisions Holding Claims Eligible – Step 2B**

CLAIMS ELIGIBLE IN STEP 2B

Claim as a whole amounts to significantly more than the recited judicial exception, i.e., the claim recites an inventive concept See MPEP 2106.05 and 2106.05(a)-(h)

Abele **Amdocs** BASCOM (Ex. 34) Exergen v. Kaz

Classen Diehr (Ex. 25) Mackay Radio

Myriad CAFC *RCT* (Ex. 3) SiRF Tech (Ex. 4)





May 2018: Eligibility Quick Reference Sheet Decisions Identifying Abstract Ideas

"Fundamental Economic Practices"

Agreements Between People/Financial Transactions

- Salwan
- Smartflash
- LendingTree
- BuySAFE
- Bilski
- Inventor Holdings
- OIP Tech
- Credit Acceptance

Mitigating Risks

- Alice
- Bilski





May 2018: Eligibility Quick Reference Sheet Decisions Identifying Abstract Ideas (2)

"Certain Methods of Organizing Human Activity"

Managing Relationships/ Transactions Between People/ Satisfying Or Avoiding A Legal Obligation

- Comiskey
- BuySAFE
- Accenture
- Bilski
- Bancorp
- Alice
- Dealertrack
- Fort Properties

Advertising, Marketing, & Sales Activities Or Behaviors

- Ameranth
- Ferguson
- Ultramercial
- Maucorps





May 2018: Eligibility Quick Reference Sheet Decisions Identifying Abstract Ideas (3)

"Certain Methods of Organizing Human Activity"

Managing Human Behavior

- Int. Ventures v. Cap One Bank
- BASCOM
- Planet Bingo
- Meyer

Tracking or Organizing Information

- Salwan
- Shortridge
- Move v. Real Estate Alliance
- TLI Comms.

Other Concepts

- Return Mail
- Int. Ventures v. Symantec





May 2018: Eligibility Quick Reference Sheet Decisions Identifying Abstract Ideas (4)

"An Idea 'Of Itself"

Data Comparisons That Can Be Performed Mentally Or Are Analogous To Human Mental Work

Mortgage Grader; Classen; Ambry/Myriad CAFC; Smartgene; Grams;
 CyberSource

Organizing Or Analyzing Information In A Way That Can Be Performed Mentally Or Is Analogous To Human Mental Work

FairWarning; Int. Ventures v. Cap One Financial; Electric Power Group;
 West View; Smart Systems Innovations; Int. Ventures v. Erie Indemnity I;
 Content Extraction; Versata; RecogniCorp; Int. Ventures v. Erie Indemnity I;
 Synopsin; Digitech; Berkheimer; Return Mail; TDE Petroleum; Cyberfone





May 2018: Eligibility Quick Reference Sheet Decisions Identifying Abstract Ideas (5)

"An Idea 'Of Itself"

Ideas Having No Particular Concrete Or Tangible Form

- Brown
- Versata
- Ultramercial

Other Concepts

- Affinity Labs v. Amazon.com
- Clarilogic
- Ameranth
- TranxitionAffinity Labs. v. DirecTV
- Prism TechsInt. Ventures v. Erie Indemnity I





May 2018: Eligibility Quick Reference Sheet Decisions Identifying Abstract Ideas (6)

"Mathematical Relationships / Formulas"

Mathematical Relationships Or Formulas

- Diehr
- Benson
- Coffelt
- Mackay Radio
- Flook
- Bilski

Performing Mathematical Calculations

- Grams
- Abele
- Bancorp
- Digitech
- Maucorps





Subject Matter Eligibility Caselaw Chart

 https://www.uspto.gov/sites/default/files/documents/iegsme_crt_dec.XLSX





USPTO Subject Matter Eligibility Webpage

 https://www.uspto.gov/patent/laws-andregulations/examination-policy/subject-mattereligibility





Thank you!



607 14th Street, NW Suite 800 | Washington, DC 20005