

Patent Eligibility Cases Post-Alice

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The following is a summary of Federal Circuit decisions the author believes are particularly pertinent regarding patent eligibility pertaining software and related technologies since (and including) the U.S. Supreme Court's 2014 decision of *Alice v. CLS Bank*.

Alice v. CLS Bank (S. Ct., June 2014)

- I. Supreme Court: Need to ensure a patent does not “pre-empt” uses of a patent-ineligible concept (i.e., an abstract idea, law of nature or natural phenomena)
- II. Recognized that “all inventions . . . embody, use, reflect, rest upon, or apply” such patent-ineligible concepts, and thus an invention is not rendered patent-ineligible simply for involving such concepts.
 - A. But the invention must have “something more” than these concepts.
- III. Recited two-part test from *Mayo v. Prometheus* (from *Parker v. Flook*):
 - A. 1) Determine whether the claims at issue are “directed” to a patent-ineligible concept, e.g., an “abstract idea”
 1. But Alice Court had just previously stated that, at some level, everything “embodied,” “used,” etc., an abstract idea. . . So apply to every patent?
 - a. “Directed” different from “embodied, used,” etc.?
 2. If “yes,” proceed to step 2.
 - B. 2) Is there an “inventive concept” — i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’ ”
 1. Sounds like some kind of novelty/non-obviousness requirement...Is proof of prior art involved?
- IV. “The Mayo test” as applied to the claims in Alice:
 - A. Step 1: are the claims directed to an abstract idea?
 1. Cited prior S. Ct cases where the claims were held to be directed to abstract ideas; court then summarily stated that “[i]t follows from our prior cases [] that the claims at issue here are directed to an abstract idea,” i.e., “the concept of intermediated settlement.”
 - a. Court summarily concluded that “[i]n any event, we need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case.” It is enough that the current case is like *Bilski*
 - i. Subject to lots of interpretation!
 - B. Step 2: Does the claim “contain[] an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application”?
 - C. No. the claimed functions at each step, separately, are “purely conventional,” and not “inventive.”
 1. Claims do not amount to “significantly more” than the abstract idea.
 - a. Much can thus depend on how the abstract idea is defined....
 - D. Then “viewed as a whole,” the claims still recite an abstract idea (i.e., they do not amount to “significantly more”)
 - E. Claims deemed not patent eligible
- V. Supreme Court did not say that software or even so-called “business methods” were patent-ineligible.
 - A. Note: a concurring opinion in Alice was needed to opine that business methods ought to be ineligible.
 1. Thus, majority did not think they were.
- VI. Examples the Alice Court indicates may lead to patent-eligibility:
 - A. Improving the functioning of the computer itself, e.g., a “specific or limiting recitation of . . . improved computer technology . . . ”
 - B. Effecting “an improvement in [another] technology or technical field

VII. Explicitly didn't overrule *Diamond v. Diehr* (e.g., re "claim as a whole")

Digitech v. EFI (Federal Circuit, July 2014)

- I. Judges Reyna (author), Moore and Hughes
- II. General patented technology: Translates color and spatial information "from a device dependent format [e.g., from a digital camera] into an independent color space which can then be translated to any number of output devices [e.g., a specific printer] at a reduced level of distortion."
- III. Court: The method claim is directed to "an abstract idea because it describes a process of organizing information through mathematical correlations and is not tied to a specific structure or machine."
 - A. "Contrary to Digitech's argument, nothing in the claim language expressly ties the method to an image processor." Claims preempt "all uses of [the abstract idea]"
 1. "We therefore need not decide whether tying the method to an image processor would lead us to conclude that the claims are directed to patent eligible subject matter in accordance with the Supreme Court's Mayo test."
 2. Didn't formally step through the Mayo two-part test

buySAFE v. Google (Federal Circuit, September 2014)

- I. Judges Taranto (author) and Hughes [Rader did not participate]
- II. Patent at issue (method steps)
- III. A computer is used to underwrite a requesting party in order to provide a third party guarantee of a sales transaction
- IV. Application of Alice to the claims at issue:
 - A. "The claims in this case do not push or even test the boundaries of the Supreme Court precedents under section 101."
 - B. Thus the claims were found to be "directed to an abstract idea," and also failed "step 2"
- V. Regarding Step 1 (abstract idea):
 - A. "The claims are squarely about creating a contractual relationship—a 'transaction performance guaranty'—that is beyond question of ancient lineage."
- VI. Regarding Step 2:
 - A. "The claims' invocation of computers adds no inventive concept."
 1. The computer functionality is "generic."
- VII. Federal Circuit, quoting/interpreting some S. Ct. case law:
 - A. From *AMP v. Myriad Genetics*: "Laws of nature, natural phenomena, and abstract ideas, no matter how '[g]roundbreaking, innovative, or even brilliant,'" are not patent-eligible under 35 U.S.C. Sec. 101.

Ultramercial v. Wildtangent (Federal Circuit, November, 2014)

- I. Judges Lourie (author), Mayer and O'Malley
- II. Patent
 - A. "[D]irected to a method for distributing copyrighted media products over the Internet where the consumer receives a copyrighted media product at no cost in exchange for viewing an advertisement, and the advertiser pays for the copyrighted content."
 - B. "Representative" claim 1:
 1. 11 steps, including use of interactive messages and tracking the number of times a sponsor message has been presented.

- III. Procedural history
 - A. 2010: Dist. Ct. granted Wildtangent's motion to dismiss for failure to state a claim (patent lacked patent-eligible subject matter) without "formally" construing the claims.
 - B. 2011: Fed Cir reversed
 - 1. Claimed subject matter is not an abstract idea but rather "a practical application of [the] idea."
 - C. 2012: GVR by S. Ct. in view of Mayo v. Prometheus
 - D. 2013: Fed Cir reversed again:
 - 1. "[R]are that a patent infringement suit can be dismissed at the pleading stage for lack of patentable subject matter, since "every issued patent is presumed to have been issued properly..."
 - 2. "The analysis under §101 is rife with underlying factual issues"
 - 3. Lourie's concurrence: In "faithfully" following Mayo, for the second step of the 2 part Mayo/Flook test, "unlike the method claims in [Alice], in my view, the added limitations in these claims represent significantly more than the underlying abstract idea..."
 - E. 2014: GVR again by S. Ct. in view of Alice v. CLS Bank
- IV. "Current" Fed Cir decision:
 - A. Judge Lorie noted that all four amicus briefs were in favor of appellee WildTangent.
 - 1. Public Knowledge, Electronic Frontier Foundation, Google, The Clearing House Association (banks)
 - B. Fed Cir did not focus or even address the issue of dismissal for failure to state a claim.
 - C. Went right into Mayo/Flook 2-step test
- V. Step 1: "Determine whether the claims at issue are directed to [e.g., an abstract idea]"
 - A. The court asserted that "the concept embodied by the majority of the limitations describes only the abstract idea of showing an advertisement before delivering free content"
 - 1. No indication how those particular limitations were chosen, or how that formulation of the abstract idea was chosen.
- VI. Step 2: "determine whether the claims do significantly more than simply describe that abstract method."
 - A. Here, the court found that "adding routine additional steps such as updating an activity log [and others in the claim that are in addition to the abstract idea] does not transform an otherwise abstract idea into patent-eligible subject matter." Claim "as a whole" not mentioned.
 - B. Note: In his earlier concurrence, Judge Lourie had said that, in view of Mayo, "unlike the method claims in [Alice], in my view, the added limitations in these claims represent significantly more than the underlying abstract idea [] and, as a consequence, do not preempt the use of that idea in all fields."
- VII. Judge Mayer's concurrence emphasized three points
 - A. 1) Whether claims meet the demands of 35 U.S.C. § 101 is a threshold question that must be addressed at the outset of litigation.
 - B. 2) No presumption of eligibility attends the section 101 inquiry
 - 1. "That rationale [for presuming validity] is 'much diminished' in situations in which the PTO has not properly considered an issue."
 - C. 3) Alice set out a technological arts test for patent eligibility
 - 1. In Alice, "[t]he problem was not that the asserted claims disclosed no innovation, but that it was an entrepreneurial rather than a technological one."

DDR Holdings v Hotels.com (Federal Circuit, December, 2014)

- I. Background:
 - A. Judges Chen (author), Wallach and Mayer
- II. Technology: Allows a host website to contain an advertising link that, upon activation, generates a composite (hybrid) web page containing the advertiser's information while also retaining the host website's "look and feel."
 - A. In this way, the host web site retains visitor traffic - doesn't allow user to be transported away to the advertiser's own web site
- III. Step 1 of Mayo test (is claim "'directed to' a patent-ineligible abstract idea"?):
 - A. Precise nature of the abstract idea not as straightforward as in past decisions
 1. Court considers several ways defendant characterized the abstract idea and merely states "under any of these characterizations of the abstract idea, the [] patent's claims satisfy Mayo/Alice step two" (something "more.")
- IV. Step 2 ("something more" – no preemption)
 - A. Claims different from the previous cases because here, "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks."
 1. Thus, these claims "do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet."
 - B. Also, the court said the claims specify a "result [] that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink. [T]he claims [thus] recite an invention that is not merely the routine or conventional use of the Internet."
- V. Dissent – Judge Meyer
 - A. "DDR's patents fail to meet the demands of section 101 because they describe a goal—confusing consumers by making two web pages look alike—but disclose no new technology, or "inventive concept"
 - B. "Because DDR's claims, like those at issue in Alice Corporation v. CLS Bank International, 'simply instruct the practitioner to implement [an] abstract idea . . . on a generic computer,' they do not meet section 101."

Content Extraction v. Wells Fargo (Federal Circuit, December, 2014)

- I. Background
 - A. Judges Chen (author) Dyk and Taranto
 - B. Patents generally relate to information recognition technology involving scanning a check (i.e., involving a scanner) to, e.g., recognize information thereon within an ATM
 - C. Focus was on two method claims (patents had a total of 242 claims)
 - D. Dist Ct. had granted defendant's motion to dismiss for failure to state a claim – no claim construction
 - E. Content Extraction v. Wells Fargo (Federal Circuit, December, 2014)
- II. Federal Circuit discussed the Mayo "two-step framework"
 - A. Step 1: Are claims "'directed to' a patent-ineligible abstract idea"?
 1. The Supreme Court has not "delimit[ed] the precise contours of the 'abstract ideas' category."
 2. After merely noting they had identified abstract ideas in previous decisions, the Fed Cir. agreed with Dist. Ct. that the abstract idea was:
 - a. Collecting data, recognizing data within the collected data, and storing the recognized data
 - i. These concepts are well known and "humans have always performed these functions"
 - B. Step 2:

1. Patentee conceded that use of a scanner to extract data from a document “was well known at the time of filing”
 - a. “There is no ‘inventive concept’ in [the] use of a generic scanner and computer to perform well-understood, routine, and conventional activities commonly used in industry.
 - i. * No mention of looking at the “claim as a whole” or even whether the claim might improve a “technological process,” per Alice/Diehr
 - b. Court asserted it looked at the remaining 240 claims and none of them added anything patent-eligible
- III. Motion to dismiss for failure to state a claim
 - A. Claim construction “is not an inviolable prerequisite to a validity determination under § 101,” pointing to Ultramercial. Grant of motion was proper.
 1. Dist Ct. construed claims most favorably to patentee, “necessarily assuming all claims required a machine”
 - a. Even when construed in that manner, “none of [the] claims amount to ‘significantly more’ than the abstract idea”

OIP v. Amazon (Fed. Cir. June 11, 2015)

- I. Patent relates to price optimization: Tests prices by statistically looking at how customers react to a given price and automatically selecting a new price accordingly.
- II. The district court granted judgment on the pleadings, concluding no patentable subject matter under 35 U.S.C. § 101. Fed. Cir affirmed.
- III. Mayo test (Step 1): Directed to abstract idea, since claimed concept is “similar to other ‘fundamental economic concepts’ found to be abstract ideas by the Supreme Court and this court.”
 - A. “That the claims do not preempt all price optimization [] do not make them any less abstract.”
- IV. Mayo Step 2: “Beyond the abstract idea of offer-based price optimization, the claims merely recite “well-understood, routine conventional activit[ies].”
 - A. “Moreover, the claims are exceptionally broad and the computer implementation limitations do little to limit their scope.”
- V. Also emphasized that specification concedes that the key distinguishing feature is the ability to automate “traditional price-optimization methods [which is] insufficient to render a claim patent eligible.”
 - A. [Sounds like an obviousness issue]

Internet Patents Corp. v. Active Network (Fed. Cir. June 23, 2015)

- I. Patent relates to opening multiple icons/forms and navigating one icon/form (including using “back” and “forward” navigational functionalities) without losing the “state” of the other ones.
- II. Judge Newman wrote a very short, terse opinion
 - A. Summarily agreed with dist. Ct. that the claim is directed to the abstract idea of “retaining information in the navigation of online forms”
 - B. Summarily stated the limitations are “conventional”
 1. No consideration to “claim as a whole”
 - C. Asserted the “mechanism” for maintaining the “state” of the icons is not described, although this is stated to be the essential”
 1. But wouldn’t that be a 112 issue rather than a “conventional” argument

Versata v. SAP (Federal Circuit, July, 2015)

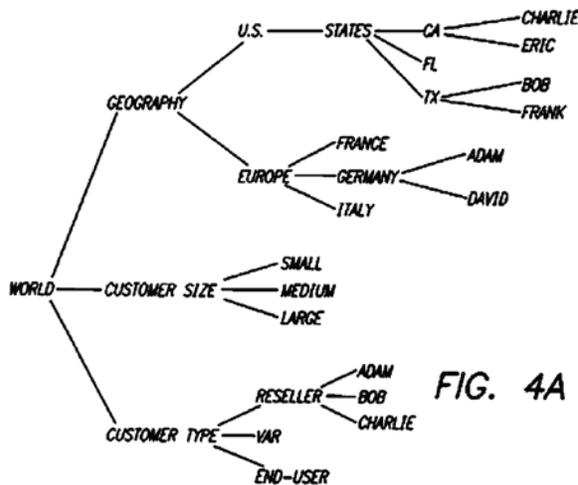
First appeal based on a CBM initiated in the PTAB

I. Technology allows pricing tables like this:

FIG. 1
PRIOR ART

WHAT WHO	486/33 CPU	486/50 CPU	486/66 CPU
ADAM	\$40	\$60	\$80
BOB	\$42	\$58	\$72
CHARLIE	\$44	\$68	\$92

II. ...to be more conveniently arranged in hierarchical fashion like this:



III. The holdings, some of which were issues of first impression, included:

- A. Federal Circuit has authority to review whether a patent in a CBM proceeding was the type of subject matter that warranted a CBM (i.e., whether it could challenge the PTAB’s decision that a patent at issue was, at the outset, a “business method”)
 1. Fed. Cir. decided it had the authority, though there was a dissenting opinion on this point...
 - a. Conflicts with *In re Cuozzo Speed Technologies, LLC*, which held the opposite way with regard to inter partes reviews, noting that “[t]he determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable.”
 - i. Note: U.S. Supreme Ct. has granted Cert. for *Cuozzo Speed* ...
- B. The patent at issue is, in fact, a “CBM patent”
 1. §18 of the AIA states a CBM patent must perform “operations used in the practice, administration, or management of a financial product or service....”
 - a. Legislative history: definition further encompasses “patents claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.”

2. Court decided the patent at issue falls within this definition
- C. Court confirmed that CBM review proceeding can include §101 challenges.
- D. Claims at issue did not fall into the “technological invention” exception
 1. “CBM patents” must not include “technological inventions”: defined as subject matter that, as a whole, “recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” (37 CFR §42.301(b)) Not helpful on its face.....
 2. 2012 USPTO Federal Register notice listed characteristics which, if present, did not help support an invention being within the exception. These included:
 - a. Mere “recitation of known technologies” and “combining prior art structures to achieve the normal, expected, or predictable result of that combination.” (77 Fed.Reg. 48756, 48763–64 (Aug. 14, 2012))
 3. Court agreed with PTO that this did not fall into the exception and that there was “no specific, unconventional software, computer equipment, tools or processing capabilities [] required.”
- E. Claims not patent-eligible under 35 U.S.C. §101, for the “usual” reasons...
 1. Step 1 of Mayo test: Claims directed to an abstract idea “in the same way” as the claims in Alice v. CLS Bank and Bilski v. Kappos were...
 2. Step 2 of Mayo: None of the claim limitations (individually or as a whole) are sufficient to render the claim a “patent-eligible application of an abstract idea”
 - a. All of the limitations “are well-understood, routine, conventional activities previously known to the industry.”
 - b. Versata’s “Commercial Success” arguments were unavailing [yet seem arguably pertinent...]

Intellectual Ventures v. Capital One (Fed. Cir. July, 2015)

- I. Two of the three patents at issue directed to an abstract idea (Step 1)
 - A. The first was directed to an abstract idea because it was not “meaningfully different from the ideas found to be abstract in other cases before the Supreme Court”
 - B. In the second, the court said “it is often useful to determine the breadth of the claims in order to determine whether the claims extend to cover a ‘fundamental ... practice long prevalent in our system....’”
 1. Apparently found the claims too broad since they asserted they were directed to a fundamental practice
- II. No inventive concept (Step 2)
 - A. Claims made up merely of generic components
 - B. Regarding DDR, Court was very brief:
 1. The patent claims here do not address problems unique to the Internet, so DDR has no applicability.
- III. Third patent not infringed in view of claim construction

Blue Calypso v. Groupon (Federal Circuit, March, 2016)

- I. CBM appealed from PTAB
 - A. Board rejected claims under §§102, 103 and 112, but not §101
- II. Blue Calypso asserted its patents didn’t qualify for CBM review

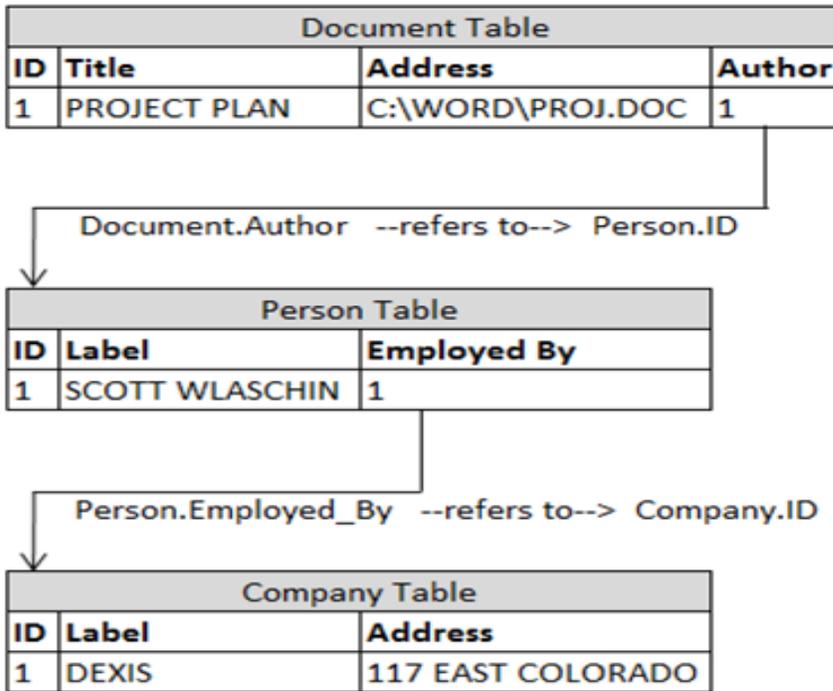
- A. Instead, claims allegedly relate to “a method for managing and distributing advertising content, which is not ‘a financial product or service’” under the relevant provision of the AIA
- III. Court: Citing previous legislative and PTO rulemaking analysis from *Versata*, the court reiterated that “the definition [of CBM [can]] be broadly interpreted to ‘encompass patents claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.’”
 - A. Invention involves the distributor of the content receiving a “subsidy,” which is financially-related. Thus, subject to CBM review
- IV. Blue Calypso alternatively asserted its claims “fall within the technological invention exception for CBM review because the claims are computer- based and contemplate hardware, software, a network, and communication devices.”
- V. Court (citing the C.F.R.): “a patent claims a technological invention if “the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art.”
 - A. Determined that “Blue Calypso has not pointed to any technological aspect in the claims that rises above the general and conventional.”
 - B. Thus, the “exception” does not apply

In re Smith (Federal Circuit, March, 2016)

- I. Invention relates to a wagering game using standard playing cards
- II. Not a surprise that the claims were found invalid under §101, but...
- III. In finding the claims directed to an “abstract idea” (Step 1 of *Mayo*), the court simply asserted that this was like “other ‘fundamental economic practice[s]’ found abstract by the Supreme Court.”
 - A. “[a] wagering game is, effectively, a method of exchanging and resolving financial obligations based on probabilities created during the distribution of the cards,” and the Fed. Cir. asserted that Alice stated that “a method of exchanging financial obligations was drawn to an abstract idea.”
 - B. This is how the scope of what is considered an abstract idea gets widened...
- IV. Claims also failed Step 2, since “[j]ust as the recitation of computer implementation fell short in *Alice*, shuffling and dealing a standard deck of cards are “purely conventional” activities.
- V. Interestingly, the court also stated that “We could envisage, for example, claims directed to conducting a game using a new or original deck of cards potentially surviving step two of *Alice*. The Government acknowledged as much during oral argument.”

Enfish LLC v. Microsoft (Fed. Cir. May 12, 2016)

- I. Background
 - A. Decided by Judges Hughes (author), Taranto and Moore
 - B. Enfish owns patents 6,151,604 and 6,163,775 directed to a logical model for a computer database (i.e., explaining how the various elements of information are related to one another).
 - C. All claims at issue were held invalid under summary judgment by C.D. Cal.
 - D. Contrary to conventional logical models, the patented model is “self-referential” and includes all data entities within a single table, with column definitions provided by rows in that same table.
 - 1. The standard “relational” database model, in contrast, provides that each entity (i.e., each type of thing) that is modeled is in a separate table.
- II. E.g., to indicate that Scott Wlaschin is the author of proj. doc and that he is employed by DEXIS, the relational model uses relationships as follows:



III. In contrast, the patented “self-referential” model 1) can store all entity types in a single table and 2) can define the table’s columns by rows in the same table:

SELF-REFERENTIAL TABLE						
ID	Type	Title	Label	Address	Employed By (#4)	Author
#1	DOCUMENT	PROJECT PLAN		C:\WORD\PROJ.DOC		#2
#2	PERSON		SCOTT WLASCHIN		#3	
#3	COMPANY		DEXIS	117 EAST COLORADO		
#4	FIELD		EMPLOYED BY			

IV. Advantages of “self-referential” model, according to the patent, include:

- A. Use of an indexing technique that allows for faster searching of data than would be possible with the relational model
- B. Allowing for more effective storage of data such as images and unstructured text
- C. Allowing for greater flexibility in configuring the database
 1. E.g., as a new attribute of information is encountered, a new “column could be added simply by inserting a new row of TYPE = “field” and LABEL = “<new attribute>”

V. Step 1 of Mayo test, discussed by Fed. Cir.

- A. Fed. Cir.: Alice “suggested that claims ‘purport[ing] to improve the functioning of the computer itself,’ . . . might not succumb to the abstract idea exception.”
 1. [Note: the Alice court mentioned this in the context of Step 2 rather than Step 1 of the Mayo test.]
- B. “We do not read Alice to broadly hold that all improvements in computer-related technology are inherently abstract and, therefore, must be considered at step two. . . . Software can make non-abstract improvements to computer technology just as hardware improvements can, . . . ”

- C. The court also asserted that here, “the plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.”
 - 1. Note: The invention doesn’t make the computer run faster per se, but allows a particular computer-related functionality (i.e., information storage and retrieval) to run faster/better/more flexibly, etc.
- VI. Improvement over existing “technology” is also key
 - A. “The specification also teaches that the self-referential table functions differently than conventional database structures.[] Moreover, our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification’s teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements.”
 - 1. Tip: Point out benefits and differences of invention from the prior art (but be mindful of KSR...)
- VII. “Physical components” not a requirement for patent eligibility
 - A. The court noted “Much of the advancement made in computer technology consists of improvements to software that, by their very nature, may not be defined by particular physical features but rather by logical structures and processes.
- VIII. The court also indicated “we are not persuaded that the invention’s ability to run on a general-purpose computer dooms the claims.”
- IX. “We find that the claims are not directed to an abstract idea”
 - A. Thus, the court did not consider Step 2 of Mayo.
- X. “In sum”: The invention “is a specific type of data structure designed to improve the way a computer stores and retrieves data in memory. The specification’s disparagement of conventional data structures, combined with language describing the ‘present invention’ as including the features that make up a self-referential table, confirm that our characterization of the ‘invention’ [is correct].”
 - 1. Helpful thoughts for software patents: 1) focus claims (and specification) on how it “improves” the operation of the “computer technology,” 2) “disparagement” of prior art can be helpful, but be mindful of KSR, and 3) “data structures” can indeed be patent-eligible

In Re TLI Communications Patent Litigation (Federal Circuit, May 17, 2016)

- I. Background
 - A. Before Dyk, Schall and Hughes (author)
 - B. Appealed from E.D. Va
 - C. The patented invention seeks to solve the problem of organizing a large number of digital images “by providing for recording [e.g. by a cell phone], administration and archiving of digital images simply, fast and in such way that the information therefore may be easily tracked.”
 - D. The defendants filed a motion to dismiss on the pleadings, which was granted
- II. Fed Cir: “On its face, representative claim 17 is drawn to the concept of classifying an image and storing the image based on its classification.”
- III. The court further added that “the specification’s emphasis that the present invention ‘relates to a method for recording, [etc., a] digital image’ underscores that claim 17 is directed to an abstract concept.”
 - A. [Does this mean that high-level statements in the specification about what the invention generally “relates” to are to weigh heavily upon what the invention is (as opposed to, e.g., the claims) for Sec. 101 purposes?]

- IV. The court also stated that “[t]he specification does not describe a new telephone, a new server, or a new physical combination of the two. The specification fails to provide any technical details for the tangible components, but instead predominately describes the system and methods in purely functional terms.”
 - A. However, Enfish states: “that the improvement is not defined by reference to ‘physical’ components does not doom the claims.” In addition, in Enfish, many technical details are described in functional terms. In fact, Enfish even states that “[m]uch of the advancement made in computer technology consists of improvements to software that, by their very nature, may not be defined by particular physical features but rather by logical structures and processes.”
- V. Though not stated clearly, perhaps what was at issue was the lack of description in the patent of the specific technology (software or otherwise) for how the improvement (i.e., enhanced speed) occurred.
 - A. Note: the court made comments such as “the server is described simply in terms of performing generic computer functions such as storing, receiving, and extracting data.”
 - 1. Thus, more details might have helped this invention be a patent-eligible “improved server,” and perhaps that’s the direction we should go for in our patent applications.
- VI. For Step 1 of the Mayo test, the court concluded that the claims “are simply directed to the abstract idea of classifying and storing digital images in an organized manner.”
- VII. For Step 2:
 - A. Simply found that the components involved conventional activities
- VIII. Claims thus found patent ineligible

Bascom Global Internet v. AT&T Mobility (Fed. Cir., June 2016)

- I. General background
 - A. Before Chen (author) Newman and O’Malley
 - B. Appeal from grant of motion to dismiss on the pleadings (12(b)(6))
- II. Technology
 - A. Generally relates to “filtering” website content requests by users
 - B. Allows the filtering for multiple users in an individualized manner to take place at a single server connected to the Internet
 - 1. Does this by requesting individual users to log into the ISP server
 - 2. Allegedly (per the patent) combines the advantages of prior systems having the filter on individual users’ computers (allowing customization for each user) with the convenient use of a centralized filtering location
 - C. Specification went into detail how the invention was advantageous over the prior art (Background about 1.5 columns)
- III. Federal Circuit determined “[t]he claims of the [patent at issue] are directed to filtering content on the Internet.”
 - A. The court quoted the claim’s preamble to make this assertion
 - B. The court also noted that the “specification reinforces this notion” of what the claim is directed to
 - 1. [The portion of the specification cited for this “reinforcement” is from a broad sentence within the Field of the Invention.]
- IV. Agreed with the district court that “filtering content is an abstract idea because it is a longstanding, well-known method of organizing human behavior, similar to concepts previously found to be abstract.”
- V. Thus, the court turned to step two (“the search for an ‘inventive concept’”) of the Mayo test
- VI. The court: “As is the case here, an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” (I.e., “claim as a whole”)

- VII. "The inventive concept described and claimed in the [current] patent is the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.
- VIII. In vacating the district court's order, the court concluded that "BASCOS has adequately alleged that the claims pass step two of Alice's two-part framework"
- IX. "[W]e find nothing on this record that refutes those allegations as a matter of law."

USPTO 11/2/16 Memorandum on Recent Decisions

- I. Addressed the BASCOM and McRO (below) decisions
- II. "These decisions do not change the basic subject matter eligibility framework explained in [prior] guidance and training examples, but provide additional information about finding eligibility for software claims."
- III. "Notable Point From BASCOM:"
- IV. In Step 2 of Mayo, "examiners should consider the additional elements in combination, as well as individually, when determining whether a claim as a whole amounts to significantly more, . . ." (Emphasis of "combination" in original)

Electric Power Group v. Alstom (Federal Circuit, August, 2016)

- I. General Background
 - A. Before Taranto (author) Bryson and Stoll
 - B. District court had granted defendant's (Alstom's) summary judgment that Electric Power's patents were patent ineligible. Numerous, lengthy claims.
- II. Technology
 - A. Patents relate to "real-time [] monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results."
- III. Fed. Cir. Holding
 - A. "Though lengthy and numerous, the claims do not go beyond requiring the collection, analysis, and display of available information in a particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology."
- IV. Fed. Cir.'s introduction to concepts
 - A. "Many of our opinions make clear that the two [Mayo] stages involve overlapping scrutiny of the content of the claims"
 - B. "There can be close questions about when the inquiry should proceed from the first stage to the second, Enfish"
 - C. "Reflecting those points, we have described the first-stage inquiry as looking at the 'focus' of the claims, their 'character as a whole,' and the second-stage inquiry (where reached) as looking more precisely at what the claim elements add—specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which (by assumption at stage two) the claim is directed."
- V. Mayo Step 1 analysis
 - A. Claims directed to an abstract idea: "The focus of the asserted claims [] is on collecting information, analyzing it, and displaying certain results of the collection and analysis."
 - B. "We have treated collecting information, including when limited to particular content [as an abstract idea, and] have treated analyzing information by steps people go through in their minds, or by

mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.”

- C. “And we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract...”
- D. “Here, the claims are clearly focused on the combination of those abstract-idea processes.”
- E. Claims here are purportedly unlike those in the Enfish decision
 - 1. In Enfish, “the claims at issue focused not on asserted advances in uses to which existing computer capabilities could be put, but on a specific improvement—a particular database technique—in how computers could carry out one of their basic functions of storage and retrieval of data.”
 - 2. “The present case is different: the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.”
 - a. [This quote still bodes toward arguing that things that allow for increased flexibility, faster search times, and smaller memory requirements (i.e., an improvement to computer technology) per Enfish, are patent eligible, and more specifically, arguably not even an “abstract idea” under step 1]

VI. Mayo Step 2 analysis

- A. “When we turn to stage two of the Alice analysis [we] scrutinize the claim elements more microscopically...”
- B. “Looking closely at the claims, we find nothing sufficient to remove the claims from the class of subject matter ineligible for patenting.”
 - 1. “Most obviously, limiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.”
 - 2. More particularly, “merely selecting information [and information sources available within a power grid] for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.”
 - 3. **Importantly for how the Federal circuit seemed to be drawing a line for what might otherwise have been patent eligible, “[t]he claims in this case do not even require a new source or type of information, or new techniques for analyzing it. [] As a result, they do not require an arguably inventive set of components or methods, such as measurement devices or techniques, that would generate new data. They do not invoke any assertedly inventive programming.”**
 - 4. **Also importantly in the same vein as above . . .**
 - 5. The claims at issue do not require any nonconventional computer, network, or display components, or even a ‘non-conventional and non generic arrangement of known, conventional pieces,’ but merely call for performance of the claimed information collection, analysis, and display functions “on a set of generic computer components” and display devices.
- C. “The claims in this case specify what information in the power-grid field it is desirable to gather, analyze, and display, including in “real time”; but they do not include any requirement for performing the claimed functions of gathering, analyzing, and displaying in real time by use of anything but entirely conventional, generic technology.”
- D. Court this found “The claims therefore do not state an arguably inventive concept,” i.e., they did not pass Step 2 of the Mayo analysis

- VII. District Court's summarizing framework for distinguishing patent-eligible subject matter as embraced by this Fed. Cir. panel:
- A. "[T]here is a critical difference between patenting a particular concrete solution to a problem and attempting to patent the abstract idea of a solution to the problem in general.' [The] asserted claims, the court observed, do the latter: rather than claiming 'some specific way of enabling a computer to monitor data from multiple sources across an electric power grid,' some 'particular implementation,' they 'purport to monopolize every potential solution to the problem'—any way of effectively monitoring multiple sources on a power grid."
 - B. The Fed. Cir. made a point of noting that the above description from the district court was not "a freestanding basis for its ineligibly holding independent of the [Supreme Court's framework], but found it a " helpful way of double-checking the application of the Supreme Court's framework to particular claims..."

TDE Petroleum v. AKM (Federal Circuit, August, 2016)

- I. Non-precedential opinion, but more clearly articulates a theme that other recent (precedential) decisions seem to be getting at
- II. Background
 - A. Judges: Lourie, Wallach and Hughes (author)
 - B. Affirmed dismissal of the suit on the pleadings under Sec. 101
 - C. Invention (per claim 1) determines "the state of an oil well drill" by receiving mechanical and hydraulic data from sensors (such as an RPM sensor), accepting only data within a range expected for valid data, and selecting "the state of the well operation" from a plurality of previously downloaded (possible) states.
- III. Step 1 of Mayo test:
 - A. The steps of claim 1 recite operations performed by any general-purpose computer.
 - B. "As we recently reiterated in [Electric Power v. Alstom], claims generally reciting 'collecting information, analyzing it, and displaying certain results of the collection and analysis' are 'a familiar class of claims directed to a patent ineligible concept.'"
 1. Court then noted claim 1 doesn't even have the displaying step
- IV. Step 2 of Mayo test:
 - A. "TDE does not and cannot argue that storing state values, receiving sensor data, validating sensor data, or determining a state based on sensor data is [] inventive.
 - B. "While the specification arguably provides specific embodiments for the step of "automatically selecting one of the states as the state of the well operation," claim 1 recites none of those details."
 1. [Therefore, it seems one needs more "details" in the claims to make it "inventive." Court seemed to want to know how it achieved the "goal of determining the state of an oil well function." (See below)]
 2. [Need to have more than what the court asserts is "nothing more than the goal..."]
- V. Step 2 of Mayo test (Cont):
 - A. "[T]he claims of the '812 patent recite the what of the invention, but none of the how that is necessary to turn the abstract idea into a patent-eligible application. See Electric Power."
 - B. In a footnote under its discussion of Step 2 of the Mayo test, the court noted that plaintiff "made no attempt in either its briefs or at oral argument to distinguish [the other] claims from representative claim 1.

1. [This implies that some of those other claims might have contained the “how” that the court was looking for.]
- C. Thus, different levels of how should be considered for at least the dependent claims, recognizing that there can be a fine line between how and what.

ITC case re: Creative Technologies Ltd. (August, 2016)

- I. Initial determination of the ITC found media player patent invalid under Section 101, and the proceedings were terminated
 - A. Patentee had previously settled with Apple under this patent for \$100M
- II. Proceedings terminated under ITC’s relatively new expedited 100 day pilot program
 - A. First time ITC had terminated an investigation under this program
 - B. Typical ITC proceeding takes over a year
- III. This initial determination is still subject to review by the full ITC

McRO, Inc. v. Namco Bandai Games America, Inc. (Fed. Cir., Sept. 2016)

- I. General background
 - A. Before Reyna (author), Taranto and Stoll
 - B. Appeal from grant of judgment on the pleadings
 - C. Many defendants
 - D. Oral argument was in December, 2015
 - II. Technology
 - A. Automatically animates lip synchronization and facial expressions of animated characters
 1. Automates the process of depicting animated characters’ mouths and changing facial expressions in relation to words they are to be saying
 2. Specific “rules” are used in this automation process that, from the record, were not used in the prior art
 - a. “One exemplary set of rules [] is for a character transitioning from silence through saying ‘hello.’”
 - III. The court: “The patents criticize the preexisting [] approach as ‘very tedious and time consuming, as well as inaccurate’
 - A. “In the prior art system, an animator would have to subjectively identify [a] problematic sequence and manually fix it by adding an appropriate keyframe.”
 1. Present invention does this through rules, making speech look more realistic
- Mayo Step 1: Claims are not directed to an abstract idea**
- IV. Claims at issue are “limited to rules with specific characteristics.”
 - V. Also, the rules did not embody “conventional activity”
 - A. “Defendants provided no evidence that the process previously used by animators is the same as the process required by the claims.”
 - B. The “how” was rather detailed here
 - VI. “While the result may not be tangible, there is nothing that requires a method “be tied to a machine or transform an article” to be patentable.”
 - VII. In conclusion: “The claim uses the limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice” and “therefore, is not directed to an abstract idea.”

- VIII. Court thus did not reach Step 2 of Mayo
- IX. Reversed and remanded

USPTO 11/2/16 Memorandum on Recent Decisions

- I. "Notable Points from McRO:"
 - A. "Examiners should consider the claim as a whole under [Step 1 of Mayo], and should not overgeneralize the claim or simplify it into its "gist" or core principles, when identifying a concept as a judicial exception."
 - B. An indication that a claim is directed to an improvement may include: "a particular solution to a problem or a particular way to achieve a desired outcome defined by the claimed invention, as opposed to merely claiming the idea of a solution or outcome"
 - 1. I.e., claim should be direct to "how," not "what." [Note: different judges read the spec into the claims to different degrees....]

Affinity Labs v. DirecTV (September, 2016)

- I. General Background
 - A. Before Bryson (author), Prost and Wallach
 - B. Appeal from grant of judgment on the pleadings
 - C. Many defendants
- II. Technology
 - A. "Claim 1 is directed to a broadcast system in which a cellular telephone located outside the range of a regional broadcaster:
 - 1. (1) requests and receives network-based content from the broadcaster via a streaming signal,
 - 2. (2) is configured to wirelessly download an application for performing those functions, and
 - 3. (3) contains a display that allows the user to select particular content."
- III. Step 1 of Mayo test
 - A. Court effectively chose a very broad concept as the one the invention was "directed to," making it directed to an "abstract idea."
 - 1. I.e., "[t]he concept of providing out-of-region access to regional broadcast content"
 - B. What really seemed to be driving the court's discontent was that the patent "claims the function of wirelessly communicating regional broadcast content to an out-of region recipient [i.e., the "idea"], not a particular way [i.e., the 'how'] of performing that function."
 - C. Court also emphasized that "the specification underscores the breadth and abstract nature of the idea embodied in the claims" such that "[e]ven if all the details contained in the specification were imported into the [] claims, the result would still [be abstract]."
 - a. "Nothing in the flow chart or the text of the specification provides any details regarding the manner in which the invention accomplishes the recited functions."
 - i. Thus, the specification seemed to also be a factor in the court's analysis.
 - ii. Helps to have the "how" in the specification – claims typically read in light of the specification
 - D. The court also "contrasted claims that are directed to an improvement in the functioning of a computer [e.g., Enfish] with [those] claims that "simply add[] conventional computer components.... without offering any technological means of effecting [the general] concept" of the invention, as was the case here.
 - E. Claims were thus deemed "focused on an abstract idea."
- IV. Step 2 of Mayo test

- A. "The [] patent does not provide an inventive solution to a problem in implementing the" idea of the invention, but simply recites it "will be implemented using the conventional components and functions generic to cellular telephones."
 - 1. Note: Court did not evaluate the claim as a whole
- B. The court also indicated that, even assuming the claim is novel, it "does not avoid the problem of abstractness," since the "essential advance" of the claim element through which novelty is discussed "is nothing but a functionally described display of information."
 - 1. Thus, court is determining what the gist of otherwise novel elements is....
 - 2. Again emphasized there was "no further specification of a particular technology [i.e., the "how"] for [implementing this element]"
- C. Comparing these claims to Bascom, the court stated "[t]he specificity of the technical solution provided by [those claims] stands in sharp contrast to the absence of any such specific technical solution in the claims of the [patent at issue]."
- D. In general, "claims that are 'so result-focused, so functional, as to effectively cover any solution to an identified problem' are frequently held ineligible under section 101."
 - 1. Court found that this is the case here. Claims thus held patent-ineligible under Section 101.

Intellectual Ventures v. Symantec (September, 2016)

- I. General Background
 - A. Before Dyk (author), Mayer and Stoll
 - B. 3 patents at issue
 - 1. Jury found all asserted claims valid under §§102 and 103
 - 2. Subsequently, defendant brought a motion that all three patents were invalid under §101 (issue not addressed by jury)
 - a. District Court found 2 of the patents invalid under §101, but not the third
 - b. Both parties appealed
- II. A) The two patents found invalid by district court under §101:
 - A. Relate to screening or routing e-mails according to some given criteria
 - B. Mayo Step 1: Federal Circuit focused on the existence of non-internet analogies to show they were directed to an abstract idea – patents were said to apply, e.g., "a well-known idea using generic computers"
 - 1. This panel did not focus on the "how" versus the "what" or the level of technical detail of the specification as previous panels had
 - C. Claims also resemble those previously deemed "abstract"
 - D. In Step 2 of Mayo test, Plaintiff asserted that the fact that the jury found the claims novel and non-obviousness is inconsistent with a determination that the claims are patent-ineligible.
 - 1. Court countered that "[t]he 'novelty' of any element or steps in a process [] is of no relevance in determining whether the subject matter of a claim falls within [§101]," citing *Diamond v. Diehr*.
 - a. But this quote from *Diehr* was to debunk the use of novelty in the 101 analysis used in the previous S. Ct. decision of *Parker v. Flook* and ultimately find *Diehr's* patent valid...
 - E. Specification of one of the patents and plaintiff's technical tutorial to the district court unwittingly emphasized how the patent is a close computer analogy of long-prevalent practices.
- III. B) The one patent found not invalid by district court under §101
 - A. Technology involves computer virus screening
 - B. Federal Circuit: Claim at issue "does not claim a new method of virus screening or improvements thereto" and therefore "constitutes an abstract idea" under Step 1 of Mayo

1. Court appears to be saying the claim is not novel (despite what the jury found...) and is therefore abstract.
- C. Regarding Step 2 of Mayo:
 1. Components recited in the claim relating to a telephone and "network elements" were deemed conventional.
 - a. Unfortunately, the specification appeared to bolster this by referring to such elements as "conventional."
- IV. Dissent by Judge Stoll regarding the third patent (held patent-eligible by D. Ct.):
 - A. The claim should have been held valid since it "constitutes an improvement of the network itself and, thus, focuses on improving computers as tools."
- V. Concurrence by Judge Mayer:
 - A. Patents constricting the essential channels of online communication [e.g., internet-related patents...] run afoul of the First Amendment
 - B. "All software implemented on a standard computer should be deemed categorically outside the bounds of section 101."

Synopsys v. Mentor Graphics (October, 2016)

- I. General Background
 - A. Before Chen (author), Lourie and Moore
 - B. Appeal from grant of summary judgment finding claims at issue invalid under Sec. 101
- II. Technology
 - A. Patent generally relates to translating a functional description of a logic circuit into a hardware component description of the logic circuit.
- III. Federal Circuit - Step 1 of Mayo:
 - A. The claimed inventions were ones that could be performed entirely by pencil and paper
 1. There were aspects of the invention that perhaps could not, but those aspects were not deemed to be found in the claims at issue
 - B. "[T]he claims do not call for the involvement of a computer. They therefore cannot be characterized as an improvement in a computer as a tool."
 1. While claimed inventions are arguably meant to be performed by a computer, "the asserted claims are not confined to that conception."
 2. However, the court added "we need not decide whether a computer- implemented version of the invention would not be 'directed to' an abstract idea."
 - C. "While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility" (Citing Ariosa)
 - D. Thus, the claim was directed to an abstract idea
 - E. Plaintiff asserts that the claims "contain an inventive concept because they were not shown to have been anticipated by (35 U.S.C. § 102) or obvious over (35 U.S.C. § 103) the prior art. [] That position misstates the law. It is true that 'the § 101 patent-eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap. [] But, a claim for a new abstract idea is still an abstract idea."
 1. Federal circuit then merely recited some of its previous case law where an "inventive concept" was found in Step 2 of Mayo without otherwise setting for significant guidance.
 - F. Thus, claim failed Step 2, and the claims were held invalid.

Amdocs (Israel) v. Openet (November, 2016)

- I. General Background
 - A. Before Plager (author), Newman and Reyna
 - B. Appeal from a granted motion for judgment on the pleadings that the patents at issue were not directed to patent eligible subject matter
- II. Technology
 - A. Patents generally relate to parts of a system designed to process large amounts of network accounting information (a problem faced by network service providers). In effect, it reduces congestion in network bottlenecks.
- III. Federal Circuit:
 - A. Looking at the claims in light of the specification, the court stated that the distributed data gathering that occurs in the system effectively reduces congestion in network bottlenecks but still allows the data to be accessible from a central location.
 1. In previous systems, all the network information flowed to one location, "making it very difficult to keep up with the massive record flows from the network devices and requiring huge databases.
 2. Thus "this claim entails an unconventional technological solution (enhancing data in a distributed fashion) to a technological problem (massive record flows which previously required massive databases)."
- IV. Step 1 of Mayo: Rather than grappling with attempting to find a suitable test or definition of "abstract idea," the majority believed that the appropriate "decisional mechanism" is to look at "earlier cases in which a similar or parallel descriptive nature can be seen [] and which way they were decided."
 - A. Emphasizes a possible strategy
- V. In examining previous decisions, the court determined that the claims were closer to BASCOM and DDR than to cases finding the claims patent-ineligible.
 - A. E.g., the patent emphasized the benefits of one of the claims at issue because of the "unconventional result" that it produced (a la DDR). [Tip: highlight unconventional results]
 - B. Reversed the district court's judgment that the claims of all 4 patents at issue were invalid under §101.
- VI. Judge Reyna (dissent)
 - A. "The majority avoids determining whether the asserted claims are directed to an abstract idea, or even identifying what the underlying abstract idea is."
 1. Contrary to the Supreme Court's direction in Alice
 2. He would have held the claims in 3 of the 4 patents patent-ineligible, and one of the patents patent-eligible