

**Patents on Computer-Implemented Methods and Systems:
The Supreme Court Grants Review (*CLS Bank*)
Background Developments and Comments**

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On December 6, 2013, the Supreme Court granted a petition for *certiorari*, filed by a patent owner, which presented the following question:

Whether claims to computer-implemented inventions—including claims to systems and machines, processes, and items of manufacture—are directed to patent-eligible subject matter within the meaning of 35 U.S.C. § 101 as interpreted by this Court. *Alice Corporation Pty. Ltd. v. CLS Bank International*.

That this question warrants Supreme Court deliberation in 2013 is startling and disgraceful. How can such uncertainty exist in the 21st century about so basic a question as the patentability of computer software? Computers, software, and disputes about intellectual property protection for programming have been around since the 1960s. The statute at issue (Section 101) is unchanged since 1952.

The responsibility lies squarely at the feet of the Supreme Court. Its confusing statements about the patenting of "abstract ideas" have trickled down to the lower courts, understandably causing disagreements among judges. Regrettably, the result is one of the most serious diseases that can infect the legal system: similar cases are decided differently based solely on the identities of the judges.

A review of recent case law developments beginning primarily with the Supreme Court's 2010 *Bilski* decision on the patent-eligibility of business methods, together with the details of the subject *CLS Bank* case, shows how dire the situation has become.

The following monograph is adapted from a soon-to-appear revision for CHISUM ON PATENTS Chapter 1 (Section 1.03[6][n]).

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1.0 Introduction: Developments After *Bilski* (2010)

In its 2010 *Bilski* (2010) decision,¹ the Supreme Court unanimously held that a particular business method was *not* "patent eligible" because it was an abstract idea. But the Court offered no general test for what constitutes an abstract idea.

This Treatise characterized *Bilski* as a "remarkably inconclusive contribution to the law on patent-eligible subject matter."²

Developments since *Bilski* validate that characterization.

Federal Circuit panel decisions ruled variously on patent claims to computer-implemented inventions, some upholding Section 101 challenges³ and some rejecting them.⁴

On October 9, 2012, the Federal Circuit granted rehearing en banc to resolve the apparent oscillation but, in *CLS Bank International v. Alice Corp. Pty.* (2013),⁵ the court split badly, arriving at no majority opinion and leaving in precedential force the prior array of panel decisions.

¹*Bilski v. Kappos*, 130 S. Ct. 3218 (2010), discussed CHISUM ON PATENTS § 1.03[6][m].

²CHISUM ON PATENTS § 1.03[6][m].

³*Bancorp Services LLC v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266 (Fed. Cir. 2012); *Fort Properties, Inc. v. American Master Lease LLC*, 671 F.3d 1317 (Fed. Cir. 2012); *DealerTrack, Inc. v. Huber*, 674 F.3d 1315 (Fed. Cir. 2012); *Classen Immunotherapies, Inc. v. Biogen Idec*, 659 F.3d 1057 (Fed. Cir. 2011) (as to claims requiring a physical step but not as to those not requiring that step); *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011).

⁴*CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341 (Fed. Cir. 2012), *vacated, reh'g en banc granted*, 484 Fed. Appx. 559 (Fed. Cir. 2012), *on rehearing en banc*, 717 F.3d 1269 (Fed. Cir. 2013), *cert. granted* ___ S. Ct. ___ (Dec. 6, 2013); *Classen Immunotherapies, Inc. v. Biogen Idec*, 659 F.3d 1057 (Fed. Cir. 2011) (as to claims requiring physical step but not as to those not requiring that step); *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323 (Fed. Cir. 2011); *Research Corp. Technologies, Inc. v. Microsoft Corp.*, 627 F.3d 859 (Fed. Cir. 2010).

⁵*CLS Bank International v. Alice Corp. Pty.*, 717 F.3d 1269 (2013) (en banc).

Not surprisingly, on December 6, 2013, the Supreme Court granted certiorari to review the *CLS* case.

2.0 Panel Decisions Up to *CLS Bank* (2013)

2.1. Point: *Research Corp.* (2010)

In a decision soon after *Bilski*, *Research Corp. Technologies, Inc. v. Microsoft Corp.* (2010),⁶ Chief Judge Rader took a restrictive view of the ban on claims to "abstract ideas," noting that:

(1) the Federal Circuit, like the Supreme Court, "will not presume to define 'abstract' beyond the recognition that this disqualifying characteristic should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act," and

(2) "inventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act."

Judge Rader added Section 112 provided "powerful tools to weed out claims that may present a vague or indefinite disclosure of the invention" and "a patent that presents a process sufficient to pass the coarse eligibility filter may nonetheless be invalid as indefinite."

In *Research Corp. Technologies*, the two patents at issue concerned "digital image halftoning," which used a "blue noise mask."

⁶Research Corp. Technologies, Inc. v. Microsoft Corp., 627 F.3d 859 (Fed. Cir. 2010).

⁷U.S. Pat. No. 5,111,310; U.S. Pat. No. 5,341,228.

The printing and display of a digital image entails use of patterns of dots that are black (for black-and-white imaging) or three (or four) colors (for color imaging). Halftoning entails using the dots (or limited number of colors) to simulate 256 shades of gray (or a full spectrum of colors). A method for generating (with a computer) halftone images is "thresholding" using a "mask." A mask has predetermined threshold numbers (typically 1 to 256), which do not relate to any image. Thresholding entails comparing the gray level of each pixel of an image against the corresponding threshold in the mask. If the gray level exceeds the threshold, the computer turns the pixel on (that is, it puts a "1" in the appropriate memory space). The result is a two-dimensional array (1s and 0s).

The prior art used various ways of measuring halftone quality. One way was by examining "dot profiles." A dot profile is the halftone produced as if the original image were a single gray shade and "is essentially a pattern of black dots on a white piece of paper." An image with a higher gray level results in more black dots. Dots occur at "high" (closely spaced) or "low" (less closely spaced) frequencies. To humans, dot profiles with few low frequencies are more visually pleasing. A "power spectrum" graphs "the relative frequency of dots in the dot profile at a particular gray level." A power spectrum's shape indicates the "noise" dot profiles exhibit. A "white noise" dot profile exhibits a power spectrum with approximately equal frequency components across the graph. A "blue noise" dot profile exhibits primarily high frequency components and negligible low frequency components.

The patents' named inventors developed a blue noise mask that was superior to "prior art blue noise masks" because it produced "higher quality halftone images while using less processor power and memory space." A figure in the '310 patent showed "an ideal blue noise power spectrum, which is unattainable in the real world." "The claimed blue noise mask has unique first and second order properties." To construct the claimed blue noise mask, a skilled person (1) created a dot profile corresponding to a 50% gray level, (2) sequentially created dot profiles for other gray levels by converting a given number of pixels in the prior level and (3) encoded the changes at every pixel level in a "cumulative array." "When all dot profiles are built, the cumulative array becomes the blue noise mask."

In an infringement suit, a district court held that the asserted claims of the '310 and '228 patents were invalid under Section 101. '310 patent claim 1 recited:

"A method for the halftoning of gray scale images by utilizing a pixel-by-pixel comparison of the image against a blue noise mask in which the blue noise mask is comprised of a random non-deterministic, non-white noise single valued function which is designed to produce visually pleasing dot profiles when thresholded at any level of said gray scale images."

'310 patent claim 2 and '228 patent claim 11 were directed to color images.

The Federal Circuit held that a district court erred in finding the asserted claims of the patent invalid under Section 101, noting that "the inventors do not purport to have invented laws of nature or physical phenomena," and that the subject matter of the claimed processes did not fail for abstractness. The invention had "functional and palpable applications" in computer technology. Some claims required hardware, such as film, memory and a display.

The claimed methods used "algorithms and formulas that control the masks and halftoning," but these "do not bring this invention even close to abstractness that would override the statutory categories and context."

2.2 Counterpoint: *Cybersource* (2011)

In *Cybersource Corp. v. Retail Decisions, Inc.* (2011),⁸ a panel, in an opinion by Judge Dyk, showed less hesitancy in applying Section 101's ban on claims to abstract ideas.

The patent in suit concerned detecting credit card fraud in internet transactions.⁹ Claim 3 was to a method. Claim 2 was a related "Beauregard" claim, that is, one to a computer readable storage medium containing program instructions for a computer to perform the same method as claim 3.¹⁰ Both claims

Judge Rader noted:

"Borrowing from the reasoning of the Supreme Court in *Diehr*, this court observes that the patentees here 'do not seek to patent a mathematical formula. Instead, they seek patent protection for a process of halftoning in computer applications. [450 U.S.] at 187. "Moreover, because the inventions claimed in the '310 and '228 patents are directed to patent-eligible subject matter, the process claims at issue, which claim aspects and applications of the same subject matter, are also patent-eligible."

⁸*Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 99 USPQ2d 1690 (Fed. Cir. 2011).

⁹U.S. Pat. No. 6,029,154.

¹⁰For a discussion of *Beauregard* (computer media) claims, see CHISUM ON PATENTS § 1.02[4][e].

were invalid for failure to recite Section 101 patent eligible subject matter because they encompassed purely mental steps, that is, the steps could be carried by a human, mentally or with the aid of pencil and paper. Mental steps fell within a "subcategory" of the Supreme Court's "abstract idea" exception to Section 101.¹¹

In *Cybersource*, Judge Dyk distinguished *Research Corp.* because, in that case, unlike this one, the claimed method could not be performed without use of a computer or machine.

"[I]n *Research Corp. Techs.* ..., we upheld the patentability of a claimed method 'for rendering a halftone image of a digital image by comparing, pixel by pixel, the digital image against a blue noise mask.' ... Because the method required the manipulation of computer data structures (e.g., the pixels of a digital image and a two-

As noted below, all the judges in *CLS Bank* treat similarly worded method claims and computer medium (*Beauregard*) as subject to the same Section 101 analysis.

¹¹The court noted that, in *Bilski*, the Supreme Court confirmed that the machine-or-transformation (MORT) test was a useful test for determining Section 101 patent eligible subject matter. However, the Court held that the test was not exclusive, and, for claims not meeting the MORT test, a court must determine whether any of the three exceptions required by Supreme Court precedent apply. Here, the "abstract idea" exception applied.

METHOD CLAIM. The method claim met neither prong of the MORT test. Merely collecting, organizing and comparing intangible data was not sufficient to meet the transformation prong. The claimed method was not performed using the internet. That the source of the data is the internet did not meet the machine prong.

The claimed method only required that information be gathered relating internet addresses associated with credit card transactions and then be used in an undefined way to determine the validity of a credit card transaction. The method could easily be carried out in the human mind, unaided or with a pencil and paper. Consequently, the method claim was to pure "mental steps," and within a "subcategory" of the "abstract idea" exception to Section 101, as articulated by Supreme Court precedent.

STORAGE MEDIUM. The storage medium (*Beauregard*) claim was merely to a software implementation of the purely mental method and, therefore, also fell outside Section 101. The claim met neither prong of the MORT test because, inter alia, it did not impose a "meaningful" limit on claim scope. Supreme Court precedent, including *Benson*, recognized that the apparatus claims could fall within the abstract idea exception.

dimensional array known as a mask) and the output of a modified computer data structure (a halftoned digital image), the method could not, as a practical matter, be performed entirely in a human's mind.

"In contrast, it is clear in the present case that one could mentally perform the fraud detection method that underlies both claims 2 and 3 of the '154 patent, as the method consists of only the general approach of obtaining information about credit card transactions utilizing an Internet address and then using that information in some undefined manner to determine if the credit card transaction is valid. Because claims 2 and 3 attempt to capture unpatentable mental processes (i.e., abstract ideas), they are invalid under § 101."

2.3 III Effects of Section 101 Challenges? *Classen* (2011)

In *Classen Immunotherapies, Inc. v. Biogen Idec* (2011),¹² three patents concerned infant immunization schedules.¹³ The panel majority held that claims that did not require a physical immunizing step were not patent eligible but those that did were.¹⁴

¹²*Classen Immunotherapies, Inc. v. Biogen Idec*, 659 F.3d 1057 (Fed. Cir. 2011).

¹³U.S. Pat. No. 6,638,739; U.S. Pat. No. 6,420,139; U.S. Pat. No. No. 5,723,283.

¹⁴The patents disclosed the named inventor's thesis that a schedule of immunizing infants for common infectious diseases, such as hepatitis B, can affect the risk of later occurrence of diseases such as diabetes. In particular, the inventor indicated that the risk was lower if the first immunization was within 42 days of birth. The patents' claims were to methods of, inter alia, screening and comparing different immunization schedules to identify a schedule with a lower risk of later development of chronic immune-mediated disorders. A district court held that all the representative asserted claims were invalid under Section 101 as for an "unpatentable natural phenomenon." On appeal, applying its 2008 en banc *Bilski* decision, *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), a Federal Circuit panel affirmed because the "machine-or-transformation" (MORT) test was not met. After the Supreme Court held in *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), that the MORT test was not exclusive, the Supreme Court remanded this case for reconsideration. On remand from the Supreme Court, in a majority opinion by Judge Newman, the panel held that claims in two patents ('739 and '139) were for patent eligible subject matter because, inter alia, they required in addition to screening and comparing a physical step of "immunizing" a subject according to the lower risk schedule. Claims of the third patent ('283) were *not* patent eligible because they did not require the physical immunizing step and were to

The case did not concern computer implementation, and its analysis may have been superseded by the subsequent Supreme Court decision on medical methods in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* (2012).¹⁵ Nevertheless, the case is notable for the additional opinions addressing approaches to Section 101.

In an "additional views" opinion, Judge Rader, joined by Judge Newman, argued that the Federal Circuit "should decline to accept invitations to restrict subject matter eligibility." He argued that eligibility restrictions had unintended and unfortunate consequences, including (1) engendering "a healthy dose of claim-drafting ingenuity" as attempts are made to use forms, such as "*Beauregard*" claims, to evade the restrictions, and (2) driving research funding to other countries with more "hospitable" patent policies.

Dissenting, Judge Moore argued that "the precise line to be drawn between patentable subject matter and abstract idea is quite elusive" but "this case is not even close": the patent owner claimed a "scientific method as applied to the field of immunization."

2.4 Re-Point (Twice): *Ultramercial* (2011) and *Ultramercial* (2013)

the idea of collecting and comparing information.

The Supreme Court's guidance in *Bilski* was that patent-eligibility exclusions should be "applied narrowly." As Justice Stevens noted in his concurrence, *Bilski* provided no "'satisfying account of what constitutes an unpatentable abstract idea.'"

Contrary to the dissent's arguments, the two sets of claims were not indistinguishable. In the '283 patent, the "immunizing" step was merely gathering published information on immunization schedules. In contrast, in the '139 and '739 patents, immunizing was "the physical implementation of the mental step claimed in the '283 patent."

¹⁵*Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), discussed CHISUM ON PATENTS § 1.03[2][f].

In *Ultramercial, LLC v. Hulu, LLC* (2011),¹⁶ the patent in suit concerned "a method for distributing copyrighted products (e.g., songs, movies, books) over the Internet where the consumer receives a copyrighted product for free in exchange for viewing an advertisement, and the advertiser pays for the copyrighted content."¹⁷

The Federal Circuit panel, in an opinion by Judge Rader, held the asserted claims eligible, relying on *Research Corp.*, distinguishing *Cybersource*, and stressing the amount of programming the claims required. The claimed "interaction with a consumer via an Internet website" was "something far removed from purely mental steps" and, therefore, distinguishable from those held invalid as "mental steps" in *CyberSource*. Judge Rader noted:

"Viewing the subject matter as a whole, the invention involves an extensive computer interface. This court does not define the level of programming complexity required before a computer-implemented method can be patent-eligible. Nor does this court hold that use of an Internet website to practice such a method is either necessary or sufficient in every case to satisfy § 101. This court simply find the claims here to be patent-eligible, in part because of these factors.

....

"[The patent] does not claim a mathematical algorithm, a series of purely mental steps, or any similarly abstract concept. It claims a particular method for collecting revenue from the distribution of media products over the Internet. In a recent case, this court discerned that an invention claimed an 'unpatentable mental process.'
CyberSource Corp. ... The eligibility exclusion for purely mental steps is particularly narrow. *See Prometheus Labs.*, 628 F.3d at 1358 (noting that claims must be considered as a whole and that 'the presence of mental steps [in a claim] does not detract from the patentability of [other] steps'). Unlike the claims in *CyberSource*, the

¹⁶*Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323 (Fed. Cir. 2011), *cert. granted, vacated and remanded sub nom. WildTangent v. Ultramercial, LLC, for reconsideration in light of Mayo Collaborative Services v. Prometheus Laboratories*, 132 S. Ct. 1289 (2012), 2012 U.S. LEXIS 3890 (2012), *aff'd on remand*, 722 F.3d 1335 (Fed. Cir. 2013).

¹⁷U.S. Pat. No. 7,346,545.

claims here require, among other things, controlled interaction with a consumer via an Internet website, something far removed from *purely* mental steps.

"In sum, as a practical application of the general concept of advertising as currency and an improvement to prior art technology, the claimed invention is not 'so manifestly abstract as to override the statutory language of section 101.' *Research Corp.*, 627 F.3d at 869."

In *Ultramercial*, the Supreme Court granted certiorari and remanded the case for reconsideration in light of *Mayo* (2012).¹⁸ Subsequent to the Federal Circuit's en banc *CLS Bank* decision discussed below, Judge Rader for the panel again upheld the claims against the Section 101 challenge with Judge Lourie writing a concurring opinion.¹⁹

2.5. 2012: Oscillating Panels Provoking En Banc Review

Oscillating panel decisions in 2012 led to the grant of en banc review in *CLS Bank*.

2.5.1. Section 101: First Resort? Last Resort?

The Federal Circuit judges debated not only the proper Section 101 standard for computer-implemented inventions but also the procedural question of when a court should address Section 101 when there are other grounds for potentially invalidating an asserted patent claim.²⁰ Should Section 101 be addressed only as a last resort? Or always first?

2.5.2. Emphasis on Claim Scope: *DealerTrack* (2012)

¹⁸*Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012).

¹⁹*Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335 (Fed. Cir. 2013), discussed below.

²⁰See *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250 (Fed. Cir. 2012), discussed below; *DealerTrack, Inc. v. Huber*, 674 F.3d 1315 (Fed. Cir. 2012), discussed below.

See also *Classen Immunotherapies, Inc. v. Biogen Idec*, 659 F.3d 1057 (Fed. Cir. 2011), discussed above (Rader, additional views).

In *DealerTrack, Inc. v. Huber* (2012),²¹ the two patents in suit concerned processing credit applications, which car dealers send to banks to finance customer car purchases.²² A district court granted summary judgment that the asserted claims of the first patent ('841) were not infringed. The panel held that the district court erred in construing the patent's claims. However, it held that the district court correctly held that the claims in the second patent ('427) were invalid under Section 101 as drawn to an abstract idea.

In an opinion by Judge Linn, the court held that, similar to the hedging claims held ineligible by the Supreme Court in *Bilski*, the claims were to the abstract idea of a clearinghouse, that is, receiving data from one source, selectively forwarding to another source, and forwarding reply data to the first source.

The claims did not become an application of an idea by the recital in the claim's preamble that the method steps were "computer-aided."²³ The claims did not specify how a computer aided the method: "the claims cover a clearinghouse process using any existing or future-devised machinery."

Judge Linn distinguished *Ultramercial*: there, the claims were to "a practical application with concrete steps requiring an extensive computer interface" Here, "the claims ... recite only that the method is 'computer aided' without specifying any level of involvement or detail."

That the patent's specification recited algorithms for carrying out the method did not save the claims: "In considering patent eligibility under § 101, one

²¹*DealerTrack, Inc. v. Huber*, 674 F.3d 1315 (Fed. Cir. 2012).

²²U.S. Pat. No. 6,587,841; U.S. Pat. No. 7,181,427.

²³For this proposition, Judge Linn relied on a pre-*Bilski* panel decision: "Simply adding a 'computer aided' limitation to a claim covering an abstract concept, without more, is insufficient to render the claim patent eligible. *See* [*SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319, 1333 (Fed. Cir. 2010)] ('In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.')."

must focus on the claims. This is because a claim may 'preempt' only that which the claims encompass, not what is disclosed but left unclaimed." A district court construed the claims as not limited to the algorithms, and the patent owner did not appeal that construction.

Comment: Judge Linn's opinions on Section 101 in the 2012-2013 time period consistently focus on claim construction and, in particular, whether a claim has been limited to specific implementation as set forth in a patent's specification. He carries forth this view to argue that the claims in the subsequent *CLS Bank* case, unlike those in *Dealer Track*, should be patent eligible because of a presumed narrow construction.

That the claims were limited to a car loan application process did not save the claims. "The notion of using a clearinghouse generally and using a clearinghouse specifically to apply for car loans, like the relationship between hedging and hedging in the energy market in *Bilski* ... is of no consequence without more."

In *DealerTrack*, Judge Plager dissented, arguing that a district court should always first address other grounds for potential invalidity of a patent, such as summary judgment based on obviousness, and "not foray into the jurisprudential morass of §101 unless absolutely necessary."

Judge Linn responded:

"With all due respect, the dissent's effort to define a more efficient judicial process, as laudable a goal as that may be, faces several obstacles. First, the Supreme Court characterizes patent eligibility under § 101 as a 'thresh-old test.' *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010) (*Bilski II*) ('The § 101 patent-eligibility inquiry is only a threshold test.')

"Second, the 'defenses provided in the statute,' § 282, include not only the 'conditions of patentability' in §§ 102 and 103, but also those in § 101. *See Aristocrat Techs. Austl. PTY Ltd. v. Int'l Game Tech.*, 543 F.3d 657, 661 (Fed. Cir. 2008) ('It has long been

understood that the Patent Act sets out the conditions for patentability in three sections: sections 101, 102, and 103.' (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966))). See also *Pa. Dep't of Corrs. v. Yeskey*, 524 U.S. 206, 212 (1998) ('The title of a statute ... cannot limit the plain meaning of the text. For interpretive purposes, it is of use only when it sheds light on some ambiguous word or phrase.' (quoting *Trainmen v. Baltimore & Ohio R.R. Co.*, 331 U.S. 519, 528-529 (1947))).

"Finally, the motion for summary judgment alluded to by the dissent was filed by [the patent owner], not [the accused infringers], and sought summary judgment of nonobviousness. In opposition, [the accused infringers] argued to the district court that summary judgment of obviousness was improper and that the issue should go to trial. Thus, the resolution of [the patent owner]'s motion would not have decided the case absent a *sua sponte* determination of obviousness as a matter of law."

2.5.3. Real Estate and Taxes: *Fort Properties* (2012)

In *Fort Properties, Inc. v. American Master Lease LLC* (2012),²⁴ the patent in suit concerned an investment tool.²⁵ The claims encompassed arranging real estate property into a "portfolio", dividing the portfolio into "deedshares," and arranging transactions so that they qualify as tax-free exchanges under Section 1031 of the Internal Revenue Code. The Federal Circuit, in an opinion by Judge Prost, affirmed a district court's summary judgment ruling the asserted claims were invalid under Section 101 as drawn to an abstract idea.

According to the court, the claims were similar to those held invalid by the Supreme Court in *Bilski*. The patent owner argued that the claims required "a series of steps to take place in the real world that involve real property, deeds, and contracts." It noted that deeds "are physical legal documents signifying real property ownership that must be publicly recorded." The court was not persuaded.

²⁴*Fort Properties, Inc. v. American Master Lease LLC*, 671 F.3d 1317 (Fed. Cir. 2012).

²⁵U.S. Pat. No. 6,292,788.

The claims in *Bilski* were not saved by similar "connections to the physical world" via commodities and money.

The court noted that Federal Circuit precedents similarly held claims to methods not patent-eligible even though they involved documents or recording actions. *Comiskey* (2009)²⁶ involved mandatory arbitration, which required use of unilateral and contractual documents. *Schrader* (1994)²⁷ involved recording bids in claimed auction method; writing bids on paper would satisfy the limitation. The claims "recite an abstract real estate investment tool. When viewing the claimed invention as a whole, the physical activities involving the deeds, contracts, and real property are insufficient to render these claims patentable."

Some of the patent's claims required that a computer generate the deedshares. However, simply adding computer usage to claims to an abstract concept did *not* save the claims. Like *DealerTrack*, the computer limitation did not "play a significant part in permitting the claimed method to be performed." Rather, the computer generated multiple deedshares. That was not a meaningful limitation. Unlike *Ultramercial*, the claims did not require complex programming or specific application to the internet.

2.5.4. Antecedent Question? *MySpace* (2012)

In *MySpace, Inc. v. GraphOn Corp.* (2012),²⁸ four patents concerned "a method and apparatus that allow a user to create, modify, and search for a database record over a computer network."²⁹

The Federal Circuit, in an opinion by Judge Plager, held that a district court did not err in granting summary judgment that the asserted claims were invalid for

²⁶*In re Comiskey*, 554 F.3d 967, 981 (Fed. Cir. 2009), discussed CHISUM ON PATENTS § 1.03[6][1][i].

²⁷*In re Schrader*, 22 F.3d 290, 291 (Fed. Cir. 1994), discussed § 1.03[6][i].

²⁸*MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250 (Fed. Cir. 2012).

²⁹U.S. Pat. 6,324,538; U.S. Pat. No. 6,850,940; U.S. Pat. No. 7,028,034; U.S. Pat. No. 7,269,591.

anticipation (Section 102) and obviousness (Section 103).

Judge Mayer dissented, arguing that "whether a claimed method meets the subject matter eligibility requirements contained in 35 U.S.C. § 101 is an 'antecedent question' that must be addressed before this court can consider whether particular claims are invalid as obvious or anticipated."³⁰

Judge Plager disagreed, arguing that any ruling on Section 101 involves a quest for a "universal truth" and adds to the confusing body of case law whereas as ruling based on obviousness or anticipation will usually be routine: "the proper course of action is the one that the trial court and the panel majority has followed: decide the case on the question of compliance with §§ 102 and 103 as Congress has instructed, and decline the dissent's invitation to put the parties and this court

³⁰Judge Mayer noted:

"This court must first resolve the issue of whether the GraphOn patents are directed to an unpatentable 'abstract idea' before proceeding to consider subordinate issues related to obviousness and anticipation. *See Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010) (noting that whether claims are directed to statutory subject matter is a 'threshold test'); *Parker v. Flook*, 437 U.S. 584, 593 (1978) (*Flook*) (emphasizing that '[t]he obligation to determine what type of discovery is sought to be patented' so as to determine whether it falls within the ambit of section 101 'must precede the determination of whether that discovery is, in fact, new or obvious'); *Comiskey*, 554 F.3d at 973 ('Only if the requirements of § 101 are satisfied is the inventor allowed to pass through to the other requirements for patentability, such as novelty under § 102 and ... non-obviousness under § 103.' (citations and internal quotation marks omitted))."

See also *WhitServe, LLC v. Computer Packages, Inc.*, 694 F.3d 10 (Fed. Cir. 2012) (Mayer, dissenting: "Section 101's prerequisites cannot be satisfied where, as here, a patentee simply describes a well-known concept and applies it using conventional computer technology and the Internet. ... " '[A] court may consider an issue antecedent to . . . and ultimately dispositive of the dispute before it, even an issue the parties fail to identify and brief.' *See U.S. Nat'l Bank v. Indep. Ins. Agents*, 508 U.S. 439, 447 (1993) (citations and internal quotation marks omitted)."; "It is appropriate to take up an issue not specifically raised by the parties where there have been significant changes in applicable law since the trial court's decision."); *Highmark, Inc. v. Allcare Health Management Systems, Inc.*, 687 F.3d 1300 (Fed. Cir. 2012) (Mayer, dissenting: "Where, as here, a patent describes an abstract idea, but discloses no new technology or "inventive concept," *Mayo*, 132 S. Ct. at 1294, for applying that idea, a robust application of section 101 at the summary judgment stage will save both courts and litigants years of needless litigation.").

in the swamp that is § 101 jurisprudence. Contrary to a dissent's argument, the court need not address whether the claims were invalid under Section 101 as for patent ineligible subject matter."³¹

³¹Judge Plager acknowledged that Judge Mayer's Section 101-first position was not unique: "one can find support for it, as the dissent notes, in the literature and in the language found in some cases." 672 F.3d at 1258. But "[o]ther voices ... urge judicial restraint in the face of what has become a plethora of opinions adding to our § 101 jurisprudence. [See, e.g., the additional views of C.J. Rader and J. Newman, in *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1073-1075 (Fed. Cir. 2011).]" 672 F.3d at 1258.

Judge Plager noted:

"Even assuming we could reach out for the § 101 issue without having it raised by the parties or decided by the trial court, there is an even more basic problem with the dissent's position. The problem with addressing § 101 initially every time it is presented as a defense is that the answer in each case requires the search for a universal truth: in the broad sweep of modern innovative technologies, does this invention fall outside the breadth of human endeavor that possibly can be patented under § 101?

....

"... Over the years courts have found dealing with 'laws of nature' and 'physical phenomena' reasonably manageable. Though hardly brightline,¹⁰ the standards that have emerged from the cases addressing these exceptions provide workable guidance. ...

"When it comes to explaining what is to be understood by 'abstract ideas' in terms that are something less than abstract, courts have been less successful. ... The effort has become particularly problematic in recent times when applied to that class of claimed inventions loosely described as business method patents. If indeterminacy of the law governing patents was a problem in the past, ... it surely is becoming an even greater problem now, as the current cases attest.

....

"Our opinions spend page after page revisiting our cases and those of the Supreme Court, and still we continue to disagree vigorously over what is or is not patentable subject matter. ...

"Beyond railing at the problem, there is the alternative that Congress has provided--a clear path for courts in deciding the question of patent validity. In section 282 of the Patent Act, Congress created a presumption of validity for an issued patent, and then specified the 'defenses in any action involving the validity

... of a patent.' These are 'any ground specified in part II of this title as a *condition of patentability*' (emphasis added), and 'failure to comply with any requirement of sections 112 or 251 of this title.' ... The two sections of part II that Congress has denominated as 'conditions of patentability' are § 102 ('novelty and loss of right to patent') and § 103 ('nonobvious subject matter').

"In each of sections 102, 103, and 112, the validity issue turns on whether one or more of the particular claims in the patent are rendered invalid by the specific criteria of the statutory section as applied to that claim. These criteria are well developed and generally well understood. ... In most cases when properly applied they will address the specifics of the case and decide that particular case, nothing more. No universal truths need be found that are necessarily applicable to the scope of patents generally, and in deciding the case the corpus of jurisprudence need not be expanded, contracted, redefined, or worse, become the source of yet more abstractions.

"Rather than taking the path the dissent urges, courts could avoid the swamp of verbiage that is § 101 by exercising their inherent power to control the processes of litigation, *Chambers v. NASCO, Inc.*, 501 U.S. 32, 43 (1991), and insist that litigants initially address patent invalidity issues in terms of the conditions of patentability defenses as the statute provides, specifically §§ 102, 103, and 112. If that were done in the typical patent case, litigation over the question of validity of the patent would be concluded under these provisions, and it would be unnecessary to enter the murky morass that is § 101 jurisprudence. This would make patent litigation more efficient, conserve judicial resources, and bring a degree of certainty to the interests of both patentees and their competitors in the marketplace.

....

"Adopting this practice would also preclude § 101 claims from becoming the next toss-in for every defendant's response to a patent infringement suit, particularly in business method litigation. We wrestled for years with the toss-in problem when defendants claimed "inequitable conduct" in just about every infringement case. Only recently did we finally fashion the stopper, which we hope will work. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011). ... We need not go through a similar exercise with § 101.

"Does this mean that § 101 can never be raised initially in a patent infringement suit? No. For one, in certain technology fields, and particularly when laws of nature or physical phenomena are the issue, efficiency may dictate applying the coarse filter of § 101 first to address legitimate questions of patent eligibility. *See, e.g. Ass'n for Molecular Pathology*, 653 F.3d 1329 (patentability

2.5.5. Inconsistent Results in Indistinguishable Decisions

Two decisions, rendered barely two weeks apart, *CLS Bank Int'l v. Alice Corp. Pty. Ltd.* (July 9, 2012),³² by Judge Linn joined by Judge O'Malley, and Judge Prost, dissenting, and *Bancorp Services LLC v. Sun Life Assurance Co. of Canada* (July 26, 2012)³³, by Judge Lourie, joined by Judges Prost and Wallach, involved similar Section 101 issues but reaching opposing conclusions.

This dualism undoubtedly provoked the Federal Circuit judges to grant rehearing en banc in *CLS Bank*.

2.5.5.1. Tweedle Dee: *CLS Bank* (Panel)

In *CLS Bank Int'l*, the four patents at issue concerned a computerized trading platform for exchanging obligations in which a trusted intermediary (third party) settles obligations of a first party and a second party to eliminate

of isolated DNA). Even when the patent invokes the abstractness issue, such as in a business method patent, if it is clear and convincing beyond peradventure—that is, under virtually any meaning of "abstract"—that the claim at issue is well over the line, then a case could be made for initially addressing the § 101 issue in the infringement context.

"But that latter patent would be a rather unusual and infrequent circumstance. More often, when the question of abstractness is presented in its usual abstract terms, the trial court could as a matter of case management summarily put aside the § 101 defense on whatever grounds seem applicable in the case. The litigants will then be left to address the invalidity defenses of §§ 102, 103, and 112, as the statute provides, and the litigants, the trial court, and this court on review would have some semblance of a chance at arriving at a predictable and understandable result."

³²*CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341 (Fed. Cir. 2012), *vacated, reh'g en banc granted*, 484 Fed. Appx. 559 (Fed. Cir. 2012), *on rehearing en banc*, 717 F.3d 1269 (Fed. Cir. 2013), cert. granted ___ S. Ct. ___ (Dec. 6, 2013).

³³*Bancorp Services LLC v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266 (Fed. Cir. 2012).

"settlement risk," that is, the risk that one party will not pay.³⁴ At issue were method claims, system claims (to a "data processing system"), and media claims (a "computer program product comprising a computer readable storage medium"). All the claims required, inter alia, "shadow" credit and debit records that are created and adjusted for each party. Applying the Supreme Court's decision in *Bilski*, a district court granted an accused infringer's motion for summary judgment that the asserted claims were invalid for failure to claim patent eligible subject matter.³⁵ The panel majority held that the district court erred because all the claims, expressly or construed in light of their specifications, required computer implementation and "it is difficult to conclude that the computer limitations here do not play a significant part in the performance of the invention or that the claims are not limited to a very specific application of the concept of using an intermediary to help consummate exchanges between parties."

In *CLS Bank*, Judge Prost dissented, arguing that "precedent and common sense counsel that the asserted patent claims are abstract ideas repackaged as methods and systems." Under "the Supreme Court's instructions on how the abstract idea test should be applied," "we must look beyond the non-inventive aspect of the claims and ask whether the remaining portion is an abstract idea."

2.5.5.1. Tweedle Dum: *Bankcorp. Services*

In *Bankcorp Services*, the two patents at issue ('792 and '037) concerned managing a stable value protected life insurance policy.³⁶ The policy had an investment component. A third party for a fee guarantees a book value for the policy regardless of market value. The patents disclosed formulae for determining values and computerized means for tracking book value and market value. At issue were method claims, computer-readable media claims, and system claims. The independent method claim recited seven steps and did not expressly recite implementation on a computer. A dependent claim required that the method steps be performed by a computer. The computer media claim recited the same seven

³⁴U.S. Pat. No. 5,970,479; U.S. Pat. No. 6,912,510; U.S. Pat. No. 7,149,720; U.S. Pat. No. 7,725,375.

³⁵*CLS Bank Int'l v. Alice Corp.*, 768 F. Supp. 2d 221 (D.D.C. 2011).

³⁶U.S. Pat. No. 5,926,792; U.S. Pat. No. 7,249,037.

steps. The system claim had elements closely corresponding to the seven steps.

In 2000, the patent owner, Bancorp., sued an accused infringer, Sun Life Assurance. In 2004, in a related case involving the method claim, the Federal Circuit reversed a district court holding that the claim was invalid for indefiniteness.³⁷ In 2008, the Federal Circuit reversed a summary judgment that the method claims was not infringed.³⁸ In 2011, applying the Supreme Court's decision in *Bilski*, the district court in the case on appeal granted an accused infringer's motion for summary judgment that the asserted claims were invalid for failure to claim patent eligible subject matter.³⁹

The Federal Circuit panel, in an opinion by Judge Lourie, who subsequently wrote for five of ten judges in the en banc *CLS* decision, held that the district court did not err in ruling that the claims were not distinguishable from those held invalid in *Bilski*. Judge Lourie distinguished the earlier *CLS Bank* panel decision. In this case, unlike in *CLS Bank*, the district court considered all the claim limitations as a whole and concluded that the computer limitations did not play a "significant part" in the claimed invention's performance. Unlike in *CLS Bank*, the claims were "not directed to a 'very specific application' of the inventive concept." Instead, the patent owner sought "to broadly claim the unpatentable abstract concept of managing a stable value protected life insurance policy."

The district court declined to construe the many claim terms that the patent owner and accused infringer disputed. Judge Lourie noted that "claim construction is not an inviolable prerequisite to a validity determination under § 101," but "will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." As noted in *Ultramercial*, there is no "bright line" rule that a court must construe claims before determining Section 101 subject matter eligibility. In *Bilski*, the Supreme Court did not construe the claims that it invalidated. The dispute

³⁷Bancorp Servs., L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367 (Fed. Cir. 2004).

³⁸Metro. Life Ins. Co. v. Bancorp Servs., L.L.C., 527 F.3d 1330 (Fed. Cir. 2008).

³⁹Bancorp Servs., L.L.C. v. Sun Life Assurance Co., 771 F. Supp. 2d 1054, 1056 (E.D. Mo. 2011).

pertinent to the Section 101 issue is "whether the claimed systems and methods required a computer." The Federal Circuit can resolve that issue without a remand because claim construction is a question of law.

On the system claims, their plain language required a computing device because the claims recite particular computing devices, such as a generator, calculator and "digital storage." The specification supported that construction because the illustrative embodiment depicted a computer system. The computer media claims recited "high density removable storage means" and carried their ordinary meaning.

The parties disputed whether the method claims required computer implementation. However, the claim differentiation doctrine created a presumption that the independent claims not be construed as limited to computer performance because the dependent claims expressly added it as a limitation (that is, "performed by a computer").⁴⁰ The patent owner argued that computer implementation was "inherent" in the method claim, but this did not rebut the presumption. It would be "inefficient" to track, reconcile and administer a life insurance policy with a stable investment component manually, but it could be done.

In *Bankcorp.*, the panel held that the system and computer medium claims in this patent were equivalent to the method claims for purposes of Section 101 patent eligibility.⁴¹ The computer media claims recited the same steps as the

⁴⁰For a discussion of claim differentiation, see CHISUM ON PATENTS § § 18.03[6].

⁴¹Judge Lourie noted:

"Previously sitting *en banc*, we declined in *In re Alappat* to decide whether a claimed apparatus could be unpatentably abstract under § 101. Referring to the abstract-idea exception as the 'mathematical' exception, we stated: '*Even if the mathematical subject matter exception to § 101 does apply to true apparatus claims, the claimed subject matter in this case does not fall within that exception.*' 33 F.3d 1526, 1542 (Fed. Cir. 1994) (*en banc*) (emphasis added). Subsequently, however, we explained in *CyberSource Corp. v. Retail Decisions, Inc.* that we look not just to the type of claim but also 'to the underlying invention for patent-eligibility purposes.' 654 F.3d 1366, 1374 (Fed. Cir. 2011). We applied that principle in concluding that a claim directed to a 'computer readable medium,'

method claims. Likewise, the system claims differed from the method claims only in form, reciting, for example, "a credit calculator for calculating credits" instead of "calculating credits."

despite its format, should be treated no differently from the comparable process claims held to be patent ineligible under § 101. *Id.* at 1375. Most recently, in *CLS Bank International v. Alice Corp.*, we held that the format of the various method, system, and media claims asserted in that case 'd[id] not change the patent eligibility analysis under § 101.' 685 F.3d 1341 (Fed. Cir. July 9, 2012).

"Thus, under *Cybersource* and *CLS*, a machine, system, medium, or the like may in some cases be equivalent to an abstract mental process for purposes of patent ineligibility. As the Supreme Court has explained, the form of the claims should not trump basic issues of patentability. *See Flook*, 437 U.S. at 593 (advising against a rigid reading of § 101 that 'would make the determination of patentable subject matter depend simply on the draftsman's art'); *see also Mayo*, 132 S. Ct. at 1294.

"On the facts of this case, we hold that the district court correctly treated the asserted system and medium claims as no different from the asserted method claims for patent eligibility purposes. For example, in the '037 patent, method claim 9 recites a 'method for managing a life insurance policy comprising' seven steps, whereas medium claim 18 recites 'a computer readable media [sic] for controlling a computer to perform' the same seven steps of method claim 9, repeated word for word. *Compare* '037 patent col.16 ll.31-48, *with id.* col.17 ll.33-50. There is no material difference between these two categories of claims in the asserted patents.

"The equivalence of the asserted method and system claims is also readily apparent. By way of example, we compare method claim 9 and system claim 1 of the '037 patent. *Id.* col.15 ll.28-48, col.16 ll.31-48. Claim 9 claims a 'method for managing a life insurance policy,' whereas claim 1 of that patent claims 'a life insurance policy management system.' Claim 9 includes the step of 'generating a life insurance policy,' whereas claim 1 includes 'a policy generator for generating a life insurance policy.' Claim 9 includes the step of 'calculating fees,' while claim 1 including 'a fee calculator for calculating fees.' Claim 9 recites 'calculating credits,' while claim 1 recites 'a credit calculator for calculating credits.' Claim 9 includes 'storing the policy unit value,' whereas claim 1 includes 'digital storage for storing the policy unit value.' And so on. The only difference between the claims is the form in which they were drafted. The district court correctly treated the system and method claims at issue in this case as equivalent for purposes of patent eligibility under § 101."

The panel held that the claims covered "no more than abstract ideas." The patent owner's arguments to the contrary were unpersuasive.

First, the patent owner argued that a claim limited to being performed on a computer cannot be an abstract idea. This failed:

"Modern computer technology offers immense capabilities and a broad range of utilities, much of which embodies significant advances that reside firmly in the category of patent-eligible subject matter. At its most basic, however, a 'computer' is 'an automatic electronic device for performing mathematical or logical operations.' 3 Oxford English Dictionary 640 (2d ed. 1989). As the Supreme Court has explained, '[a] digital computer ... operates on data expressed in digits, solving a problem by doing arithmetic as a person would do it by head and hand.' *Benson*, 409 U.S. at 65. Indeed, prior to the information age, a 'computer' was not a machine at all; rather, it was a job title: 'a person employed to make calculations.' Oxford English Dictionary, *supra*. Those meanings conveniently illustrate the interchangeability of certain mental processes and basic digital computation, and help explain why the use of a computer in an otherwise patent ineligible process for no more than its most basic function--making calculations or computations--fails to circumvent the prohibition against patenting abstract ideas and mental processes. As we have explained, '[s]imply adding a "computer aided" limitation to a claim covering an abstract concept, without more, is insufficient to render the claim patent eligible.'" *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).

"To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not."

In this case, the claims required using a computer "only for its most basic function, the repetitive calculations, and as such does not impose meaningful limits" on the claims' scope.

As noted in *Bilski*, the machine-or-transformation (MORT) test is an

important "clue" to Section 101 patent eligibility. The claims met neither prong.

As the "principal precedent" for its argument, the patent owner relied on *Research Corp. Techs.*, discussed above. Judge Lourie distinguished *Research Corp.* as involving improvements in computer technology. The method required the manipulation of data that was dependent on computer components. In contrast, in the method in *Bancorp.*, a computer was used merely to accelerate calculations that could be performed by a human mentally. Putting aside the "insignificant computer-based limitations," the claims required only determining specified values, such as an initial value and a policy value, and then storing, removing and accumulating the values. The determination and manipulation of values were matters "of mere mathematical computation." Thus, the claims impermissibly preempted the "mathematical concept of managing a stable value protected life insurance policy."

Second, the patent owner argued that its claims were limited to the life insurance market and, therefore, were not abstract ideas. *Bilski* rejected a similar argument.

Third, the patent owner argued that its claims did not preempt the idea of stable value protected life insurance policies because the accused infringer contended that its policies did not infringe. The argument was "creative" but "unpersuasive." Under court rules, an infringer may "plead in the alternative."

3.0 Federal Circuit's En Banc *CLS Bank* (2013)

In *CLS Bank Int'l*, discussed above, a divided Federal Circuit panel rejected accused infringers' Section 101 challenge to a patent owner's asserted claims, which concerned methods, computer media and systems for reducing "settlement risk." The accused infringers petitioned the Federal Circuit for rehearing in banc.

On October 9, 2012, the court granted the petition. In granting review, the Federal Circuit requested briefing on two questions:

"a. What test should the court adopt to determine whether a computer-implemented invention is a patent ineligible 'abstract idea'; and when, if ever, does the presence of a computer in a claim lend

patent eligibility to an otherwise patent-ineligible idea?

"b. In assessing patent eligibility under 35 U.S.C. § 101 of a computer-implemented invention, should it matter whether the invention is claimed as a method, system, or storage medium; and should such claims at times be considered equivalent for § 101 purposes?"

On May 10, 2013, the Federal Circuit handed down its anticipated decision, which consisted of a short, conclusory "per curiam." The entire text of that per curiam is as follows:

"Upon consideration en banc, a majority of the court affirms the district court's holding that the asserted method and computer-readable media claims are not directed to eligible subject matter under 35 U.S.C. § 101. An equally divided court affirms the district court's holding that the asserted system claims are not directed to eligible subject matter under that statute."

The per curiam opinion was followed by *six* opinions (two by Chief Judge Rader, one each by Judges Lourie, Moore, Newman and Linn).

The Federal Circuit's decision was stunningly inconclusive. Indeed, even the most creative or devious-minded law professor would have been hard-pressed to concoct a vote pattern and set of rationales as complex and indecisive.

In terms of the end result, a majority of seven of the ten judges agreed that the method and computer media claims were unpatentable as abstract ideas. No opinion explaining the rationale for that holding garnered a majority. On the system claims, the judges split five to five. That split resulted in the district court judgment, which invalidated the system claims, being affirmed.

Coming closest to a majority was Judge Lourie's opinion for five of the ten judges, which argued that all the claims were ineligible and, thus, invalid. Judge Rader's opinion for four judges argued that the system claims were patent eligible. It also argued that the method and media claims were invalid but adopted a narrower interpretation of the abstract idea exception. Two of the four judges

declined to join that portion of Judge Rader's opinion, arguing along with Judge Newman that all the claims were eligible.

A month after *CLS Bank*, on June 13, 2013, in *Association for Molecular Pathology v. Myriad Genetics, Inc.* (2013),⁴² the Supreme Court handed down its unanimous opinion concerning the Section 101 "exception" as applied to isolated DNA and cDNA as a "composition of matter." *AMP* did not address, directly, the "abstract idea" prong of the exception or the patent eligibility of computer-implemented inventions. However, an argument can be framed that *AMP* moved the law away from treating the three exclusions (abstract idea, principle of nature, and phenomenon of nature) as distinctly defined exceptions and toward being facets of the definitions in Section 101, including "process" and "composition of matter."

3.1 Background: Why? Ambiguity from *Bilski* and *Mayo*

The reason for the ugly division among the Federal Circuit judges in *CLS Bank* was rather clear: it was the imponderables in the Supreme Court's decisions in *Bilski* (2010)⁴³ and *Mayo* (2012).⁴⁴ Thus, in fairness to the Federal Circuit's judges, a large part of the blame for the uncertainty the division instilled should have been placed largely at the doorstep of the Supreme Court.

Factually, the claimed invention in *CLS Bank* resembled that in *Bilski*. Both involving financial transactions and the reduction of risk, either through hedging, as in *Bilski*, or use of a third-party intermediary to settle transactions, as in *CLS Bank*. In *Bilski*, the nine Supreme Court justices agreed that the method claims at issue were within the "abstract idea" exception to Section 101 recognized in prior Supreme Court decisions. However, the justices were divided on the rationale and scope of the exception, especially as applied to business methods and software. Thus, the Court offered little more than the conclusion: these claims are invalid as

⁴²*Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013), discussed CHISUM ON PATENTS § 1.02[7][e].

⁴³*Bilski v. Kappos*, 130 S. Ct. 3218 (2010), discussed CHISUM ON PATENTS § 1.03[6][m].

⁴⁴*Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), discussed CHISUM ON PATENTS § 1.03[2][f].

preempting an abstract idea (hedging).

The holding of *Bilski* was not directly controlling in *CLS Bank* because the claims at issue in *Bilski* were method claims not limited to computer implementation whereas the claims at issue in *CLS Bank* were method claims limited to computer implementation, system claims, and computer media claims.

The subsequent *Mayo* decision involved an invention that was factually very different from that in *CLS Bank*, to wit, a method of correlating the level of the metabolites of a drug in a patient's blood and the drug's efficacy and toxicity, and another "exception," to wit, that for a "law of nature." Yet, unlike *Bilski*, the Supreme Court justices issued a unanimous decision by Justice Breyer, which set forth an analytic framework stated to be applicable generally to the Section 101 exceptions, including that regarding abstract ideas.

The *Mayo* framework required three determinations: (1) whether a claim is drawn to a law of nature, natural phenomenon, or abstract idea, (2) whether the claim adds steps that are more than "well-understood, routine, conventional activity previously engaged in by researchers in the field,"⁴⁵ and (3) whether the claim "risk[s] disproportionately tying up the use of the underlying natural laws, inhibiting their use in the making of further discoveries."⁴⁶

A source of debate and dispute among the judges in the *CLS Bank* opinions was the meaning of the following language in *Mayo* regarding "preemption" and "inventive concept."

"[Supreme Court precedents] warn us against interpreting patent statutes in ways that make patent eligibility 'depend simply on the draftsman's art' without reference to the 'principles underlying the prohibition against patents for [natural laws].'*Flook*, [437 U.S.] at 593. They warn us against upholding patents that claim processes that too broadly preempt the use of a natural law. *Morse*, [56 U.S.] at 112-120; *Benson*, [409 U.S.] at 71-72. And they insist that a process

⁴⁵132 S. Ct. at 1294.

⁴⁶132 S. Ct. at 1294.

that focuses upon the use of a natural law also contain other elements or a combination of elements, sometimes referred to as an 'inventive concept,' sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself. *Flook*, supra, at 594; see also *Bilski*, supra, at ____, 130 S. Ct. 3218, 3225, ([T]he prohibition against patenting abstract ideas "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment" or adding "insignificant post solution activity" ' (quoting *Diehr*, supra, at 191-192))."⁴⁷

3.2. The Patents: Reducing Settlement Risk

Four patents at issue in *CLS Bank* concerned a computer-implemented system and method for reducing "settlement risk" that arises from trades between two parties where there is a time gap between a trade and the settlement by transfer between the parties' financial ("exchange") institutions (such as banks).⁴⁸

The '479 patent had a 1993 filing date and claims priority to a 1992 Australian application. The '510 and '375 patents also claimed priority to the 1992 application. The '720 patent claimed priority to a 1994 application.

The system used an intermediary ("supervisory") institution, which kept "shadow" records of each party's "real-world" accounts and periodically authorized transfers. The system was a version of a classical "escrow."

The patents set forth detailed flow charts and algorithms for carrying out various functions.

The asserted claims included claims 33 and 34 of the '479 patent and all claims of the '510, '720, and '375 patents. Set forth in full in the margin are the claims of the three types considered in the Lourie opinion as representative:

⁴⁷132 S. Ct. at 1294.

⁴⁸U.S. Pat. No. 5,970,479; U.S. Pat. No. 6,912,510; U.S. Pat. No. 7,149,720; U.S. Pat. No. 7,725,375.

(1) method claim 1 from the '479 patent,⁴⁹

(2) computer media claim 39 of the '375 patent,⁵⁰

⁴⁹Method claim 33 of the '479 patent recites:

"33. A method of exchanging obligations as between parties, each party holding a credit record and a debit record with an exchange institution, the credit records and debit records for exchange of predetermined obligations, the method comprising the steps of:

(a) creating a shadow credit record and a shadow debit record for each stakeholder party to be held independently by a supervisory institution from the exchange institutions;

(b) obtaining from each exchange institution a start-of-day balance for each shadow credit record and shadow debit record;

(c) for every transaction resulting in an exchange obligation, the supervisory institution adjusting each respective party's shadow credit record or shadow debit record, allowing only these transactions that do not result in the value of the shadow debit record being less than the value of the shadow credit record at any time, each said adjustment taking place in chronological order; and

(d) at the end-of-day, the supervisory institution instructing ones of the exchange institutions to exchange credits or debits to the credit record and debit record of the respective parties in accordance with the adjustments of the said permitted transactions, the credits and debits being irrevocable, time invariant obligations placed on the exchange institutions."

⁵⁰Computer media claim 39 of the '375 patent recites:

"39. A computer program product comprising a computer readable storage medium having computer readable program code embodied in the medium for use by a party to exchange an obligation between a first party and a second party, the computer program product comprising:

program code for causing a computer to send a transaction from said first party relating to an exchange obligation arising from a currency exchange transaction between said first party and said second party; and

program code for causing a computer to allow viewing of information relating to processing, by a supervisory institution, of said exchange obligation, wherein said processing includes

(1) maintaining information about a first account for the first party, independent from a second account maintained by a first exchange institution, and information about a third account for the second party, independent from a fourth account maintained by a second exchange institution;

(3) system claim 1 of the '720 patent.⁵¹

3.3 The Suit

CLS Bank brought a suit against the patent owner, Alice Corp., for a declaratory judgment that the patents were invalid or not infringed. The patent owner counterclaimed for infringement.

After the *Bilski* decision in 2010, the accused infringer renewed a prior motion for summary judgment that the asserted claims were invalid under Section 101.

(2) electronically adjusting said first account and said third account, in order to effect an exchange obligation arising from said transaction between said first party and said second party, after ensuring that said first party and/or said second party have adequate value in said first account and/or said third account, respectively; and

(3) generating an instruction to said first exchange institution and/or said second exchange institution to adjust said second account and/or said fourth account in accordance with the adjustment of said first account and/or said third account, wherein said instruction being an irrevocable, time invariant obligation placed on said first exchange institution and/or said second exchange institution."

⁵¹System claim 1 of the '720 patent recites:

"1. A data processing system to enable the exchange of an obligation between parties, the system comprising:

a data storage unit having stored therein information about a shadow credit record and shadow debit record for a party, independent from a credit record and debit record maintained by an exchange institution; and

a computer, coupled to said data storage unit, that is configured to

(a) receive a transaction;

(b) electronically adjust said shadow credit record and/or said shadow debit record in order to effect an exchange obligation arising from said transaction, allowing only those transactions that do not result in a value of said shadow debit record being less than a value of said shadow credit record; and

(c) generate an instruction to said exchange institution at the end of a period of time to adjust said credit record and/or said debit record in accordance with the adjustment of said shadow credit record and/or said shadow debit record, wherein said instruction being an irrevocable, time invariant obligation placed on said exchange institution."

The patent owner responded by submitting, inter alia, an expert declaration in which the expert explained the operation of the patent owner's system and opined that, based on the patents' specification and prosecution history, a person of ordinary skill in the art would interpret the asserted claims, including the method claims, as requiring electronic implementation using a computing processor and memory.

The district court did not engage in a formal claim construction, but it noted that "the parties agreed for purposes of deciding their summary judgment motions that Alice's claims should all be interpreted to require a computer including at least 'a processor and memory.'" ⁵²

The district court granted summary judgment that all the claims were invalid. It concluded that (1) the method claims were to an abstract idea, to wit, "employing an intermediary to facilitate simultaneous exchange of obligations in order to minimize risk," (2) the system claims would "preempt the use of the abstract concept" on any computer, and (3) the computer media claims were to the same abstract concept despite being, nominally, to a device rather than a method.

3.4 Summary of Positions on Types of Claims

Based on the individual opinions described below, the judges divided on the three types of claims as follows.

3.4.1. Method Claims

For the method claims, a Lourie group (Judges Lourie, Dyk, Prost, Reyna and Wallach) plus two other judges (Judges Rader and Moore) voted to affirm the district court's invalidation. That yielded a majority of seven out of the ten judges.

Judges Linn and O'Malley dissented, arguing that all the claims, including the method claims were eligible based on the narrow claim construction put forth by the patent owner, which limited the claims to the specific computer implementation reflected in the system claims.

⁵²CLS Bank Int'l v. Alice Corp., 768 F. Supp. 2d 221, 236 (D. D.C. 2011), *aff'd in part & aff'd in part by equally divided court*, 717 F.3d 1269 (Fed. Cir. 2013 (en banc)).

Judge Newman in a separate opinion argued that all the claims were eligible and urged that the exceptions to Section 101 could justifiably be eliminated entirely if the court clarified that patents do not preclude experimentation use, such preclusion being the concern of the Supreme Court in *Mayo*.

Finally, Judge Rader, in an additional opinion, argued that the Supreme Court should return to the plain language of the statute (Section 101), which admitted of no exceptions, and should allow the more clearly and predictably interpreted statutory conditions of patentability (Sections 102, 103, and 112) to filter out inappropriately abstract claims.

3.4.2. Interpreting *Mayo*: The Lourie-Rader Debate

In their separate opinions, Judges Lourie and Rader differed sharply on the rationale for invalidating the method claims, based on their differing interpretations of the Supreme Court's *Mayo* framework.

The differing interpretations focused primarily on the *Mayo* requirement that a claim reciting an abstract idea contain an "additional", meaningful step so that the claim does not "preempt" all practical uses of the idea.

Judge Lourie's standard for an additional step was that it entail a "genuine human contribution to the claimed subject matter." That stemmed, in part, from *Mayo*'s reference to an "inventive concept."

On the other hand, Judge Rader's standard credited an additional claim step if it is beyond what the idea inherently requires.

Thus, presumably, more types of steps would be sufficient to establish eligibility under the Rader standard than under the Lourie standard.

3.4.3. Is Computer Implementation as Sufficient Additional Step under *Mayo*?

A specific point of disagreement between Judges Lourie and Rader was whether a step or element of computer implementation was a sufficient additional step, Judge Lourie contending that adding a computer that performs operations a

human could do only faster and more accurately would not suffice, Judge Rader disagreeing.

3.4.4. System Claims: Equal Division

For the system claims, the five member Lourie group voted to affirm. The other five judges dissented. That yielded an equally-divided court (five to five).

As stated by the Per Curiam opinion, the equal vote resulted in the district court's decision being affirmed.⁵³ Thus, the judgment that all the asserted claims are invalid under Section 101 was affirmed.

In his opinion for five judges, Judge Lourie noted that all types of claims are subject to the same eligibility analysis. Here, the system claims employed terminology that differed from the method claims only in minor ways. Thus, the system implicated an abstract idea. The added recited hardware components, to wit, a computer, data storage, and a communications controller, were described only generally as capable of performing the same functions as for carrying out the abstract method. In Judge Lourie's view, the 1994 en banc *Alappat* decision,⁵⁴ which upheld the eligibility of a claim to a computer system programmed to carry out functions, had been superseded by the Supreme Court's subsequent *Bilski* and *Mayo* decisions.

In his opinion for four judges, Judge Rader would hold the system claims eligible. They recited structural components configured to carry out specific requirements. The patents provided detailed algorithms for software to program the hardware. The limitations were not inherent in an escrow. Nor were they shown to be conventional as of the patents' filing dates in the early 1990s. Thus, the claims were indistinguishable from the computer system claims upheld by the Supreme Court in *Diehr* and the Federal Circuit in *Alappat*.

In her separate opinion, Judge Newman would also hold the system claims

⁵³For another decision in which the Federal Circuit divided equally, see *Marine Polymer Technologies, Inc. v. Hemcon, Inc.*, 672 F.3d 1350 (Fed. Cir. 2012) (en banc).

⁵⁴*In re Alappat*, 33 F.3d 1526, 31 USPQ 1545 (Fed. Cir. 1994) (en banc), discussed CHISUM ON PATENTS § 1.03[6][j][i].

eligible but on a broader rationale.

3.4.5. Decimating Electronic and Software Industries?

Judge Moore, joined by rest of the Rader group of four, wrote separately, arguing in strong terms for the patent eligibility of the system claims and predicting that the Lourie approach to the system claims would "decimate the electronics and software industries."

Comment. Judge Moore's passionately and sincerely held views are thought-provoking, but it would be best to consider the dire predictions of the death of all electronics patents as literary hyperbole, which is fair play in a dissenting opinion.

In his opinion, Judge Lourie recognized that there is a threshold to any "integrated approach", which is that an abstract idea be implicated at all. In most cases, the answer will be negative.

That Judge Lourie did not regard his integrated approach as fatal to all software patents was made clear in a panel decision soon after *CLS Bank* in which he concurred in an opinion by Judge Rader, which rejected a Section 101 challenge to a method that required complex programming and interaction with a computer and the internet. *Ultramercial, LLC v. Hulu, LLC*, 722 F.3d 1335 (Fed. Cir. 2013), discussed below.

Supporting a moderate view of Judge Lourie's integrated approach is the Supreme Court's subsequent decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013), discussed § 1.02[7][e]. As noted in a comment, *AMP* can be read as moving the law back toward a definitional approach to Section 101 and away from the exceptional approach.

3.4.6. Computer Media Claims

The computer media claims were in a so-called "*Beauregard*" form, after

the case, *In re Beauregard* (1995).⁵⁵ They claimed as a "product" a computer readable storage medium having code to cause a computer to perform steps similar to those recited in the method claims.

All the judges equated the media claims with the method claims for purposes of a Section 101 analysis.

3.5. Precedential Effect of Opinions

Judges Lourie and Rader sparred in their opinions not only over the merits but also over the precedential effect of those opinions.

Judge Rader noted that, "though much is published today, no opinion commanded a majority in regard to the rationale for invalidating the method and media claims" and, therefore, "nothing said today beyond our judgment has the weight of precedent."

In response, Judge Lourie noted that a majority had agreed on the invalidity of the method and computer media claims and that eight of the ten judges agreed that all the claims "should rise and fall together in the § 101 analysis."

Unquestionably, the Lourie opinion garnered the most votes, but, because of the "Per Curiam" opinion, it was unclear whether it may be cited as a "plurality" opinion.⁵⁶

In *Marks v. United States* (1968),⁵⁷ the Supreme Court noted:

"When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, the holding of

⁵⁵*In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995), discussed CHISUM ON PATENTS § 1.02[4][e].

⁵⁶See Davis & Reynolds, *Juridical Cripples, Plurality Opinions in the Supreme Court*, 23 Duke L. J. 59 (1974); Thurmon, Note, *When the Court Divides: Reconsidering the Precedential Value of Supreme Court Plurality Decisions*, 42 Duke L.J. 419 (1992).

⁵⁷*Marks v. United States*, 430 U.S. 188 (1968).

the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds."

One interpretation of the *Marks* proposition, as applied to Section 101 challenges to computer method and media claims, is that *CLS Bank* constitutes an en banc "holding" that claims that meet Judge Rader's rationale for invalidation will be invalid. Whether claims that are invalid under Judge Lourie's rationale but not under Judge Rader's would be left indeterminate, leaving the issue for future panels to decide unencumbered by an en banc ruling.

3.6. Lourie Concurring Opinion; an "Integrated Approach"

Setting forth and applying an "integrated approach," Judge Lourie's opinion, concurring for five of the ten judges, concluded that "the asserted method, computer-readable medium, and system claims of [the] '479, '510, '720, and '375 patents are invalid under § 101 for failure to recite patent-eligible subject matter."

3.6.1. Legal Standard

In Part II of his opinion, Judge Lourie addressed the legal standard for statutory subject matter and "common law exceptions" and set forth the need for and substance of an "integrated approach."

3.6.1.1. Need for an Intergrated Approach.

As to the need, the "basic steps" in a patent eligibility analysis were (1) determine whether the claimed invention is in a Section 101 category (a process, machine, manufacture, or composition of matter); if not, it is ineligible; (2) if it is within one of categories, determine whether one of the three exceptions (law of nature, natural phenomenon, abstract idea) applies; if so, it is ineligible. However, the difficulty lies in consistently and predictably distinguishing (1) claims that tie up a law of nature, natural phenomena or abstract idea, from (2) claims that "merely 'embody, use, reflect, rest upon, or apply' those fundamental tools. *Mayo*, 132 S. Ct. at 1293."

Decisions on whether a claim is abstract "can feel subjective and unsystematic, and the debate often trends toward the metaphysical, littered with

unhelpful analogies and generalizations." Therefore, what was needed was "a consistent, cohesive, and accessible approach to the § 101 analysis," which "should provide predictability and "guidance" "for patent applicants and examiners, litigants, and the courts."

3.6.1.2. Guideposts from Supreme Court Precedent; Three Themes

Judge Lourie found "guideposts" for an approach in the Supreme Court's five "Foundational Section 101 Precedents", to wit, *Gottschalk v. Benson* (1972),⁵⁸ *Parker v. Flook* (1978),⁵⁹ *Diamond v. Diehr* (1981),⁶⁰ *Bilski v. Kappos* (2010),⁶¹ and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.* (2012).⁶²

The approach turned "primarily on the practical likelihood of a claim preempting a fundamental concept." The approach addressed "the abstractness of the specific computer-implemented inventions presented in this case," but it might also "inform patent-eligibility inquiries arising in other contexts."

Three "common themes" ran through the cases. First, the cases indicated that a patent cannot "preempt the fundamental tools of discovery." The focus of preemption was not "preemption per se," because all patents granted a right to exclude. Rather, the concern was that a claim "not be coextensive with a natural law, natural phenomenon, or abstract idea" A claim must have included "one or more substantive limitations," which made the claim cover "significantly less" than the basic principle. The quest was for "meaningful limitations that prevent the claim as a whole from covering the concept's every practical application."

Second, the cases eschewed "formalistic approaches" to subject-matter

⁵⁸*Gottschalk v. Benson*, 409 U.S. 63 (1972), discussed CHISUM ON PATENTS § 1.03[6][c].

⁵⁹*Parker v. Flook*, 437 U.S. 584 (1978), discussed CHISUM ON PATENTS § 1.03[6][e].

⁶⁰*Diamond v. Diehr*, 450 U.S. 175 (1981), discussed CHISUM ON PATENTS § 1.03[6][g].

⁶¹*Bilski v. Kappos*, 130 S.Ct. 3218 (2010), discussed CHISUM ON PATENTS § 1.03[6][m].

⁶²*Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012), discussed CHISUM ON PATENTS § 1.03[2][f].

eligibility. They gave no credit to "claim drafting strategies" that sought to avoid Section 101 by using "highly stylized language, hollow field-of-use limitations, or the recitation of token post-solution activity."

Third, the cases endorsed a "flexible, claim-by-claim approach," that avoids "rigid line drawing." Thus, *Bilski* rejected a categorical exclusion of business methods. A flexible approach provided "for unanticipated technological advances while remaining true to the core principles underlying the fundamental exceptions to § 101."

3.6.1.3 Integrated Approach

Thus, Judge Lourie suggested the "integrated approach" for "determining whether a computer-implemented claim recites patent-eligible subject matter under § 101 or falls into the common law exception for abstract ideas." The approach is summarized below.

INTEGRATED APPROACH TO § 101.

1. DOES CLAIMED INVENTION FIT IN SECTION 101 CATEGORY? The first question is whether a claimed invention fits in a Section 101 category.

2. IF SO, TURN TO JUDICIAL EXCEPTIONS. Assuming it does, the analysis turns to the judicial exceptions.

3. PRELIMINARY QUESTION: DOES CLAIM RAISE ABSTRACTNESS CONCERN? For the exceptions, a preliminary question is whether a claims raises any abstractness concern. In most cases, the answer plainly will be no. (Judge Lourie cited a 1973 district court decision on computer hardware patents.⁶³)

4. IF SO, IDENTIFY AND DEFINE FUNDAMENTAL CONCEPT "APPARENTLY WRAPPED UP IN THE CLAIM." At the outset, one must unambiguously "identify and define whatever fundamental concept appears wrapped up in the claim so that the

⁶³ "Cf. *Honeywell Inc. v. Sperry Rand Corp.*, 180 USPQ 673 (D. Minn. Oct. 19, 1973) (early computer hardware patents)."

For a description of the Honeywell-Sperry case, see CHISUM ON PATENTS § § 18.07[6][c][i].

subsequent analytical steps can proceed on a consistent footing."

a. NARROW OR FAR-REACHING. The concept can be a "narrow 'basic tool[]' " as well as an abstract concept with "far-reaching implications."

b. CLAIM CONSTRUCTION. Construing a claim before addressing a Section 101 issue is "not required" but "may be especially helpful ... by facilitating a full understanding of what each claim entails."

5. PREEMPTION ANALYSIS: DOES THE BALANCE OF THE CLAIM CONTAIN ADDITIONAL SUBSTANTIVE LIMITATIONS SUCH THAT THE CLAIM DOES NOT COVER THE FULL ABSTRACT IDEA? The Section 101 proceeds to the "requisite preemption analysis," which entails, after identifying the "pertinent abstract idea," evaluating the balance of a claim "to determine whether it contains additional substantive limitations that narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself."

a. "INVENTIVE CONCEPT." In *Mayo*, the Supreme Court notes that the additional substantive imitation requirement has "sometimes" been referred to as an "inventive concept."

i. NOT NOVELTY (§ 102) AND NONOBVIOUSNESS (§ 103). However, "inventive concept" should not be read as requiring application of the novelty (Section 102) and nonobviousness (Section 103) patentability conditions.

ii. GENUINE HUMAN CONTRIBUTION. In the Section 101 context, "inventive concept" "refers to a genuine human contribution to the claimed subject matter."

b. MORE THAN "TRIVIAL APPENDIX." The human contribution must be "more than a trivial appendix to the underlying abstract idea."

c. MERELY TANGENTIAL, ROUTINE, WELL-UNDERSTOOD, CONVENTIONAL. The human contribution must be more than "merely tangential, routine, well-understood, or conventional, or in practice fail to narrow the claim relative to the fundamental principle therein."

d. BARE FIELD-OF-USE LIMITATIONS. The human contribution must not be a bare "field-of-use" limitation.

3.6.1.4. Threshold Test; Presumption of Validity

Judge Lourie noted two "other considerations." First, *Bilski* referred to Section 101 as a "threshold test," but that did *not* mean that a district court must always consider a Section 101 challenge first. Another section of the Patent Act might "provide a clearer and more expeditious path to resolving a dispute."

Second, the Section 292 presumption of validity applied to Section 101 challenges.

3.6.2. Applying Approach to Patents

In Part III of his opinion, Judge Lourie turned to the patents in suit, separately considering the method claims, the computer-readable medium claims, and the system claims.

3.6.2.1. Method Claims

Part III.A. addressed the "method claims."

Applying the integrated approach described above, the asserted method claims in this case were "drawn to patent-ineligible subject matter and invalid under § 101." As illustrated by representative claim 33 of the '479 patent, the claims were "broad non-technical method claims," which resembled those held invalid in *Bilski* except for an implied requirement for computer implementation. However, "adding generic computer functions to facilitate performance provides no substantial limitation." Thus, the issue became "whether that process amounts to no more than a patent-ineligible abstract idea."

The approach's first step was to identify the abstract idea a claim represented. Here, the claimed method drew "on the abstract idea of reducing settlement risk by effecting trades through a third-party intermediary (here, the supervisory institution) empowered to verify that both parties can fulfill their obligations before allowing the exchange--i.e., a form of escrow." The accused infringer argued that the concept was "fundamental and ancient," but the latter was "not determinative": "whether long in use or just recognized, abstract ideas remain abstract." Here, the idea, as defined (reducing settlement risk by facilitating a trade

through third-party intermediation), was an abstract idea because it was "disembodied" and "untethered from any real-world application."

The integrated approach turned to whether "the balance of the claim adds 'significantly more.'" Apart from the idea (third-party intermediation), the claim contained three substantive limitations.

The first limitation was computer implementation, but here, as added only by stipulation, the implementation could not have been less specific:

"At its most basic, a computer is just a calculator capable of performing mental steps faster than a human could. Unless the claims require a computer to perform operations that are not merely accelerated calculations, a computer does not itself confer patent eligibility."

There was no limitation to essential or improved computer technology, unlike *SiRF Tech., Inc. v. Int'l Trade Comm'n* (2010)⁶⁴ (essential) and *Research Corp. Techs., Inc. v. Microsoft Corp.* (2010) (improved).⁶⁵ The computer limitation was "insignificant post-solution activity" relative to the abstract idea, like *Fort Props., Inc. v. Am. Master Lease LLC* (2012).⁶⁶

Appending generic computer functionality "to lend speed or efficiency to the performance of an otherwise abstract concept does not meaningfully limit claim scope for purposes of patent eligibility." This was apparent in this case. Because computers are so efficient and ubiquitous, all practical applications of the abstract idea here would rely on basic computer functions, such as calculating balances and exchanging data among institutions.

The second added limitation was to create and adjust "shadow" credit and

⁶⁴*SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319, 1332–33 (Fed. Cir. 2010).

⁶⁵*Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 865, 868–69 (Fed. Cir. 2010), discussed above.

⁶⁶*Fort Props., Inc. v. Am. Master Lease LLC*, 671 F.3d 1317, 1323–24 (Fed. Cir. 2012), discussed above.

debit record. In its use of "shadow" records, the claim employed "extravagant language" to recite a basic function of an intermediary in an escrow, to wit, "tracking each party's obligations and performance." " The recitation of the necessary tracking function was no more than insignificant pre-solution or data-gathering activities and, thus, add nothing of practical significance to the idea, as was true in *Mayo and CyberSource Corp. v. Retail Decisions, Inc.* (2011)."⁶⁷

The third added limitation was to provide end-of-day instructions to exchange institutions (such as banks) to reconcile parties' real-world accounts with the day's accumulated adjustment to the shadow records. This was a "trivial limitation": "Whether the instructions are issued in real time, every two hours, or at the end of every day, there is no indication in the record that the precise moment chosen to execute those payments makes any significant difference in the ultimate application of the abstract idea."

3.6.2.2. Computer-Readable Medium Claims

Part III.B. of the Lourie opinion addressed the "computer-readable medium claims.

The claims to computer-readable media "fail[ed] the patent-eligibility test for the same reasons as the cognate method claims." The claims recited causing a computer "to perform a method of escrow that is indistinguishable from recited in the representative method claim. The claims were in a "*Beauregard*" form, after *In re Beauregard* (1995).⁶⁸ Such claims formally recited a tangible product, a computer-readable medium, but required the medium to contain a computer program that directed a computer to carry out a specified method. Such claims were equivalent to the recited method for Section 101 purposes, as held in *CyberSource Corp. v. Retail Decisions, Inc.* (2011).⁶⁹ The claims did "not

⁶⁷*CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011), discussed above.

⁶⁸*In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995), discussed CHISUM ON PATENTS § 1.02[4][e].

⁶⁹*CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011), discussed above.

overcome the Supreme Court's warning to avoid permitting a 'competent draftsman' to endow abstract claims with patent-eligible status."

3.6.2.3. System Claims.

Part III. C. addressed the "system" claims. The system claims were invalid under Section 101 because they were, in effect, to "abstract methods coupled with computers adapted to perform those methods." Clothing abstract methods in computer language did not make them patent-eligible machines.

Judge Lourie stressed that some system claims "face little difficulty passing through the § 101 filter." However, "applying a presumptively different approach to system claims generally would reward precisely the type of clever claim drafting that the Supreme Court has repeatedly instructed us to ignore." Such "has long been recognized. "See *In re Johnston*, 502 F.2d 765, 773 (CCPA 1974) (Rich, J., dissenting) (noting that '[e]very competent draftsman' knows how to cast method claims 'in machine system form')."

The same analysis applied regardless of format: did a claim "in practical effect place an abstract idea at risk of preemption?" If it did, was there a limitation, including a computer-based one, that added "enough" beyond the idea to limit the claim to a patent-eligible application of the idea? Or was the limitation a "Trojan horse designed to enable" an abstract claim "to slide through the screen of patent eligibility?"

Here, the system claim's computer-limitations provided no "meaningful distinction from the computer-based limitations that failed to supply an 'inventive concept' to the related method claims."

The system claims employed "minor differences" in terminology, reciting, for example, first and second "independent" accounts instead of "shadow" records, but required "performance of the same basic process."

The system claims recited hardware components, to wit, a "computer, "data storage," and a "communications controller," each "capable of performing the same generalized functions required of the claimed systems to carry out the otherwise abstract methods recited therein."

That a method claim failed under Section 101 did not mean all associated system and method claims must also have failed. A system claim may build on an abstract idea and incorporate sufficient additional limitations.

3.6.2.4. Response to Moore Opinion

Judge Lourie responded to a separate opinion (by Judge Moore), which argued that the system claims were "simply claims to a patent-eligible machine, a tangible item one can put on one's desk."

The opinion relied on the en banc decision, *In re Alappat* (1994).⁷⁰ Undoubtedly, a particular computer, composed of wires, plastic and silicon, was a machine. However, the question here was whether a claim ostensibly describing a system presented only "an abstract idea in legal substance." When computers were first invented, they were patent eligible. However, Judge Lourie noted that "we are living and judging now (or at least as of the patents' priority dates), and have before us not the patent eligibility of specific types of computers or computer components, but computers that have routinely been adapted by software consisting of abstract ideas, and claimed as such, to do all sorts of tasks that formerly were performed by humans." The Supreme Court had ruled that "merely adding existing computer technology to abstract ideas—mental steps—does not as a matter of substance convert an abstract idea into a machine." The fallacy of relying on *Alappat* was that both "the world of technology" and the "legal world" had changed: the "Supreme Court has spoken since *Alappat* on the question of patent eligibility, and we must take note of that change."

3.7. Rader Opinion Concurring and Dissenting; System Claims Eligible; Methods Claims Not Eligible

Judge Rader filed an opinion joined fully by Judge Moore and in part by Judges Linn and O'Malley. Judges Rader and Moore would have affirmed on the ineligibility of the method and media claims but reverse and uphold the patentability of the system claims. Judge Moore wrote separately to emphasize the eligibility of the system claims. Judge Linn with Judge O'Malley would have

⁷⁰*In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994) (en banc), discussed CHISUM ON PATENTS § 1.03[6][j][i].

reversed as to all claims, as noted in Judge Linn's separate opinion.

3.7.1 Beginning with the Statute; Section 101

In Part II of his opinion, Judge Rader noted that the analysis should begin with the statute, 35 U.S.C. Section 101. The Section 100(b) definition of "process" confirmed that Congress intended Section 101 to be broad by stating that a process includes a new use of a known machine. To confirm the broad scope of patentable subject matter, the 1952 Act added Section 100(a), which states that "[t]he term 'invention' means invention or discovery." Bolstering that breadth was the provision in Section 103 that "an invention 'shall not be negated by the manner in which [it] ... was made.'" Congress intended that the prior judicial requirement of "invention", as a standard of patentability, be replaced by the Section 103 condition of unobviousness over the prior art. Thus, Judge Rader concluded, "any requirement for 'inventiveness' beyond sections 102 and 103 is inconsistent with the language and intent of the Patent Act."

3.7.2 Exceptions to Section 101

In Part III, Judge Rader addressed the "exceptions" to Section 101. The concern of the "abstract ideas exception," as the Supreme Court's "more recent precedents" made clear, was not merely with claim breadth but with whether a "claim seeks to patent an idea itself, rather than an application of that idea."

In applying the exception, a court must consider the actual language of a claim. "Any claim can be stripped down, simplified, generalized, or paraphrased to remove all of its concrete limitations, until at its core, something that could be characterized as an abstract idea is revealed." The Supreme Court recognized that such an approach was improper because, at an extreme, it would "make all inventions unpatentable." A court should not hunt "for abstractions by ignoring the concrete, palpable, tangible limitations of the invention the patentee actually claims." The inquiry was practical, determining "whether the claim, as a whole with all of its limitations, in effect covers a patent ineligible abstract idea or a patent eligible application of that idea."

Patent eligibility turned on whether a claim "contains limitations that meaningfully tie that idea to a concrete reality or actual application of that idea." A

claim was not meaningfully limited if it covered "all practical applications of an abstract idea." This concept was "frequently referred to as 'preemption,' " but "all patents 'pre-empt' some future innovation in the sense that they preclude others from commercializing the invention without the patentee's permission. Preemption is only a subject matter eligibility problem when a claim preempts all practical uses of an abstract idea." However, "even if a claim does not wholly pre-empt an abstract idea, it still will not be limited meaningfully if it contains only insignificant or token pre- or post-solution activity--such as identifying a relevant audience, a category of use, field of use, or technological environment." The Supreme Court "has told us that "a claim is not meaningfully limited if its purported limitations provide no real direction, cover all possible ways to achieve the provided result, or are overly-generalized." An added limitation was meaningful if it is "essential to the invention."

Judge Rader contended that Judge Lourie's conclusion that "the system claims are not patent eligible in part because it is now routine for computers to perform the functions described" improperly injected hindsight into the eligibility analysis. Eligibility, as with all patentability questions, was "measured as of the filing date."

Judge Rader noted that a "reference to a general purpose computer will not save a method claim from being deemed too abstract to be patent eligible," but "the fact that a claim is limited by a tie to a computer is an important indication of patent eligibility."

"While no particular type of limitation is necessary, meaningful limitations may include the computer being part of the solution, being integral to the performance of the method, or containing an improvement in computer technology. *See SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319, 1332-33 (Fed. Cir. 2010) A special purpose computer, i.e., a new machine, specially designed to implement a process may be sufficient. *See Alappat*, 33 F.3d at 1544

"At bottom, where the claim is tied to a computer in such a way that the computer plays a meaningful role in the performance of the claimed invention, and the claim does not pre-empt virtually all

uses of an underlying abstract idea, the claim is patent eligible."

Judge Rader argued that the Supreme Court's use of "inventive concept" "routine," and "conventional" in *Mayo* "should not be read to conflate principles of patent eligibility with those of validity." In its Section 101 decisions, the Supreme Court repeatedly cautioned against conflating eligibility with the novelty and unobviousness conditions of patentability. *Mayo*'s reference to "inventiveness" "must be read as shorthand for its inquiry into whether implementing the abstract idea in the context of the claimed invention inherently requires the recited steps." *Mayo* "recognized that the additional steps were those that anyone wanting to use the natural law would necessarily use."

"If, to implement the abstract concept one must perform the additional step, then the step merely separately restates an element of the abstract idea, and thus does not further limit the abstract concept to a practical application."

Judge Lourie's opinion, by interpreting "inventive concept" as referring to a "genuine human contribution," imbued the phrase with a life that is inconsistent with the Patent Act and Supreme Court precedent. To Judge Rader, it was "inconceivable" that the Supreme Court would, in "one phrase in one opinion," undo much of what Congress sought to accomplish in the 1952 Patent Act.

Guiding application of the abstract idea exception was the principle that "judge-made exceptions to properly enacted statutes are to be narrowly construed."

3.7.3 System Claims

Parts IV and V of Judge Rader's concurring-dissenting opinion addressed the "system claims." The four judges joining the Rader opinion agreed that the system claims are patent-eligible. "[T]he system claims are indistinguishable from those in *Diehr*," in which a computer "supplied the speed, accuracy, reliability, and automaticity that enhanced and applied the known rubber molding process and formulae."

Judge Rader noted that computer-implemented inventions were patent eligible because computers were "machines," and Section 101 expressly listd

machines as eligible. A computer programmed with software to perform a specific function was a new machine, a "special purpose computer," as recognized in the 1994 *Alappat* decision.⁷¹ In *Diehr*, the Supreme Court upheld the eligibility of a computer-implemented process for running a rubber press. Combining new software and computers had accomplished wonders, such as the "smart phone," by "reducing difficult processes ... into a series of simple steps." *Bilski* recognized that a machine tie was a "useful and important clue" that a *method* was eligible. "If tying a method to a machine can be an important indication of patent-eligibility, it would seem that a claim embodying the machine itself, with all its structural and functional limitations, would rarely, if ever, be an abstract idea."

Judge Rader argued that Judge Lourie's view that a computer must do "something that a human could not would mean that computer implementation could never produce patent eligibility." To the contrary, "[i]f a computer can do what a human can in a better, specifically limited way, it could be patent eligible." An increase in speed along may suffice as a meaningful limitation.

The system claims, such as the typical '375 patent claim 26, covered "the use of a computer and other hardware specifically programmed to solve a complex problem." The claimed data processing system included four structural components: a computer, a first party device, a second party device, and a communications controller coupled to the computer and first party device. The claim further required a structural configuration that receives, electronically adjusts, and generates according specific requirements of the system. The '375 patent disclosed figures providing detailed algorithms for software to program the hardware. Other claims were even narrower than claim 26, adding, for example, means-plus-function elements.

"Labeling this system claim an 'abstract concept' wrenches all meaning from those words, and turns a narrow exception into one which may swallow the expansive rule (and with it much of the investment and innovation in software)."

The system claims had limitations that tied the abstract escrow concept to

⁷¹*In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994) (en banc), discussed CHISUM ON PATENTS § 1.03[6][j][i].

practical application. The limitations were not inherent in an escrow. Persons could use the escrow for "many other applications" either without a computer or using computers in other ways.

Judge Rader noted that there was no clear and convincing evidence in the record that the recited limitations "as of the critical time" "were used commonly in computer implemented prior art practicing the abstract concept implicated here." There were rapid changes in computer and telecommunications technology in the early 1990's, when the applications for the patents were filed.

"While apparently routine at the present time to use computers to perform instantaneous international financial transactions, this court will not engage in the hindsight error of speculating about the state of that technology over twenty years ago."

The "limitations are not stated at a high level of generality."

3.7.4 Method Claims

Part IV addressed the method claims. It represented the views of only Judges Rader and Moore.

Judge Rader argued that the method claims were not eligible but for reasons different from those Judge Lourie articulated. The patent owner conceded that all the asserted method claims should rise or fall together with claim 39. That claim was indistinguishable from that held invalid in *Bilski*. It recited, at a high level, steps that were inherent in an escrow.

The claim described the general concept of using an intermediary in an exchange to reduce the risk one party will not perform, that is, an escrow. The record showed that the concept has been used for centuries. Thus, it embodied "elements of abstractness which propel this court into a further examination of its eligibility."

Under the proper analysis of eligibility, the question was whether the additional limitations "are inherent in an escrow and claimed at a high level of generality, such that in fact the claim is not to a practical application of the

concept of an escrow."

The claim's first step, creating shadow records, was highly generalized and nothing by a step inherent in an escrow. As shown in a text on the history of accounting cited by the patent owner, tracking accounts in this fashion had long been a basic form of bookkeeping.

The second, third, and fourth steps (obtaining values of previously created accounts, adjusting balances, and instructing to pay or deduct funds) were also inherent in the concept of an escrow.

That the claim limits escrows to a particular field was not enough under *Bilski* and *Flook*.

The method claims did not mention a computer. The district court assumed computer implementation. Assuming that was a correct claim construction, the "implicit reference" to computer implementation was "not, by itself, enough."

3.8 Moore Opinion; Death of Software and Electronics Patents

In a separate opinion joined by Judges Rader, Linn and O'Malley, Judge Moore separately discusses why the system claims were for patent eligible subject matter and attacks Judge Lourie's position.

Judge Moore predicted that, if the claims in this case, including the system claims, were ineligible, so would be thousands of other patents, "including all business method, financial system, and software patents as well as many computer implemented and telecommunications patents." If Judge Lourie's reasoning were adopted, it would "decimate the electronics and software industries."

Comment. As noted above, Judge Moore's predictions about the effect of Judge Lourie's approach may be hyperbolic.

Judge Moore noted that (1) "[t]hese claims are to a system of tangible machine components with limited specialized functions programmed consistent with detailed algorithms disclosed in the patent," and (2) if, as *Bilski* indicated, "meaningfully tying a method to a machine can be an important indication of

patent-eligibility, how can a claim to the machine itself, with all its structural and functional limitations, not be patent-eligible?"

According to Judge Moore, Judge Lourie's approach (1) erroneously applied "*Prometheus's* 'inventive concept' language by stripping away all known elements from the asserted system claims and analyzing only whether what remains, as opposed to the claim as a whole, is an abstract idea," (2) imposed a time dependency, under which "a system claim that passes § 101 when the patent issues could later magically transform into an abstract idea simply because certain computer hardware elements no longer seem inventive," and (3) was inconsistent with *In re Alappat* (1994) (en banc),⁷² which held eligible a claim to a general purpose computer programmed to carry out recited operations, and which was "completely consistent with *Bilski*, *Prometheus* [*Mayo*] and the Supreme Court's other § 101 cases."

Judge Moore argued that the representative claim was "a pure system claim, directed to a specific machine configured to perform certain functions."

"Indeed, the computer covered by this claim is a tangible item that you could pick up and put on your desk. It is *not* a method claim simply disguised as a machine claim, nor does it incorporate the computer elements in an insignificant way. "

....

"It is important to remember that, regardless of whether we hold these claims to be patent-eligible, they may well fail to meet the other requirements for patent protection. Taking a known or abstract idea and simply putting it on a computer is likely not entitled to patent protection. Section 102's novelty or § 103's nonobviousness requirements are the means to challenge a system claim that does no more than take a familiar, well known concept and put it on a computer. Or, if the claim is to a machine whose precise structure or method of operation is not sufficiently detailed (think perpetual motion machine), then § 112 would prevent patentability."

⁷²*In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994) (en banc), discussed CHISUM ON PATENTS § 1.03[6][j][i].

Judge Moore concluded: "When you walk up to the § 101 gate holding a computer in your arms (or software for that matter), you should not be rejected because your computer is an abstract idea."

3.9 Newman; Patents Not Inhibiting Innovation; Experimental Use.

In a dissenting opinion, Judge Newman argued that the current "misdirected spin on section 101" stems from "the misperception that study of patented subject matter is precluded."

Judge Newman discussed the exemption from infringement liability for experimentation and research.⁷³

In *Mayo*, the Supreme Court expressed concern that granting patents will "inhibit future innovation."

"With clarification of the right to experiment with the information disclosed in patents, it will no longer be necessary to resort to the gambit of treating such information as an 'abstraction' in order to liberate the subject matter for experimentation, whether for scientific or commercial purposes."

3.10 Judge Linn; Narrow Claim Construction

Judge Linn, joined by Judge O'Malley, dissented, arguing that all three categories of claims were patent eligible based on an agreed narrow construction of those claims.

According to Judge Linn, all the claims should have risen or fell together. Based on the narrow construction limiting all the claims to the specific computer implementation, as disclosed in the patents' specifications, and as agreed to by the parties and adopted by the district court, all the claims were patent eligible, including the method claims. As narrowly construed, the claims did not read like those in *Bilski*.

⁷³For a discussion of experimental and research use, see CHISUM ON PATENTS § 16.03[1].

Because of the case's procedural posture, in which the district court granted summary judgment of invalidity without formally construing the claims, the patent owner's proposed construction must be accepted. That construction limited all the claims, including the method claims to electronic implementation, as set forth in the specifications.

For example, the "shadow records" were, as indicated in the patent owner's expert declaration, understood by a skilled person to require a record created by a computer coupled to a data storage unit.

The accused infringer's counsel agreed that, for purposes of resolving the Section 101 question, "every limitation and electronic process that appears in the system claims must be read into the method claims."

Judge Linn argued that both the Lourie and the Rader opinions ignored the record on the construction of the claims. The Rader opinion construed the method claims as broader than the system claims and treated them differently under the Section 101 abstract idea exception. The Lourie opinion construed the method claims broadly and then imported that breadth into the system and media claims.

The other judges may have felt free to ignore the record because claim construction is a question of law reviewable de novo on appeal.⁷⁴ However, de novo review was still review based on a record in which parties have had "an opportunity to proffer intrinsic and extrinsic evidence." That did not occur in this case.

As explained in the Rader and Moore opinions, the system claims included structural components performing very specific functions. The same rational should have been applied to find the method and media claims eligible and not "unduly preemptive." As construed, the claims required specific ways of using an intermediary to facilitate financial transactions.

The claims "may have been obvious over the prior art--which, of course, would include the abstract idea itself," but the claims did "not preempt all

⁷⁴On the standard of review to claim construction, see CHISUM ON PATENTS § 18.06[2][a][iv].

commercial uses or applications of that idea."

Comment. The casual assumption that the prior art "of course" includes "the abstract idea itself" is dubious if read to mean that abstract ideas are automatically deemed to be a part of the prior art. Often they will be, but it is bad policy to treat any information that is new and original with an inventor as prior art when it is not.

Judge Linn acknowledged the amici curiae briefs, that is, briefs by "friends of the court," including Google and Facebook, which expressed concern over "the proliferation and aggressive enforcement of low quality software patents."

Congress could adopt particular rules on software patents, but a court "may not change the law to address one technological field or the concerns of a single industry."

3.11 Rader Additional Reflections; Reverting to Statute After Failure of Exceptional Approach

In his solo "additional reflections" opinion, Chief Judge Rader, lamented that, early in his judicial career, he participated with Judges Lourie and Newman in *Arrythmia Research Tech. v. Corazonix Corp.* (1992),⁷⁵ which involved a Section 101 challenge to a patent on a software invention that "allowed for swift computer analysis of electrocardiogram images to detect heart attack risks."

At that time, he filed a concurring opinion, suggesting that "the statute settled the question without the need for laborious analysis." That admonition, "when all else fails, ... consult the simplicity, clarity and directness of the statute" was as applicable to the post-*Mayo* era now as it was then.

⁷⁵*Arrythmia Research Tech. v. Corazonix Corp.*, 958 F.2d 1053 (Fed. Cir. 1992), discussed CHISUM ON PATENTS § 1.03[6][i].

Arrythmia was one of the first cases on the abstract idea exception to patent eligibility to reach the courts in the context of an issued patent enforced in an infringement suit. Prior Supreme Court and lower courts cases were appeals from rejections by the Patent and Trademark Office.

Comment: The aphorism about consulting statutory language only when other interpretative aids have failed is hyperbole. Universally recognized law is that the language of a statute is consulted first, not last, in the course of interpreting the statute. In effect, Chief Judge Rader challenges the Supreme Court precedent that there are exceptions to the statute (Section 101), which is certainly a valid point of view.

Judge Rader cited recent cases, including *Bilski* (2010), *Mayo* (2012), *Ass'n for Molecular Pathology* (2012), *MySpace* (2012), *Dealertrack* (2012), and *Classen* (2011), as demonstrating that "all else has failed."

Judge Rader criticized the Supreme Court's *Mayo* decision for its assumptions about what is a law of nature.

"[F]or perspective, even gravity is not a natural law in Einsteinian theory, but a symptom of a curved universe. Einstein posited the speed of light as the only true natural constant. Thus, in context, equating the personalized medicinal effect of a human-created pharmaceutical in patients of different metabolic rates and genetic makeups with the speed of light (or even gravity), [as the Supreme Court did in *Mayo*] "is only possible in a netherworld of undefined judicial insights."

4.0 Decisions After CLS Bank

Decisions after *CLS Bank* continued to address Section 101 issues in regard to claims to computer implemented inventions.⁷⁶ In two panels decisions, reaching opposing results on Section 101 eligibility, Judges Rader and Lourie

⁷⁶For district court decisions, compare *DDR Holdings, LLC v. Hotels.com L.P.*, 2013 U.S. Dist. LEXIS 86962 (E.D. Tex. 2013) (claims not invalid) with *Compression Technology Solutions LC v. EMC Corp.*, 2013 U.S. Dist. LEXIS 78338 (N.D. Calif. 2013) (claims "impermissibly abstract").

continued their debate.⁷⁷

5.0 Conclusion: An Issue Ripe for the Court

It is hard to imagine an issue more ready for Supreme Court review than the patent eligibility of computer-implemented methods and systems.

There is no doubting the importance of the issue: at stake are thousands of patents and pending applications. Based on recent corporate acquisitions of patent portfolios, their potential value equates to many *billions* of dollars.

The Supreme Court often intervenes to resolve splits among the various courts of appeal. Here a split exists within a circuit that the circuit itself is unable to resolve. The circuit judges' varying interpretations of a body of recent and not-so-recent Supreme Court precedent riddled with fuzzy language and inconsistent results caused the split. Now, the Court has the opportunity (and the obligation) to clean up a mess that is, to a major extent, of its own making.

A final note. Usually, one can say that if a problem exists with how the courts have interpreted a statute (in this instance, 35 U.S.C. Section 101 on patent eligibility), Congress can fix it. But, quite unusually, Congress has recently expressly disclaimed responsibility for the interpretation of Section 101, leaving the matter to the courts. In Section 18(e) of the 2011 America Invents Act, Congress enacted a special procedure for reexamining a limited category of problematic business method patents but tossed away the "hot potato" of interpreting Section 101 patent eligibility in the context of software: "Nothing in this section shall be construed as amending or interpreting categories of patent-eligible subject matter set forth under section 101 of title 35, United States Code." Given such Congressional abdication, the Supreme Court has the full freedom (and obligation) to revisit its own prior precedents on the interpretation of Section 101.

⁷⁷Accenture Global Services, GMBH v. Guidewire Software, Inc., 728 F.3d 1336 (Fed. Cir. 2013) (Lourie in the majority; Rader, dissenting); Ultramercial, LLC v. Hulu, LLC, 722 F.3d 1335 (Fed. Cir. 2013) (Rader in majority, Lourie concurring).