

35 U.S.C. § 101: POST-ALICE LANDSCAPE

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ABSTRACT

No case in recent history has had as profound an impact on U.S. patent litigation as the Supreme Court's June 19, 2014 decision in *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S. Ct. 2347 (2014). The *Alice* decision clarified the law on subject matter eligibility under 35 U.S.C. § 101. The case "clarified" (instead of changed) this law because the Supreme Court simply adopted its two-part test from its 2012 *Mayo* decision. See *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289, 1293-1294 (2012). Notwithstanding that the Supreme Court did not really create new law with its *Alice* decision, since that decision, both the Court of Appeals for the Federal Circuit and U.S. district courts have routinely invalidated patents under 35 U.S.C. § 101 and *Alice*. As shown below, with only one exception, whenever the Federal Circuit has addressed 35 U.S.C. § 101 since *Alice*, the Federal Circuit has invalidated the patent or patents at issue. And according to one study, the district courts are granting *Alice* motions (i.e., invalidating the patents) over 70% of the time since the *Alice* decision.²

35 U.S.C. § 101 and the Supreme Court's *Alice* Decision

An analysis into subject matter eligibility starts with 35 U.S.C. § 101 to determine whether the claims cover statutorily recognized subject matter (*i.e.*, a process, machine, manufacture, or composition of matter). 35 U.S.C. § 101 provides:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101.

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² *Alice Haunted Federal Courts and USPTO in October*, by Robert R. Sachs. Published in Law 360 on November 10, 2015.

If the claim does pass the initial 35 U.S.C. § 101 hurdle, the Supreme Court stated it must then withstand the two-part *Alice/Mayo* test. The two-part test first identifies, in the claim, an exception to section 101 patentability (e.g., a law of nature, natural phenomena, or an abstract idea) and then, second, determines whether the other elements in the claims add significantly more (e.g., an inventive concept) to make them subject matter eligible. The Supreme Court in *Alice* generally explained both steps one and two.

Step One requires that the claims be “[v]iewed as a whole” (*Alice*, 134 S. Ct. at 2359; *see also* FN3) to determine “whether the claims at issue are directed to [laws of nature, natural phenomena, and abstract ideas].” *Id.* at 2355 (citing *Mayo*, 132 S. Ct. at 1297). With respect to the computer arts, the abstract idea addressed in *Alice* is the most relevant. “The abstract ideas category embodies the longstanding rule that an idea of itself is not patentable.” *Id.* at 2355 (citations omitted). The mere recitation of computer elements does not render a claim not abstract as “[t]he fact that a computer necessarily exists in the physical rather than purely conceptual realm is beside the point.” *Id.* at 2358. The *Alice* court stated the section 101 inquiry should not be allowed to be avoided “simply on the draftsman’s art” with the recitation of computer elements. *Id.* (citing *Parker v. Flook*, 98 S. Ct. 2522 (1978)).

Step Two requires a “consider[ation] [of] the [claim] elements . . . both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application. . .” *Id.* at 2355 (citing *Mayo*, 132 S. Ct. at 1297). A claim that recites an abstract idea can be patent eligible if it contains an “‘inventive concept’ – *i.e.*, an element or combination of elements that [are] ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (citing *Mayo* at 1294). The claims “must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’ . . . [T]ransformation into a patent-eligible application requires ‘more than simply stat[ing] the [abstract idea] while adding the words ‘apply it.’” *Id.* at 2357 (citing *Mayo*, 132 S. Ct. at 1294). The additional features must be more than well-understood, routine and conventional. *Id.* at 2359. An abstract idea cannot be made patentable by limiting the abstract idea to a particular technological environment. *Id.* (citing *Bilski v. Kappos*, 130 S. Ct. 3218, 3218 (2010)). “[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea ‘while adding the words ‘apply it’ is not enough for patent eligibility.” *Id.* at 2358 (citing *Mayo* at 1294). Indeed, the Supreme Court

has “long warned against interpreting § 101 in ways that make patent eligibility depend simply on the draftsman’s art.” *Id.* at 2360 (quotations omitted).

With respect to the actual patent at issue in the case, the claims were drawn to “a method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk.” *Id.* at 2356. Representative claim 33 of U.S. Patent No. 5,970,479 provides:

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 on[e] 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*.

Step One:

The Supreme Court found that, “[o]n their face, the claims . . . are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.” *Id.* at 2356. “Like the risk hedging in *Bilski*, the concept of intermediated settlement is a fundamental economic practice long prevalent. . . . The use of a third-party intermediary . . . is also a building block of the modern of the modern economy.” *Id.* The Supreme Court found that intermediated settlement, like hedging, is an abstract idea.

Step Two:

The Supreme Court found that the claims lack an inventive concept to transform the abstract idea into something subject matter eligible. The claims “simply instruct the practitioner to implement the abstract idea of intermediated settlement on a generic computer.” *Id.* at 2359. “[T]he function performed by the computer at each step of the process is ‘[p]urely conventional.’” *Id.* at 2359 (citing *Mayo* at 1298). “The same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are ‘well-understood, routine, conventional activit[ies]’ previously known to the industry. . . . [E]ach step does no more than require a generic computer to perform generic computer functions.” *Id.* at 2359 (citing *Mayo* at 1294) (alterations in original). The claims do not “purport to improve the functioning of the computer itself. . . . Nor do they effect an improvement in any other technology or technical field.” *Alice* at 2359 (citing *Diamond v. Diehr*, 101 S. Ct. 1048 (1981)). “Instead, the claims at issue amount to ‘nothing significantly more’ than an instruction to apply the abstract idea of intermediated settlement using some unspecified, generic computer.” *Id.* at 2360 (citing *Mayo* at 1297). “Nearly every computer will include a communications controller and data storage unit capable of performing the basic calculation, storage, and transmission functions required by the method claims. . . . As a result, none of the hardware recited by the system claims offers a meaningful limitation beyond generally linking the use of the [method] to a particular technological environment, that is, implementation via computers.” *Id.* (quotations omitted).

Post-Alice Federal Circuit Decisions

Cyberfone Sys., LLC v. CNN Interactive Group, Inc., 558 F. Appx. 988 (Fed. Cir. Feb. 26, 2014)

On July 10, 2014, one month after *Alice* was decided, the Federal Circuit in *Cyberfone* denied a rehearing request of an earlier pre-*Alice*, 35 U.S.C. § 101 decision. The pre-*Alice* decision, dated February 26, 2014, applied the two-part *Mayo* analysis and affirmed a district court’s ruling of summary judgment of invalidity under section 101. The claims in *Cyberfone* were directed to “steps [that] require obtaining data, ‘exploding’ the data, i.e., separating it into component parts, and sending those parts to different destinations.” *Cyberfone*, 558 F. Appx. at 990. Representative claim 1 of U.S. Patent No. 8,019,060, reproduced below, recites:

1. A method, comprising:

obtaining data transaction information entered on a telephone from a single transmission from said telephone; forming a plurality of different exploded data transactions for the single transmission, said plurality of different exploded data

transaction[s] indicative of a single data transaction, each of said exploded data transactions having different data that is intended for a different destination that is included as part of the exploded data transactions, and each of said exploded data transactions formed based on said data transaction information from said single transmission, so that different data from the single data transmission is separated and sent to different destinations; and sending said different exploded data transactions over a channel to said different destinations, all based on said data transaction information entered in said single transmission.

Step One:

The Federal Circuit found that the claims were directed to an abstract idea because, despite the fact that the claims cannot be performed “unaided by devices, . . . the category of patent-ineligible abstract ideas is not limited to methods that can be performed in the human mind.” *Id.* at 992. The claims recite “an abstract idea, as in *Bilski*[,] like protecting against risk, using categories to organize, store, and transmit information is well-established. Here, the well-known concept of categorical data storage, i.e., the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible.” *Id.*

Step Two:

The Federal Circuit found that the claims lacked “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.” *Id.* The plaintiff argued that the claim was “sufficiently limited by the machinery it requires and transformations it effects” but “[f]or ‘a machine to impose a meaningful limit . . . it must play a significant part in permitting the claimed method to be performed. . . .’” *Id.* “By contrast, ‘simply implementing an abstract concept on a computer, without meaningful limitations to that concept, does not transform a patent-ineligible claim into a patent-eligible one.’” *Id.* at 992-993 (citations omitted). “The ‘telephone’ recited in claim 1 is not a specific machine, and adds nothing of significance to the claimed abstract idea.” *Id.* at 993. With respect to transformation, “the mere collection and organization of data . . . is insufficient to meet the transformation prong of the test . . . [T]he exploding step effects no meaningful transformation because it merely makes the originally-gathered information accessible to different destinations without changing the content or its classification.” *Id.* at 993 (citations omitted).

Digitech Image Technologies, LLC v. Electronics for Imaging, Inc., 758 F.3d 1344 (Fed. Cir. July 11, 2014).

The next day, on July 11, 2014, the Federal Circuit affirmed a district court's grant of summary judgment of invalidity under 35 U.S.C. § 101. The claims at issue in *Digitech* were "directed to the generation and use of an 'improved device profile' that describes spatial and color properties of a device within a digital image processing system. In general, digital image processing involves electronically capturing an image of a scene with a 'source device,' such as a digital camera, altering the image in a desired fashion, and transferring the altered image to an 'output device,' such as a color printer." *Digitech*, 758 F.3d at 1347. Device claims 1 and 26 and method claim 10 of U.S. Patent No. 6,128,415 are reproduced below:

1. A device profile for describing properties of a device in a digital image reproduction system to capture, transform or render an image, said device profile comprising:

first data for describing a device dependent transformation of color information content of the image to a device independent color space; and second data for describing a device dependent transformation of spatial information content of the image in said device independent color space.

26. A device profile for describing properties of a device in a digital image reproduction system to capture, transform or render an image, said device profile comprising data for describing a device dependent transformation of spatial information content of the image to a device independent color space, wherein through use of spatial stimuli and device response for said device, said data is represented by spatial characteristic functions.

10. A method of generating a device profile that describes properties of a device in a digital image reproduction system for capturing, transforming or rendering an image, said method comprising:

generating first data for describing a device dependent transformation of color information content of the image to a device independent color space through use of measured chromatic stimuli and device response characteristic functions;

generating second data for describing a device dependent transformation of spatial information content of the image in said device independent color space through use of spatial stimuli and device response characteristic functions; and combining said first and second data into the device profile.

With respect to device Claims 1 and 26, the Federal Circuit found that the device claims failed to recite patent eligible subject matter because they fail to recite a tangible object. *Id.* at 1348. The device claims “are not directed to any tangible embodiment of . . . information (i.e., in physical memory or other medium) or claim any tangible part of the digital processing system. The claims are instead directed to information in its non-tangible form. [T]he device profile . . . does not fall within any of the categories of eligible subject matter under section 101.” *Id.* at 1349. The claimed device profile was not an embodiment of hardware or software. Instead, “[t]he claims encompass all embodiments of the information contained in the device profile. . . . Data in its ethereal, non-physical form is simply information that does not fall under any of the categories of eligible subject matter under section 101.” *Id.* at 1349-1350. “The device profile, as claimed, is a collection of intangible color and spatial information” and not patent eligible subject matter under section 101. *Id.* at 1350.

Regard method Claim 10, and in contrast to the device claims, method claim 10 recited a category deemed patentable under section 101 (i.e., a process) but the court nonetheless found that it covered a patent ineligible abstract idea. *Id.*

Step One:

The Federal Circuit held that claim 10 was directed to an abstract idea. Claim 10 “recites a process of taking two data sets and combining them into a single data set, the device profile. The two data sets are generated by taking existing information . . . and organizing this information into a new form. . . . Without additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.” *Id.* at 1351.

Step Two:

The Federal Circuit found that there was nothing more to claim 10 to render it patent eligible. Plaintiff argued that the method is tied to an image processor. However, the Federal Circuit stated that “[t]he only mention of a ‘digital image reproduction system’ lies in the claim’s preamble, and . . . a preamble does not limit claim scope if it ‘merely states the purpose or intended use of an invention.’” *Id.* Even if the method claim is tied to an image processor, “[t]he method claimed . . . is thus ‘so abstract and sweeping’ as to cover any and all uses of a device profile . . .” *Id.*

Planet Bingo LLC, v. VKGS LLC, 576 Fed. Appx. 1005 (Fed. Cir. August 26, 2014)

A month after *Digitech*, the Federal Circuit upheld a district court's ruling of summary judgment of invalidity under section 101. The claims at issue in *Planet Bingo* generally "recite storing a player's preferred sets of bingo numbers; retrieving one such set upon demand, and playing that set; while simultaneously tracking the player's sets, tracking player payments, and verifying winning numbers." *Planet Bingo*, 576 Fed. Appx. at 1006. Representative claim 1 of U.S. Patent No. 6,398,646, is reproduced below:

1. A system for managing a game of Bingo which comprises:

(a) a computer with a central processing unit (CPU) and with a memory and with a printer connected to the CPU;

(b) an input and output terminal connected to the CPU and memory of the computer; and

(c) a program in the computer enabling:

(i) input of at least two sets of Bingo numbers which are preselected by a player to be played in at least one selected game of Bingo in a future period of time;

(ii) storage of the sets of Bingo numbers which are preselected by the player as a group in the memory of the computer;

(iii) assignment by the computer of a player identifier unique to the player for the group having the sets of Bingo numbers which are preselected by the player wherein the player identifier is assigned to the group for multiple sessions of Bingo;

(iv) retrieval of the group using the player identifier;

(v) selection from the group by the player of at least one of the sets of Bingo numbers preselected by the player and stored in the memory of the computer as the group for play in a selected game of Bingo in a specific session of Bingo wherein a number of sets of Bingo numbers selected for play in the selected game of Bingo is less than a total number of sets of Bingo numbers in the group;

(vi) addition by the computer of a control number for each set of Bingo numbers selected for play in the selected game of Bingo;

(vii) output of a receipt with the control number, the set of Bingo numbers which is preselected and selected by the player, a price

for the set of Bingo numbers which is preselected, a date of the game of Bingo and optionally a computer identification number; and

(viii) output for verification of a winning set of Bingo numbers by means of the control number which is input into the computer by a manager of the game of Bingo.

Step One:

The Federal Circuit held that the claims at issue were directed to the abstract idea of “managing a bingo game while allowing a player to repeatedly play the same sets of numbers in multiple sessions. . . .” *Id.* at 1007. “[M]anaging the game of bingo consists solely of mental steps which can be carried out by a human using pen and paper.” *Id.* (citations omitted). Although not drawn to the same subject matter as *Bilski* and *Alice*, the Federal Circuit stated that the claims are “directed to the abstract idea of solving a tampering problem and also minimizing other security risks during bingo ticket purchases” *Id.* at 1008. “This is similar to the abstract ideas of ‘risk hedging’ during ‘consumer transactions,’ . . . and ‘mitigating settlement risk’ in ‘financial transactions, . . . that the Supreme Court found ineligible [in *Bilski* and *Alice*].” *Id.*

Step Two:

The Federal Circuit also found that the claims lack an inventive concept sufficient to transform the claimed abstract idea into a patent eligible application. “Apart from managing a game of bingo, the claims at issue also require ‘a computer with a central processing unit,’ ‘a memory,’ ‘an input and output terminal,’ ‘a printer,’ in some cases ‘a video screen,’ and a ‘program . . . enabling’ the steps of managing a game of bingo.” *Id.* The Federal Circuit found that these elements are all generic. “[T]he claims recite a program that is used for the generic functions of storing, retrieving, and verifying a chosen set of bingo numbers against a winning set of bingo numbers. And, as was the case in *Alice*, ‘the function performed by the computer at each step of the process is purely conventional.’” *Id.* (citing *Alice*, 134 S. Ct. at 2359). *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. September 3, 2014)

A week later, the Federal Circuit affirmed a district court’s judgment on the pleadings rendering a patent invalid under section 101. The technology at issue in *buySAFE* was directed towards the use of computers over a network to provide a performance guarantee for online commercial transactions. *buySAFE*, 765 F.3d at 1351. Representative claim 1 of U.S. Patent No. 7,644,019 is reproduced below. “Claim 14 [(not shown)] narrows the claim 1 method to a guaranty ‘in one form of: a surety bond; a specialized bank

guaranty; a specialized insurance policy; and a safe transaction guaranty.” *Id.* at 1352.

1. A method, comprising:

receiving, by at least one computer application program running on a computer of a safe transaction service provider, a request from a first party for obtaining a transaction performance guaranty service with respect to an online commercial transaction following closing of the online commercial transaction;

processing, by at least one computer application program running on the safe transaction service provider computer, the request by underwriting the first party in order to provide the transaction performance guaranty service to the first party,

wherein the computer of the safe transaction service provider offers, via a computer network, the transaction performance guaranty service that binds a transaction performance guaranty to the online commercial transaction involving the first party to guarantee the performance of the first party following closing of the online commercial transaction.

Step One:

The Federal Circuit found that the claims were directed to an abstract idea. “The claims . . . do not push or even test the boundaries of the Supreme Court precedents under section 101. . .” *Id.* at 1354. “The claims are squarely about creating a contractual relationship – a ‘transaction performance guaranty’ – that is beyond question of ancient lineage. . . The dependent claims’ narrowing to particular types of such relationships, themselves familiar, does not change the analysis.” *Id.* at 1355.

Step Two:

The Federal Circuit found that the claims lacked an inventive concept. “The computer functionality is generic – . . . a computer receives a request for a guarantee and transmits an offer of guarantee in return. There is no further detail. That a computer receives and sends the information over a network – with no further specification – is not even arguably inventive. . . And it likewise cannot be enough that the transactions being guaranteed are themselves online transactions. At best, that narrowing is an ‘attempt to limit the use’ of the abstract guarantee idea ‘to a particular technological environment,’ which has long been held insufficient to save a claim in this context.” *Id.* (citing *Alice*, 134 S. Ct. at 2358).

Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709 (Fed. Cir. November 14, 2014)

A month later, the Federal Circuit affirmed a district court's dismissal of a complaint because the asserted patent was not subject matter eligible under section 101. The representative claim at issue in *Ultramercial* "includes eleven steps for displaying an advertisement in exchange for access to copyrighted media." *Ultramercial*, 772 F.3d at 714. This was like "using advertising as an exchange or currency." *Id.* at 715. Representative claim 1 of U.S. Patent No. 7,346,545 is reproduced below. The "other claims of the patent [(not shown)] are drawn to a similar process they suffer from the same infirmity as claim 1" and do not require separate consideration. *Id.* at 712.

1. A method for distribution of products over the Internet via a facilitator, said method comprising the steps of:

a first step of receiving, from a content provider, media products that are covered by intellectual property rights protection and are available for purchase, wherein each said media product being comprised of at least one of text data, music data, and video data;

a second step of selecting a sponsor message to be associated with the media product, said sponsor message being selected from a plurality of sponsor messages, said second step including accessing an activity log to verify that the total number of times which the sponsor message has been previously presented is less than the number of transaction cycles contracted by the sponsor of the sponsor message;

a third step of providing the media product for sale at an Internet website;

a fourth step of restricting general public access to said media product;

a fifth step of offering to a consumer access to the media product without charge to the consumer on the precondition that the consumer views the sponsor message;

a sixth step of receiving from the consumer a request to view the sponsor message, wherein the consumer submits said request in response to being offered access to the media product;

a seventh step of, in response to receiving the request from the consumer, facilitating the display of a sponsor message to the consumer;

an eighth step of, if the sponsor message is not an interactive message, allowing said consumer access to said media product after said step of facilitating the display of said sponsor message;

a ninth step of, if the sponsor message is an interactive message, presenting at least one query to the consumer and allowing said consumer access to said media product after receiving a response to said at least one query;

a tenth step of recording the transaction event to the activity log, said tenth step including updating the total number of times the sponsor message has been presented; and

an eleventh step of receiving payment from the sponsor of the sponsor message displayed.

Step One:

The Federal Circuit found that the claims were directed to an abstract idea. Representative claim 1 “recites an abstraction . . . devoid of concrete or tangible application. Although certain additional limitations, such as consulting an activity log, add a degree of particularity, the concept embodied by the majority of the limitations describes only the abstract idea of showing an advertisement before delivering free content.” *Id.* at 715. The Federal Circuit stated that “the addition of merely novel or non-routine components to the claimed idea [does not] necessarily turn[] an abstraction into something concrete. . . . [A]ny novelty in implementation of the idea is a factor to be considered only in the second step of the *Alice* analysis.” *Id.*

Step Two:

The Federal Circuit found that there was nothing in the claims to transform the abstract idea into something patent eligible. “[T]he claims simply instruct the practitioner to implement the abstract idea with routine conventional activity.” *Id.* at 716. “The majority of those steps comprise the abstract concept . . . and use of the Internet does not transform an otherwise abstract idea into a patent-eligible subject matter. Instead, the claimed sequence of steps comprises only ‘conventional steps, specified at a high level of generality,’ which is insufficient to supply an ‘inventive concept.’” *Id.* “[T]he steps of consulting and updating an activity log represent[] insignificant ‘data-gathering steps,’ and thus add nothing of practical significance to the underlying abstract idea. Further, that the system is active, rather than passive, and restricts public access also represents only insignificant ‘[pre]-solution activity,’ which is also not sufficient to transform an otherwise patent-ineligible abstract idea into patent-eligible subject matter.” *Id.* “The claims’ invocation of the Internet also adds no inventive concept. . . . [because], [g]iven the prevalence of the Internet,

implementation of an abstract idea on the Internet . . . is not sufficient to provide any ‘practical assurance that the process is more than a drafting effort designed to monopolize the abstract idea itself.’” *Id.* (citing *Mayo*, 132 S. Ct. at 1297).

The Federal Circuit also addressed the machine-or-transform test and stated that it can provide a useful clue in the 35 U.S.C. § 101 analysis. The claims at issue, however, “are not tied to any particular novel machine or apparatus, only a general purpose computer. . . [T]he Internet is not sufficient to save the patent under the machine prong of the machine-or-transformation test . . . It is a ubiquitous information-transmitting medium, not a novel machine. And adding a computer to otherwise conventional steps does not make an invention patent eligible. . . Any transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the analysis.” *Id.* at 716-717. The claims also fail to satisfy the transformation prong because “manipulations of ‘public or private legal obligations or relationships, business risks, or other such abstractions cannot meet the test because they are not physical objects or substances, and they are not representative of physical objects or substances.” *Id.* at 717.

In concurrence, Judge Mayer emphasized that he believes that subject matter eligibility under section 101 is a threshold issue that needs to be addressed at the outset of litigation. *Id.* Judge Mayer stated that addressing subject matter eligibility at the outset “will conserve scarce judicial resources . . . [and the] [f]ailure to recite statutory subject matter is the sort of ‘basic deficiency,’ that can, and should, ‘be exposed at the point of minimum expenditure of time and money by the parties and the court.’” *Id.* at 718-719 (quoting *Bell Atl. Corp. v. Twombly*, 127 S. Ct. 1955). “[R]esolving subject matter eligibility at the outset provides a bulwark against vexatious infringement suits. The scourge of meritless infringement claims has continued unabated for decades due, in no small measure, to the ease of asserting such claims and the enormous sums required to defend against them.” *Id.* at 719. “Subject matter eligibility challenges provide the most efficient and effective tool for clearing the patent thicket, weeding out those patents that stifle innovation and transgress the public domain.” *Id.* at 719. Judge Mayer also stated that no presumption of eligibility applies in a section 101 inquiry (*Id.* at 717) but there has been no indication whether the Federal Circuit, as a whole, adopts Judge Mayer’s view. *DDR Holdings, LLC, v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. December 5, 2014)

A month after *Ultramercial*, the Federal Circuit issued its decision in *DDR Holdings*. Of all of post-*Alice* decisions, *DDR Holdings* is arguably the most interesting and important because it is the only decision that upheld the validity of the patent under 35 U.S.C. § 101. The patent claims at issue described a

“new web page that permits a website visitor, in a sense, to be in two places at the same time. On activation of a hyperlink on a host website – such as an advertisement for a third-party merchant – instead of taking the visitor to the merchant’s website, the system generates and directs the visitor to a composite web page that displays product information from the third-party merchant, but retains the host website’s ‘look and feel.’” *DDR Holdings*, 773 F.3d at 1248-1249. Representative claim 19 of U.S. Patent No. 7,818,399 is reproduced below.

19. A system useful in an outsource provider serving web pages offering commercial opportunities, the system comprising:

(a) a computer store containing data, for each of a plurality of first web pages, defining a plurality of visually perceptible elements, which visually perceptible elements correspond to the plurality of first web pages;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

(ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the outsource provider, and the owner of the first web page displaying the associated link are each third parties with respect to one other;

(b) a computer server at the outsource provider, which computer server is coupled to the computer store and programmed to:

(i) receive from the web browser of a computer user a signal indicating activation of one of the links displayed by one of the first web pages;

(ii) automatically identify as the source page the one of the first web pages on which the link has been activated;

(iii) in response to identification of the source page, automatically retrieve the stored data corresponding to the source page; and

(iv) using the data retrieved, automatically generate and transmit to the web browser a second web page that displays: (A) information associated with the commerce object associated with the link that has been activated, and (B) the plurality of visually perceptible elements visually corresponding to the source page.

The Federal Circuit stated the claims were different from others the court had found invalid “because they do not merely recite the performance of some business practices known from the pre-Internet world along with the requirement to perform it on the Internet.” *Id.* at 1257. The court said there was no old analogy to compare the claims to. *Id.* (stating that the “dissent suggests that the ‘store within a store’ concept, such as a warehouse store that contains a kiosk for selling a third-party partner’s cruise vacation packages, is the pre-Internet analog of the ‘399 patent’s asserted claims”). “Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.* The problem to be solved did not arise in the “‘brick and mortar’ context.” *Id.*

Step One and Two:

The Federal Circuit did not precisely define the abstract idea because, “under any . . . characterization . . . the claims satisfy *Mayo/Alice* step two.” *Id.* In other words, the Federal Circuit focused on *Alice* step 2. The court held there was an inventive concept in the claims, because they modified the “routine, conventional functioning of the Internet hyperlink protocol.” *Id.* Instead of transporting away from a website after clicking a link, the claims generate a hybrid webpage retaining the look and feel of the host website. *Id.* at 1257-1258. Put another way, the Federal Circuit held that the claims at issue improved a way of doing business on the Internet.

While the decision in *DDR Holdings* was pro-patentee, the Federal Circuit did note that “after *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. . . . The bare fact that a computer exists in the physical rather than purely conceptual realm ‘is beside the point.’” *Id.* at 1255 (quoting *Alice*, 134 S. Ct. at 2358).

The Federal Circuit also addressed the preemption concern and stated that the claims in *DDR Holdings* “do not attempt to preempt every application of the idea of . . . making two web pages look the same. . . . Rather, they recite a specific way to automate the creation of a composite webpage . . . in order to solve a problem faced by websites on the internet.” *Id.* at 1259. “As a result, the . . . claims include ‘additional features’ that ensure that the claims are ‘more than a drafting effort design to monopolize the [abstract] idea.’” *Id.* (citing *Alice*, 134 S. Ct. at 2357).

In re BRCA1- and BRCA2- Based Hereditary Cancer Test Patent Litigation, 774 F.3d 755 (Fed. Cir. December 17, 2014)

In December, the Federal Circuit dealt with an appeal of a preliminary injunction. In *In re BRCA1*, the claims are directed to the identification of

alterations of genes by comparing BRCA sequences. *In re BRCA1*, 774 F.3d at 763. Claim 7 and 8 of U.S. Patent No. 5,753,441, revised to include the language of claim 1, are reproduced below.

Claim 7, revised to include the language of claim 1, from which it depends, provides:

A method for screening germline of a human subject for an alteration of a BRCA1 gene which comprises comparing germline sequence of a BRCA1 gene or BRCA1 RNA from a tissue sample from said subject or a sequence of BRCA1 cDNA made from mRNA from said sample with germline sequences of wild-type BRCA1 gene, wild-type BRCA1 RNA or wild-type BRCA1 cDNA, wherein a difference in the sequence of the BRCA1 gene, BRCA1 RNA or BRCA1 cDNA of the subject from wild-type indicates an alteration in the BRCA1 gene in said subject[,] wherein a germline nucleic acid sequence is compared by hybridizing a BRCA1 gene probe which specifically hybridizes to a BRCA1 allele to genomic DNA isolated from said sample and detecting the presence of a hybridization product wherein a presence of said product indicates the presence of said allele in the subject.

Claim 8, revised to include the language of claim 1, from which it depends, provides:

A method for screening germline of a human subject for an alteration of a BRCA1 gene which comprises comparing germline sequence of a BRCA1 gene or BRCA1 RNA from a tissue sample from said subject or a sequence of BRCA1 cDNA made from mRNA from said sample with germline sequences of wild-type BRCA1 gene, wild-type BRCA1 RNA or wild-type BRCA1 cDNA, wherein a difference in the sequence of the BRCA1 gene, BRCA1 RNA or BRCA1 cDNA of the subject from wild-type indicates an alteration in the BRCA1 gene in said subject[,] wherein a germline nucleic acid sequence is compared by amplifying all or part of a BRCA1 gene from said sample using a set of primers to produce amplified nucleic acids and sequencing the amplified nucleic acids.

Step One:

The Federal Circuit stated that the claims were “directed to the patent-ineligible abstract idea of comparing BRCA sequences and determining the existence of alterations. The methods, directed to identification of alterations of the gene, require merely comparing the patient’s gene with the wild-type and identifying any differences that arise. . . [A]llowing a patent on

the comparison step could impede a great swath of research relating to the BRCA genes, and it is antithetical to the patent laws to allow these basic building blocks of scientific research to be monopolized.” *Id.* at 763.

Step Two:

The Court stated that the claims lacked an inventive concept to make them patent eligible. “‘Any scientist engaged in obtaining the sequence of a gene in a patient sample would rely on these techniques.’ . . . The second paragraphs of claims 7 and 8 do nothing more than spell out what practitioners already knew – how to compare gene sequences using routine, ordinary techniques. Nothing is added by identifying the techniques to be used in making the comparison because those comparison techniques were the well-understood, routine, and conventional techniques that a scientist would have thought of when instructed to compare two gene sequences.” *Id.* at 764.

Content Extraction and Transmission LLC v. Wells Fargo Bank, 776 F.3d 1343 (Fed. Cir. December 23, 2014)

Toward the end of December, 2014, the Federal Circuit affirmed a district court’s dismissal of a complaint for asserting a patent that did not claim patent eligible subject matter under section 101. In *Content Extraction*, the “claims generally recite a method of 1) extracting data from hard copy documents using an automated digitizing unit such as a scanner, 2) recognizing specific information from the extracted data, and 3) storing that information in a memory.” *Content Extraction*, 776 F.3d at 1345. Representative claim 1 of U.S. Patent No. 5,258,855 is reproduced below.

A method of processing information from a diversity of types of hard copy documents, said method comprising the steps of:

(a) receiving output representing a diversity of types of hard copy documents from an automated digitizing unit and storing information from said diversity of types of hard copy documents into a memory, said information not fixed from one document to the next, said receiving step not preceded by scanning, via said automated digitizing unit, of a separate document containing format requirements;

(b) recognizing portions of said hard copy documents corresponding to a first data field; and

(c) storing information from said portions of said hard copy documents corresponding to said first data field into memory locations for said first data field.

Step One:

The Federal Circuit found that “the claims of the asserted patents are drawn to the abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory.” *Id.* at 1347. “The concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions. And banks have, for some time, reviewed checks, recognized relevant data such as the amount, account number, and identity of account holder, and stored that information in their records.” *Id.* at 1345.

Step Two:

The Federal Circuit found that the claims recited only routine activity. Plaintiff argued that the claims require a computer and a scanner but “the claims in *Alice* also required a computer that processed streams of bits, but nonetheless were found to be abstract.” *Id.* at 1347. The computer claims do not “involve more than performance of ‘well-understood, routine, and conventional activities previously known in the industry.’” *Id.* at 1347-1348. There is no inventive concept in the use of “a generic scanner and computer to perform well-understood, routine, and conventional activities commonly used in industry.” *Id.* at 1348.

The Federal Circuit also rejected the contention that claim construction is required for a section 101 analysis. The Court stated that “[a]lthough the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter, claim construction is not an inviolable prerequisite to a validity determination under § 101.” *Id.* at 1349. “Even when construed in a manner most favorable to [plaintiff], none of [plaintiff’s] claims amount to ‘significantly more’ than the abstract idea of extracting and storing data from hard copy documents using generic scanning and processing technology.” *Id.* The plaintiff also argued that the district court erred by analyzing a representative claim but the Federal Circuit stated that the “district court . . . correctly determined that addressing each claim of the asserted patents was unnecessary.” *Id.* at 1348.

Allvoice Developments US, LLC v. Microsoft Corp., 612 Fed. Appx. 1009 (Fed. Cir. May 22, 2015)

After the initial flurry of section 101 cases, the Federal Circuit remained quiet on section 101 issues until May of 2015. Then in *Allvoice* the Federal Circuit reviewed an appeal of summary judgment of invalidity under section 101. The technology at issue in *Allvoice* related to speech recognition and the recognition of words in computer related applications. Claims 60 and 64 of U.S. Patent No. 5,799,273 are reproduced below.

60. *A universal speech-recognition interface that enables operative coupling of a speech-recognition engine to at least any one of a plurality of different computer-related applications, the universal speech-recognition interface comprising:*

input means for receiving speech-recognition data including recognised words;

output means for outputting the recognised words into at least any one of the plurality of different computer-related applications to allow processing of the recognised words as input text; and

audio playback means for playing audio data associated with the recognised words.

64. *A speech-recognition interface that enables operative coupling of a speech-recognition engine to a computer-related application, the interface comprising:*

input means for receiving speech-recognition data including recognised words;

output means for outputting the recognised words into a computer-related application to allow processing of the recognised words as input text, including changing positions of the recognised words; and

means, independent of the computer-related application, for determining positions of the recognised words in the computer related application.

The Federal Circuit found that none of the claims were directed towards a category of patent eligible subject matter recognized by 35 U.S.C. § 101. The claims did “not recite a process or tangible or physical object and, thus, do not fall within any of the categories of eligible subject matter.” *Allvoice*, 612 Fed. Appx. At 1017. The claims were directed to a speech recognition interface and the Federal Circuit stated that “[s]oftware may be patent eligible, but when a claim is not directed towards a process, the subject matter must exist in tangible form. Here, the disputed claims merely claim software instructions without any hardware limitations.” *Id.* at 1018. The Court refused to import or imply any tangible medium when no such medium is claimed. *Id.* *OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. June 11, 2015)

A month later, the Federal Circuit, reviewed a district court's judgment of invalidity under section 101 on the pleadings. The technology at issue in *OIP Technologies* was directed towards "a price-optimization method that 'help[s] vendors automatically reach better pricing decisions through automatic estimation and measurement of actual demand to select prices.'" *OIP Technologies*, 788 F.3d at 1361. Representative claim 1 of U.S. Patent No. 7,970,713:

1. A method of pricing a product for sale, the method comprising:

testing each price of a plurality of prices by sending a first set of electronic messages over a network to devices;

wherein said electronic messages include offers of said product;

wherein said offers are to be presented to potential customers of said product to allow said potential customers to purchase said product for the prices included in said offers;

wherein the devices are programmed to communicate offer terms, including the prices contained in the messages received by the devices;

wherein the devices are programmed to receive offers for the product based on the offer terms;

wherein the devices are not configured to fulfill orders by providing the product;

wherein each price of said plurality of prices is used in the offer associated with at least one electronic message in said first set of electronic messages;

gathering, within a machine-readable medium, statistics generated during said testing about how the potential customers responded to the offers, wherein the statistics include number of sales of the product made at each of the plurality;

using a computerized system to read said statistics from said machine-readable medium and to automatically determine, based on said statistics, an estimated outcome of using each of the plurality of prices for the product;

selecting a price at which to sell said product based on the estimated outcome determined by said computerized system; and

sending a second set of electronic messages over the network, wherein the second set of electronic messages include offers, to be presented to potential customers, of said product at said selected price.

Step One:

The Federal Circuit found that the claims were directed to the abstract idea “of offer-based price optimization.” *Id.* at 1362. The claims “broadly recite[] a ‘method of pricing a product for sale,’ and the specification describes the invention as an ‘automatic pricing method and apparatus for use in electronic commerce.’ . . . This concept of ‘offer based pricing’ is similar to other ‘fundamental economic concepts’ found to be abstract ideas by the Supreme Court and this court.” *Id.* The Federal Circuit noted the fact that “the claims do not preempt all price optimization or be limited to price optimization in the e-commerce setting do not make them any less abstract.” *Id.* at 1362-1363.

Step Two:

The Federal Circuit stated that the claims lack an inventive concept because they “merely recite well-understood, routine conventional activities, either by requiring conventional computer activities or routine data-gathering steps.” *Id.* at 1363 (citations omitted). “[C]laim 1 recites “sending a first set of electronic messages over a network to devices,” the devices being “programmed to communicate,” storing test results in a “machine-readable medium,” and “using a computerized system ... to automatically determine” an estimated outcome and setting a price. Just as in *Alice*, ‘all of these computer functions are ‘well-understood, routine, conventional activit[ies]’ previously known to the industry.’” *Id.* (quoting *Alice*, 134 S. Ct. at 2359). The addition of steps to test prices and collect data based on reactions does not any meaningful limitations to the abstract idea. *Id.* The Federal Circuit also stated that mere optimization using a computer is insufficient to render the claims subject matter eligible as “relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.” *Id.* at 1363.

Judge Mayer, in concurrence, again reiterated his view previously expressed in his *Ultramercial* concurrence that subject matter eligibility should be resolved on the pleadings. Judge Mayer stated that “[f]ailure to recite statutory subject matter is the sort of ‘basic deficiency,’ that can, and should, ‘be exposed at the point of minimum expenditure of time and money by the parties and the court.’ Addressing 35 U.S.C. § 101 at the outset not only conserves scarce judicial resources and spares litigants the staggering costs associated with discovery and protracted claim construction litigation, it also works to stem the tide of vexatious suits brought by the owners of vague and overbroad business

method patents.” *Id.* at 1364 (citing *Bell Atl. Corp. v. Twombly*, 127 S.Ct. 1955 (2007)).

Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371 (Fed. Cir. June 12, 2015)

On June 12, 2015, the Federal Circuit affirmed a district court’s ruling of summary judgment of invalidity based on section 101. The technology at issue in *Ariosa* is directed to “certain methods of using cffDNA . . . [which] include amplifying the cffDNA contained in a sample of a plasma or serum from a pregnant female and detecting the paternally inherited cffDNA . . . [and] for making a diagnosis of certain fetal characteristics based on the detection of paternally inherited cffDNA.” *Ariosa*, 788 F.3d at 1373. Claims 1, 24, and 25 of U.S. Patent No. 6,258,540 are reproduced below. “The remaining claims [(not shown)] explain how the method of detection occurs or how it can be used.” *Id.* at 1374.

1. A method for detecting a paternally inherited nucleic acid of fetal origin performed on a maternal serum or plasma sample from a pregnant female, which method comprises amplifying a paternally inherited nucleic acid from the serum or plasma sample and detecting the presence of a paternally inherited nucleic acid of fetal origin in the sample.

24. A method for detecting a paternally inherited nucleic acid on a maternal blood sample, which method comprises: removing all or substantially all nucleated and anucleated cell populations from the blood sample, amplifying a paternally inherited nucleic acid from the remaining fluid and subjecting the amplified nucleic acid to a test for the Paternally [sic] inherited fetal nucleic acid.

25. A method for performing a prenatal diagnosis on a maternal blood sample, which method comprises obtaining a non-cellular fraction of the blood sample amplifying a paternally inherited nucleic acid from the non-cellular fraction and performing nucleic acid analysis on the amplified nucleic acid to detect paternally inherited fetal nucleic acid.

Step One:

The Federal Circuit found that the claims were directed to natural phenomenon. “It is undisputed that the existence of cffDNA in maternal blood is a natural phenomenon.” *Id.* at 1376.

Step Two:

The Federal Circuit found that the claims lacked an inventive concept to render them patent eligible under section 101. “The method at issue . . .

amounts to a general instruction to doctors to apply routine, conventional techniques when seeking to detect cffDNA.” *Id.* The specification confirms that the “preparation and amplification of DNA sequences in plasma or serum were well-understood, routine, conventional activities performed by doctors in 1997.” *Id.*

The Court rejected the argument that the lack of complete preemption renders a claim valid under § 101. The Court stated that “questions on preemption are inherent in and resolved by the § 101 analysis. . . . While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. . . . Where a patent’s claims are deemed only to disclose patent ineligible subject matter under the Mayo framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Id.* at 1379

Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343 (Fed. Cir. June 23, 2015)

Shortly after *Ariosa*, the Federal Circuit affirmed a district court’s dismissal of a complaint asserting a patent that failed to claim patent eligible subject matter under section 101. The claims at issue in *Internet Patents* recited “the use of a conventional web browser Back and Forward navigational functionalities without data loss in an online application consisting of dynamically generated web pages.” *Internet Patents*, 790 F.3d at 1344. The addressed claims of U.S. Patent No. 7,707,505 are produced below.

1. A method of providing an intelligent user interface to an online application comprising the steps of:

furnishing a plurality of icons on a web page displayed to a user of a web browser, wherein each of said icons is a hyperlink to a dynamically generated online application form set, and wherein said web browser comprises Back and Forward navigation functionalities;

displaying said dynamically generated online application form set in response to the activation of said hyperlink, wherein said dynamically generated online application form set comprises a state determined by at least one user input; and

maintaining said state upon the activation of another of said icons, wherein said maintaining allows use of said Back and Forward navigation functionalities without loss of said state.

2[/10]. The method[/computer system] of claim 1[/9], wherein said displaying said dynamically generated online application form set

comprises combining information from a template file and either a database or a conditional merge file or both to form said dynamically generated online application form set.

7[/15/23]. The method[/computer system/computer-readable storage medium] of claim 1[/9/17], wherein said web page comprises quasistatic elements distinct from said dynamically generated online application form set, wherein said displaying said dynamically generated online application form set in response to the activation of said hyperlink affects the display of said quasi-static elements.

Step One:

The Federal Circuit found “that the character of the claimed invention is an abstract idea: the idea of retaining information in the navigation of online forms.” *Id.* at 1348. “[T]he claim is directed to the idea itself—the abstract idea of avoiding loss of data.” *Id.*

Step Two:

The Federal Circuit found that the claims lacked an inventive concept to render the claims subject matter eligible under section 101. The “[p]atent specification refers to the ‘browser Back and Forward button functionality’ as ‘conventional.’ [and] as ‘well-known’ and ‘common,’ *e.g.*, ‘Furthermore, the common convenience of the ‘Back’ and ‘Forward’ buttons (provided in all well-known Internet browsers) generally does not function properly when filling in online forms.’” *Id.* “The additional limitations of these dependent claims do not add an inventive concept, for they represent merely generic data collection steps or siting the ineligible concept in a particular technological environment.” *Id.* at 1349.

The Federal Circuit also stated that a “pragmatic analysis of § 101 is facilitated by considerations analogous to those of §§ 102 and 103 as applied to the particular case. The courts have recognized that it is not always easy to determine the boundary between abstraction and patent-eligible subject matter.” *Id.* at 1347. The “[d]etermination of what is an inventive concept favors inquiries analogous to those undertaken for determination of patentable invention, for a known idea, or one that is routine and conventional, is not inventive. . .” *Id.* at 1346. For “*Bilski* and *Alice*, the conventional idea was based on the use of computers. . . . For *Mayo*, the Court held that . . . administer[ing] the drug according to . . . presence [of thiopurine] in the blood at most adds a suggestion that he should take those natural laws into account when treating the patient.” *Id.* (quotations omitted).

Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363 (Fed. Cir. July 6, 2015)

The most recent Federal Circuit decisions dealing with subject matter eligibility were decided in July. The first, *Intellectual Ventures I*, was a review of an appeal of summary judgment. The technology at issue in *Intellectual Ventures I* “generally relates to budgeting, or, . . . utilizing user-selected preset limits on spending that are stored in a database that, when reached, communicates a notification to the user via a device.” *Intellectual Ventures I*, 792 F.3d at 1367 (internal quotations omitted). Representative Claim 5 of U.S. Patent No. 8,083,137 and representative claim 1 of U.S. Patent No. 7,603,382 are provided below.

‘137 Patent, Claim 5. A method comprising:

storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit; and causing communication, over a communication medium and to a receiving device, of transaction summary data in the database for at least one of the one or more user-selected categories, said transaction summary data containing said at least one user-selected category's user pre-set limit.

‘382 Patent, Claim 1. A system for providing web pages accessed from a web site in a manner which presents the web pages tailored to an individual user, comprising:

an interactive interface configured to provide dynamic web site navigation data to the user, the interactive interface comprising:

a display depicting portions of the web site visited by the user as a function of the web site navigation data; and

a display depicting portions of the web site visited by the user as a function of the user's personal characteristics.

Step One:

The Federal Circuit found that the claims of the ‘137 and ‘382 patent were directed to abstract ideas. With respect to the ‘137 patent, “the patent claims are directed to an abstract idea: tracking financial transactions to determine whether they exceed a pre-set spending limit (*i.e.*, budgeting).” *Id.* at 1367. “[B]udgeting undoubtedly . . . is an abstract idea. And while the claims recited budgeting using a communication medium . . . , that limitation does not render the claims any less abstract.” *Id.* at 1367.

With respect to the ‘382 patent, the Federal Circuit stated that “[t]here is no dispute that newspaper inserts had often been tailored based on information known about the customer—for example, a newspaper might advertise based on the customer’s location. Providing this minimal tailoring—e.g., providing different newspaper inserts based upon the location of the individual—is an abstract idea.” *Id.* at 1369. The Federal Circuit described how the abstract idea of the ‘382 patent is a long-practiced concept. “Tailoring information based on the time of day of viewing is also an abstract, overly broad concept long-practiced in our society. There can be no doubt that television commercials for decades tailored advertisements based on the time of day during which the advertisement was viewed. For example, a television channel might choose to present a commercial for children’s toys during early morning cartoon programs but beer during an evening sporting event. An advertisement taking into account the time of day and tailoring the information presented to the user based on that information is another ‘fundamental ... practice long prevalent in our system....’” *Id.* at 1370 (citing *Alice*, 134 S. Ct. at 2356).

Step Two:

The Federal Circuit found that both the ‘137 and ‘382 patents lacked an inventive concept. Plaintiff attempted to compare the claims to *DDR Holdings* but the Federal Circuit stated that *DDR Holdings* is inapplicable because “[t]he patent claims here do not address problems unique to the Internet. . .” *Id.*

With respect to the ‘137 patent, the Federal Circuit stated that “[t]he recited elements, e.g., a database, a user profile . . . , and a communication medium, are all generic computer elements. Instructing one to ‘apply’ an abstract idea and reciting no more than generic computer elements performing generic computer tasks does not make an abstract idea patent-eligible.” *Id.* at 1368 (citing *Alice* 134 S. Ct. at 2359-2360).

With respect to the ‘382 patent, the Federal Circuit stated that “there is no inventive concept that would support patent eligibility. . . . Although the claim includes a ‘dynamic’ limitation, the specification makes clear that determining whether the user falls into one category or another (e.g., whether the viewer is a ‘Generation X’er’ or an ‘older individual’) and then presenting the user a pre-created advertisement based on the category determination, satisfies the dynamic requirement.” *Id.* at 1370. “Rather, the ‘interactive interface’ simply describes a generic web server with attendant software, tasked with providing web pages to and communicating with the user’s computer.” *Id.* “Requiring the use of a ‘software’ ‘brain’ ‘tasked with tailoring information and providing it to the user’ provides no additional limitation beyond applying an

abstract idea, restricted to the Internet, on a generic computer.” *Id.* at 1371. With respect to both patents, the Federal Circuit stated that any improvement or speed efficiency in applying an abstract idea with a computer does not provide a sufficient inventive concept. *Id.* at 1367.

Versata Development Group, Inc. v. SAP America, Inc., 793 F.3d 1306 (Fed. Cir. July 9, 2015)

The most recent Federal Circuit decision, *Versata*, dealt with an appeal of a patent office’s ruling of invalidity under section 101 from a covered business method patent review. The patent at issue was directed to arranging customers into a hierarchy of customer groups and products into a hierarchy of product groups. *Versata*, 793 F.3d at 1312. Representative claim 17 of U.S. Patent No. 6,553,350 is reproduced below.

17. A method for determining a price of a product offered to a purchasing organization comprising:

arranging a hierarchy of organizational groups comprising a plurality of branches such that an organizational group below a higher organizational group in each of the branches is a subset of the higher organizational group;

arranging a hierarchy of product groups comprising a plurality of branches such that a product group below a higher product group in each of the branches is a subset of the higher product group;

storing pricing information in a data source, wherein the pricing information is associated, with (i) a pricing type, (ii) the organizational groups, and (iii) the product groups;

retrieving applicable pricing information corresponding to the product, the purchasing organization, each product group above the product group in each branch of the hierarchy of product groups in which the product is a member, and each organizational group above the purchasing organization in each branch of the hierarchy of organizational groups in which the purchasing organization is a member;

sorting the pricing information according to the pricing types, the product, the purchasing organization, the hierarchy of product groups, and the hierarchy of organizational groups; eliminating any of the pricing information that is less restrictive; and

determining the product price using the sorted pricing information.

Step One:

The Federal Circuit found that the claims were directed to an abstract idea. The claims “are directed to the abstract idea of determining a price, using organizational and product group hierarchies, in the same way that the claims in *Alice* were directed to the abstract idea of intermediated settlement, and the claims in *Bilski* were directed to the abstract idea of risk hedging.” *Id.* at 1333. “Using organizational and product group hierarchies to determine a price is an abstract idea that has no particular concrete or tangible form or application. It is a building block, a basic conceptual framework for organizing information, similar to the claims involving collecting, recognizing, and storing data in *Content Extraction* and the claims in *CyberSource*.” *Id.* at 1333-1334.

Step Two:

The Federal Circuit also found that the claim limitations were conventional. “[T]he limitations of claim 17 involve arranging a hierarchy of organizational and product groups, storing pricing information, retrieving applicable pricing information, sorting pricing information, eliminating less restrictive pricing information, and determining the price. All of these limitations are well-understood, routine, conventional activities previously known to the industry. . . . The limitations are either inherent in the abstract idea of determining a price using organization and product group hierarchies—*e.g.*, arranging the hierarchies—or conventional and well-known limitations involving a computer—*e.g.*, storing pricing information.” *Id.* at 1334.

The Court rejected plaintiff’s argument that the claims satisfy the machine-or-transform test and are therefore patent eligible under section 101. “[T]he claims at issue do not transform a general purpose computer into a specific machine. The steps [the] claims (*e.g.*, arranging, storing, retrieving, sorting, eliminating, determining) are conventional, routine, and well-known. They involve the normal, basic functions of a computer. 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.” *Id.* at 1335 (citations omitted).

The Court noted, that unlike *DDR Holdings*, “the claims at issue are not rooted in computer technology to solve a problem specifically arising in some aspect of computer technology.” *Id.* at 1334. “Examination of the claims—as a whole and in terms of each claim’s limitations—reveals that the claims are not directed to improving computer performance and do not recite

any such benefit. The claims are directed to price determination and merely use a computer to improve the performance of that determination—not the performance of a computer.” *Id.* at 1335.

Conclusion

Absent amendment to 35 U.S.C. § 101 or the Supreme Court taking up another section 101 case, both of which appear unlikely, *Alice* challenges are here to stay. Filing a motion to dismiss, motion for judgment on the pleadings, or motion for summary judgment on *Alice* grounds must be considered by anyone accused of infringement. And plaintiffs must consider the strength of their patent with respect to *Alice* before filing suit, as this will impact whether or where to bring suit. Any analysis of 35 U.S.C. § 101 should start with *Alice*, *Mayo*, and the Federal Circuit’s section 101 decisions, with patentees analogizing to *DDR Holdings* and accused infringers analogizing to the rest of the cases. The same cases are also useful when considering whether to file a patent application, and when prosecuting patent applications. Those prosecuting patents should also look to the USPTO’s 2014 and 2015 Interim Guidance on Subject Matter Eligibility, available on the USPTO’s website. And obviously, both litigators and prosecutors should continue to monitor what is expected to be many future Federal Circuit *Alice* decision.