

IN THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CLS BANK INTERNATIONAL,
Plaintiff-Appellee,

and

CLS SERVICES LTD.,
Counterclaim-Defendant Appellee,

v.

ALICE CORPORATION PTY. LTD.,
Defendant-Appellant.

Appeal from the United States District Court for the District of Columbia in
Case No. 07-CV-0974, Judge Rosemary M. Collyer

***EN BANC RESPONSE BRIEF OF DEFENDANT-APPELLANT
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CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rule 47.4, undersigned counsel for Defendant-Appellant certifies the following:

1. The full name of every party or amicus represented by me is Alice Corporation Pty. Ltd.
2. The name of the real party in interest represented by me is the same.
3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are: National Australia Bank Limited.

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STATEMENT OF RELATED CASES

As discussed in appellant Alice Corporation Pty. Ltd.'s ("Alice's") opening brief before the panel, this Court previously denied a petition by CLS Bank International and CLS Services Ltd. (collectively, "CLS") for an interlocutory appeal from the same underlying district court action. *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, No. 2010-M922, 411 F. App'x 306 (Fed. Cir. 2010); see Alice Br. at 1.

In addition, Alice is aware of one case pending before this Court whose outcome may be directly affected by this Court's decision in this appeal. In *Graff/Ross Holdings, LLP v. Fed. Home Loan Mtg. Corp.*, Nos. 2013-1067, -1068, -1069, the parties have jointly moved to stay the briefing schedule pending the decision of this appeal, on the grounds that "the CLS Bank decision will likely define the legal standard" for that case. No. 2013-1067, Dkt. No. 6, at 6.

STATEMENT OF THE CASE

CLS Bank International began this action in May 2007, when it filed a complaint against Alice in the United States District Court for the District of Columbia for a declaratory judgment of non-infringement, invalidity, and unenforceability of U.S. Patent Nos. 5,970,479 ("the '479 patent"), 6,912,510 ("the '510 patent"), and 7,149,720 ("the '720 patent"). Alice filed counterclaims against CLS Bank International and its related company CLS Services Ltd. asserting

infringement of these same patents. A fourth patent, U.S. Patent No. 7,725,375 (“the ’375 patent”) was added to the case after it issued in May 2010.

There were only limited proceedings in the district court prior to its entry of judgment. First, the district court allowed limited discovery regarding CLS’s assertion that it did not infringe Alice’s patents because portions of the accused system are located abroad and, thereafter, denied CLS’s motion for summary judgment on this issue. *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 667 F. Supp. 2d 29 (D.D.C. 2009).

Second, following this Court’s decision in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (en banc), CLS requested that the district court decide as a threshold issue whether Alice’s claims satisfy 35 U.S.C. § 101. The district court agreed to do so, but before the parties’ cross-motions for summary judgment were decided, the Supreme Court granted *certiorari* in *Bilski*, leading the district court to deny the pending summary judgment motions without prejudice, pending the Supreme Court’s decision. JA12.

In August 2010, CLS renewed its motion for summary judgment, alleging invalidity for lack of patent-eligible subject matter, and Alice cross-moved for summary judgment that its asserted claims satisfy 35 U.S.C. § 101. Because the district court had not yet conducted claim construction proceedings, the parties and the district court agreed that for purposes of deciding the motions, the district court

would assume claim constructions favorable to Alice—including construing all of the asserted claims to require the use of a computer system. JA24–25.

The district court granted CLS’s motion for summary judgment and denied Alice’s cross-motion, holding that all of the asserted claims of Alice’s four patents are invalid for lack of patentable subject matter because they merely claim abstract ideas. *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 768 F. Supp. 2d 221 (D.D.C. 2011). The district court entered final judgment in CLS’s favor, and Alice timely appealed.

This Court reversed the district court’s judgment as to all of Alice’s claims. The panel majority ruled that Alice’s claims are not directed to abstract ideas, but rather to “the practical application of a business concept in a specific way,” which required computer implementation in a manner that “can be characterized as being integral to the method, as ‘play[ing] a significant part in permitting the method to be performed,’ and as not being token post-solution activity.” *CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341, 1348–49, 1355 (Fed. Cir. 2012) (brackets in original) (“Panel Op.”). Judge Prost dissented, and would have held all of Alice’s claims ineligible under § 101.

CLS petitioned for rehearing *en banc*. This Court granted CLS’s petition, and directed the parties to submit additional briefing on two questions, discussed in detail below. 484 F. App’x 559, 559–60 (Fed. Cir. 2012) (per curiam).

STATEMENT OF THE FACTS

Alice, which is half-owned by National Australia Bank Limited, was founded in the 1990s by Ian Shepherd, the former head of the Melbourne, Australia, office of McKinsey & Company and the inventor of the patents-in-suit. In the early 1990s, Mr. Shepherd conceived of and later built a computerized system for creating and exchanging financial instruments such as derivatives.

Alice applied for and obtained patents covering aspects of Mr. Shepherd's invention, four of which are at issue in this case. Contrary to CLS's suggestion, these patents do not "broadly claim the use of an intermediary or middleman to mitigate settlement risk in financial transactions." CLS En Banc Br. at 6. Rather, Alice's patents describe and claim the computerized system Mr. Shepherd invented, known in the patents as the INVENTCO system. One aspect of the INVENTCO system, which is recited in the asserted claims and described, *inter alia*, at columns 24 through 28 of the '479 patent (as well as in the corresponding places in the specifications of the other three patents, *see* JA365–67, 528–30, 688–89, 849–51), relates to a specific system and process for the execution of a previously-agreed-upon exchange, known in the financial world as "settlement."

Typically, when parties agree to exchange particular things of value—such as, for instance, currencies—their agreement to make the exchange occurs prior to, and separate from, the actual exchange. Thus, for example, while parties may

agree on Monday to trade a certain number of dollars for a certain number of euros, the actual exchange will not occur until sometime later, typically several days. This later execution of the parties' previously-agreed upon trade is referred to as settlement. JA1004–05; *see also, e.g.*, JA259, 403, 562, 724. A major risk in this sort of transaction is that one party will perform and send its portion of the exchange at the time for settlement, but the other party will not do the same.

JA1005.

Mr. Shepherd's invention addresses this problem by using a computer to perform settlements in a particular way that mitigates or eliminates the risk that one party to an exchange will perform without the other doing so. As the panel majority recognized, Alice's claims do not cover every way of using an intermediary to effectuate exchanges, nor do they broadly cover all ways of using a computer as the intermediary between the parties to an exchange. Panel Op., 685 F.3d at 1355–56. Rather, Alice has claimed one particular way of using a computer to carry out a settlement, in which the computer system uses electronic “shadow” records that it maintains separately and independently from the real-world accounts that each party holds at an “exchange institution,” such as a central bank, and performs a particular sequence of steps in order to carry out the parties' exchange.

Claim 33 of the '479 patent exemplifies Alice's invention:

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.

JA386. Thus, in this example, the parties have agreed on Monday to exchange a certain number of euros for a certain number of dollars. The exchange has not yet occurred at the time of their agreement, *i.e.*, no money has yet changed hands. To carry out the exchange, the computer creates and maintains “shadow records” for each party that are independent of real-world records, or accounts, which the parties hold at the exchange institutions. The computer obtains start-of-day balances for the parties’ shadow records from the exchange institutions. Then, as transactions are sent to the computer to be settled, the computer checks the shadow accounts to ensure that they contain adequate value to consummate each exchange.

If there is sufficient value, the computer electronically adjusts *the shadow accounts—but not the real-world accounts at this stage*—in real time to effectuate the parties’ exchange. Sometime later—at the end of the day in claim 33—the computer issues irrevocable instructions to the exchange institutions to adjust the parties’ real-world accounts to reflect the transactions that had been performed earlier in the shadow accounts, in order to conclude the parties’ exchange of obligations. JA365–67, 386, 1005–10; Panel Op., 685 F.3d at 1355.

While claim 33 and other asserted claims are directed to methods of exchanging obligations, Alice also claimed the computer system that Mr. Shepherd invented, as well as computer storage media containing code to program computer systems for use with Mr. Shepherd’s invention. Claim 14 of the ’375 patent claims that computer system:

14. A data processing system to enable the exchange of an obligation between parties, the system comprising:
 - a communications controller,
 - a data storage unit having stored therein
 - (a) information about a first account for a first party, independent from a second account maintained by a first exchange institution, and
 - (b) information about a third account for a second party, independent from a fourth account maintained by a second exchange institution; and
 - a computer, coupled to said data storage unit and said communications controller, that is configured to
 - (a) receive a transaction from said first party via said communications controller;
 - (b) electronically adjust 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

(c) generate 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.

JA868. The computer in this claim is configured to receive transactions from the parties to an exchange and settle them using a method similar to the one claimed in claim 33 of the '479 patent. A data storage unit coupled to the computer stores information about the "first" and "third" accounts, which correspond to the "shadow" records of claim 33. The "second" and "fourth" accounts are accounts with exchange institutions. As in claim 33, whenever a transaction is received and there is adequate value in the "first" and "third" accounts, those accounts are electronically adjusted in real time; sometime later, the computer generates an instruction to the exchange institution to implement the exchange in the parties' real-world "second" and/or "fourth" accounts.

After reviewing Alice's claims, the panel majority concluded that they are not directed to the abstract idea of "the use of an intermediary or middleman to mitigate settlement risk in financial transactions," CLS En Banc Br. at 6, but rather are directed to a particular way of using computer technology to exchange obligations. Panel Op., 685 F.3d at 1355. The panel observed that the use of a

computer is “integral” to the invention as claimed, and further recognized that Alice’s claims “leave broad room for other methods of using intermediaries to help consummate exchanges, whether with the aid of a computer or otherwise.” *Id.*

The panel majority accordingly reversed the decision of the district court. The district court, the panel held, erred by “look[ing] past the details of the claims in characterizing them as being directed to the fundamental concept ‘of employing an intermediary to facilitate simultaneous exchange of obligations in order to minimize risk.’” Panel Op. 685 F.3d at 1353 (quoting JA37). Because it “ignor[ed] claim limitations in order to abstract [Alice’s] process down to a fundamental truth,” the district court erroneously “treat[ed] the claims as encompassing nothing more than fundamental truths.” *Id.* The panel held that when properly considered without ignoring limitations or improperly “dissecting” the claims, Alice’s claims are not directed to a fundamental truth or abstract idea, but rather are patent-eligible.

SUMMARY OF THE ARGUMENT

I. The first question this Court has directed the parties to address is: “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?”

A claim involving an abstract idea, including a claim to a computer-implemented invention, is patent-ineligible when it is merely directed to an abstract idea itself, or when the claim includes only “token” additional limitations that fail to ensure that “the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012). Thus, when a claimed invention requires the use of a computer, and the claim involves an abstract idea, the claim is patent-eligible under § 101 if the computer plays a sufficiently meaningful role that it is a significant part of the claimed invention, rather than a mere token addition to the claim.

Contrary to CLS’s arguments, neither *Mayo* nor any other Supreme Court precedent imposes a separate “inventiveness” requirement under which a *portion* of a claimed invention must be demonstrably “new” in isolation. While *Mayo* referred to the need for a claimed invention to contain an “inventive concept,” this was not a separate requirement, but only a restatement of the proposition that to be patent-eligible, a claimed invention must contain “other elements or a combination of elements” beyond just an abstract idea “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” *Mayo*, 132 S. Ct. at 1294. CLS’s additional “inventiveness” requirement is directed to the wrong question and would run afoul of the Supreme Court’s

statement in *Diamond v. Diehr*, 450 U.S. 175 (1981)—which it reaffirmed in *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), and in *Mayo* itself—that a claim must be considered “as a whole” and should not be “dissect[ed]” into “old” and “new” elements for purposes of the § 101 analysis. *Diehr*, 450 U.S. at 188.

Under the proper standard, all of Alice’s asserted claims are patent-eligible. The claims require the use of a computer to serve as an electronic intermediary in a particular way—one of myriad ways in which two parties might exchange obligations using a computer as an electronic intermediary—by carrying out a method that is adapted for the use of computer technology and would not work as intended without an electronic implementation. As the panel majority recognized, the computer in all of Alice’s claims is far more than a “token” addition to the claims, and the claims are not directed to abstract ideas. The decision of the district court to the contrary should be reversed.

II. The second question this Court has directed the parties to address is: “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?”

The judicial exceptions to patent eligibility, including the “abstract idea” exception, apply equally regardless of whether a claim is to a method, system, or

storage medium. A party may not patent an abstract idea itself, irrespective of how a claim is phrased. That does not mean, however, that the fact that a particular claim is directed to a system as opposed to a method is irrelevant to the § 101 analysis. A court cannot ignore structural limitations in a computer system or storage medium claim and analyze such claims as if they were simply claims to a process. Rather, each claim must be analyzed based on its own limitations to determine whether that particular claim seeks to patent an abstract idea.

A claim that is drawn to a structurally-defined machine—such as a computer system comprising particular components—is claiming a “concrete thing, consisting of parts.” *In re Nuijten*, 500 F.3d 1346, 1355 (Fed. Cir. 2007) (quotation marks omitted). It is not a claim to an abstract idea. And a tangible computer system does not somehow become merely an abstract idea when additional limitations are added to a claim specifying what the computer system is configured to do, even if the process that the computer is configured to perform would not be patent-eligible standing alone. Indeed, this Court held as much nearly twenty years ago in *In re Alappat*, 33 F.3d 1526, 1543–45 (Fed. Cir. 1994) (en banc), and no intervening case has undermined the vitality of *Alappat*. A similar analysis applies to claims to structurally-defined manufactures: they are tangible objects, not abstract ideas.

By contrast, claims nominally directed to machines or manufactures, but otherwise claimed in purely functional terms without any structural elements, may appropriately be analyzed as if they were process claims. That is because though nominally to a “machine” or “manufacture,” such claims do not define the machine or manufacture being claimed but rather are really to the process being performed.

Alice’s computer system claims recite hardware components, structurally defined. They are to tangible objects, not abstract ideas, and are patent-eligible for this additional and independent reason. By contrast, while Alice’s computer-readable storage medium claims are to manufactures, they are defined in functional terms, and they are thus appropriately analyzed with Alice’s method claims.

ARGUMENT

I. A CLAIM TO A COMPUTER-IMPLEMENTED INVENTION IS PATENT-ELIGIBLE IF THE CLAIM AS A WHOLE IS TO SIGNIFICANTLY MORE THAN AN ABSTRACT IDEA ITSELF.

A. A Claim Directed to an Application of an Abstract Idea Is Patent-Eligible.

1. 35 U.S.C. § 101 sets forth four broad categories of subject matter that are eligible for patent protection: “any new and useful process, machine, manufacture, or composition of matter.” “In choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). A claim falling within the scope of one of the four statutory categories

is eligible for patent protection under § 101 unless it falls within “three specific exceptions to § 101’s broad patent-eligibility principles: laws of nature, physical phenomena, and abstract ideas.” *Bilski*, 130 S. Ct. at 3225 (quotation marks omitted).

The Supreme Court reiterated in *Bilski* that the only exceptions to § 101’s broad eligibility principles are “the exceptions for laws of nature, physical phenomena, and abstract ideas,” and that, as a result, courts do not have “*carte blanche* to impose other limitations that are inconsistent with the text and the statute’s purpose and design.” *Id.* at 3226. The Supreme Court has also cautioned courts against overly broad interpretations of the three recognized exceptions. *Id.* at 3230. As the Court observed in *Mayo*, “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” 132 S. Ct. at 1293. Accordingly, the Supreme Court noted, “too broad an interpretation” of these exceptions to patent eligibility “could eviscerate patent law.” *Id.*

There is no dispute in this case that each of Alice’s claims meets the statutory definition of a “process,” “machine,” or “manufacture.” The sole question in this appeal is whether they are excluded from patent eligibility because they fall within the last of the three exceptions—that for “abstract ideas.”

2. The Supreme Court has never provided “a rigid formula or definition for abstractness,” and this Court has likewise refrained from doing so. *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 868 (Fed. Cir. 2010) (“*RCT*”). See also Panel Op., 685 F.3d at 1348–49 (recognizing difficulty of defining “abstract idea”). Indeed, as the Government recognized in its brief as *amicus curiae*, “[t]he Supreme Court’s recent decisions in *Bilski* and *Mayo* . . . make clear that categorical, bright-line tests for eligibility under § 101 are not appropriate.” Br. for United States (“U.S. Br.”) at 5.

Even without providing a clear definition of “abstract idea,” however, the precedents of the Supreme Court set forth a governing principle that determines whether claims fall within the “abstract idea” exception. The Supreme Court has consistently characterized the relevant distinction between eligible and ineligible claims as being between (1) claims directed to abstract ideas themselves, which are ineligible, and (2) claims that are directed to an “application” of an abstract idea, which should be upheld. *Mayo*, 132 S. Ct. at 1293–94; see also *Bilski*, 130 S. Ct. at 3230; *Diehr*, 450 U.S. at 187–88. Importantly, the mere fact that a claim uses an abstract idea does not make it ineligible; the question is whether the patentee has effectively claimed the abstract idea itself or rather a particular application of that idea. *Mayo*, 132 S. Ct. at 1293–94; *Diehr*, 450 U.S. at 192. In making this

determination, the claim must be considered “as a whole,” taking into account all of its limitations. *Mayo*, 132 S. Ct. at 1298; *Diehr*, 450 U.S. at 188.

This Court’s first question asks what test the Court should adopt to determine whether a computer-implemented invention is a patent ineligible “abstract idea.” The ultimate objective of any such test—in relation to computer-implemented claims or any others—is to differentiate between claims to abstract ideas themselves, which are impermissible, and claims to applications of ideas, which are eligible. In doing such an analysis, the focus should not simply be on the computer-implementation aspects of the claim, but rather on all of a claim’s limitations, and the question is whether that claim, as a whole, is to nothing more than an abstract idea. *Mayo*, 132 S. Ct. at 1298. Thus, in *Diehr*, although the claim was computer-implemented, it was not the presence of a computer that was determinative. Rather, the claim was patent-eligible because the claim as a whole was to a method of curing rubber and was not simply to an abstract idea, even though the claim involved a computer that calculated the rubber curing time according to a particular mathematical algorithm. *Diehr*, 450 U.S. at 191–93.

Similarly, as will be explained in Part II, a claim to a structurally-defined computer system is not a claim to an abstract idea because it is claiming a tangible machine. The fact that the tangible machine is a programmable computer does not make the claim more, or less, abstract. And that tangible machine is not somehow

transformed into an abstract idea when it is programmed to do something, irrespective of whether the process it is configured to perform would be deemed abstract standing alone.

Thus, the fact that an invention uses a computer may not be the deciding factor in assessing whether a computer-implemented claim is eligible—a claim that is not otherwise directed to an abstract idea does not become impermissibly abstract when a computer is added. When, however, a computer-implemented claim is otherwise directed to an abstract idea, the question is whether the role of the computer in the claim is sufficient to make the claimed invention an application of the abstract idea, not the abstract idea itself.

B. Whether the Presence of a Computer Makes a Claim Patent-Eligible Depends on the Role of the Computer in the Claimed Invention.

1. The Computer May Not Merely Play an Insignificant or Token Role.

a. In assessing whether a claim is directed to an abstract idea, as opposed to a permissible application of such an idea, the Supreme Court has been careful not to allow the addition of mere “token” limitations to what would otherwise be a claim to an abstract idea to be sufficient to make the claim patent-eligible. For instance, if a claim is otherwise directed simply to an abstract idea—such as a particular series of mathematical calculations—adding to the claim what the Supreme Court has termed “insignificant post-solution activity,” like printing the

result of the calculation, is not generally sufficient to confer patent eligibility. *Mayo*, 132 S. Ct. at 1298 (quotation marks omitted); *Diehr*, 450 U.S. at 191–92; *see also, e.g., In re Grams*, 888 F.2d 835, 839–40 (Fed. Cir. 1989) (holding that mere data-gathering steps are analogous to insignificant post-solution activity and likewise fail to make otherwise abstract claims patent-eligible). Nor is simply stating that an abstract idea should be used in a particular field of use—such as specifying that a particular calculation be used in particular contexts—sufficient. *Diehr*, 450 U.S. at 192. Likewise, a claim that simply “state[s] the [abstract idea] while adding the words ‘apply it,’” or the equivalent, is not patent-eligible. *Mayo*, 132 S. Ct. at 1294.

The rule that emerges from these precedents, as aptly summarized by the Government, is that a claim involving an abstract idea is patent-eligible if “the claim, properly construed, incorporates enough meaningful limitations to ensure that it amounts to more than a claim for the abstract idea itself.” U.S. Br. at 7 (emphasis omitted); *see id.* at 11. As the Government correctly explains, to be “meaningful,” a limitation “cannot be a mere field-of-use limitation, a tangential reference to technology, insignificant extra-solution activity, an ancillary data-gathering step, or the like.” *Id.* at 7. That is, if the only limitations in a claim that is otherwise directed to an abstract idea are merely “token” limitations, such that

the claim is still “effectively a claim on the abstract idea itself,” then the claim is unpatentable under § 101. *Id.* at 7.

b. This test expresses the same concept that the Supreme Court articulated in *Mayo v. Prometheus*, when it held that “a process that focuses upon the use of a natural law [must] 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.” *Mayo*, 132 S. Ct. at 1294. That is, when a claim involves an abstract idea, the relevant question is whether the claim also contains “other elements or a combination of elements” that are not mere “token” additions to the claim, but rather are sufficiently “significant” or “meaningful” that the claim is to an application of the abstract idea, rather than to the idea itself. The *Mayo* Court used the term “inventive concept” to refer to the “other elements or a combination of elements” in a claim that identify the claim as being directed to a patent-eligible application of an abstract idea, as opposed to the idea itself. *Id.* Put another way, the “inventive concept” that is required is the presence of additional elements that add enough to the claim so that the claim amounts “to significantly more than a patent upon the natural law itself.” *Id.* at 1294, 1297–98; *see also* U.S. Br. at 18–19.

The claim in *Mayo* amounted to nothing more than a claim to the law of nature itself (a correlation between levels of a particular substance in the bloodstream and a need to adjust a patient’s dosage of a drug) and was thus not patent-eligible, because the additional claim elements beyond the correlation added nothing to the law of nature itself. The patentee acknowledged that the additional steps, such as the physical determination of the level of relevant metabolites in the blood, were routine and conventional in the sense that they were steps that anyone who wished to make use of the law of nature would necessarily employ. Because they were necessary adjuncts to the law of nature, they added nothing to the patentee’s avowed discovery of the law of nature. *Id.* at 1297–98. Therefore, the addition of these “routine and conventional” steps did not make the claim directed to significantly more than the law of nature itself.

c. CLS argues that *Mayo*’s use of the term “inventive concept” means that the “other elements or a combination of elements” in a claim, other than an abstract idea, must be inventive in the sense that they are novel and non-obvious, not just “meaningful” or “significant” in the claim as a whole. That is, CLS argues that *Mayo* holds that for a claim to be patent-eligible, there must be some portion of the claim that, standing alone, is both “inventive” and non-abstract. CLS En Banc Br. at 18–23, 29. *Mayo* imposes no such requirement. *Mayo* adopted the “inventive concept” terminology from *Parker v. Flook*, 437 U.S. 584 (1978),

which used the term, as *Mayo* did, to refer to whether an additional claim element beyond the abstract idea at issue was sufficient to make an otherwise abstract claim patent-eligible, and held that “conventional” “post-solution activity” is not. 437 U.S. at 590. This is the same type of “token” limitation that was at issue in *Mayo*. *Mayo*, 132 S. Ct. at 1298; *see id.* at 1301 (discussing *Flook*). In both cases, the question was whether the limitations of the claim other than the abstract idea or law of nature itself were sufficient to demonstrate that the claim was not directed to the idea or law itself, not whether these limitations were “inventive” in the sense that CLS suggests. *Mayo*, 132 S. Ct. at 1298; *Flook*, 437 U.S. at 593–95.

Indeed, the argument that *Flook*’s reference to an “inventive concept”—quoted in *Mayo*—imposes an “inventiveness” requirement in the § 101 analysis was expressly considered and rejected by the Supreme Court in *Diehr*. The petitioner in *Diehr* advanced the argument that “if everything other than the algorithm is determined to be old in the art, then the claim cannot recite statutory subject matter.” *Diehr*, 450 U.S. at 189 n.12. The Supreme Court held that this was an incorrect application of *Flook*, because a court must consider claims “as a whole” when determining patent eligibility. *Id.* at 188–89 & n.12. That is, a court may not “dissect the claims into old and new elements and then . . . ignore the presence of the old elements in the analysis.” *Id.* at 188. Thus, the Court held, “[t]he ‘novelty’ of any element or steps in a process, or even of the process itself,

is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Id.* at 188–89.

Mayo and *Bilski* both expressly relied on *Diehr* and neither gave any indication of overruling this or any aspect of it. While *Mayo* began its analysis by considering each limitation of the claims individually, it then expressly reaffirmed *Diehr*’s holding that to determine eligibility under § 101, the claim must be considered “as a whole,” including all of its limitations. *Id.* Likewise, in *Bilski*, the Supreme Court quoted and reaffirmed *Diehr*’s holding that patent eligibility may not be analyzed by “dissect[ing] the claims into old and new elements.”” *Bilski*, 130 S. Ct. at 3230 (alteration in original) (quoting *Diehr*, 450 U.S. at 188).

And *Mayo* itself is inconsistent with the notion that the reference to an “inventive concept” requires examination of whether the individual steps of Alice’s claims are “inventive” in the sense of being novel, because it expressly quoted *Diehr*’s statement that a “new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.”” *Mayo*, 132 S. Ct. at 1298 (quoting *Diehr*, 450 U.S. at 188). Moreover, the *Mayo* Court “recognize[d] that, in evaluating the significance of additional steps, the § 101 patent-eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap. But that *need not always be so.*” *Id.* at 1304 (emphasis added). That is, the same facts that may be

relevant to determining if something is an insignificant, token limitation may also be relevant to assessing whether the invention is novel, but the § 101 inquiry does not require determination of whether a given limitation is novel.

Contrary to CLS's arguments, *Diehr*'s express repudiation of the argument that patent eligibility turns on whether a portion of the claim is "new" undermines any argument that the Supreme Court's pre-*Mayo* precedents imposed such an "inventiveness" requirement.¹ CLS En Banc Br. at 20–23. And as the panel majority correctly observed, nothing in *Mayo* injects an "inventiveness" inquiry into the patent-eligibility analysis. Panel Op., 685 F.3d at 1352 n.2.

d. In its recent decisions considering computer-implemented inventions, this Court has applied the same fundamental inquiry advocated by the Government and compelled by *Mayo* and previous Supreme Court cases. Starting in *SiRF Technology, Inc. v. ITC*, 601 F.3d 1319, 1333 (Fed. Cir. 2010), and in numerous subsequent cases, this Court has asked whether a computer limitation provides a

¹ Besides *Flook* and *Diehr*, CLS argues that an "inventiveness" requirement is compelled by *Gottschalk v. Benson*, 409 U.S. 63 (1972), relying on language in *Benson* stating that the claimed method at issue in that case could be carried out "in existing computers long in use." CLS En Banc Br. at 21 (quoting *Benson*, 409 U.S. at 64). *Benson* was about a claim to a mathematical algorithm, and the "existing computers" to which CLS refers were examples of machines that could perform the algorithm, not elements of the claim. *Benson*, 409 U.S. at 64, 67. The point of this observation in *Benson* was that the claim could be used in virtually unlimited contexts and was directed to nothing more than the algorithm itself, not that patent-eligibility depended on whether the computers on which the claimed algorithm could be used were themselves "inventive."

“meaningful limit” on an otherwise abstract claim’s scope, that is, whether the computer plays a “significant part” in permitting the claimed invention to be practiced, rather than merely “function[ing] 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.” *SiRF*, 601 F.3d at 1333; *see also Mayo*, 132 S. Ct. at 1294 (patent in practice must be to “significantly more” than the natural law); U.S. Br. at 11 (describing and applying *SiRF* test).

As this Court has repeatedly recognized, a claim that does nothing more than recite an abstract idea and then state that the idea should be implemented on a computer is not patent-eligible; it is akin to simply taking a law of nature and saying “apply it.” *See Dealertrack Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012); *Fort Props., Inc. v. Am. Master Lease LLC*, 671 F.3d 1317, 1322 (Fed. Cir. 2012); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011); *see also Mayo*, 132 S. Ct. at 1301. Likewise, if all the computer is doing is performing a calculation in a claim that is otherwise merely to an abstract idea, the claim is still essentially directed to the idea. *E.g.*, *SiRF*, 601 F.3d at 1333. That is why, for example, the claims at issue in *Benson* were patent-ineligible; the claims were simply directed to a mathematical algorithm (which happened to be useful in the context of computers), and the claims—if they were limited to a computer at all—required at most that the calculation be performed by a computer, but did not

apply that algorithm to any real-world purpose in any particular way. 409 U.S. at 68 (noting that “[t]he end use” to which the claimed algorithm may be put “may (1) vary from the operation of a train to verification of drivers’ licenses to researching the law books for precedents and (2) be performed through any existing machinery or future-devised machinery or without any apparatus”).

In contrast, a claim involving a computer is patent-eligible if the computer plays a “significant part” in permitting the claimed invention to be practiced, rather than merely “functioning solely as an obvious mechanism for permitting a solution to be achieved more quickly.” *SiRF*, 601 F.3d at 1333. In other words, if the computer imposes a “meaningful limit” on the claim’s scope, then the claim is patent-eligible. *Id.* This test—first articulated in *SiRF*—has been applied consistently by this Court, including by the panel majority here. Panel Op., 685 F.3d at 1351 (applying *SiRF*); *Bancorp Servs. v. Sun Life Assur. Co. of Canada*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (same); *Dealertrack*, 674 F.3d at 1332 (same); *Fort Props.*, 671 F.3d at 1323 (same); *CyberSource*, 654 F.3d at 1375 (same). And because it distinguishes claims that contain mere “token” recitations that a computer should be used from claims in which the computer plays a sufficiently “meaningful” role that the claim as a whole “amounts to more than a claim for the abstract idea itself,” it amounts to the same test that, as the

Government correctly observes, is mandated by the Supreme Court’s precedents. U.S. Br. at 7 (emphasis omitted).

Interestingly, CLS advances this same test when it urges this Court to adopt the analysis of *Bancorp*. CLS En Banc Br. at 23–26. Notwithstanding CLS’s arguments to the contrary—discussed *infra* Part I.B.3—*Bancorp* applied the same standard articulated in *SiRF* and applied by the panel majority here. *Bancorp*, 687 F.3d at 1278, 1280. And in doing so, it expressly discussed the panel decision and concluded that there was no inconsistency between the two decisions. *Id.* at 1280. *Bancorp* distinguished Alice’s claims on the ground that unlike Alice’s claims, the claims at issue in *Bancorp* “are not directed to a ‘very specific application’” of an abstract idea, did not involve a computer that played a “‘significant part’ in the performance of the claimed invention,” and merely recited the addition of a computer to a broad, purely mathematical method. *Id.* at 1279–81 (quoting Panel Op., 685 F.3d at 1355). While CLS argues that “the *Bancorp* Court did not hold that the claims asserted here would be patent-eligible under the approach announced and applied in *Bancorp* itself,” and asserts that the claims here “clearly would not be” patent-eligible under *Bancorp*, CLS En Banc Br. at 45–46, in fact, the two cases utilize the same standard. They reached different results, as the *Bancorp* panel expressly acknowledged, because the differences in the claims mandated different conclusions. 687 F.3d at 1280.

* * *

In sum, when a claim requiring the use of a computer otherwise involves an abstract idea, patent eligibility turns on whether the computer plays a sufficiently meaningful role in the claim to ensure that the claim amounts to more than a claim to the abstract idea itself.

2. CLS’s Own Application of an “Inventiveness” Test Illustrates Why “Inventiveness” Is Not Part of the § 101 Analysis.

A significant portion of CLS’s brief is dedicated to an attempt to demonstrate that Alice’s claims fail its “inventiveness” test. CLS’s analysis of the patent eligibility of Alice’s claims reinforces the conclusion that *Mayo* did not impose a requirement that some portion of a claim independently be “inventive.”

To show that Alice’s claims purportedly contain “no inventive concept,” CLS cites articles and books that, it claims, demonstrate that the fundamental principle of intermediation that purportedly underlies Alice’s claims is “timeworn.” CLS En Banc Br. at 36. It also cites references that, it claims, demonstrate that Alice’s methods are not “inventive.” CLS’s approach is fundamentally flawed.

The patent doctrines used to determine whether a claim is “inventive”—novelty and obviousness—are heavily fact-dependent inquiries, based on an evaluation of how the person of ordinary skill in the art would evaluate the prior

art. *See, e.g., OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 704–09 (Fed. Cir. 2012). Here, however, there have been no proceedings in any court regarding whether Alice’s claims are novel or non-obvious. No court has considered the references CLS cites, or any expert testimony concerning those references. Indeed, not one of the references that CLS cites is part of the record on appeal. And most of them are not even prior art, dating from as recently as 2008, when the asserted patents are entitled to a priority date no later than 1993. It cannot be the case that what the Supreme Court did in *Mayo* was to create a § 101 analysis in which appellate courts are encouraged to determine “inventiveness” based solely on attorney argument about references introduced for the first time on appeal, without the benefit of any factual development in the trial court.

Moreover, CLS’s approach to “inventiveness” under § 101 bears no resemblance to how a court would actually determine whether a claim is “inventive” in the sense that it is novel and non-obvious. Under §§ 102 and 103, the issue is not whether any given limitation—or even all of the individual limitations—can be found somewhere in the prior art. Rather, the issue under § 102 is whether the entire invention is disclosed in a single prior art reference, and the issue under § 103 is whether the invention as a whole is taught or suggested by the prior art to a person of ordinary skill in the art. *See, e.g., Therasense, Inc. v.*

Becton, Dickinson & Co., 593 F.3d 1325, 1332 (Fed. Cir. 2010); *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012).

To determine “inventiveness” under § 101, however, CLS undertakes nothing resembling either of these traditional inquiries. Rather, CLS paraphrases each of Alice’s individual method steps at a high level of generality, and then tallies up purported references to each of these generalities individually somewhere in books and articles it has located. CLS En Banc Br. at 39–43. Having done so, it concludes that there is nothing “inventive” about any individual step, or about the combination of these generalized steps, on the theory that anyone practicing financial intermediation would have to use these steps. *Id.* As discussed *infra* Part I.C, CLS is incorrect that any financial intermediation would necessarily require use of even the general steps it recites. But more fundamentally, CLS has undertaken the wrong mode of analysis. Nowhere does it address Alice’s actual claimed invention as a whole, and nowhere does it address any of the inquiries that courts use to determine, relative to the prior art, if an invention is actually inventive. That cannot be what the Supreme Court intended in *Mayo*.

3. *Bancorp* Did Not Impose Additional Patent-Eligibility Requirements.

In addition to an “inventiveness” requirement, CLS also advocates for two additional patent-eligibility requirements, each of which it purports to draw from *Bancorp*. It argues that a computer must be “specialized” in order to confer patent

eligibility, and that patent eligibility of a computer-implemented invention turns on whether the invention represents an “improvement[] in computer technologies.” *E.g.*, CLS En Banc Br. at 25–26. *Bancorp* did not apply and does not support either additional requirement.

a. CLS argues that in order to confer patent eligibility, a computer must be “specialized.” *E.g.*, CLS En Banc Br. at 10, 12, 22–23, 33–34, 43–44. While CLS acknowledges that a computer may be “specialized” using software rather than customized hardware components, *id.* at 23, it asserts that this software must be “unique,” and not “conventional,” for the presence of a computer to make a claim patent-eligible. *Id.* But CLS fails to provide any basis for distinguishing between “conventional” and “unique” programming, and no such distinction appears in *Bancorp*. Rather, the dispositive question in *Bancorp* was whether the computer was “integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not”—the same standard discussed above and applied by the panel majority here. *Bancorp*, 687 F.3d at 1278; *see* Panel Op., 685 F.3d at 1351. And the distinction CLS draws is unsupportable; all computer programming causes a computer to perform a particular function, and the programming for a particular word processor (one of CLS’s examples of “conventional” programming) may be no less “special,” and no less worthy of patent protection, than the programming that enables a computer to

control a rubber-curing process (the example, from *Diehr*, that CLS offers of a “special purpose” computer).

In any event, even if a computer did need to be “specialized” in order to make a claim patent-eligible, Alice’s computer would meet that test. Alice’s claims may involve commercially available hardware—indeed, the specification provides examples of specific models of computer made by Sun Microsystems that can be used in the invention. JA357, 517–18, 677, 839, 1015–16. But they also require the specialized “applications software” that Alice invented, which is “written around the flow diagrams” in the patent, *i.e.*, custom-designed to carry out the claimed invention. *Id.*; *see also* JA278, 286–90, 422, 430–34, 581, 589–93, 743, 751–55. Alice lays out, in great detail and in a lengthy specification, how to program such a computer system, and its claims require that a computer be configured to perform a very specific sequence of steps using software programming. *Id.*; JA365–67, 386, 528–30, 546–48, 688–89, 706–08, 849–51, 863–64, 868–69, 1007–19; *see generally* JA251–869. In other words, by any standard, the software programming that Alice’s claimed invention requires is “unique” and “specialized.”

b. CLS also suggests that an invention must represent an “improvement to computer technology” for a computer to make an otherwise abstract claim patent-eligible, apparently meaning that the invention must be an improvement in

the computer itself, rather than an invention that uses a computer to accomplish a real-world end in another field. CLS En Banc Br. at 25 (quotation marks omitted). CLS draws this purported requirement from *Bancorp*, but the *Bancorp* Court announced no such rule. Rather, the language that CLS quotes comes from the portion of *Bancorp* in which the Court distinguished the claims in *RCT* from those in *Bancorp* by observing that the claims in *RCT* “represented improvements to computer technologies in the marketplace.” *Bancorp*, 687 F.3d at 1279 (citing *RCT*, 627 F.3d at 865). In doing so, the Court was merely contrasting the facts of its case with those in *RCT*; it was not announcing a new test for patent eligibility.

RCT observed, and *Bancorp* reiterated, that “inventions with specific applications or improvements to technologies in the marketplace” are not likely to simply be abstract ideas. *Id.* (quoting *RCT*, 627 F.3d at 869). Neither, however, holds that in order not to be an impermissible claim to an abstract idea, a computer-implemented invention must represent an improvement to computer technology itself. Nor is there any basis for excluding from patent eligibility computer-implemented claims that accomplish real-world ends, but are not directed to improving computer technology itself.

4. This Court’s Statements that a Claim’s Abstractness Must Be “Manifestly Evident” Are Not a Separate Patent-Eligibility Test.

CLS also criticizes the panel majority for stating that a claim’s abstractness must be “manifestly evident” before the claim can be held invalid, arguing that this is a new or additional test for evaluating the “abstract idea” exception that conflicts with Supreme Court precedent. CLS En Banc Br. at 28–29; *see also* U.S. Br. at 15 (characterizing the requirement that abstractness be “manifest” as “[a]n additional, substantive requirement”). To the contrary, the substantive rule of decision that the panel majority applied was the same test, based on *SiRF*, that was applied in *Bancorp* and the other decisions of this Court that CLS cites with approval. Panel Op., 685 F.3d at 1351.

The panel’s statement that abstractness must be “manifestly evident” simply repeated an uncontroversial proposition previously stated by this Court in both *RCT*, 627 F.3d at 868, and *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1065–67 (Fed. Cir. 2011): A patent claim should be invalidated as claiming an abstract idea only if it is clear that the claim is in fact directed to nothing more than an abstraction, rather than to a patent-eligible invention that makes use of an abstract idea. That concept is inherent in the presumption of validity itself and the requirement that invalidity be demonstrated by clear and convincing evidence, which the Government acknowledges should play a key role

in evaluating challenges to issued patents under § 101. *See* 35 U.S.C. § 282; *Microsoft Corp. v. i4i Ltd. P’ship*, 131 S. Ct. 2238 (2011); U.S. Br. at 21–22. And the Supreme Court expressed a similar concern in *Mayo*, when it cautioned that because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” “too broad an interpretation” of the exceptions to patent eligibility “could eviscerate patent law.” *Mayo*, 132 S. Ct. at 1293. The panel majority was simply recognizing that before a court invalidates claims under the abstract idea exception, it should be “wholly convinced that the subject matter of the claims is abstract”; it was not imposing a new standard under which only “manifestly abstract” claims, not mere “abstract” ones, are patent-ineligible. Panel Op., 685 F.3d at 1352 n.3.

CLS likewise criticizes the panel for leaving “primary responsibility for screening out unpatentable claims” to other patentability doctrines (§§ 102, 103, and 112), rather than § 101. CLS En Banc Br. at 29. To the contrary, while the panel recognized that “§§ 102, 103, and 112 do the substantive work of disqualifying those *patent eligible* inventions”—that is, those that satisfy § 101—“that are ‘not worthy of a patent,’” it did nothing to minimize the importance of § 101. Panel Op., 685 F.3d at 1348 (quoting *RCT*, 627 F.3d at 868) (emphasis added). As the majority recognized, each section “serves a different purpose and plays a distinctly different role” in excluding from patentability unpatentable

inventions, but “[n]o one section is more important than any other.” *Id.* Consistent with this observation, the Supreme Court itself stated expressly in *Bilski* that “[t]he § 101 patent-eligibility inquiry is only a threshold test.” 130 S. Ct. at 3225. Thus, while the Supreme Court in *Mayo* rejected the argument that § 101’s “screening function” can be shifted entirely to §§ 102, 103, and 112, *Mayo*, 132 S. Ct. at 1303–04, nothing in the majority’s opinion conflicts with this or suggests that claims that are in fact directed to ineligible subject matter should not be invalidated under § 101.

C. Alice’s Claims Are Patent-Eligible Because the Computer Plays a Meaningful Role in Alice’s Claimed Invention.

The panel majority in this case applied the same test to the claims at issue that Alice and the Government both urge this Court to adopt *en banc*, and which this Court applied in *Bancorp*, the case CLS urges the Court to adopt as a model. After doing so, the panel majority concluded that the role of the computer in Alice’s claims “can be characterized as being integral to the method, as ‘play[ing] a significant part in permitting the method to be performed,’ and as not being token post-solution activity.” Panel Op., 685 F.3d at 1355. As discussed in Part II, Alice’s computer system claims are patent-eligible because they claim tangible machines, irrespective of what the computer is configured to do. Even assuming, however, as the panel did, that all of Alice’s claims should be analyzed together, the panel correctly determined that all of Alice’s claims are patent-eligible.

1. The computer in Alice’s claims is no mere “token” limitation. Alice’s claims do not simply recite that an otherwise abstract process should be carried out using a computer, nor is the computer simply “an obvious mechanism for permitting a solution to be achieved more quickly.” *SiRF*, 601 F.3d at 1333. To the contrary, Alice has claimed a specific way of applying computer technology to the problem of exchanging obligations in which the computer plays a central role in the transaction.

The point of Alice’s invention is for a computer system itself to stand between two parties to a transaction and then effect the exchange of obligations in a particular way. JA365–67, 528–30, 688–89, 849–51, 1014–16. The computer therefore “play[s] a significant part in permitting [Alice’s] method[s] to be performed,” *SiRF*, 601 F.3d at 1333, which, as the panel majority correctly held, makes all of Alice’s claims patent-eligible, Panel Op., 685 F.3d at 1355.²

Contrary to CLS’s (and the district court’s) characterizations, Alice has not claimed “[t]he concept of mitigating settlement risk through intermediation,” CLS En Banc Br. at 35, nor has it claimed that concept implemented on a computer.

² Alice’s computer system claims are directed to expressly claimed computer system components configured to carry out an exchange of obligations according to Alice’s inventions. JA 708, 869. However, all of Alice’s asserted claims, including method claims that do not expressly recite computer hardware components, were construed for purposes of summary judgment to require the use of a computer. JA24–25. As discussed herein, that computer is integral to the claims and plays a meaningful—indeed, central—role in all of them.

Rather, it has claimed one particular, computerized way of exchanging obligations between parties.

As the panel correctly observed, Alice's claims require a particular sequence of computer-implemented steps that "exchang[e] obligations maintained at an exchange institution" in a "specific way." Panel Op., 685 F.3d at 1355 (citing JA386, claim 33). That "specific way" requires "creating electronically maintained shadow credit and shadow debit records" which must "be held independently" of the parties' real-world accounts at exchange institutions. *Id.* It requires that those records be adjusted electronically "based on only certain specified allowed transactions," *i.e.*, when particular criteria are met to ensure that both parties have adequate value to perform the exchange. *Id.* It requires, at least in the case of claim 33 of the '479 patent, that "start-of-the-day balances be obtained from the exchange institution," that "adjustments be made in chronological order," and that "at the end of the day, instructions be given to the exchange institution to reflect the adjustments made on the basis of the permitted transactions." *Id.* And it requires that the instructions sent to the exchange institution be "irrevocable, time invariant obligations placed on the exchange institution." *Id.*

As Alice's expert explained, the computer is a crucial aspect of Alice's invention. Alice's claims do not merely recite that a computer must be used, nor

do they merely use the computer to carry out the claimed steps more quickly.

JA1013. The undisputed testimony of Alice’s expert is that Alice’s claimed methods “only work, as intended, when carried out using a computer.” *Id.* That is, even if it were possible to perform analogous method steps without using a computer—and it is not, since the claimed invention is a particular computer-based way of doing an exchange—doing so would not fulfill the intended purpose of the method. The particular computerized method that Alice has claimed permits the execution of transactions in real time, while ensuring that only transactions that are adequately supported by a party’s balance will be permitted to go forward.

JA365–67, 528–30, 688–89, 849–51. Only a computer, not a human, can provide the necessary levels of accuracy and reliability. JA1013–15. Also, a computer can readily be accessed remotely and instantaneously from any part of the world, facilitating exchanges—and mitigating risks—when parties are in different countries and time zones. JA366, 529, 688, 850. If, hypothetically speaking, one were to attempt to carry out steps analogous to the steps of Alice’s methods without using a computer as intermediary, not only would the method not be Alice’s method, but these advantages—a core aspect of Alice’s invention—would be diminished or eliminated. JA365–67, 528–30, 688–89, 849–51, 1013–15.

2. For these reasons, CLS is simply wrong when it asserts that “[t]he *only* role played by a computer in carrying out [Alice’s] method is performing

calculations more quickly or efficiently than a person could using a pencil and paper or abacus; such participation is not ‘integral’ to the method.” CLS En Banc Br. at 45 (emphasis added). It is no accident that CLS does not cite anything in support of this assertion; there is no basis for it, and it is flatly contrary to the undisputed testimony of Alice’s expert and to the disclosures in Alice’s specification. *E.g.*, JA357–58, 365–67, 517–19, 528–30, 676–79, 688–89, 838–40, 849–51, 1013–15.

CLS also asserts that, contrary to the panel majority’s conclusion, the computer is not “integral” to the claimed invention because setting aside efficiency concerns, a person could, in principle, carry out each step of Alice’s method. CLS Br. at 46–49. This assertion is also incorrect. For the reasons discussed above, a hypothetical person who carried out an analogous sequence of method steps without using a computer would not merely perform that different method more slowly than a computer could, but would be unable to achieve the risk-mitigation goals that the claimed computer-implemented invention achieves. More fundamentally, the question whether a computer is “integral” to or plays a “significant” role in a claimed invention does not depend on whether it is impossible for steps of a method, stripped of their computer implementation, to still be performed in some fashion. Rather, the question is whether the computer

plays a significant role in the invention *as claimed*, when all of the steps are considered together. Here, the computer plays such a role.

3. Moreover, as the panel majority recognized, the patent eligibility of Alice’s claims is supported by the fact that there are multiple other ways to exchange obligations using a computer (and still mitigate settlement risk). Panel Op., 685 F.3d at 1355–56. For example, if two parties held “real-world” accounts at the same institution, a computer could perform an exchange between those accounts by adjusting them directly, without using shadow accounts. Or, still without using shadow accounts, a computer could instantaneously check the parties’ balances at two different exchange institutions and perform an exchange by directly adjusting those balances in real time. *See also* Alexandra Schaller, *Continuous Linked Settlement: History and Implications* 48 (2007), available at http://www.bf.uzh.ch/publikationen/dis/alexandra_schaller_dissertation.pdf (describing various alternative approaches to performing computerized settlement that CLS itself considered when designing the accused system). Alice, however, has patented a single, particularly advantageous approach to performing exchanges using a computer.

Thus, CLS is wrong when it argues that Alice’s claims are directed to an abstract idea because “[a]nyone who wants to make use of” the idea of using an intermediary to settle a transaction “must first create accounts, next obtain values

for those accounts, then adjust those accounts for transactions, and finally command payment when appropriate.” CLS En Banc Br. at 41. First, there are numerous ways to perform an exchange using an intermediary that do not require the steps CLS recites, and which, as the panel majority recognized, do not require Alice’s particular configuration of real-world and shadow accounts and Alice’s particular series of steps. For instance, one could perform an exchange without accounts at all, or without “creating” accounts for the parties separate from their real-world accounts, or by using a single account belonging to the intermediary.

More importantly, CLS’s generalized series of steps is not what Alice has claimed. As the panel correctly recognized, Alice’s claims have numerous additional limitations, including that the shadow accounts that are created and maintained by the computer be “held independently” of accounts at the exchange institution; that transactions only affect the account balances if particular criteria are met; that adjustments be made in chronological order; and that the exchange culminate with the issuance of an “irrevocable, time invariant obligation[] placed on the exchange institution.” Panel Op., 685 F.3d at 1355.

4. CLS points to language in *Mayo* that the “functional concern” underlying the exceptions to patent eligibility is “how much future innovation is foreclosed relative to the contribution of the inventor.” CLS En Banc Br. at 14–17 (quoting *Mayo*, 132 S. Ct. at 1303). CLS does not appear to argue that this

“concern” is part of the test for eligibility, and the Supreme Court plainly did not direct that courts should undertake a free-ranging inquiry into the scope of an inventor’s “contribution” to a particular field in order to determine whether a claim is directed to an abstract idea. Rather, the Court in *Mayo* was rejecting the argument that the claims there should have been upheld because the particular laws of nature that they embodied were narrow; the Supreme Court was pointing out that even a claim to a “narrow” law of nature can inhibit future research and is impermissible. *Mayo*, 132 S. Ct. at 1303.

Moreover, to the extent the foreclosure of future innovation using a given abstract idea is relevant to determining whether a claim is to an abstract idea, this analysis supports Alice. Alice does not claim the idea of using an intermediary to exchange obligations, nor does it claim the idea of exchanging obligations using a computer. Rather, Alice’s claims are directed only to one particular way of using a computer system to exchange obligations, and there is nothing in Alice’s claims that forecloses others from exchanging obligations in other ways, with or without a computer.

5. CLS is also wrong to caricature Alice’s claims as simply the addition of a computer to “the concept of mitigating settlement risk through intermediation.” *E.g.*, CLS En Banc Br. at 35; *see id.* at 33 (“The patents asserted by Alice in this case principally recite a method for using a middleman to reduce

settlement risk in a financial transaction.”); *id.* at 49 (describing invention as “the abstract idea of financial intermediation”). This argument is based on an erroneous attempt to identify a broad concept at the “heart” of Alice’s invention. CLS En Banc Br. at 35.

As the panel majority observed, it is “fundamentally improper to paraphrase a claim in overly simplistic generalities in assessing whether the claim falls under the limited ‘abstract ideas’ exception to patent eligibility under 35 U.S.C. § 101.” Panel Op., 685 F.3d at 1351; *see* U.S. Br. at 16. The Supreme Court has expressly stated that when analyzing validity, a claim may not be stripped down to some supposed “‘essential’ element, ‘gist,’ or ‘heart’ of the invention,” but rather must be viewed as a whole, including all of the limitations actually in the claim. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 345 (1961). Basing the patent-eligibility analysis on some supposed “heart” of the invention violates *Diehr*’s admonition that it is inappropriate to “dissect the claims” and base the patent-eligibility determination on something other than the claimed invention “as a whole.” *Diehr*, 450 U.S. at 188; *see supra* Part I.B.1.c.

In characterizing Alice’s claims as being directed to the broad “concept of mitigating settlement risk through intermediation,” CLS, like the district court, essentially ignores what Alice actually claimed, and instead argues tautologically that the abstract idea that Alice’s invention “reflect[s]” or “rest[s] upon”—once

one takes away the specifics—is abstract. That is not the proper analysis; rather, the inquiry must be directed to *the invention Alice actually claimed*.

6. By making these errors, CLS loses sight of the fundamental question in the § 101 analysis: whether the invention as claimed is merely an abstract idea, or whether the claim as a whole is directed to something more. As the panel majority correctly determined, because Alice’s specific way of carrying out an exchange is designed for and depends upon the use of a computer, and the computer itself is not merely a calculating device but rather stands between the parties and actually carries out their exchange, the computer plays a meaningful role in Alice’s claims, and the claimed invention cannot be described as merely an abstract idea. Rather, Alice’s claims “cover the practical application of a business concept in a specific way, which requires computer implemented steps of exchanging obligations maintained at an exchange institution by creating electronically maintained shadow credit and shadow debit records.” Panel Op., 685 F.3d at 1355.

Contrary to CLS’s arguments, Alice’s claims are readily distinguishable from those in *Bilski* and *Bancorp*. CLS quotes the steps of Alice’s method in chart form next to the claims from *Bilski* and *Bancorp* and asserts that “no coherent line can be drawn to distinguish this case from those.” CLS En Banc Br. at 37–38. But the role of the computer in Alice’s claims is much more significant than in *Bilski* or

Bancorp. Indeed, the claims in *Bilski* did not require the use of a computer at all; the patentee in *Bilski* conceded that the claims were not limited to any kind of machine implementation. See 130 S. Ct. at 3223–24; *In re Bilski*, 545 F.3d at 962. *Bancorp* involved claims to a mathematical method of managing life insurance policies where a computer did the calculations. The *Bancorp* Court itself expressly distinguished Alice’s claims based on the role of the computer, holding that “*unlike in CLS*,” “the computer limitations d[id] not play a ‘significant part’ in the performance of the claimed invention” and “are not directed to a ‘very specific application’ of the inventive concept.” *Bancorp*, 687 F.3d at 1280 (emphasis added).

II. THE PATENT ELIGIBILITY OF A CLAIM TURNS ON THE LIMITATIONS OF THE PARTICULAR CLAIM.

A. Each Claim Must Be Analyzed Individually.

1. 35 U.S.C. § 101 sets forth four separate statutory categories of inventions. In a variety of contexts, this Court has recognized the distinctions among those categories; while at some level of generality, claims that are directed to different statutory categories may cover similar inventions, claims that are drafted to fall within different categories are not the same in scope. *In re Kollar*, 286 F.3d 1326, 1332 (Fed. Cir. 2002). The fact that a claim is drawn to a machine or manufacture rather than a process often has profound consequences. For example, marking of products may be required in order to recover full damages

relating to a machine or manufacture claim, but is not needed with respect to a process claim because there is no way to physically “mark” a process. 35 U.S.C. § 287(a); *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1334 (Fed. Cir. 2012). And process claims are infringed differently from machine and manufacture claims. For example, in *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1318 (Fed. Cir. 2005), this Court held that a computer-implemented process claim in which the components that carried out certain steps were located abroad was not infringed because every step of the process had to be performed within the United States for there to be an infringing use, while the same conduct could infringe a machine claim drawn to the computer system—regardless of the location of the components—because the system was “used” within the United States.

Thus, while the Supreme Court has held that the exceptions to patent eligibility, including the “abstract idea” exception, apply with equal force to claims drawn to the four different statutory categories, *Benson*, 409 U.S. at 67–68, it does not follow that related claims directed to different statutory categories must rise or fall together. To the contrary, patent validity is determined on a claim-by-claim basis. *Nat’l Steel Car, Ltd. v. Canadian Pac. Ry., Ltd.*, 357 F.3d 1319, 1334 (Fed. Cir. 2004); *Ortho Pharm. Corp. v. Smith*, 959 F.2d 936, 942 (Fed. Cir. 1992). Thus, a validity analysis—including an analysis under § 101—is not based on the

“‘essential’ element, ‘gist,’ or ‘heart’ of the invention,” but rather on the claim as a whole, including all of the limitations of the claim. *Aro*, 365 U.S. at 345; *see Mayo*, 132 S. Ct. at 1298 (citing *Diehr*, 450 U.S. at 188); *Bilski*, 130 S. Ct. at 3230.

Claims that are drawn to different statutory categories are directed to different things and have different limitations, and there is no justification for automatically treating claims in different statutory categories as equivalent. Even in situations where a patent applicant has procured multiple different forms of claim based on a common body of inventive work, a claim to a machine or manufacture cannot simply be analyzed as though it were a process merely because it is related to a process claim or because the machine or manufacture is configured to carry out or embody the process. Rather, whether a claim is directed to something more than an abstract idea must be analyzed independently for each claim, based on the particular limitations of that claim. *See Mayo*, 132 S. Ct. at 1298; *Bilski*, 130 S. Ct. at 3230; *Diehr*, 450 U.S. at 188.

B. Structurally-Claimed Machines and Manufactures Are Not “Abstract Ideas.”

1. The Supreme Court long ago defined a machine to be a “concrete thing, consisting of parts.” *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 570 (1863); *see Nuijten*, 500 F.3d at 1355 (adopting *Burr* definition). Based on this definition, the Supreme Court rejected an argument that a claimed machine fell within the “abstract idea” exception to patent eligibility under the nearly identical patent-

eligibility statute of that era. *Burr*, 68 U.S. (1 Wall.) at 570 (“A machine is not a principle or an idea.”).

When a machine is defined based on its structural components, it is directed to a specific “concrete thing”—not to an abstract idea. A claim directed to a “computer, coupled to a data storage unit,” without any further limitations, is a claim to a tangible thing, not an abstract idea. Today, that machine would of course not be novel, but CLS has not articulated any theory under which such a claim would not be patent-eligible as a machine. This claimed computer system does not somehow become an abstract idea when the claim further specifies what the computer is configured to do. *Alappat*, 33 F.3d at 1544–45. Whether or not the process that the computer is programmed to perform would be independently patent-eligible, the claim is still directed to a concrete machine, not an abstract idea. *Id.* at 1544. And because the abstractness of the computer system does not depend on what it is configured to do, it is inappropriate to treat such a claim for purposes of the § 101 analysis as if it were equivalent to the process the computer is configured to perform.

A similar analysis applies to claims to manufactures, such as computer storage media. Manufactures are “articles” “produc[ed] . . . from raw or prepared materials by giving to these materials new forms, qualities, properties, or

combinations, whether by hand-labor or by machinery.” *Nuijten*, 500 F.3d at 1356.

A structurally-defined article is not an abstract idea.

2. The fact that a claim is nominally directed to a “machine” or “manufacture,” however, does not end the inquiry. As this Court’s predecessor recognized, some claims nominally directed to a machine or apparatus are more appropriately analyzed as if they were claims to processes. A claim to an “apparatus” may be purely “functionally[]defined” and thus fail to specify what kind of machine the claim covers, or what components that machine comprises. *In re Walter*, 618 F.2d 758, 768 (C.C.P.A. 1980). In this circumstance, a claim may be drawn to a “machine” yet not recite any “concrete thing, consisting of parts.” If such a “functionally-defined” claim is “so broad that [it] encompass[es] any and every means for performing the recited function,” then “the claim is really to the method or series of functions itself.” *Id.*; see also *In re Abele*, 684 F.2d 902, 909 (C.C.P.A. 1982) (quoting and applying *Walter*); *Manual of Patent Examining Procedure* § 2106 (citing “a machine that operates in accordance with $F=ma$ ” as an example of an ineligible machine claim having “no tangible structural elements”). Similarly, this Court recognized in *CyberSource* that a claim to a functionally-defined manufacture—a computer storage medium defined only by the fact that it was a medium that was computer-readable rather than by any structural claim

limitation—was in effect merely a claim to the process that was stored on the medium. *CyberSource*, 654 F.3d at 1374.³

3. CLS argues that system claims and method claims must be analyzed identically because “[a]ny method claim that uses a general purpose computer may also be drafted as a system (containing computers) that carries out the method.”

CLS En Banc Br. at 52 (quoting Panel Dissent, 685 F.3d at 1360).⁴ The prohibition, however, is on claiming abstract ideas; if a claim is directed to a structurally-defined machine, it is not claiming such an idea. And CLS’s contrary rule leads to the perverse result that a structurally-defined computer system, which standing alone is unquestionably a tangible machine, can become an abstract idea

³ For this reason, Alice does not argue that its particular computer-readable storage medium claims should be analyzed separately from its process claims. In contrast, Alice’s computer system claims are directed to machines, consisting of parts; irrespective of what the computers are programmed to do, they are not merely claims to abstract ideas.

⁴ In connection with this argument, CLS also cites *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109 (2008). But while *Quanta* recognized that for purposes of patent exhaustion, the sale of an article exhausts both claims to that article and claims to a method that the article “embodie[s],” *id.* at 2117–18, that has nothing to do with patentability under § 101, which expressly sets forth four distinct categories of statutory subject matter. Not only are inventions in distinct categories treated differently for a variety of purposes, *see supra* Part II.A.1, but the issue for the abstract idea exception is whether a claim is merely directed to an abstract idea, an inquiry that plainly depends on what limitations the particular claim includes.

when further limitations are added specifying what the computer is configured to do.

Contrary to CLS's arguments and the holding of the district court, there is no contradiction between the foregoing analysis and the Supreme Court's statement, first made in *Flook*, that patent eligibility should not depend solely on the "draftsman's art." JA16, 46; CLS En Banc Br. at 51–55 (quoting *Flook*, 437 U.S. at 590). The Supreme Court was not saying that the limitations of a particular claim do not matter to the § 101 analysis, or that any differences between claims relating to the same "underlying" invention are somehow irrelevant.

Rather, the Supreme Court was addressing whether the addition of a "token" or insignificant limitation to a claim otherwise directed to an abstract idea alters the § 101 analysis, and concluded that it does not. The question in *Flook* was whether a claim to a mathematical method of calculating an "alarm limit" became patent-eligible when the patentee added "token" claim limitations, such as statements that the invention is to be used in a particular field, or the addition of "insignificant post-solution activity." *Flook*, 437 U.S. at 593–95. The Supreme Court held that it did not because "[t]o hold otherwise would allow a competent draftsman to evade the recognized limitations on the type of subject matter eligible for patent protection." *Diehr*, 450 U.S. at 192 (discussing *Flook*). Thus, what the Supreme Court's reference to the "draftsman's art" means is that a patentee cannot salvage

an otherwise abstract claim merely by appending token, insignificant additional limitations. *Flook*, 437 U.S. at 590, 593. And while *Mayo* quoted *Flook*'s admonition about the "draftsman's art," it did nothing to suggest that it meant anything different from *Flook* or intended to alter the standards for determining whether a claim limitation affects patent eligibility. *Mayo*, 132 S. Ct. at 1294. The question in *Mayo*, as in *Flook*, was whether certain limitations added to an otherwise-ineligible process claim were merely "token" or whether they were sufficient to make the claim patent-eligible. *Id.*

The Supreme Court's decision in *Diehr* illustrates that claim limitations that affect what invention a claim is directed to cannot simply be dismissed as an exercise of the "draftsman's art." Both *Flook* and *Diehr* were directed to processes that made use of mathematical algorithms. But while the patentee in *Flook* claimed a method of performing a calculation and specified in the preamble that it was to be used "in a process comprising the catalytic chemical conversion of hydrocarbons," the patentee in *Diehr* claimed an "improved process for molding rubber articles" that made use of a mathematical calculation. *Compare Flook*, 437 U.S. at 596 app., *with Diehr*, 450 U.S. at 181.

Over a vigorous dissent by the author of *Flook* that quoted *Flook*'s reference to the "draftsman's art," 450 U.S. at 213–15 & n.36 (Stevens, J., dissenting), the *Diehr* Court held that this distinction made a difference: because the claim in

Diehr was directed to a specific process that made use of an algorithm, rather than to the algorithm itself, it was patent-eligible, *id.* at 187. Recognizing this distinction did not mean that the “draftsman’s art” was affecting patent eligibility—rather, the distinction meant that the claims in *Diehr* were directed to a different, patent-eligible invention.

Similarly, in some circumstances, a computer system itself may be patent-eligible even though a related process claim may not be. Such a result does not give inappropriate weight to the “draftsman’s art”; rather, it simply means that each claim’s patent eligibility depends on what invention is being claimed. A “computer” limitation in a method claim may sometimes be merely a “token” limitation such that the claim is still effectively directed to an abstract idea itself. A claim directed to a structurally-defined computer system itself is not claiming an abstract idea, and the computer is no “token.” Rather, it is the very thing that the claim is directed to: a concrete, tangible object, irrespective of what that system is configured to do. *See supra* Part II.B.1.

C. The Patent Eligibility of Computer Systems Has Already Been Settled by this Court, Sitting *En Banc*.

The reasoning above—that a claim to a computer system is a claim to a patent-eligible “machine” regardless of how the computer is programmed—should also be adopted by this Court under principles of *stare decisis*: the question presented is not a new one, but rather was decided by this *en banc* Court nearly

two decades ago in *Alappat*. 33 F.3d at 1545. Nothing has changed since *Alappat* to warrant reconsideration of the prior holding. See, e.g., *Patterson v. McLean Credit Union*, 491 U.S. 164, 172–73 (1989) (observing that “any departure from the doctrine of *stare decisis* demands special justification” and that “[c]onsiderations of *stare decisis* have special force in the area of statutory interpretation” because Congress is free to alter judicially-established rules (quotation marks omitted)). Moreover, in the almost two decades since *Alappat* was decided, the PTO has issued thousands of claims to computer systems, creating settled expectations and property rights that should not be lightly swept aside.

The specific question in *Alappat* was one of the same questions that is now before this Court again—when, or whether, a claim to a computer system is directed to an “abstract idea.” 33 F.3d at 1543–45. Rejecting the PTO’s argument that a claim to a programmed computer should be analyzed as if it were a claim to a process, the *Alappat* Court concluded that a claim directed to a computer system—even if programmed to carry out a calculation—is “apparatus not mathematics.” *Id.* at 1544–45 & n.25. Thus, the *Alappat* Court held that claims to computer systems are to machines, not abstract ideas, even if, as was the case in *Alappat*, the computer is configured to perform operations that would constitute an abstract idea if claimed directly as a process. *Id.*

None of the Supreme Court’s § 101 decisions since *Alappat* do anything to undermine its holding. Both *Bilski* and *Mayo* concern method claims, and neither addressed claims directed to computer systems or any other machines. Indeed, *Mayo* cited with approval an English case, *Neilson v. Harford*, (1841) 151 Eng. Rep. 1266 (Exch. of Pleas), in which a claim to a machine was upheld because it “d[id] not merely claim a principle, but a machine embodying a principle.” *Mayo*, 132 S. Ct. at 1300 (quotation marks omitted). This is the same basic concept that *Alappat* recognized—a claim to a machine is not simply a claim to an “abstract idea.” Far from undermining *Alappat*, therefore, *Mayo* supports it.

Alappat controls the decision as to Alice’s computer system claims, because those claims, like the claims in *Alappat*, are directed to concrete machines that are patent-eligible, and not abstract ideas, regardless of how the machines are programmed or whether the steps they are configured to perform would be independently patent-eligible as a process. *Alappat*, 33 F.3d at 1544; *see also* Alice Opening Br. at 31–35 (discussing application of *Alappat*); Alice Repl. Br. at 20–22 (same).

D. Alice’s Computer System Claims Are Patent-Eligible Because They Are Directed to Concrete Machines.

For these reasons, in addition to the reasons set forth in Part I, the district court erred in holding that Alice’s computer system claims were invalid as claims to abstract ideas. Each of Alice’s computer system claims is directed to a “data

processing system” comprising a “data storage unit” and a “computer, coupled to said data storage unit”; certain computer system claims add additional components such as a “communications controller.” JA706–08, 868–69. These are concrete hardware components that structurally define a machine. Regardless of how the computer system is configured, the claims are directed to concrete things, not abstract ideas.

Citing *CyberSource*, CLS argues that Alice’s system claims cannot “be saved by the fact that they claim physical things” because they are not “truly drawn to a specific apparatus.” CLS En Banc Br. at 58. But *CyberSource* was addressing the situation where the claim defines the apparatus in purely functional terms; in that situation, as discussed above, a machine claim is appropriately analyzed as a claim to a process. *CyberSource*, 654 F.3d at 1374. On the other hand, a claim, such as Alice’s, that identifies structural components coupled together does not merely claim any apparatus capable of performing a given function; rather, it defines a concrete machine and must be analyzed as such.

Moreover, as this Court held in *Alappat*, claims to programmed computer systems such as Alice’s are claims to “specific” machines. Rejecting any distinction between customizing a computer using software as opposed to hardware, this Court observed that programming a general purpose computer to perform particular tasks “creates a new machine, because a general purpose

computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.” 33 F.3d at 1545. Alice’s computer systems, which are configured to perform a specified sequence of operations, are therefore “specific” computers.

Accordingly, the decision of the district court as to the system claims of the ’720 and ’375 patents should also be reversed for this independent reason.

CONCLUSION

For the foregoing reasons, the judgment of the district court should be reversed, and the case remanded for further proceedings.

Respectfully submitted,



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January 10, 2013

CERTIFICATE OF SERVICE

I, Adam L. Perlman, counsel for appellant and a member of the Bar of this Court, certify that, on January 10, 2013, the attached *En Banc* Brief of Appellant Alice Corporation Pty. Ltd. was hand-delivered to the Clerk and two copies were dispatched by first-class U.S. Mail or overnight Federal Express (where indicated) to the following:

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I further certify that all parties required to be served have been served.

A handwritten signature in black ink, appearing to read 'A.L. Perlman', written over a horizontal line.

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January 10, 2013

**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME
LIMITATION, TYPEFACE REQUIREMENTS,
AND TYPE STYLE REQUIREMENTS**

1. This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B). The brief contains 13,813 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).

2. This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). The brief has been prepared in a proportionally spaced typeface using Microsoft Word 2007 in 14-point Times New Roman font.



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January 10, 2013