

1a

**APPENDIX A**

**United States Court of Appeals for the Federal  
Circuit**

---

SOLUTRAN, INC.,  
*Plaintiff-Cross-Appellant*

v.

ELAVON, INC., U.S. BANCORP,  
*Defendants-Appellants*

---

2019-1345, 2019-1460

---

Appeals from the United States District Court for  
the District of Minnesota in No. 0:13-cv-02637-SRN-  
BRT, Judge Susan Richard Nelson.

---

Decided: July 30, 2019

---

ROBERT JAMES GILBERTSON, Greene Espel,  
PLLP, Minneapolis, MN, argued for plaintiff-cross-  
appellant. Also represented by SYBIL LOUISE  
DUNLOP, DAVID WALLACE-JACKSON.

JOHN THOMAS VITT, Jones Day, Minneapolis,  
MN, argued for defendants-appellants. Also  
represented by GREGORY A. CASTANIAS,  
Washington, DC; PETER MCCREERY LANCASTER,  
TIMOTHY J. DROSKE, BEN DESMOND  
KAPPELMAN, Dorsey & Whitney LLP, Minneapolis,  
MN.

---

Before CHEN, HUGHES, and STOLL, *Circuit Judges*.

CHEN, *Circuit Judge*.

U.S. Bancorp and its affiliate Elavon, Inc. (collectively, Bank) appeal orders in the United States District Court for the District of Minnesota (1) denying U.S. Bank's motion for summary judgment that claims 1–5 of U.S. Patent No. 8,311,945 ('945 patent), assigned to Solutran, Inc. (Solutran), are invalid under 35 U.S.C. § 101 for failing to recite patent-eligible subject matter and (2) granting Solutran's motion for summary judgment that Solutran's products infringe claims 1–5 of the '945 patent. Solutran cross-appeals, arguing that the district court abused its discretion when it denied Solutran the ability to amend its complaint to include a claim for willful infringement after the deadline set out in the scheduling order.

Because we agree with U.S. Bank that claims 1–5 of Solutran's patent are invalid under § 101, we reverse.

## BACKGROUND

### A. The '945 Patent

The '945 patent, issued in 2012, describes a system and method for processing paper checks. '945 patent. The patent explains that in the past, the payee would transport the check to his or her own bank to be read and processed, then the payee's bank would transport the check to the payor's bank, where it also would be read and processed. *Id.* at col. 1, ll. 30–39. At this point, the payor's bank would debit the payor's

account and transfer the money to the payee's bank, which would credit the payee's account. *Id.* at col. 1, ll. 39–45.

The Background section of the '945 patent explains that the digital age ushered in a faster approach to processing checks, where the transaction information—*e.g.*, amount of the transaction, routing and account number— on the check is turned into a digital file at the merchant's point of sale (POS) terminal. *Id.* at col. 1, l. 51 – col. 2, l. 8, col. 4, ll. 51–58 (at the point of purchase, “the merchant keys, or applies amount captured at POS, into the terminal the amount of the purchase” and “passes the check through a MICR (magnetic ink character recognition) reader to capture the consumer's account number, routing number of the financial institution holding the account, and the check number”). The digital check information is sent electronically over the Internet or other network, *id.* at col. 1, ll. 54– 61, and the funds are then transferred electronically from one account to another. *Id.* at col. 2, ll. 5–8. By converting the check information into digital form, it no longer was always necessary to physically move the paper check from one entity to another to debit or credit the accounts. *Id.* at col. 2, ll. 1–5. But retaining the checks was still useful for, among other things, verifying accuracy of the transaction data entered into the digital file. *Id.* at col. 2, ll. 11–15. It was well-known that merchants could optionally capture a digital image of the check at the point of purchase. *Id.* at col. 2, ll. 61–63, col. 4, ll. 58–59, FIG. 1; *see also id.* at col. 2, ll. 30–31 (“The original check can be scanned and its digital image stored for later use . . .”).

The patent also discloses a method proposed by the

National Automated Clearing House Association (NACHA) for “back office conversion” where merchants scan their checks in a back office, typically at the end of the day, *id.* at col. 2, l. 65 – col. 3, l. 1, “instead of at the purchase terminal,” *id.* at col. 5, ll. 2–4, FIG. 2. A scanner captures an image of the check, and MICR data from the check is stored with the image. *Id.* at col. 3, ll. 1–2. An image file containing this information can be transferred to a bank or third-party payment processor. *Id.* at col. 3, ll. 2–4.

The patent describes its invention as a system and method of electronically processing checks in which (1) “data from the checks is captured at the point of purchase,” (2) “this data is used to promptly process a deposit to the merchant’s account,” (3) the paper checks are moved elsewhere “for scanning and image capture,” and (4) “the image of the check is matched up to the data file.” *Id.* at col. 3, ll. 16–46. The proffered benefits include “improved funds availability” for merchants and allegedly “reliev[ing merchants] of the task, cost, and risk of scanning and destroying the paper checks themselves, relying instead on a secure, high-volume scanning operation to obtain digital images of the checks.” *Id.* at col. 3, ll. 46–62. Solutran explains that its method allows merchants to get their accounts credited sooner, without having to wait for the check scanning step.

The court treated claim 1 as representative, which the parties do not dispute. *See* J.A. 47. Claim 1 recites:

1. A method for processing paper checks, comprising:
  - a) electronically receiving a data file

containing data captured at a merchant's point of purchase, said data including an amount of a transaction associated with MICR information for each paper check, and said data file not including images of said checks;

b) after step a), crediting an account for the merchant;

c) after step b), receiving said paper checks and scanning said checks with a digital image scanner thereby creating digital images of said checks and, for each said check, associating said digital image with said check's MICR information; and

d) comparing by a computer said digital images, with said data in the data file to find matches.

*Id.* at claim 1.

#### B. District Court and CBM Proceedings

Solutran sued U.S. Bank in the United States District Court for the District of Minnesota, alleging infringement of claims 1–5 of the '945 patent. U.S. Bank filed an answer and counterclaims alleging, *inter alia*, that it did not infringe and that the asserted claims were invalid under § 101. U.S. Bank later filed a motion for summary judgment that the '945 patent was invalid because it did not recite patent-eligible subject matter under § 101, specifically because the claims were directed to the “abstract idea of delaying and outsourcing the scanning of paper checks.” See J.A. 50. The district court disagreed, concluding that the claims were not directed to an abstract idea and the '945 patent was

therefore patent-eligible.

The district court found a previous covered business method (CBM) review of the '945 patent by the Patent Trial and Appeal Board (Board) persuasive in reaching its determination. J.A. 52 n.5. In August 2014—two months after the Supreme Court issued its *Alice Corp. Pty. Ltd. v. CLS Bank International*, 573 U.S. 208 (2014), decision—the Board issued an institution decision denying the petition as to the § 101 challenge, concluding that claim 1 of the '945 patent was not directed to an abstract idea. *U.S. Bancorp v. Solutran, Inc.*, No. CBM2014-00076, 2014 WL 3943913 (P.T.A.B. Aug. 7, 2014). The Board reasoned that “the basic, core concept of independent claim 1 is a method of processing paper checks, which is more akin to a physical process than an abstract idea.” *Id.* at \*8. “Indeed, there is nothing immediately apparent about this basic, core concept that would indicate that it is directed to an abstract idea at all.” *Id.*

The district court’s reasoning aligned with the Board’s. The district court focused on the physical nature of checks’ processing and movement and accused U.S. Bank of improperly construing the claim to “a high level of abstraction.” J.A. 51–57. The district court distinguished U.S. Bank’s cited Federal Circuit and Board decisions involving check-related patents on the basis that the '945 patent, in its view, is directed to an improved technique for processing and transporting physical checks, rather than just handling data that had been scanned from the checks. J.A. 55.

The district court concluded, in the alternative,

that the asserted claims also recited an inventive concept under step two of *Alice*. The district court accepted Solutran’s assertion that “Claim 1’s elements describe a new combination of steps, in an ordered sequence, that was never found before in the prior art and has been found to be a non-obvious improvement over the prior art by both the USPTO examiner and the PTAB’s three-judge panel (affirmed by the Federal Circuit).”<sup>1</sup> J.A. 58. The district court also concluded that the claim passes the machine-or-transformation test because “the physical paper check is transformed into a different state or thing, namely into a digital image.” J.A. 59.

U.S. Bank appeals, *inter alia*, the § 101 ruling. Solutran cross-appeals on the issue of willful infringement. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

## DISCUSSION

Patent eligibility under § 101 is a question of law that may contain underlying issues of fact. *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1342 (Fed. Cir. 2018) (citing *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018)). We review an ultimate conclusion on patent eligibility *de novo*. See *id.*

The Supreme Court has held that certain categories of subject matter, including abstract ideas,

---

<sup>1</sup> CBM2014-00076, which this court affirmed, only included an obviousness challenge to the ’945 patent, as the § 101 challenge had already been denied at institution. See *U.S. Bancorp v. Solutran, Inc.*, No. CBM2014-00076, 2015 WL 4698463, at \*17 (P.T.A.B. Aug. 5, 2015); *U.S. Bancorp v. Solutran, Inc.*, 668 F. App’x 363, 364 (Fed. Cir. 2016).

are not eligible for patent protection under § 101. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70, (2012). “The ‘abstract ideas’ category embodies the longstanding rule that an idea of itself is not patentable.” *Alice*, 573 U.S. at 218 (internal brackets and quotation marks omitted). To determine whether claimed subject matter is patent-eligible, we apply the two-step framework explained in *Alice*. *Id.* First, we “determine whether the claims at issue are directed to a patent-ineligible concept” such as an abstract idea. *Id.* Second, if so, we “examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 221 (internal quotation marks omitted) (quoting *Mayo*, 566 U.S. at 72, 80). At each step, the claims are considered as a whole. *See id.* at 218 n.3, 225.

### 1. Step One

We agree with U.S. Bank that the claims of the ’945 patent are directed to an abstract idea, although we articulate it a bit differently than U.S. Bank does. We conclude that the claims are directed to the abstract idea of crediting a merchant’s account as early as possible while electronically processing a check.

We have previously ruled that certain transaction claims performed in a particular order or sequence are directed to abstract ideas. In *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014), the claims at issue were drawn to a method for distribution of copyrighted content over the Internet including the steps of, *inter alia*,



receiving media from a content provider, selecting an ad, offering the media to the consumer in exchange for watching the ad, displaying the ad, then allowing the consumer to access the media. *Id.* at 714–15. We determined that the ordered combination of steps recited “an abstraction—an idea, having no particular concrete or tangible form.” *Id.* at 715. We defined the abstract idea as “showing an advertisement before delivering free content.” *Id.* “Because the innovative aspect of the claimed invention [wa]s an entrepreneurial rather than a technological one,” we deemed the invention patent-ineligible. *Id.* at 722.

Aside from the timing of the account crediting step, the '945 patent claims recite elements similar to those in *Content Extraction & Transmission LLC v. Wells Fargo Bank, National Ass'n*, 776 F.3d 1343 (Fed. Cir. 2014). There, we held that a method of extracting and then processing information from hard copy documents, including paper checks, was drawn to the abstract idea of collecting data, recognizing certain data within the collected data set, and storing that recognized data in a memory. *Id.* at 1347. We explained that “[t]he concept of data collection, recognition, and storage is undisputedly well-known”; “[i]ndeed, humans have always performed these functions.” *Id.* We also recognized that “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.* Here, too, the claims recite basic steps of electronic check processing. In its background, the '945 patent explains that “there has been an industry transition

to the electronic processing of checks[, including] the recordation of the data ... presented by the check into a digital format which can then be transferred electronically.” *Id.* at col. 1, ll. 53–57, col. 1, ll. 61–62. It had become standard for the merchant to capture the check’s transaction amount and MICR data at the point of purchase. *Id.* at col. 4, ll. 52–58, FIG. 1. Further, the patent’s background explains that verifying the accuracy of the transaction information stored in the digital file against the check was already common.<sup>2</sup> *Id.* at col. 2, ll. 13–15.

Crediting a merchant’s account as early as possible while electronically processing a check is a concept similar to those determined to be abstract by the Supreme Court in *Bilski v. Kappos*, 561 U.S. 593 (2010) and *Alice*. In *Bilski*, the Supreme Court determined that claims directed to “the basic concept of hedging, or protecting against risk” recited “a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class” and therefore “an unpatentable abstract idea.” 561 U.S. at 611–12. In *Alice*, the Supreme Court deemed “a method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk” to be an abstract idea. 573 U.S. at 219. The desire to credit a merchant’s account as soon as possible is an equally long-standing commercial practice.

Solutran argues that the claims “as a whole” are not directed to an abstract idea. *See, e.g.*, Cross-

---

<sup>2</sup> Solutran does not contend that using a digital rather than paper version of the check for that comparison is inventive.

Appellant's Op. Br. at 38. The '945 patent articulates two benefits of its invention: (1) "improved funds availability" because the merchant's account is credited before the check is scanned or verified; and (2) relieving merchants of the task, cost, and risk of scanning and destroying paper checks by outsourcing those tasks. '945 patent at col. 3, ll. 38–64. At oral argument, Solutran's counsel conceded that the claims are not limited to an embodiment that requires outsourcing. Oral Argument at 25:36–26:09 ("Claim 1 doesn't require that it be done by someone other than the merchant . . ."). The only advance recited in the asserted claims is thus crediting the merchant's account before the paper check is scanned. We conclude that this is an abstract idea.

This is not a situation where the claims "are directed to a specific improvement to the way computers operate" and therefore not directed to an abstract idea, as in cases such as *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016). Solutran's counsel acknowledged at oral argument that the '945 patent's invention did not improve the technical capture of information from a check to create a digital file or the technical step of electronically crediting a bank account. *See, e.g.*, Oral Argument at 23:40–24:12 ("So I grant you that there is not a specific technical change in the way the data file is constructed or in the way the crediting occurs ..."), 33:14–33:29. Nor does the '945 patent invention improve how a check is scanned. This is also not a situation where the claims are "limited to rules with specific characteristics" to create a technical effect and therefore not directed to an

abstract idea, as in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016). To the contrary, the claims are written at a distinctly high level of generality.

We do not agree that U.S. Bank “improperly construe[d] Claim 1 to ‘a high level of abstraction.’” J.A. 51 (quoting *Enfish*, 822 F.3d at 1337). In *Enfish*, the district court and the appellees generalized the claims such that their characterization of the alleged abstract idea was “untethered from the language of the claims.” See *Enfish*, 822 F.3d at 1337. That is not the case here; rather, both our characterization and U.S. Bank’s characterization are directly tethered to the claim language. We understand that it may be difficult at times to determine what the correct level of abstraction is to characterize the claims. After all, “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. We share the Supreme Court’s concern that “too broad an interpretation of this exclusionary principle could eviscerate patent law.” *Id.* But where, as here, the abstract idea tracks the claim language and accurately captures what the patent asserts to be the “focus of the claimed advance over the prior art,” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016), characterizing the claim as being directed to an abstract idea is appropriate. Moreover, the specification states, and Solutran does not dispute, that the steps of the claim are conventional processes for processing checks electronically.

Contrary to Solutran’s arguments, the

physicality of the paper checks being processed and transported is not by itself enough to exempt the claims from being directed to an abstract idea. As we explained in *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1161 (Fed. Cir. 2018), “the abstract idea exception does not turn solely on whether the claimed invention comprises physical versus mental steps.” In fact, “[t]he claimed methods in *Bilski* and *Alice* also recited actions that occurred in the physical world.” *Id.* We have likewise determined that a method for voting that involved steps of printing and handling physical election ballots, *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376 (Fed. Cir. 2018), and a method of using a physical bankcard, *Smart Sys. Innovations, LLC v. Chi. Transit Auth.*, 873 F.3d 1364 (Fed. Cir. 2017), were abstract ideas. And the Supreme Court has concluded that diagnostic methods that involve physical administration steps are directed to a natural law. *Mayo*, 566 U.S. at 92. The physical nature of processing paper checks in this case does not require a different result, where the claims simply recite conventional actions in a generic way (e.g., capture data for a file, scan check, move check to a second location, such as a back room) and do not purport to improve any underlying technology.

The district court’s and Solutran’s reliance on the paper checks being processed in two “different location[s]” via two paths as preventing the claims from being directed to an abstract idea is also misplaced. *See, e.g.*, J.A. 51; Cross-Appellant’s Op. Br. at 39–40, 42–43, 46, 48–49. The claims on their face are broad enough to allow the transaction data to be captured at the merchant’s point of purchase

and the checks to be scanned and compared in the merchant's back office. The location of the scanning and comparison—whether it occurs down the hallway, down the street, or across the city—does not detract from the conclusion that these claims are, at bottom, directed to getting the merchant's account credited from a customer's purchase as soon as possible, which is an abstract idea.

## 2. Step Two

We disagree with the district court that the '945 patent claims “contain a sufficiently transformative inventive concept so as to be patent eligible.” See J.A. 60. Even when viewed as a whole, these claims “do not, for example, purport to improve the functioning of the computer itself” or “effect an improvement in any other technology or technical field.” See *Alice*, 573 U.S. at 225. To the contrary, as the claims in *Ultramercial* did, the claims of the '945 patent “simply instruct the practitioner to implement the abstract idea with routine, conventional activity.” 772 F.3d at 715. As we noted above, the background of the '945 patent describes each individual step in claim 1 as being conventional. Reordering the steps so that account crediting occurs before check scanning (as opposed to the other way around) represents the abstract idea in the claim, making it insufficient to constitute an inventive concept. *Id.* Any remaining elements in the claims, including use of a scanner and computer and “routine data-gathering steps” (i.e., receipt of the data file), have been deemed insufficient by this court in the past to constitute an inventive concept. *Content Extraction*, 776 F.3d at 1349 (conventional use of computers and scanners); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788

F.3d 1359, 1363 (Fed. Cir. 2015) (routine data-gathering steps).

To the extent Solutran argues that these claims are patent-eligible because they are allegedly novel and non-obvious, *see* Cross-Appellant’s Op. Br. at 49, 52, 54–55, 63, 67, we have previously explained that merely reciting an abstract idea by itself in a claim—even if the idea is novel and non-obvious—is not enough to save it from ineligibility. *See, e.g., Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] claim for a new abstract idea is still an abstract idea.” (emphasis in original)).

Solutran also argues on appeal that its claims pass the machine-or-transformation test—*i.e.*, “transformation and reduction of an article ‘to a different state or thing.’” *See Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). While the Supreme Court has explained that the machine-or-transformation test can provide a “useful clue” in the second step of *Alice*, passing the test alone is insufficient to overcome Solutran’s above-described failings under step two. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[I]n *Mayo*, the Supreme Court emphasized that satisfying the machine-or-transformation test, by itself, is not sufficient to render a claim patent-eligible, as not all transformations or machine implementations infuse an otherwise ineligible claim with an ‘inventive concept.’”).

In any respect, we disagree with Solutran that the claims pass the test. Solutran reads the analysis in *In re Bilski*, 545 F.3d 943, 962–63 (Fed. Cir. 2008)

(en banc), which the Supreme Court explicitly declined to follow, as supporting its argument that “scanning . . . paper checks with a digital-image scanner to create images of the checks” alone passes the machine-or-transformation test. See Appellant’s Op. Br. at 65 (relying on discussion of *In re Abele*, 684 F.2d 902 (C.C.P.A. 1982) in *In re Bilski*, 545 F.3d at 962–63). Regardless of whether our *Bilski* opinion’s analysis of *Abele* is still sound in view of recent Supreme Court opinions, Solutran’s check-scanning argument directly conflicts with *Content Extraction*. Merely using a general-purpose computer and scanner to perform conventional activities in the way they always have, as the claims do here, does not amount to an inventive concept. See *Content Extraction*, 776 F.3d at 1348–49; *Ultramercial*, 772 F.3d at 716–17.

Because the claims of the ’945 patent recite the abstract idea of using data from a check to credit a merchant’s account before scanning the check, and because the claims do not contain an inventive concept sufficient to transform this abstract idea into a patent-eligible application, the claims are not directed to patent-eligible subject matter under § 101. We therefore need not review U.S. Bank’s alternative § 103 argument or Solutran’s cross-appeal relating to a potential willful infringement claim. We have considered the parties’ remaining arguments and find them unpersuasive. Accordingly, we reverse.

**REVERSED**



**APPENDIX B**

**United States District Court, D. Minnesota**

---

SOLUTRAN, INC.,  
*Plaintiff,*

v.

U.S. BANCORP and ELAVON, INC.,  
*Defendants.*

---

U.S. BANCORP and ELAVON, INC.  
*Counter-claimants,*

v.

SOLUTRAN, INC.  
*Counter-defendant.*

---

Case No. 13-cv-2637 (SRN/BRT)

---

Signed 11/27/2017

---

David J. Wallace-Jackson, Robert J. Gilbertson, and Sybil L. Dunlop, Greene Espel PLLP, 222 South Ninth Street, Suite 2200, Minneapolis, Minnesota, for Plaintiff and Counter-defendant.

Ben D. Kappelman, Kenneth E. Levitt, Peter M. Lancaster, Dorsey & Whitney LLP, 50 South Sixth Street, Suite 1500, Minneapolis, Minnesota 55402, and J. Thomas Vitt, Jones Day, 90 South Seventh Street, Suite 4950, Minneapolis, Minnesota 55402, for Defendants and Counter-claimants.

---

SUSAN RICHARD NELSON, United States District  
Judge

## I. INTRODUCTION

This matter comes before the Court on the parties' cross-motions for summary judgment. (*See* Pl.'s Mot. for Summ. J. [Doc. No. 183]; Defs.' Mot. for Summ. J. [Doc. No. 170].) For the reasons that follow, Plaintiff's motion is granted, and Defendants' motion is denied.

## II. BACKGROUND

Plaintiff Solutran, Inc. ("Solutran") is the owner by assignment of United States Patent No. 8,311,945 (the "'945 Patent"), which claims a system and method for processing check transactions. (*See* Compl. ¶ 10 [Doc. No. 1].) According to Solutran, its system improves on legacy check processing systems by eliminating the need for merchants to scan checks after they are received, and by speeding the rate at which the merchant's account would be credited with a payment. (*See* Pl.'s Opening Claim Construction Br. at 4–6 [Doc. No. 78].) Solutran's check processing system is marketed as "Solutran's POS [Point of Sale] Imaging Network," or "SPIN." (*See* Compl. ¶ 9.)

On September 25, 2013, Solutran filed suit against Defendants U.S. Bancorp and its subsidiary, Elavon, Inc. (collectively, "US Bank"), alleging infringement of the '945 Patent. (*See generally id.*) In particular, Solutran contends that US Bank's competing "Electronic Check Service," or "ECS," system is practically identical to SPIN, and infringes at least one of the claims of the '945 Patent. (*See generally id.*) US Bank has consistently denied any

infringement and brings counterclaims in its own right against Solutran, seeking declaratory judgments of non-infringement and patent invalidity. (*See generally* Am. Answer [Doc. No. 17].)

In February 2014, US Bank petitioned for a Covered Business Model (“CBM”) review of the ‘945 Patent before the U.S. Patent and Trademark Office’s Patent Trial and Appeal Board (“PTAB”), arguing that: (1) the patent was invalid under 35 U.S.C. § 101; and (2) the patent’s claims were unpatentable under 35 U.S.C. § 103 as obvious. *See US Bancorp v. Solutran, Inc.*, No. CBM2014-00076, 2014 WL 3943913, at \*1 (PTAB Aug. 7, 2014). The PTAB rejected US Bank’s § 101 argument, but instituted the CBM proceeding based on the § 103 argument. *See id.* at \*6–13. While the CBM review was underway, this Court stayed proceedings in this district court action. (*See* Sept. 18, 2014 Order to Stay [Doc. No. 50].) After the PTAB found that the challenged claims in the ‘945 Patent were not unpatentable as obvious, *see US Bancorp v. Solutran*, 2015 WL 4698463, at \*10–16 (PTAB Aug. 5, 2015), *aff’d*, No. 2016-1302, 668 Fed. App’x 363 (Fed. Cir. 2016), this Court lifted the stay. (*See* Jan. 12, 2016 Text-Only Order [Doc. No. 62].)

Following extensive motion practice and discovery, the Court heard the parties’ claim construction arguments on August 30, 2016. (*See* Aug. 30, 2016 Minute Entry [Doc. No. 87].) In total, the parties asked the Court to construe eight different terms found variously in claims 1, 2, 4, and 5 of the ‘945 Patent. *See Solutran, Inc. v. U.S. Bancorp*, No. 13-cv-2637 (SRN/BRT), 2017 WL 2274959, at \*2 (D. Minn. May 24, 2017). At this stage of the

litigation, however, the application of only one of those terms is disputed: “comparing by a computer said digital images with said data in the data file to find matches.”<sup>1</sup> This term appears in claims 1(d), 4(e), and 5(e) of the ’945 patent— for illustrative purposes, and to provide needed context, the Court will reproduce claim 1 in full here:

1. A method for processing paper checks, comprising:
  - a) electronically receiving a data file containing data captured at a merchant’s point of purchase, said data including an amount of a transaction associated with MICR<sup>2</sup> information for each paper check, and said data file not including images of said checks;
  - b) after step a) crediting an account for the merchant;
  - c) after step b), receiving said paper checks and scanning said checks with a digital image scanner thereby creating digital images of said checks and, for each said check, associating said digital image with said check’s MICR information; and
  - d) *comparing by a computer said digital images with said data in the data file to find matches.*

(Compl., Ex A (“’945 Patent”) at 10:54-67 (emphasis

---

<sup>1</sup> For simplicity, the Court will generally refer to this term as the “comparing step” from this point on.

<sup>2</sup> “MICR” stands for “magnetic ink character recognition.” See Solutran, 2017 WL 2274959, at \*13.

added).)

The Court issued its claim construction order on May 24, 2017. The parties responded by filing their cross-motions for summary judgment the following month. (*See generally* Pl.’s Mot. for Summ. J.; Defs.’ Mot. for Summ. J.) Solutran contends that the undisputed record evidence shows that US Bank’s ECS service practices “every single step” of claims 1, 2, 3, and 5 of the ’945 Patent. (*See* Pl.’s Mem. in Supp. of Mot. for Summ. J. (“Pl.’s Mem. in Supp.”) at 1 [Doc. No. 185].)<sup>3</sup> It notes that US Bank now argues non-infringement solely on the basis of the comparing step. (*See id.*) In its view, however, the Court’s construction of this term resolves the issue in its favor, and thus a judgment of infringement is warranted here. (*See id.*) US Bank, however, argues the opposite in its own motion—that the Court’s construction makes clear that its service does *not* infringe the ’945 Patent. (*See* Defs.’ Mem. in Supp. of Mot. for Summ. J. (“Defs.’ Mem. in Supp.”) at 2 [Doc. No. 172].) In the alternative, US Bank also contends that all asserted claims are invalid because they are too abstract to qualify for patent protection under 35 U.S.C. § 101. (*See id.*)

The Court heard oral argument on the parties’ motions on August 11, 2017, and the matter is now ripe for disposition.

### III. DISCUSSION

#### A. Standard of Review

Summary judgment is appropriate if “the movant

---

<sup>3</sup> The Court’s citations refer to the parties’ original pagination in their memoranda, as opposed to the ECF pagination.

shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). A fact is “material” only if it may affect the outcome of the lawsuit. *TCF Nat’l Bank v. Mkt. Intelligence, Inc.*, 812 F.3d 701, 707 (8th Cir. 2016). Likewise, an issue of material fact is “genuine” only if “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The moving party bears the burden of establishing a lack of genuine issue of fact, *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986), and the Court must view the evidence and any reasonable inferences in the light most favorable to the nonmoving party. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986). In responding to a motion for summary judgment, however, the nonmoving party may not rest on mere allegations or denials, but must “demonstrate on the record the existence of specific facts which create a genuine issue for trial.” *Krenik v. Cty. of Le Sueur*, 47 F.3d 953, 957 (8th Cir. 1995).

### **B. The Issue of Infringement**

A determination of infringement requires a two-step analysis. *See Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1370 (Fed. Cir. 2002). First, the Court must determine the scope and meaning of the patent claims asserted. *See Phil-Insul Corp. v. Airlite Plastics Co.*, 854 F.3d 1344, 1358 (Fed. Cir. 2017). Second, the properly construed claims are compared to the allegedly infringing device or process. *See id.* Although the second inquiry is one of fact, *Transclean Corp.*, 290 F.3d at 1370, the Court may decide infringement on summary judgment if there

are no genuine issues of material fact requiring determination at trial. *See, e.g., 3M Co. v. Mohan*, No. 09-cv-1413 (ADM/FLN), 2010 WL 3200052, at \*2 (D. Minn. Aug. 9, 2010) (“Courts routinely grant summary judgment and find infringement as a matter of law where there is no factual dispute on the infringement question.”). Where, as here, “there is no dispute regarding the operation of the accused system[], [the] issue [of infringement] reduces to a question of claim interpretation and is amenable to summary judgment.” *MyMail, Ltd. v. Am. Online, Inc.*, 476 F.3d 1372, 1378 (Fed. Cir. 2007).

A patent is infringed if every limitation set forth in a claim is present in an accused product or process, either literally or through the doctrine of equivalents. *Deering Precision Instruments, L.L.C. v. Vector Distrib. Sys., Inc.*, 347 F.3d 1314, 1324 (Fed. Cir. 2003). Because only literal infringement is alleged here, Solutran bears the burden of proving that the accused process contains each limitation of an asserted claim. *See id.* Although at this point in the proceedings, US Bank contends only that its process does not meet the requirements of the '945 Patent's comparing step, that step is a required element of all asserted claims. *See Hutchins v. Zoll Med. Corp.*, 492 F.3d 1377, 1382 (Fed. Cir. 2007) (citing 35 U.S.C. § 112, ¶ 4 (pre-AIA)) (noting that limitations in each independent claim are incorporated into every dependent claim). Accordingly, Solutran's infringement argument rises or falls on the application of that step to the accused process. *See Wolverine World Wide, Inc. v. Nike, Inc.*, 38 F.3d 1192, 1199 (Fed. Cir. 1994).

## 1. The Court's Construction of the "Comparing Step"

The purpose of claim construction is “to arrive at the true and consistent scope” of the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). A claim term can have only correct meaning, *see Linear Tech. Corp. v. Monolithic Power Sys., Inc.*, No. 06-cv-476 (GMS), 2007 WL 6126455, at

\*2 n.2 (D. Del. Nov. 20, 2007), and in exercising its duty to define that meaning, this Court endeavors always to state its determination with clarity and precision, “for the protection of the patentee [and the benefit of the public].” *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996).

The parties' submissions here, however, suggest that the Court was not as clear in defining the comparing step as it had originally intended. As noted above, that step requires “comparing by a computer said digital images with said data in the data file to find matches.” One of the key disputed points between the parties in interpreting this term was whether the phrase “said data” necessarily incorporated the definition of that phrase found in claim 1(a),<sup>4</sup> which provides in part for “electronically receiving a data file containing data captured at a merchant's point of purchase, *said data* including an amount of a transaction associated with MICR information . . . .” (*See* '945 Patent at 10:55-58 (emphasis added).) *See Solutran*, 2017 WL 2274959, at \*6. US Bank argued that the phrase must be interpreted uniformly across the claims, and that its

---

<sup>4</sup> As well as claims 4(a) and 5(a).



explicit reference to the transaction amount meant that the comparing step should be read as requiring that the transaction amount be involved in any comparison. *See id.* In contrast, Solutran argued that the phrase could be left to its plain meaning, but that in any event, US Bank's interpretation was improper. *See id.* The Court construed the term, and there the matter rested for the moment. *See id.* at \*6-8.

Now, however, the parties once again debate a matter of interpretation—this time with regard to the boundaries of the Court's construction. (*See* Pl.'s Mem. in Supp. at 9-19; Defs.' Mem. in Opp'n to Pl.'s Mot. for Summ. J. ("Defs.' Mem. in Opp'n") at 2-11 [Doc. No. 203].) Both parties agree on one thing: that the Court made clear that the "said data" referenced in the comparing step must include, at minimum, the amount of the transaction. (*See* Pl.'s Mem. in Supp. at 12; Defs.' Mem. in Opp'n at 6-7.) Where they differ, however, is whether the Court also meant to be understood as requiring that the transaction amount found in "said data" *must* be independently considered as part of the comparing process. Because the parties do not apparently dispute that US Bank's process relies on MICR information and not the transaction amount in conducting its own comparison, resolution of this issue is effectively dispositive of Solutran's infringement claim. (*See, e.g.*, Defs.' Mem. in Opp'n at 17.)

Having carefully reviewed the parties' arguments on the matter, the Court clarifies its initial construction of the comparing step as follows: (1) the data captured at the merchant's point of purchase must include the transaction amount; (2) the

transaction amount must be one of the elements of the “said data” in the “data file,” the latter of which must then be compared with the digital images; and (3) the “match” being made as part of the comparison step can involve, but need not necessarily involve, the transaction amount. In other words, additional data from the data file, such as MICR information, can independently form the basis of the match for purposes of claim 1(d), 4(e), and 5(e). While the transaction amount must be in the “said data” grouping, it need not be separately singled out and directly compared against a similar datum in the digital image.

## **2. Application of the Construction**

In light of this updated—and, hopefully, clearer—construction, the Court concludes that summary judgment is warranted in favor of Solutran on the issue of infringement. The parties do not contest that US Bank’s process involves a comparison step that is designed to match the digital image of the check with data captured in a data file. (*See, e.g.*, Defs.’ Mem. in Opp’n at 9; Pl.’s Mem. in Supp. at 10.) Nor do they contest that US Bank captures the transaction amount as part of the data captured at the point of purchase. (*See, e.g.*, Defs.’ Mem. in Opp’n at 9.) Although it is apparent that the accused process does not rely on the transaction amount for purposes of forming matches (rather, it uses MICR information), that fact is not dispositive of infringement. In light of the Court’s construction of claim 1(d), so long as US Bank captures the transaction amount *and* makes a match using some element (or elements) of the data in the data set, then its process infringes upon that claim. Here, this is exactly what the ECS system

does.

As Defendants disputed infringement solely as to the comparing step, and do not, apparently, contest infringement as to all other steps of the asserted claims, resolution of this matter in favor of Solutran necessarily resolves the parties' infringement dispute. The Court accordingly grants Solutran's motion for summary judgment of infringement, and denies US Bank's corresponding motion for non-infringement.

### **C. Invalidity Under 35 U.S.C. § 101**

US Bank alternatively argues that the '945 Patent is invalid under 35 U.S.C. § 101. It contends that Solutran's core claimed invention is an abstract concept, and that Solutran has not added significantly more to that abstract concept. (*See* Defs.' Mem. in Supp. at 12–25.) While the '945 Patent contains three independent claims, the parties acknowledge that the language in the other claims is similar or nearly identical to the language in Claim 1. (*See id.* at 22; Pl.'s Mem. in Opp'n at 15.) Because independent Claim 1 is representative of the '945 Patent, the analysis of this claim is representative of the other two independent claims. *See Intellectual Ventures, LLC v. Erie Indem. Co.*, \_\_\_ Fed. App'x \_\_\_, No. 2017-1147, 2017 WL 5041460, at \* 2 (Fed. Cir. Nov. 3, 2017) (examining a representative claim for purposes of § 101 analysis).

Section 101 provides that only “inventions” are patent-eligible, and are granted to “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. Addressing the language of § 101, the Supreme Court

has stated, “In choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Bilski v. Kappos*, 561 U.S. 593, 609 (2010) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)).

The Federal Circuit advises that “[a] § 101 analysis begins by identifying whether an invention fits within one of the four statutorily provided categories of patent-eligible subject matter: processes, machines, manufactures, and compositions of matter.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713–14 (Fed. Cir. 2014). Here, the invention at issue is claimed to be a “process,” which falls within one of the four statutory classes. Section 100(b) defines this class, stating, “The term ‘process,’ means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” 35 U.S.C. § 100(b). The Supreme Court has further stated that “[a] process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery.” *Diamond v. Diehr*, 450 U.S. 175, 18 (1981) (citation omitted).

Despite § 101’s broad reading of patent eligibility, the Supreme Court has long recognized three “implicit exception[s]” to the subject matter of patents for “laws of nature, natural phenomena, and abstract ideas.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (citing *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 133

S. Ct. 2107, 2116 (2013)). A process that attempts to patent an abstract idea is not patentable under § 101. See *Bilski*, 561 U.S. at 609. The rationale for this exclusionary principle lies in the concern that general “building blocks of human ingenuity,” such as abstract ideas, should not be limited for future innovations. *Alice*, 134 S. Ct. at 2354. However, courts should “tread carefully in construing this exclusionary principle lest it swallow all of patent law,” see *id.* at 2354, because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012).

Courts apply a two-step test to challenges to the eligibility of patent subject matter under § 101. See *id.* at 79. First, courts must “determine whether the claims at issue are directed to a patent-ineligible concept.” *Alice*, 134 S. Ct. at 2355. If they are, courts then examine the elements of the disputed claims to determine whether they contain an inventive concept that sufficiently “transform[s]” the abstract idea into a patent-eligible application. *Id.* at 2357 (citing *Mayo*, 566 U.S. at 79).

Both steps of the *Alice* framework involve “overlapping scrutiny of the content of the claims.” *Elec. Power Grp., LLC v. Alstom S.A.*, 1353 (Fed. Cir. 2016). But the Federal Circuit has observed that the first step in the § 101 inquiry is a “meaningful one,” given that “a substantial class of claims are not directed to a patent-ineligible concept.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Therefore, the step-one analysis may sometimes resolve the § 101 inquiry. See *Elec. Power*,

830 F.3d at 135. In other words, if the Court determines that the challenged claim is not directed to an abstract idea, it need not reach step two. *Alice*, 134 S. Ct. at 2355. However, if the Court finds otherwise, it then moves to the second step, examining the elements of the disputed claim to determine whether the claim contains a sufficiently transformative inventive concept so as to be patent eligible. *Id.* (citing *Mayo*, 566 U.S. at 79).

### 1. Step One

US Bank argues that the '945 Patent specification emphasizes either the “abstract idea of delaying and outsourcing the scanning of paper checks” or the single, abstract concept of converting a customer’s check electronically and crediting the merchant’s account prior to imaging the check. (*See* Defs.’ Mem. in Supp. at 14, 21–23.) The Court finds that US Bank’s characterization fails to consider the character of the claims as a whole.

In conducting the “directed to” inquiry at step 1, courts must not simply ask whether the claims *involve* a patent-ineligible concept because, again, on some level, all patent-eligible claims involving physical products and actions *involve* laws of nature, natural phenomena, or abstract ideas. *Enfish*, 822 F.3d at 1335 (citing *Mayo*, 566 U.S. at 71–72). Rather, the “directed to” inquiry requires the Court to consider whether, in light of the patent specification, the character of the claim as a whole “is directed to excluded subject matter.” *Id.* (citations omitted). US Bank fails to do so. *See Diehr*, 450 U.S. at 188. Rather, as Solutran asserts, US Bank’s characterization omits the physical processing of checks from the point of sale to a different location,

and in a particular sequence. (See Pl.’s Mem. in Opp’n at 18–19.) In so doing, US Bank improperly construes Claim 1 to “a high level of abstraction.” *Enfish*, 822 F.3d at 1337.

The character of Claim 1, recited on page 4, *supra*, is directed to a physical process for processing paper checks in which data captured from a paper check at the merchant’s point of purchase is used to credit a merchant’s account, while the same paper check is scanned at a later time and in a different location to create an image of that check. Specifically, in Claim 1(a), a data file is electronically captured from a paper check at the merchant’s point of sale; in 1(b), the merchant’s account is credited; in 1(c), the paper check is received, at a later time and place, and scanned to create an image; and in 1(d), the files are brought back together to compare digital images with the data file to find matches. (See ‘945 Patent, Ex. A to Ernstene Aff. at 10:54-67 [Doc. No. 187-1].)

When focusing on the claimed advance of the ‘945 Patent over the prior art—as the Federal Circuit instructs courts to consider, *see Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016)—the ‘945 Patent purportedly improves upon the prior art through the processing of paper checks, via two-paths, at different times and locations, and the physical movement of paper checks. (See ‘945 Patent, Ex. A to Ernstene Aff. (Abstract)) (“The data files and image files are separated both in time and in space, with the data files being used to promptly initiate the transfer of funds to and from appropriate accounts, while the paper checks, at a remote location and typically lagging in time, are scanned to create digital image files and deposited as

an image or substitute check if deemed ACH ineligible.”). This claimed advance is not directed to an abstract idea. Additional language found in the ‘945 Patent emphasizes that the claimed invention is rooted in an enhanced processing method and a palpable application of that process, in a different time and place. The “Summary of the Invention” describes the processing of paper checks, along with their physical transportation, (*see id.* at 4:6–18), Figure 3 of the ‘945 Patent also depicts this physical transfer and delivery with the image of a truck, (*see id.* (Fig. 3)) (illustrating ‘945 Patent, 5:50–52), and Figure 4 explains additional details of the process, including the “divergent flows” for the point-of-sale data, the physical checks, and images of the checks. (*See id.* (Fig. 4)) (illustrating ‘945 Patent, 6:22–26).

In US Bank’s earlier, unsuccessful § 101 challenge before the PTAB, the Board found that US Bank improperly focused on “each method step individually without accounting sufficiently for the claims as a whole.”<sup>5</sup> *US Bancorp*, 2014 WL 3943913, at \*8. Examined as a whole, the PTAB found that

---

<sup>5</sup> US Bank asserts that the PTAB’s earlier rejection of its § 101 challenge should not affect this Court’s present determination. (*See* Defs.’ Mem. in Supp. at 26–27; Defs.’ Reply at 3 [Doc. No. 206].) Solutran concedes that “present law does not clearly establish” that the doctrine of estoppel applies to bar US Bank from reasserting its § 101 argument here. (*See* Pl.’s Mem. in Opp’n at 8 & n.10 [Doc. No. 194].) While the Federal Circuit has found that estoppel does not preclude the assertion of non-instituted grounds in a CBM or IPR proceeding, *see, e.g., Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1053 (Fed. Cir. 2017), the Supreme Court has not considered this issue. Accordingly, this Court does not assign preclusive effect to the PTAB’s findings on § 101 validity. However, it finds the PTAB’s guidance persuasive.



the basic, core concept of Claim 1 is a method of processing paper checks, “which is more akin to a physical process than an abstract idea.” *Id.* Moreover, the Board found that “there is nothing immediately apparent about this basic, core concept that would indicate that it is directed to an abstract idea at all.” *Id.* While the PTAB acknowledged that Claim 1 recited some fundamental economic practices, such as “crediting an account for a merchant,” it could not “disembody such recitations from the claim viewed as a whole.” *Id.* The PTAB pointed to other substantive limitations in Claim 1—“receiving said paper checks and scanning said checks with a digital scanner” and “comparing by a computer said digital images”—that narrow the claim. *Id.*

While there is no definitive test to determine what constitutes an “abstract idea,” courts frequently compare the challenged claims “to those claims already found to be directed to an abstract idea in previous cases.” *Enfish*, 822 F.3d at 1334 (citing *Alice*, 134 S. Ct. at 2357). In *Bilski*, 561 U.S. at 609–12, the Supreme Court cited as “guideposts” three abstract-idea decisions involving patented processes: *Gottschalk v. Benson*, 409 U.S. 63 (1972); *Parker v. Flook*, 437 U.S. 564 (1978); and *Diehr*, 450 U.S. at 175. It noted that in *Gottschalk*, 409 U.S. at 67, an algorithm used to convert binary-coded decimal numerals into pure binary code was not a patent eligible process under § 101, and any contrary conclusion “would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.” *Bilski*, 561 U.S. at 609–10 (quoting *Gottschalk*, 409 U.S. at 72). In *Flook*, 437 U.S. at 585–86, the Supreme Court evaluated the § 101 eligibility of a patent for monitoring the

conditions during the catalytic conversion process in the petrochemical and oil-refining industries. The Court held that the bar against patenting abstract ideas “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment” or adding “insignificant postsolution activity.” *Bilski*, 561 U.S. at 610 (quoting *Diehr*, 450 U.S. at 191–92). Finally, in *Diehr*, 450 U.S. at 177, the Court held that a new process for curing synthetic rubber, involving the use of a mathematical formula in several of the steps, completed by a computer, was not an abstract idea. The Court underscored the importance of considering the invention as a whole, and stated that although an abstract idea is not patent eligible, “an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Id.* at 187–88.

Relying on this precedent, the Court in *Bilski* held that a patent claiming a general method for hedging risk in the energy commodities market was abstract, and therefore not patent-eligible under § 101. 561 U.S. at 611. The Court found that hedging is a “fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class,” and it “is an unpatentable abstract idea, just like the algorithms at issue in [*Gottschalk*] and *Flook*.” *Id.* at 611–12.

The PTAB considered this precedent in US Bank’s petition for CBM review, finding the ‘945 patent’s claims unlike the fundamental economic practices in *Alice* and *Bilski*, the mathematical formulas in *Flook*, or the basic tools of scientific and technological work in *Gottschalk*. *US Bancorp*, 2014 WL 3943913, at \*8.

US Bank suggests that the PTAB failed to adequately consider the then-recent *Alice* decision, and failed to solicit any briefing from the parties on the effect of that case. (See Defs.' Mem. in Opp'n at 26; Defs.' Reply at 3.) But the PTAB's ruling cites *Alice* several times and follows the two-step procedure that *Alice* and *Mayo* prescribe. See *U.S. Bancorp*, 2014 WL 3943913, at \*6–8.

US Bank also asserts that two cases involving check-related patents provide sufficient bases for invalidating the '945 Patent. (Def.'s Mem. in Supp. at 13) (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *Fidelity Nat'l Servs. v. DataTreasury Corp.*, CBM 2014-00020, 2015 WL 1967327, at \*5–6 (PTAB April 29, 2015), *aff'd* 669 Fed. App'x 572 (Fed. Cir. 2016)). *Content Extraction* involved a claim directed to a computerized technique that recognized data in scanned documents and stored that data in appropriate data fields in a computer. 776 F.3d at 1345. But unlike here, the claimed advance was not based on when or how the hard copy documents were scanned, manipulated, or transported— instead, the claimed advance was simply in the computer recognition process. *DataTreasury* is similarly inapplicable, because the patent owner did not assert that the claimed advance was something more than the encrypted transferring of information, and instead argued that the presence of a tangible object precluded a finding that the claim was directed to an abstract idea. 2015 WL 1967327, at \*10. Here, however, Claim 1 is directed to an improved technique for processing physical checks that emphasizes both the processing and the

transportation of the checks.<sup>6</sup>

US Bank also cites authority for the proposition that patents involving computer functions are frequently found to be abstract at step one. (See Defs.’ Mem. in Supp. at 19) (citing *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) (generating a second computer menu from a first menu and sending it elsewhere); *Elec. Power*, 830 F.3d at 1353–54 (using a “process of gathering and analyzing information of a specified content, then displaying the results”); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333 (Fed. Cir. 2015) (using organizational and product group hierarchies to determine price); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (retaining information from the navigation of online forms); *Content Extraction*, 776 F.3d at 1347 (collecting data, recognizing certain data from the collected group, and storing recognized data)). The Court does not dispute this general observation. But while the ‘945 patent’s claims may involve the use of scanning or imaging devices as part of the patented process, the patent does not claim advances over the prior art based on the processing, gathering, or manipulation of data via computer. See *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (finding a process that began with data, added an algorithm, and ended with data in a new form was directed to an abstract idea).

---

<sup>6</sup> Moreover, *DataTreasury* was decided by the PTAB only four months prior to the PTAB’s ruling on US Bank’s petition. As Solutran observes, *DataTreasury* lacks persuasive authority, “given that the PTAB also considered and rejected the same type of section 101 challenge to the ‘945 Patent itself.” (Pl.’s Mem. in Opp’n at 22.)

The Court similarly finds inapposite US Bank's authority regarding the abstract character of claims for fundamental economic practices, (*see* Defs.' Mem. in Supp. at 23) (citing *Alice*, 134 S. Ct. at 2356), methods of organizing human activity (*see id.*) (citing *Planet Bingo LLC v. VKGS LLC*, 576 F. App'x 1005, 1007–08 (Fed. Cir. 2014), and mental processes. (*See id.*) (citing *CyberSource Corp. v. Decisions, Inc.*, 654 F.3d 1366, 1371 (Fed. Cir. 2011)). As noted, the Court agrees with the PTAB that simply because individual elements of Claim 1 recite isolated, fundamental economic practices, such as “crediting an account for a merchant,” when viewed as a whole, the claim's limitations demonstrate that the claim is not directed to an abstract concept. *See US Bancorp*, 2014 WL 3943913, at \*8. Neither is the core concept of Claim 1 a method of organizing human activity similar to the commercial practice of hedging in *Alice*, nor is it a mental process that can be performed by human thought alone, like the method claim in *CyberSource* for verifying the validity of a credit card transaction over the internet. Rather, the character of Claim 1 is directed to a physical process for processing paper checks that captures data from a paper check at the merchant's point of purchase, and uses the data to credit a merchant's account, while the same paper check is later scanned in a different location to create an image of that check.

Because the Court finds that Claim 1 of the '945 Patent is not directed to an abstract idea, it need not examine the claim under step two. However, even if Claim 1 were directed to an abstract idea, it would nevertheless satisfy the second step of the *Mayo/Alice* analysis.

## 2. Step Two

Again, at the second step of the analysis, courts consider whether the challenged claim contains an “inventive concept” that transforms the abstract concept into a patentable claim under § 101. Courts examine whether the limitations in the claim represent a patent-eligible application of the abstract idea. *See Alice*, 134 S. Ct. at 2357. Elements of a claim that consist of merely routine data gathering or involve a general computer function or activity do not meet this standard. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015). Nor do claims that are limited to a specific technological environment. *See Elec. Power*, 830 F.3d at 1354. However, claims that involve a “specific, discrete implementation” of an abstract concept have been found to be sufficiently inventive, even if none of the individual claim limitations are inventive when considered separately. *See Bascom Global Internet Servs. v. AT & T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

US Bank contends that Solutran’s claimed invention is “nothing more than a trivial application of computers and scanning equipment to conventional check processing.” (*See* Defs.’ Mem. in Supp. at 15, 20.) But “new 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.” *Diehr*, 450 U.S. at 188. While US Bank argues that component parts of the claimed invention were known conventions, (*see* Defs.’ Reply at 13), it fails to consider the ordered combination of the elements in Claim 1, focusing instead on the individual elements. Nor does it argue

that these combined elements were a known convention. Rather, as Solutran notes, “Claim 1’s elements describe a new combination of steps, in an ordered sequence, that was never found before in the prior art and has been found to be a non-obvious improvement over the prior art by both the USPTO examiner and the PTAB’s three-judge panel (affirmed by the Federal Circuit).” (Pl’s Mem. in Opp’n at 27.) The ordered combination captures data from a paper check at the merchant’s point of sale in order to credit the merchant’s account, while the same check is later scanned at a different location to create an image. The image and the data are then reunited and compared to find matches. While US Bank asserts that the claim fails to recite that the checks are “transported,” (*see* Defs.’ Reply at 13), Claim 1(c) indicates that the paper checks are “receiv[ed].” This Court previously construed “receiving said paper checks” as “the paper checks are received from a location different from where the checks are scanned” in its claim construction ruling, *see Solutran*, 2017 WL 2274959, at \*5. This construction sufficiently conveys that the checks are moved from one location to another.

Specifically with respect to patented “processes” under § 101, one means by which courts evaluate their patent eligibility is the “machine-or-transformation test.” *See Bilski*, 561 U.S. at 602–03. Under this test, a claimed invention is not deemed patentable if it is not tied to a machine and does not transform an article. *Id.* The Supreme Court has held that this is not the sole means by which to decide whether an invention is a patent-eligible process, but it is “a useful and important clue, an investigative tool.” *Id.* at 604.

The Court agrees with Solutran that the '945 Patent's claims pass the machine-or-transformation test. As Solutran explains, "the physical paper check is transformed into a different state or thing, namely into a digital image." (Pl.'s Mem. in Opp'n at 29.) In *Bilski*, the Federal Circuit stated that the transformation of raw, physical data, into a visual depiction of that object satisfies the transformation part of the machine-or-transformation test. 545 F.3d at 962–63. Moreover, the transformation here is "central to the purpose of the claimed process," *id.* at 962, and "impose[s] a meaningful limit on the scope of the claim." *Versata Dev.*, 793 F.3d at 1335. Solutran explains that receiving and scanning paper checks *after* they have been moved from the merchant's point of sale is central to the purpose of the '945 Patent: "If this step (c) were removed from the claims, then step (d) would be incomprehensible and steps (a) and (b) would merely describe relatively routine practices found in [point of purchase] check transactions. Step therefore is not 'mere data gathering' or 'routine, post-solution activity,' but imposes a meaningful limit on the claimed process." (Pl.'s Mem. in Opp'n at 30–31.) The Court therefore finds that even if it reaches step 2 in the analysis, the elements of Claim 1 contain a sufficiently transformative inventive concept so as to be patent eligible.

Accordingly, for all of the reasons set forth above, the Court finds that the claims of the '945 Patent are not abstract, but rather, are patent eligible under § 101. Defendant's summary judgment motion is therefore denied on this basis as well.



**THEREFORE, IT IS HEREBY ORDERED THAT:**

1. Plaintiff's Motion for Summary Judgment [Doc. No. 183] is **GRANTED**; and
2. Defendants' Motion for Summary Judgment [Doc. No. 170] is **DENIED**; and
3. The remaining issues are set for trial on March 6, 2018. A pretrial order will follow.

42a

**APPENDIX C**

**United States Court of Appeals for the Federal  
Circuit**

---

SOLUTRAN, INC.,  
*Plaintiff-Cross-Appellant*

v.

ELAVON, INC., U.S. BANCORP,  
*Defendants-Appellants*

---

2019-1345, 2019-1460

---

Appeals from the United States District Court for  
the District of Minnesota in No. 0:13-cv-02637-SRN-  
BRT, Judge Susan Richard Nelson.

---

**ON PETITION FOR REHEARING EN BANC**

---

Before PROST, *Chief Judge*, NEWMAN, LOURIE,  
DYK, MOORE, O'MALLEY, REYNA, WALLACH,  
TARANTO, CHEN, HUGHES, and STOLL, *Circuit  
Judges*.

PER CURIAM.

**ORDER**

Cross-Appellant Solutran, Inc. filed a petition for  
re-hearing en banc. The petition was first referred as  
a petition for rehearing to the panel that heard the  
appeal, and thereafter the petition for rehearing en

43a

banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied. The petition for rehearing en banc is denied.

The mandate of the court will issue on October 8, 2019.

FOR THE COURT

October 1, 2019  
Date

/s/ Peter R. Marksteiner  
Peter R. Marksteiner  
Clerk of Court

44a

**APPENDIX D**

**United States Patent and Trademark Office**

---

BEFORE THE PATENT TRIAL AND APPEAL  
BOARD

---

U.S. BANCORP, Petitioner,

v.

SOLUTRAN, INC.,  
Patent Owner.

---

Case CBM2014-00076  
Patent 8,311,945 B2  
August 7, 2014

---

Before MICHAEL W. KIM, BEVERLY M. BUNTING,  
and PATRICK M. BOUCHER, *Administrative Patent  
Judges.*

BUNTING, *Administrative Patent Judge.*

**DECISION**

Institution of Covered Business Method Patent  
Review

*37 C.F.R. § 42.208*

## I. INTRODUCTION

U.S. Bancorp (“Petitioner”) filed a Petition (Paper 1, “Pet.”) on February 19, 2014, requesting a covered business method patent review of claims 1–6 of U.S. Patent No. 8,311,945 B2 (Ex. 1002, “the ’945 patent”). Solutran, Inc. (“Patent Owner”) filed a Patent Owner’s Preliminary Response (Paper 15, “Prelim. Resp.”) on May 27, 2014. We have jurisdiction under 35 U.S.C. § 324.<sup>1</sup>

## II. BACKGROUND

The standard for instituting a covered business method patent review is set forth in 35 U.S.C. § 324(a), which provides as follows:

**THRESHOLD.** – The Director may not authorize a post-grant review to be instituted unless the Director determines that the information presented in the petition filed under section 321, if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.

35 U.S.C. § 324(a). Petitioner challenges the patentability of claims 1–6 (i.e., “the challenged claims”) under 35 U.S.C. § 101 and 35 U.S.C. § 103(a). Pet. 10. Upon consideration of the information presented in the Petition and Patent Owner’s Preliminary Response, we determine that

---

<sup>1</sup> See section 18(a) of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284, 329 (2011) (“AIA”).

Petitioner has demonstrated that it is more likely than not that the challenged claims are unpatentable. Pursuant to 35 U.S.C. § 324 and section 18(a) of the AIA, we institute a covered business method patent review as to claims 1–6 of the '945 patent on the grounds identified in the Order of this decision.

*A. Related Proceedings*

Petitioner asserts that the '945 patent is the subject of the following judicial matter: *Solutran, Inc. v. U.S. Bancorp and Elavon, Inc.*, Case No. 13-cv-2637, (D. Minn), filed September 25, 2013. Pet. 74.

*B. The '945 Patent (Ex. 1002)*

The '945 patent is directed to a system and method for processing paper checks and check transactions, in which check data is captured at point of sale and later a check image is captured remotely for subsequent matching of the check image with the check data. Ex. 1002, 1:13–17. Processing of the paper check entails transferring the check data independent of the check image, resulting in debiting of a consumer account and crediting of a merchant account prior to scanning and creating the check image (*id.* at 4:30–34) as shown in Figure 3 reproduced below:

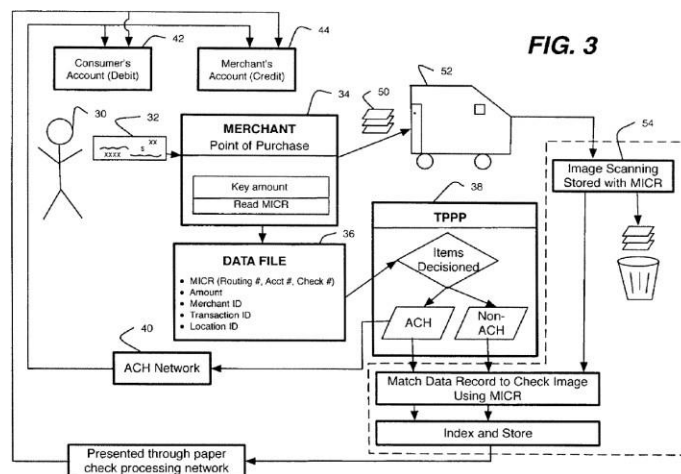


FIG. 3 illustrates the method of processing a check between a consumer and merchant using a third party processor.

Specifically, check data is captured at a point of purchase, and “is used to promptly process a deposit to the merchant’s account via a third party payment processor” (“TPPP”). *Id.* at 3:18–20. After the TPPP receives the check data, if determined to be eligible for processing via the Automated Clearing House (ACH), the check data passes “through the ACH network for processing and appropriate debiting of the consumer’s account 42 and ... crediting the merchant’s account 44.” *Id.* at 5:37–42. Separately and subsequently, the paper check is transported physically from the merchant to the TPPP for scanning to create a check image that is stored in a digital image file. *Id.* at 3:23–28; 5:47–58.

### C. Illustrative Claim

Petitioner challenges claims 1–6 of the ’945

patent. Of the challenged claims, claims 1, 4, and 5 are independent, and all are directed to a method for processing paper checks. Claim 1 is illustrative:

1. A method for processing paper checks, comprising:

a) electronically receiving a data file containing data captured at a merchant's point of purchase, said data including an amount of a transaction associated with MICR information for each paper check, and said data file not including images of said checks;

b) after step a), crediting an account for the merchant;

c) after step b), receiving said paper checks and scanning said checks with a digital image scanner thereby creating digital images of said checks and, for each said check, associating said digital image with said check's MICR information; and

d) comparing by a computer said digital images, with said data in the data file to find matches.

*D. Prior Art*

Petitioner relies on the following prior art references (Pet. 6):



<b>Reference (s)</b>	<b>Patents/Printed Publications</b>	<b>Date</b>	<b>Exhibit</b>
Figure 2 of the '945 patent	Figure 2 of U.S. Patent Number 8,311,945 B2	January 30, 2006	1002
Randle	U.S. Patent Publication No. US 2005/0071283 A1	March 31, 2005	1012

*E. Asserted Grounds*

Petitioner challenges claims 1–6 of the '945 patent based on the following statutory grounds. Pet. 10.

<b>Claims Challenged</b>	<b>Basis</b>	<b>Reference(s)</b>
1–6	§ 101	None
1–6	§ 103(a)	Figure 2 of the '945 patent and Randle

### III. ANALYSIS

*A. Standing to Seek Covered Business Method Patent Review*

A “covered business method patent” is one that “claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological

inventions.” AIA § 18(d)(1); *see also* 37 C.F.R. § 42.301(a) (2013). For the following reasons, we conclude the ’945 patent meets the definition of a “[c]overed business method patent,” and Petitioner has standing to file a petition for a covered business method patent review. *See* 37 C.F.R. § 42.301(a).

1. *Petitioner Has Been Sued for Infringement of the ’945 Patent*

As discussed above in Section II-A, Petitioner represents it has been sued for infringement of the ’945 patent. Pet. 74.

2. *Claims 1–6 Are Directed to a Financial Product or Service*

The legislative history of the AIA “explains that the definition of covered business method patent was drafted to encompass patents ‘claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.’” Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 48,734, 48,735 (Aug. 14, 2012) (quoting 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011)). For purposes of determining whether a patent is eligible for covered business method patent review, we focus on the claims. *See id.* at 48,736 (responses to comments 4 and 8). A patent need have only one claim directed to a covered business method to be eligible for covered business method patent review. *See id.* In this case, we focus on claim 1 of the ’945 patent.

Claim 1 of the ’945 patent recites a method for processing paper checks. Ex. 1002, 10:54–67.

Petitioner asserts that the processing of a paper check “clearly encompass[es] activities that are financial in nature.” Pet. 15. Moreover, the claim limitation of “crediting an account for the merchant” is an activity that is financial in nature. On these facts, we are persuaded that claim 1 satisfies the “financial product or service” component of the definition set forth in § 18(d)(1) of the AIA.

### 3. *Exclusion for Technological Inventions*

The definition of “covered business method patent” expressly excludes “patents for technological inventions.” AIA § 18(d)(1); *see also* 37 C.F.R. § 42.301(a) (2013). To determine whether a patent is for a technological invention, we consider on a case-by-case basis “whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” 37 C.F.R. § 42.301(b) (2013).<sup>2</sup>

Petitioner contends that the claims of the ’945 patent fail to disclose a technological invention because the claims include “only known generic hardware devices used in known ways and fail to include a technological feature that is novel and unobvious over the prior art.” Pet. 16–20. For example, Petitioner points to the claim features of “‘electronically receiving a data file’; ‘scanning checks with a digital image scanner thereby creating digital images of said checks’; and ‘comparing by a computer said digital images, with said data in the data file to

---

<sup>2</sup> For additional examples of “technological inventions” see Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,763–64 (Aug. 14, 2012).

find matches.” *Id.* at 17, citing Ex. 1002 10:55–67. Moreover, Petitioner contends that because the claims of the ’945 patent do not contain a novel and unobvious technological feature, the claims do not solve a technical problem using a technical solution. *Id.* at 20–22. Patent Owner, in its Preliminary Response, does not dispute Petitioner’s standing to seek covered business method patent review.

We agree with Petitioner that the ’945 patent is not directed to a technological invention within the meaning of 37 C.F.R. § 42.301(b), because checks, digital image scanners, and computers were known technologies in the prior art before the effective filing date of the ’945 patent in 2006. In this context, we identify no limitation of claim 1 that represents a technological feature that is novel or unobvious over the prior art.

#### 4. Conclusion

Based on the above, we are persuaded that the ’945 patent is eligible for covered business method patent review.

##### *B. Claim Interpretation*

As a step in our analysis of whether to institute a review, we determine the meaning of the claims for purposes of this decision. In a covered business method review, “[a] claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b); *see* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764–66, (Aug. 14, 2012) (*Claim Construction*); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir.

2004). Under the broadest reasonable interpretation standard, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. See *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification “with reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Petitioner proposes express construction of several claim terms. Pet. 13. However, Petitioner does not indicate how these claim interpretations are relevant to the proposed grounds of unpatentability set forth in the instant proceeding. Patent Owner does not address Petitioner’s proposed claim construction; however, Patent Owner does proffer specific constructions for several claim terms, and points to the corresponding description from the Specification in support thereof. Prelim. Resp. 14–19. Like Petitioner, however, Patent Owner does not indicate how these claim interpretations are relevant to the proposed grounds of unpatentability set forth in the instant proceeding.

Having considered both Petitioner’s and Patent Owner’s proposed claim interpretations, we see no need to provide any express claim constructions at this time.

### *C. Non-Statutory Subject Matter*

Petitioner challenges generally each claim of the ’945 patent as failing to recite patentable subject matter under 35 U.S.C. § 101 because they fall within the judicially created exception encompassing

“abstract ideas or mental processes.” Pet. 25–44. In the Preliminary Response, Patent Owner does not dispute Petitioner’s challenge of the claims of the ’945 patent based on 35 U.S.C. § 101. On the arguments and evidence presented, we are not persuaded that the challenged claims are directed to non-statutory subject matter.

Our analysis begins with the statute. 35 U.S.C. § 101 provides that a new and useful “process, machine, manufacture, or composition of matter” is eligible for patent protection. The Supreme Court has made clear that the test for patent eligibility under Section 101 is not amenable to bright-line categorical rules. *See Bilski v. Kappos*, 561 U.S. 593, 572–73 (2010). As Petitioner indicates, there are three limited, judicially-created exceptions to the broad categories of patent-eligible subject matter in § 101: Laws of nature; natural phenomena; and abstract ideas. Pet. 23; *see Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012).

More recently, in *Alice Corporation Pty, Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2355 (2014), the Supreme Court reiterated the framework set forth previously in *Mayo*, “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of [these] concepts.” Under *Alice*, the first step of such analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If determined that the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually

and ‘as an ordered combination’” to determine whether there are additional elements that “transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1297–8). In other words, the second step is to “search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* (brackets in original) (quoting *Mayo*, 132 S. Ct. at 1294).

In the first step of determining whether a claim is directed to a patent-ineligible concept, the Supreme Court consistently begins its analysis by distilling the claim down to its basic, core concept. *See Alice Corporation Pty, Ltd. v. CLS Bank International*, 134 S. Ct. at 2356 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk”); *Bilski v. Kappos*, 130 S. Ct. at 3231 (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk”); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) (“Analyzing respondents’ claims according to the above statements from our cases, we think that a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable subject matter”); *Parker v. Flook*, 437 U.S. 584, 594-595 (1978) (“Respondent’s application simply provides a new and presumably better method for calculating alarm limit values”); and *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) (“They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals”).

After determining the basic, core concept, the Supreme Court then considers where the determined basic, core concept falls within a spectrum that extends from “abstract ideas” at one end to “technological processes” at the other. Claims that fall towards the abstract-idea end are generally not directed to patent-eligible subject matter under § 101, while those that fall towards the technological-process end are generally patent-eligible. *Compare Alice Corporation Pty, Ltd. v. CLS Bank International*, 134 S. Ct. at 2356 with *Diamond v. Diehr*, 450 U.S. at 184. *See also Gottschalk v. Benson*, 409 U.S. at 64 (“They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals. The claims were not limited to any particular art or technology, to any particular apparatus or machinery, or to any particular end use”). The Supreme Court has determined that the abstract-idea end of the spectrum includes fundamental economic practices, *Alice Corp. Pty., Ltd. v. CLS Bank Int’l*, at 2357, *Bilski v. Kappos*, 130 S. Ct. at 3231; mathematical formulas, *Parker v. Flook*, 437 U.S. at 594-595; and basic tools of scientific and technological work, *Gottschalk v. Benson*, 409 U.S. at 69. On the opposite technological-process end of the spectrum are physical and chemical processes, such as curing rubber, *Diamond v. Diehr*, 450 U.S. at 184, “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores,” and a process for manufacturing flour. *See Gottschalk v. Benson*, 409 U.S. at 69 (internal citations omitted).

1. Claims 1–3 and 6

Turning to the claims, Petitioner argues generally



that the claim limitation of “shifting the step of scanning checks with a digital scanner from a merchant to another entity in a NACHA regulated back office conversion process” is an abstract idea, because it is not associated with any technological improvement in scanning, nor accompanied by any other limitation that would make the claim anything other than an abstract idea. Pet. 26. In particular, Petitioner argues “[o]ther than the claimed idea of a non-merchant entity performing check scanning, claim 1 includes nothing but mental process steps, insignificant extra-solution activity, and conventional computer hardware components for performing basic computer functions.” *Id.* at 28. According to Petitioner, this abstract idea of the non-merchant entity performing the scanning is not made patentable “by the addition of ‘well-understood, routine, conventional activity.’” *Id.*, citing *Mayo* 132 S. Ct. at 1298. Further, Petitioner argues that the limitation requiring that step (c) be performed after the merchant’s account is credited, represents “a disembodied abstract idea that is not patentable.” Pet. 32. With regards to claims 2, 3, and 6, all of which depend from claim 1 and include additional limitations, Petitioner characterizes these additional limitations as “insignificant post-solution activity.” Pet. 33–35.

In determining whether a method or process claim recites an abstract idea, we must examine the claim as a whole. *Alice Corp. Pty., Ltd. v. CLS Bank Int’l*, at 2361, n. 3. On the record before us, Petitioner’s arguments are not persuasive because they are directed to each method step individually without accounting sufficiently for the claims as a whole. For when we mirror the first step of

determining whether a claim is directed to a patent-ineligible concept, as set forth above, we find that the basic, core concept of independent claim 1 is a method of processing paper checks, which is more akin to a physical process than an abstract idea. Indeed, there is nothing immediately apparent about this basic, core concept that would indicate that it is directed to an abstract idea at all.

In reaching our determination, we are mindful of the Supreme Court’s implicit caution to maintain focus on the basic, core concept of the claim, particularly when the claim is dressed in technological language. Most instructive in this regard is *Parker v. Flook*, where the claim’s preamble indicated that the claim’s basic, core concept was ostensibly directed to a chemical process involving catalytic conversion of hydrocarbons. *Id.* at 594-595. The Supreme Court found, however, that when more closely scrutinized, the claim’s basic, core concept was actually calculating alarm limits—a mathematical algorithm, not a chemical process.

In further considering independent claim 1, we recognize that some fundamental economic practices are recited, such as “crediting an account for a merchant.” But application of the Supreme Court’s test cannot disembody such recitations from the claim viewed as a whole—including its recitation of other limitations such as “receiving said paper checks and scanning said checks with a digital scanner” and “comparing by a computer said digital images.” These are not fundamental economic practices, mathematical algorithms, or basic tools of scientific and technological work. The presence of isolated limitations that recite fundamental economic

practices do not persuade us that the basic, core concept of independent claim 1—when all its limitations are considered collectively—is anything other than processing paper checks. Our analysis is no different for claims 2-3 and 6.

Given our determination that claims 1–3, and 6 are not directed to the patent-ineligible concept of an abstract idea, we need not consider the second step of whether the challenged claims lack an inventive concept.

Petitioner also argues that the challenged claims are unpatentable using the rationale provided by the preemption test. Pet. 37-39. Because we have determined that the challenged claims are not directed to a patent-ineligible abstract idea, we need not proceed with the preemption analysis for the reasons provided above. *See Accenture*, 728 F.3d at 1341.

## 2. Claims 4 and 5

Petitioner argues that independent claims 4 and 5 are similar to claim 1, and are likewise unpatentable because they recite an abstract idea. Pet. 39–44. Petitioner characterizes the additional recitations in claim 4 as “routine, post-solution activities associated with handling ACH and non-ACH presentment.” *Id.* at 40–41. With respect to claim 5, Petitioner argues that the additional recitations regarding the receipt of data from multiple merchants does not impart the necessary subject matter that is missing from claim 1 to make the claim patent eligible. *Id.* at 43.

Petitioner's arguments regarding claims 4 and 5 are likewise unpersuasive, because they are directed to each method step individually, and do not account sufficiently for the claims as a whole. Moreover, our own independent analysis does not dissuade us from the notion that the basic, core concept of claims 4 and 5 is processing paper checks, which is not an abstract idea for the reasons discussed above. On the present record, we determine that claims 4 and 5 are not directed to the patent-ineligible concept of an abstract idea. Given our determination that claims 4 and 5 are not directed to the patent-ineligible concept of an abstract idea, we need not consider whether the challenged claims lack an inventive concept.

### 3. Conclusion

Based on the record before us, Petitioner has not demonstrated that it is more likely than not that challenged claims 1–6 are unpatentable under 35 U.S.C. § 101.

#### *D. Obviousness Based on Figure 2 of the '945 Patent and Randle*

Petitioner contends that claims 1–6 of the '945 patent are unpatentable under 35 U.S.C. § 103 as obvious based on Figure 2 of the '945 patent and Randle. After considering the Petition and the Preliminary Response, we are persuaded that, based on the record before us, Petitioner has demonstrated that it is more likely than not that challenged claims 1–6 are obvious over Figure 2 of the '945 patent and Randle, for the reasons provided herein.

1. Overview of Figure 2 (Ex. 1002, fig. 2)

The specification of the '945 patent describes a prior art method of processing paper checks as shown in Figure 2 reproduced below:

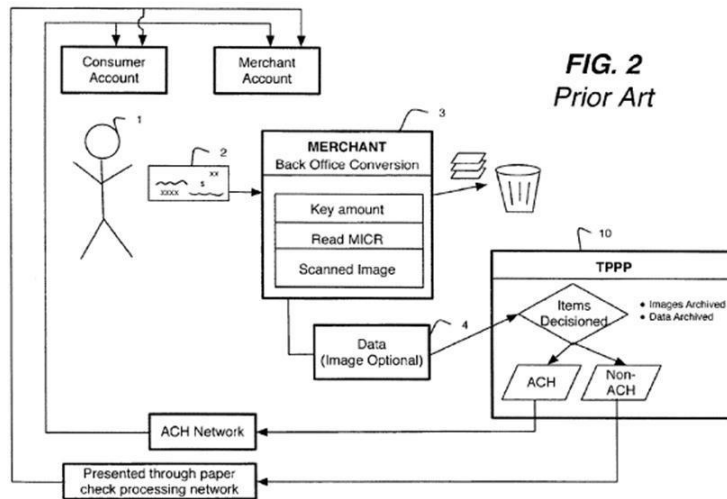


FIG. 2 is a schematic diagram of a prior art system for converting a check in a merchant's back office.

With the prior art system, a merchant scans checks in a back office conversion to generate a digital image file of each check. Ex. 1002, 3:1-4; 5:1-4. As shown in Figure 2, a check data file transferred to the TPPP via block 4 may *optionally* include the digital image file of the check. At block 10, the TPPP determines whether to direct the check data file through the ACH network or paper check processing network, both of which serve to debit a consumer account and credit a merchant account. The TPPP also archives the digital image file and the check data file.

## 2. Overview of Randle (Ex. 1012)

Randle is directed to electronic transaction processing, including “secure, accurate and verified imaging of financial instruments, check truncation and electronic funds payment, settlement and clearing.” Ex. 1012, ¶ 2. Specifically, the system of Randle

allows for secure check truncation at the point of presentment or any other step in the item processing chain by creating a file containing an image of the check and a file containing transaction data related to the paper check, each of which can be transmitted together or separately in a network and subsequently uniquely matched and or integrated for check processing.

*Id.* ¶ 76. According to Randle, the deposit bank captures a check and related information by scanning to create an image of the check, which is in addition to creating a data file containing MICR data of the check. *Id.* ¶ 80. Specifically, “separate data file **10** and image plus data file **11** are separately manipulated and processed for settlement, payment and clearing.” *Id.* Noting that smaller size data files may be transferred more quickly than larger image files, Randle discloses that

the clearing house has a capability to timely notify financial institution participants of debit and credit obligations that will accrue upon actual receipt and processing of the imaged instruments upon conclusion of a periodic, or other, settlement . . . [a]fter clearing, the checks (in image/IRD form) are returned to payor banks **22** where they are separately processed and associated with individual

payor's accounts, and returned, as data and/or a complete or partial image, to the payor in or accompanying an account statement **25**. The payee bank **21**, receiving funds, will assign the funds and credit the respective individual payee **3**.

*Id.*

3. Claim 1

Turning to claim 1, Petitioner contends that Figure 2 of the '945 patent discloses the limitations of step (a), step (b), and portions of step (c) of claim 1, and indicates where these limitations are disclosed by the drawing. *Id.* at 48–51. With regards to Randle, Petitioner contends that Randle discloses portions of step (c) and step (d), and sets forth where these limitations are disclosed in Randle. *Id.* at 51–52. Acknowledging that Figure 2 and Randle do not expressly disclose performing step (c), i.e., scanning a paper check, after step (b), i.e. crediting the merchant account, Petitioner argues “this sequencing would be obvious to one of skill based on Figure 2 in view of Randle.” Pet. 52.

Specifically, Petitioner argues claim 1 is obvious because it merely reverses the sequence in which the steps of “[m]aking a digital image of a paper check and associating it with [] data regarding the check”, i.e., step (c), and “[c]rediting the merchant’s account,” i.e., step (b), are performed. *Id.* at 57. According to Petitioner, Figure 2 discloses that the merchant’s account can be credited without imaging the check at all, though imaging the check is optional, and Randle discloses that the check can be imaged before the merchant’s account is credited. *Id.* at 58–59. Thus, Petitioner reasons that the sequence between the

steps of crediting the merchant's account and imaging the check is based on "finite and well understood possibilities." *Id.* Based on this understanding, Petitioner asserts that changing the order of steps from the prior art methods is *prima facie* obviousness. *Id.* (citing *Ex parte Rubin*, 128 USPQ 440 (BPAI 1959); *In re Burhans*, 154 F.2d 690 (CCPA 1946); *In re Gibson*, 39 F.2d 975 (CCPA 1930)). Changing the order of steps would not provide new or unexpected results, according to Petitioner, because one of skill in the art, as evidenced by prior art Figure 2 at the time of filing, would have readily recognized that a data file without the image may be sent for ACH processing, and Randle discusses the time-saving advantage of not having the merchant scan the check and associate the resulting image with the data file. *Id.* at 59.

On this record, we are persuaded by Petitioner's contentions that merely reversing the order of two steps is *prima facie* obvious, and that there is no new or unexpected result attained by changing the order between the scanning and crediting steps. *Id.* Specifically, Figure 2 suggests in blocks 3 and 4 that scanning and transmitting the scanned image to the TPPP is optional; and in block 10 the image is archived by the TPPP. Thus, based on these teachings, it follows that the check image would be scanned either by the merchant or the TPPP, that both techniques were known, and that it would have been within the abilities of one of ordinary skill to implement the techniques in any order, as two options is the epitome of a finite number of options. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 403 (2007) ("When there is a design need or market pressure to solve a problem and there are a finite



number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense”). On this record, we are persuaded that the known need to credit the merchant more quickly provides a sufficient rationale to carry out the admittedly known scanning and crediting limitations of independent claim 1 in any order that would expedite the process.

Accordingly, for the reasons explained above, we are persuaded Petitioner has demonstrated that it is more likely than not that claim 1 of the '945 patent is unpatentable as obvious over the combination of Figure 2 of the '945 patent and Randle.

#### 4. Claims 2–6

Dependent claims 2, 3, and 6 each depend from claim 1 and include additional limitations. Likewise, independent claims 4 and 5 are similar to claim 1, and include additional limitations. Petitioner relies on the cited portions of Figure 2 of the '945 patent and Randle as satisfying the claim limitations of claims 2–6. Pet. 48-71. Petitioner argues that claims 2–6 are obvious for the reasons provided with respect to claim 1. *Id.*

For the reasons provided *supra* with respect to claim 1, we are persuaded similarly by Petitioner's contentions and supporting evidence concerning claims 2–6. Accordingly, we are persuaded that Petitioner has demonstrated that it is more likely than not that claims 2–6 of the '945 patent are unpatentable as obvious over the combination of

Figure 2 of the '945 patent and Randle.

5. Conclusion

Petitioner has shown that it is more likely than not that claims 1–6 are unpatentable as obvious over the combination of Figure 2 of the '945 patent and Randle.

IV. CONCLUSION

For the foregoing reasons, we determine that the information presented in the Petition demonstrates that it is more likely than not that Petitioner would prevail in establishing that claims 1-6 of the '945 patent are unpatentable based on 35 U.S.C. § 103(a). We also determine that the information presented in the Petition does not demonstrate that it is more likely than not that Petitioner would prevail in establishing that claims 1-6 of the '945 patent are unpatentable based on 35 U.S.C. § 101. The Board, however, has not made a final determination, under 35 U.S.C. § 328(a), as to the patentability of any challenged claim.

V. ORDER

For the foregoing reasons, it is

Ordered that, pursuant to 35 U.S.C. § 324(a), a covered business method patent review of the '945 patent is hereby instituted as to the following claims and grounds: claims 1–6 as unpatentable under 35 U.S.C. § 103(a) as obvious over Figure 2 of the '945 patent and Randle;

67a

FURTHER ORDERED that all other grounds raised in the Petition are denied for the reasons discussed; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 324(d) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial commences on the entry date of this decision