

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

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**BOZEMAN FINANCIAL LLC,**  
*Appellant*

v.

**FEDERAL RESERVE BANK OF ATLANTA,  
FEDERAL RESERVE BANK OF BOSTON,  
FEDERAL RESERVE BANK OF CHICAGO,  
FEDERAL RESERVE BANK OF CLEVELAND,  
FEDERAL RESERVE BANK OF DALLAS, FEDERAL  
RESERVE BANK OF KANSAS CITY, FEDERAL  
RESERVE BANK OF MINNEAPOLIS, FEDERAL  
RESERVE BANK OF NEW YORK, FEDERAL  
RESERVE BANK OF PHILADELPHIA, FEDERAL  
RESERVE BANK OF RICHMOND, FEDERAL  
RESERVE BANK OF SAN FRANCISCO, FEDERAL  
RESERVE BANK OF ST. LOUIS,**  
*Appellees*

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2019-1018

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. CBM2017-  
00035.

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**BOZEMAN FINANCIAL LLC,**  
*Appellant*

v.

**FEDERAL RESERVE BANK OF ATLANTA,  
FEDERAL RESERVE BANK OF BOSTON,  
FEDERAL RESERVE BANK OF CHICAGO,  
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RESERVE BANK OF SAN FRANCISCO, FEDERAL  
RESERVE BANK OF ST. LOUIS,**

*Appellees*

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2019-1020

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. CBM2017-  
00036.

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Decided: April 10, 2020

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SCOTT E. GANT, ERIC J. MAURER, Boies, Schiller &  
Flexner, LLP, Washington, DC, argued for appellant. Also  
represented by THOMAS MAIORINO, Maiorino Law Group  
LLC, Mt. Laurel, NJ; JOHN W. GOLDSCHMIDT, JR., Ference  
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JEFFREY S. BUCHOLTZ, JOSHUA NATHANIEL MITCHELL,  
King & Spalding LLP, Washington, DC, argued for

appellees. Also represented by NATASHA HORNE MOFFITT, Atlanta, GA.

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Before LOURIE, DYK, and MOORE, *Circuit Judges*.

MOORE, *Circuit Judge*.

Bozeman Financial LLC appeals from the Patent Trial and Appeal Board’s covered business method (CBM) review decisions holding all of the claims of U.S. Patent Nos. 6,754,640 and 8,768,840 ineligible under 35 U.S.C. § 101.<sup>1</sup> On appeal, Bozeman challenges the Board’s authority to decide the petitions because it argues the Banks<sup>2</sup> are not “persons” under the America Invents Act (AIA). It further challenges the Board’s eligibility decisions. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

For the reasons set forth below, we hold that the Banks are “persons” who may petition for post-issuance review under the AIA. We further hold that claims 21–24 of the ’640 patent and 1–20 of the ’840 patent are ineligible under § 101. Accordingly, the Board’s decisions are affirmed.

## I

Bozeman filed a supplemental brief arguing that the Banks are not “persons” under the AIA, and therefore they may not petition for post-issuance review under the AIA. Bozeman contends that the Banks are government entities,

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<sup>1</sup> The Board also determined that claims 1–20, 25, and 26 of the ’640 patent are unpatentable under § 112, but Bozeman does not challenge that decision on appeal.

<sup>2</sup> The petitioners and now appellees are a set of Federal Reserve banks from Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, San Francisco, and St. Louis (the Banks).

which the Supreme Court held in *Return Mail, Inc. v. U.S. Postal Serv.*, are not “persons” under the AIA. 139 S. Ct. 1853 (2018). The Banks argue that Bozeman waived this argument by not raising it to the Board or in its opening brief. Additionally, they argue that *Return Mail* is inapplicable because the Banks are distinct from the United States government.

The general rule is “that a federal appellate court does not consider an issue not passed upon below.” *Singleton v. Wulff*, 428 U.S. 106, 120 (1976). We generally do not consider arguments not raised to the Board. *See In re Baxter*, 678 F.3d 1357, 1362 (Fed. Cir. 2012); *In re DBC*, 545 F.3d 1373 (Fed. Cir. 2008). We similarly consider arguments not raised in an appellant’s opening brief waived absent exceptional circumstances. *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006). There are circumstances where we will exercise our discretion to consider an issue despite its not being raised below or in an appellant’s opening brief, however. *See Interactive Gift Exp., Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1344–45 (Fed. Cir. 2001); *L.E.A. Dynatech, Inc. v. Allina*, 49 F.3d 1527, 1531 (Fed. Cir. 1995); *Cemex, S.A. v. United States*, 133 F.3d 897, 902 (Fed. Cir. 1998); *Becton Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 800 (Fed. Cir. 1990). Here, we find that the circumstances warrant deviating from the general rule of waiver.

Whether the Banks are “persons” for purposes of the AIA is an issue of statutory interpretation, a purely legal question. Resolving this issue is limited to interpretation of provisions of the AIA that apply to the Board, an issue that would only be appealable to this court, even if addressed by the Board in the first instance. Patent law questions of this sort fall squarely within the role of this court to create a uniform body of patent law. Reaching the issue is unlikely to substantially prejudice the parties. Bozeman moved for supplemental briefing to address the Supreme Court’s decision in *Return Mail*, which the Banks opposed,

arguing that Bozeman forfeited its argument by not raising that argument in its opening brief. That motion was granted and the parties were given the opportunity to brief the issue. While resolution of this issue may not have a large impact (beyond this case) on pending post-issuance proceedings before the Board, it is pertinent to multiple pending and future patent litigations involving the Banks. Oral Arg. at 23:08–12. Because the issue is narrow and legal, and the parties are not prejudiced by our resolution, we exercise our discretion to reach the issue. We note that this decision is limited to the status of the Banks and does not prejudice other entities whose status as “persons” under the AIA may separately be questioned.

Turning to the merits, we hold that the Banks are “persons” under the AIA and the Board had authority to resolve the issues raised in their petitions. In *Return Mail*, the Supreme Court held that federal agencies are not “persons” able to seek post-issuance review of a patent under the AIA. 139 S. Ct. at 1858. The Court held that the government was not a “person,” such that it was capable of petitioning for any of the three post-issuance proceedings before the USPTO—*inter partes* review, post-grant review, and CBM review. The Banks argue that they are distinct from the government for purposes of the AIA, such that they are “persons” capable of bringing petitions for post-issuance review under the AIA. We agree.

Bozeman argues that the Banks are operating members of the nation’s Federal Reserve System, which is a federal agency, meaning they are government entities. According to Bozeman, the Banks implement the monetary and fiscal policies of the United States, conduct important governmental functions, and any profit generated by the Banks is transferred to the United States Treasury. *See* 12 U.S.C. § 289. For these reasons, Bozeman argues that the Banks are not private financial institutions, but are instead fundamentally public, government institutions whose equity interest remains with the United States.

The Banks respond that the Federal Reserve Banks are chartered corporate instrumentalities of the United States, which are distinct from the sovereign because they are not part of any executive agency or department. They argue that they are corporations that are not government-owned and are operationally distinct from the federal government. We agree that the Banks are “persons” and as such are capable of petitioning the USPTO.

The Federal Reserve Banks were established as chartered corporate instrumentalities of the United States under the Federal Reserve Act of 1913. *See* 12 U.S.C. § 221 *et seq.* Unlike the Postal Service, which was at issue in *Return Mail*, the Banks’s enabling statute does not establish them as part of an executive agency, but rather each bank is a “body corporate.” 12 U.S.C. § 341. Like any other private corporation, the Banks each have a board of directors to enact bylaws and to govern the business of banking. *Id.* Moreover, the Banks may sue or be sued in “any court of law or equity.” *Id.*

It is significant that the Banks are subject to suit for patent infringement in any court. The Supreme Court recognized that federal agencies face less risk for patent infringement than do private entities, and recognized that lessened risk as a reason for Congress to treat federal agencies differently. *Return Mail*, 139 S. Ct. at 1867. A patent owner’s remedy is limited when it sues the government rather than private entities.<sup>3</sup> 28 U.S.C. § 1498(a). Patent

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<sup>3</sup> Although this court has held that § 1498(a) applied to the Banks in *Advanced Software Design Corp. v. Fed. Reserve Bank of St. Louis*, 583 F.3d 1371, 1378 (Fed. Cir. 2009), that decision arose in an unusual posture. The court held that the Banks’ acts of infringement were only “for the Government” because a government agency, the Treasury, had authorized and consented to the use of the infringing software. *Id.* at 1377–78. The court specifically declined

owners' ability to sue the Banks in any district court, and to seek remedies they would be prohibited from in a suit against the government, favors a finding that the Banks are separate from the government and Congress intended the Banks have access to post-issuance proceedings.

The Banks are not structured as government agencies. The Banks do not receive congressionally appropriated funds. 12 U.S.C. § 244. No Bank official is appointed by the President or any other Government official. 12 U.S.C. § 341. Moreover, the government exercises limited control over the operation of the Banks. Instead, the "direct supervision and control of each Bank is exercised by its board of directors." 12 U.S.C. § 301. And the Banks cannot promulgate regulations with the force of law. *Scott v. Fed. Reserve Bank*, 406 F.3d 532, 535 (8th Cir. 2005).

For these reasons, we conclude that the Banks are distinct from the government for purposes of the AIA. We recognize that there may be circumstances where the structure of the Banks does not render them distinct from the government for purposes of statutes other than the AIA. For purposes of the AIA, however, we conclude the Banks are "persons" capable of petitioning for post-issuance review under the AIA. The Board therefore had authority to decide the CBM petitions at issue here.

## II

Having determined that the Board had the authority to resolve the petitions before it, we now turn to Board's determinations holding ineligible the claims of the '840 and '640 patents. The '840 and '640 patents are directed to methods for authorizing and clearing financial transactions to detect and prevent fraud. *See, e.g.*, '640 patent at

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to resolve whether the Banks themselves are considered government agencies in a patent infringement suit. *Id.* at 1379.

Abstract. The '840 patent is a continuation of a divisional application, which was a continuation-in-part of the application that issued as the '640 patent. Claim 1 of the '840 patent is representative:

1. A computer implemented method for detecting fraud in financial transactions during a payment clearing process, said method comprising:

receiving through one of a payer bank and a third party, a first record of an electronic financial transaction from at least one of the following group: a payer, a point-of-sale terminal, an online account and a portable electronic device;

storing in a database accessible by each party to said payment clearing process of said electronic financial transaction, said first record of said electronic financial transaction, said first record comprising more than one parameter;

receiving at said database at least a second record of said electronic financial transaction from one or more of a payee bank and any other party to said payment clearing process as said transaction moves along said payment clearing process, wherein said second record comprises at least one parameter which is the same as said more than one parameter of said first record;

each of said first and second records received at said database comprise at least two of the same said more than one parameters;

determining by a computer when there is a match between at least two of said parameters of said second record of said first financial transaction received at said database and the same parameters of said first record of said financial transaction stored in said database, and wherein any party to said payment clearing process is capable of



verifying said parameters at each point along said financial transaction payment clearing process;

sending a notification to said payee bank participant with authorization to process said electronic financial transaction when said parameters match; and

sending a notification to said payee bank participant to not process said electronic financial transaction when said parameters do not match.

The Banks petitioned for CBM review of claims 1–26 of the '640 patent and claims 1–20 of the '840 patent. The Board determined that the '640 patent's claims are directed to the abstract idea of “collecting, displaying, and analyzing information to reconcile check information against a ledger.” No. 2019-1018 at J.A. 34. The Board further found that the claims do not contain an inventive concept to render them eligible under § 101. The Board noted, and rejected, Bozeman's attempt to incorporate by reference arguments related to the '840 patent's CBM rather than offer any argument in its Patent Owner Response. The Board also found that claims 1–20, 25, and 26 are unpatentable under § 112.

The Board determined that the '840 patent claims are directed to the abstract idea of “collecting and analyzing information for financial transaction fraud or error detection.” No. 2019-1020 at J.A. 33. The Board found that the claims do not contain an inventive concept to render them eligible under § 101. It found that the claims recite generic computer technology and that the claim elements considered individually and as an ordered combination merely “apply the abstract concept of collecting, storing, analyzing, and communicating information to reconcile financial information.” *Id.* at J.A. 47. The Board concluded that claims 1–20 of the '840 patent are ineligible under § 101.

Bozeman appeals the Board's decisions that the claims of the '640 and '840 patents are ineligible under § 101.<sup>4</sup>

#### A. Eligibility

The Banks argue that Bozeman waived any separate eligibility arguments related to the claims of the '640 patent. In its patent owner response, Bozeman's argument was limited to a single sentence incorporating by reference its eligibility arguments in the '840 patent CBM proceeding stating, "the '640 Patent would fall under the same Section 101 Patentability as the child parent, the '840." No. 19-1018 at J.A. 188. The Board found that Bozeman "offer[ed] no arguments in its Patent Owner Response" in the '640 patent CBM proceeding. *Id.* at J.A. 37. It also determined that Bozeman's attempt to incorporate by reference its arguments in the separate CBM proceeding violated the Board's rules. *Id.* (citing 37 C.F.R. § 42.6(a)(3)). The Board nevertheless viewed as applicable the reasoning it provided in the CBM related to the '840 patent and held ineligible the claims of the '640 patent. *Id.* at J.A. 38.

Bozeman's failure to separately argue the eligibility of the '640 patent claims before the Board precludes it from doing so for the first time on appeal. Bozeman concedes that the appeal is limited to the eligibility of claims 21–24 of the '640 patent. We limit our review to the only argument Bozeman made to the Board, that the '640 patent

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<sup>4</sup> At oral argument, Bozeman's counsel acknowledged that only the Board's ineligibility decisions as to claims 21–24 of the '640 patent are at issue on appeal. Oral Arg. at 17:55–18:13. Bozeman did not appeal the Board's decision that claims 1–20, 25, and 26 of the '640 patent were invalid under § 112. Thus, our review of the Board's ineligibility decision is limited to claims 21–24 of the '640 patent and claims 1–20 of the '840 patent.

claims are eligible for the same reasons as the '840 patent claims.

We review the Board's legal conclusions de novo and its factual findings for substantial evidence. *Samsung Elecs. Co. v. Elm 3DS Innovations, LLC*, 925 F.3d 1373, 1380 (Fed. Cir. 2019). Eligibility under § 101 is a question of law, based on underlying facts. *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018). Section 101 states that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Abstract ideas are not patent eligible. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). We apply the two-step framework set forth in *Alice* to determine patent-eligibility under § 101. *Id.* at 217. We first determine whether the claims are directed to a “patent-ineligible concept,” such as an abstract idea. *Id.* If so, we “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78–79 (2012)).

### 1. *Alice* Step One

At step one, we determine whether the claims are directed to an abstract idea. *Alice*, 573 U.S. at 217. “[F]undamental economic practice[s] long prevalent in our system of commerce” are examples of abstract ideas, which are ineligible subject matter. *Bilski v. Kappos*, 561 U.S. 593, 611 (2010). The Board determined that the claims of the '840 patent are directed to the abstract idea of “collecting and analyzing information for financial transaction fraud or error detection.” No. 19-1020 at J.A. 33. We agree.

Claim 1 of the '840 patent claims a method of receiving data from two financial records, storing that data,

comparing that data, and displaying the results. As the specification explains, “[t]he present invention relates to a Universal Positive Pay Database method, system, and/or computer useable medium to reduce check fraud and verify checks, other financial instruments and documents.” ’840 patent at 1:22–25; *see id.* at 5:29–53. Verifying financial documents to reduce transactional fraud is a fundamental business practice that, without more, is not eligible for patent protection. The ’840 patent’s claimed method, which implements basic computer equipment to achieve this verification, is similar to methods we have held directed to abstract ideas. *See Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1054–56 (Fed. Cir. 2017); *Fairwarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016); *Content Extraction & Transmission LLC v. Wells Fargo Bank, National Assoc.*, 776 F.3d 1343 (Fed. Cir. 2014).

In *Credit Acceptance*, we held claims directed to “a system for maintaining a database of information about the items in a dealer’s inventory, obtaining financial information about a customer from a user, combining these two sources of information to create a financing package for each of the inventoried items, and presenting the financing packages to the user” were directed to an abstract idea. 859 F.3d at 1054. We explained that the claims there were directed to the abstract idea of processing an application for a financial purchase, which was not meaningfully distinct from the types of financial industry practices held ineligible by the Supreme Court. *Id.* (citing *Alice*, 134 S. Ct. at 2356; *Bilski*, 561 U.S. at 611). The claims here likewise obtain information from financial databases and present results of a comparison of those pieces of financial information.

Our recent decision in *Solutran, Inc. v. Elavon, Inc.* held claims like the claims of the ’840 patent ineligible. 931 F.3d 1161 (Fed. Cir. 2019). In *Solutran*, the claims recited a method for electronic check processing that involved,

among other things, receiving purchase data at a point of sale and comparing that information to the paper check to verify the accuracy of the transaction, and crediting a merchant's account while processing the check. *Id.* at 1166–67. We held that crediting a merchant's account as early as possible was a long-standing commercial practice, and that the claims directed to that commercial practice were directed to an abstract idea. *Id.* The '840 patent claims similarly recite a method of reducing check fraud by receiving financial transaction data from two sources including the point of sale and comparing that data to verify a transaction. And like the claimed subject matter in *Solutran*, verifying a transaction to avoid fraud, in particular check fraud, is a long-standing commercial practice. Moreover, the use of well-known computer components to collect, analyze, and present data, in this case to verify financial transactions, does not render these claims any less abstract. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1352 (Fed. Cir. 2016). We see no meaningful distinction between the claims of the '840 patent and our precedent that would lead us to conclude that these claims are not directed to an abstract idea.

Bozeman argues that the claimed method is a physical process that improves handling and processing of checks, not an abstract idea. It argues that because the process involves tangible steps, it cannot be an abstract idea, even if the claims additionally involve or include otherwise abstract concepts. As we explained in *Solutran*, “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” *Id.*; *see In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1161 (Fed. Cir. 2018) (“[T]he abstract idea exception does not turn solely on whether the claimed invention comprises physical versus mental steps.”). Moreover, recording or extracting data from physical documents, such as paper checks, is not alone sufficient to render claims not abstract. *Content Extraction*, 776 F.3d

at 1347. In *Content Extraction*, we explained that “data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions. And banks have, for some time, reviewed checks, recognized relevant data such as the amount, account number, and identity of account holder, and stored that information in their records.” *Id.* Despite the presence of physical documents from which data was collected, we held that the claims were directed to the abstract idea of “1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory.” *Id.* The claims of the ’840 patent, however, do not even limit the method steps to processing a physical check. These claims are directed to the abstract idea of collecting and analyzing information for financial transaction fraud or error detection.

## 2. *Alice* Step Two

At *Alice* step two, we “consider the elements of each claim individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 218 (quoting *Mayo*, 566 U.S. at 78–79). The Board determined that the ’840 patent claims do not contain an inventive concept sufficient to “transform the nature of the claims into patent-eligible applications of an abstract idea.” No. 19-1020 at J.A. 42. We agree that there is nothing additional in the claims of the ’840 patent that would render the claims patent-eligible.

The ’840 patent specification explains that methods for inhibiting check fraud and verifying financial transactions were well-known. *See* ’840 patent at 1:57–2:46. The specification further demonstrates that the technological components recited in claim 1 of the ’840 patent were conventional, off-the-shelf computer components. *Id.* at 9:30–47. As the Board found, “[n]othing in the claims, understood in light of the specification, appears to require

anything more than off-the-shelf, conventional computer, storage, network, and display technology for collecting the data related to financial transactions, and displaying the data to the users.” No. 19-1020 at J.A. 43. Indeed, Bozeman does not argue that the claimed computer components provide the inventive concept.

Bozeman instead argues that the ordered combination of the elements in claim 1 of the ’840 patent is a specific implementation of an invention that was not routine or conventional. But Bozeman fails to identify what about the ordering of the steps in claim 1 provides an inventive concept. It argues that “the claim elements describe a new combination of steps, in an ordered sequence, that was never found before in the prior art and was found to be a non-obvious improvement over the prior art by the USPTO examiner.” No. 19-1020, Appellant’s Br. at 44. Bozeman does not provide any evidence to contradict the Board’s finding that, “the claims only recite a logical sequence of steps for receiving and storing information, analyzing that information, and sending a notification upon completion of that analysis.” No. 19-1020 at J.A. 46.

Bozeman further argues that the claims meet the machine-or-transformation test by transforming a paper check into financial data. “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 satisfy step two. *Solutran*, 931 F.3d at 1169 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014)). In any event, we do not agree that the claims of the ’840 patent satisfy the machine-or-transformation test. As explained in *Solutran*, “[m]erely 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.” *Id.* (citing *Content Extraction*, 776 F.3d at 1348–49; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716–17 (Fed. Cir. 2014)). Bozeman’s use of a digital-image

scanner to create a digital electronic record of a check, therefore, does not meet the machine-or-transformation test.

Based on the foregoing, we conclude that the claims of the '840 patent are directed to the abstract idea of “collecting and analyzing information for financial transaction fraud or error detection,” and the claims do not include an inventive concept that would otherwise render the claims eligible. The claims are therefore not directed to patent-eligible subject matter under § 101. As discussed, Bozeman has not preserved any eligibility arguments related to claims 21–24 of the '640 patent separate from the claims of the '840 patent. The Board’s holdings that claims 21–24 of the '640 patent and claims 1–20 of the '840 patent are ineligible are therefore affirmed.

### III

We have considered Bozeman’s remaining arguments and find them unpersuasive. We hold that the Banks are “persons” who may petition for post-issuance review under the AIA. We further hold that claims 21–24 of the '640 patent and 1–20 of the '840 patent are ineligible under § 101.

**AFFIRMED**