No. 20-____

IN THE SUPREME COURT OF THE UNITED STATES

BOZEMAN FINANCIAL LLC,

Petitioner,

v.

FEDERAL RESERVE BANK OF ATLANTA, et al.,

Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

In *Return Mail, Inc. v. United States Postal Serv.*, 139 S. Ct. 1853 (2019), the Court held the Federal Government is not a "person" permitted to request post-issuance patent review under the America Invents Act (AIA), reversing the judgment of the Federal Circuit.

The twelve regional Federal Reserve Banks ("the Banks") are the "operating arms" of the Federal Reserve System, which is the central bank of the United States. Subsequent to this Court's decision in *Return Mail*, the Federal Circuit held in this case that the Banks are "distinct" from the Federal Government, and therefore qualify as "persons" permitted to seek post-issuance review under the AIA.

The question presented is:

Whether the regional Federal Reserve Banks the "operating arms" of the Federal Reserve System, which is the central bank of the United States—are "distinct" from the Federal Government, and qualify as "persons" permitted to seek post-issuance patent review under the America Invents Act, when the Federal Government may not under the Court's holding in *Return Mail, Inc. v. United States Postal Serv.*, 139 S. Ct. 1853 (2019).

PARTIES TO THE PROCEEDING

Petitioner is Bozeman Financial LLC.

Respondents are the 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, and Federal Reserve Bank of St. Louis.

CORPORATE DISCLOSURE STATEMENT

Bozeman Financial LLC has no parent company, and no publicly held company owns more than 10% of its stock.

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RELATED PROCEEDINGS

Bozeman Financial LLC v. Fed. Reserve Bank of Atlanta et al., No. 19-1018, U.S. Court of Appeals for the Federal Circuit. Judgment entered April 10, 2020.

Bozeman Financial LLC v. Fed. Reserve Bank of Atlanta et al., No. 19-1020, U.S. Court of Appeals for the Federal Circuit. Judgment entered April 10, 2020.

Fed. Reserve Bank of Atlanta et al. v. Bozeman Financial LLC, No. CBM2017-00035, Patent Trial and Appeal Board. Final Written Decision issued July 23, 2018.

Fed. Reserve Bank of Atlanta et al. v. Bozeman Financial LLC, No. CBM2017-00036, Patent Trial and Appeal Board. Final Written Decision issued July 23, 2018.

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JURISDICTION

This Court has jurisdiction under 28 U.S.C. § 1254(1). The Federal Circuit's opinion is dated April 10, 2020. Pet. App. 1a. Bozeman Financial LLC ("Bozeman") timely filed a petition for rehearing en banc, which the Federal Circuit denied on June 3, 2020. Pet. App. 219a. In response to the "public health concerns relating to COVID-19," the Chief Justice extended the time to file a petition for certiorari to 150 days from the date of the lower court judgment. Order of March 19, 2020, 589 U.S. _____ (2020).

STATUTORY PROVISIONS

The relevant provisions of the America Invents Act, 35 U.S.C. §§ 311, 321, which provide that only a "person" may initiate post-issuance patent review proceedings, are reproduced in the Appendix at 223a.

INTRODUCTION

In *Return Mail, Inc. v. United States Postal Serv.*, 139 S. Ct. 1853 (2019), this Court held the "Federal Government" is not a "person" under the America Invents Act ("AIA"),¹ and therefore is not permitted to seek post-issuance patent review under the AIA.

The twelve regional Federal Reserve Banks are the "operating arms" of the Federal Reserve System, which is the central bank of the United States.

In this case, subsequent to this Court's decision in *Return Mail*, the Federal Circuit held the Banks are "persons" under the AIA because they are "distinct" from the Federal Government for purposes of the Act. It rendered that holding even while admitting "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," Pet. App. 9a, and without identifying anything in or about the AIA which justifies a contrary result.

The Federal Circuit's precedential decision is wrong in both its approach and outcome.

The AIA is silent about whether the Banks are "persons" under the statute. The Federal Circuit filled this void by fashioning a formalistic test of its own creation which ignored numerous significant features of the Federal Reserve System. The Federal Circuit's approach also conflicts with this Court's functional analyses employed in other cases assessing

¹ "Person" is not defined in the Act. *Return Mail*, 139 S. Ct. at 1861-62; *id*. at 1861 ("The patent statutes do not define the term 'person.").

whether an entity is part of the Federal Government. In those cases, this Court focused on the functions of the entities at issue and how they are controlled, emphasizing "practical reality" rather than labels and formalities.

Applying its own test, the Federal Circuit concluded the Banks are "distinct" from the Federal Government because: (1) the Banks are designated as "corporations"; (2) Congress chose in 1913 to permit the Banks "to be sued in any court," while the laterenacted 28 U.S.C. § 1498(a) requires certain patent lawsuits against or concerning the United States be brought in the Court of Federal Claims; and (3) the Banks are "not structured as government agencies." *See* Pet. App. 7a-9a. But none of these considerations, individually or together, provide a reasonable basis for its holding that the Banks are "distinct" from the Federal Government for purposes of the AIA.

The Court's review of the Federal Circuit's decision is warranted. The court of appeals decided an important question of federal law that has not been, but should be, settled by this Court. The decision below also conflicts with relevant decisions of this Court, and is in tension with decisions by several other courts of appeals. See, e.g., Fed. Reserve Bank of Bos. v. Comm'r of Corps. & Taxation of Com. of Mass., 499 F.2d 60, 62 (1st Cir. 1974) (Banks' "interests seem indistinguishable from those of the sovereign"); see also SUP. CT. R. 10(a), (c).

For these reasons, and because this case presents an ideal vehicle for resolving the question presented, the Petition should be granted.

STATEMENT OF THE CASE

A. The Federal Reserve System and the Role of the Regional Federal Reserve Banks

The Federal Reserve System is the nation's central bank, and the twelve Federal Reserve Banks ("the Banks") are "the operating arms" of that System, carrying out responsibilities to implement and foster the monetary and fiscal policies of the United States. Their functions include serving as lenders of last resort and providing a variety of "key financial services" that "undergird the nation's payment system." BD. OF GOVERNORS OF THE FED. RESERVE SYS., THE FEDERAL RESERVE SYSTEM: PURPOSES & FUNCTIONS at 14 (10th ed. 2016) ("PURPOSES & FUNCTIONS").

The Banks also function as a supervisor and regulator of private financial institutions.² For example, the Banks enforce compliance with federal

² See PURPOSES & FUNCTIONS at 83-84 (explaining the Board's supervisory functions depend on "examinations and inspections" that are conducted by "professionals who work at local Federal Reserve Banks"); *Taft v. Agric. Bank of China Ltd.*, No. 15-CV-5321, 2016 WL 2766661, at *14 (S.D.N.Y. May 12, 2016) (Banks are "Federal supervisory agenc[ies]" under the Bank Secrecy Act); 12 CFR § 265.11(e)(5) (codifying delegation by Board to Banks of responsibility for monitoring capital stock of member banks).

banking³ and consumer protection⁴ laws, and conduct regulatory reviews of proposed mergers and

³ See, e.g., 12 U.S.C. § 374a; see also Order to Cease & Desist, In the Matter of UniCredit, S.p.A. et al., Docket No. 19-017-B-FB (April 15, 2019), https://www.federalreserve.gov/newsevents/pre ssreleases/files/enf20190415a1.pdf (FRBNY participating in enforcement action resulting in \$157 million fine); Order to Cease & Desist, In the Matter of Bank Hapoalim B.M., Docket No. 20-005-B-FB (April 30, 2020), https://www.federalreserve.gov/newsevents/pressreleases/files/e nf20200430a1.pdf (FRBNY participating in enforcement action resulting in \$37 million fine).

See PURPOSES & FUNCTIONS, supra, at 14 (describing the 4 Banks' obligation "to ensure and enforce compliance with federal consumer protection and fair lending laws" as one of their "core functions"); id. at 156 ("The Board has delegated its examination authority to the 12 Reserve Banks," each of which "conduct periodic compliance examinations at financial institutions under the Federal Reserve's supervisory authority, including state member banks and bank holding companies."); id. ("The network of Reserve Banks across the United States is integral to the implementation of the Federal Reserve's [consumer protection] supervisory policy"); id. at 158 ("The Federal Reserve Banks, using policies set by the Board of Governors, maintain consumer compliance supervisory programs that evaluate institutions for their level of compliance with applicable consumer protection laws."); id. (discussing the Banks' role in enforcing the Truth in Lending Act, the Fair Credit Reporting Act, the Equal Credit Opportunity Act, the Community Reinvestment Act, and other consumer protection laws).

acquisitions in the banking industry to evaluate their competitive effects. 5

Although "[t]he Federal Reserve began operations in 1914 as a peculiar hybrid, a partly public, partly private institution," "[t]he Banking Acts of 1933 and especially 1935 greatly reduced Reserve bank autonomy, greatly reduced the role of the bank's outside directors. and centralized control in Washington." ALLAN H. MELTZER, A HISTORY OF THE FEDERAL RESERVE (VOLUME 1: 1913-1951) 725 (2003) ("MELTZER VOL. 1"); ALLAN H. MELTZER, A HISTORY OF THE FEDERAL RESERVE (VOLUME 2, BOOK 2: 1970-1986) 1218 (2009). "By 1951 the Federal Reserve System had become a central bank with its headquarters in Washington" and "[t]he semiautonomous regional

⁵ See generally 12 CFR § 265.11(c)(11) (codifying delegation by the Board of Governors to the Banks of responsibility to assess "competitive factors involved in a bank merger"); 12 U.S.C. §§ 1842-1843 (provisions under the Bank Holding Act likely to trigger competitiveness review by the Board of Governors and the Banks); 12 U.S.C. § 1828(c)(2)(B) (provisions of the Federal Deposit Insurance Act likely to trigger competitiveness review by the Board of Governors and the Banks); 12 U.S.C. § 1467a(e) (provisions under Home Owners' Loan Act likely to trigger competitiveness review by the Board and Banks); Frequently Asked Questions: Competitive Effects of Mergers, Board of Governors of the Federal Reserve System https://www.federalreserve.gov/bankinforeg/competitive-effectsmergers-acquisitions-faqs.htm (last updated Oct. 9, 2014), (directing applications for merger review to the Banks, not the Board).

banks were now part of a unified system." MELTZER VOL. 1 at $726.^{6}$

In this "unified system" the Banks operate under the direction and ultimate control of federal governmental appointees—specifically, the Board of Governors of the Federal Reserve System (the "Board" or "Board of Governors"), which has been empowered by Congress to exercise "general supervision" over the "Federal reserve banks." 12 U.S.C. § 248(j). The Board approves (and may remove) the president and vice president of each Bank, and directly elects certain members of each Bank's board of directors.⁷ See, e.g., 12 U.S.C. §§ 248, 302, 304, 341. The Banks are also subject to annual examinations conducted by the Board of Governors, 12 U.S.C. § 485, and to unique accounting rules drafted by the Board. See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM. FEDERAL FINANCIAL ACCOUNTING MANUAL FOR RESERVE BANKS (2020).

⁶ See also LAWRENCE R. JACOBS & DESMOND KING, FED POWER 71 (2016) ("The new deal banking reforms stripped control over monetary policy from the regional banks . . . and initiated a process of centralization"); PETER CONTI-BROWN, THE POWER AND INDEPENDENCE OF THE FEDERAL RESERVE 104 (2016) (the Banks "have become, over time, more and more like public regulatory institutions").

⁷ See also 50 Cong. Rec. 4673–74 (1913) (Board entrusted with "supreme oversight and control of the whole [Federal Reserve] System"); 50 Cong. Rec. 4644 (1913) (Board is "capstone" of Federal Reserve System); 51 Cong. Rec. 174 (1913) (Board to be given "absolute command" of Federal Reserve System); 51 Cong. Rec. 901 (1913) (Board possesses "complete supervisory control" of Federal Reserve System).

B. The Banks Sue Bozeman as "Instrumentalities of the United States" Performing "Important Public Functions"

In 2017, the Banks sued Petitioner Bozeman in federal district court. Pet. App. 224a-46a. The Banks sought a declaratory judgment that they had not infringed two patents owned by Bozeman relating to the verification of electronic payments. Pet. App. 225a, 230a-32a, $\P\P$ 1, 20-21, 27.

In their complaint, the Banks identified themselves as "instrumentalities of the United States that, collectively, make up the operating arm of the Federal Reserve System, the central bank of the United States." Pet. App. 227a, ¶ 14. The Banks represented to the district court that they "carry out the nationwide, operational responsibilities of the nation's central bank and perform a myriad of important *public* functions, designed to develop, implement and foster the monetary and fiscal policies of the United States." Pet. App. 227a (emphasis added).

Shortly after the Banks filed their complaint, the action was stayed pending a Patent Trial and Appeal Board's Covered Business Method (CBM) Review of the two patents at issue, requested by the Banks. Order Granting Motion to Stay Pending CBM Review, *Fed. Reserve Bank of Atlanta et al. v. Bozeman Financial LLC*, No. 17-cv-389-AT (N.D. Ga. Mar. 28, 2017), ECF No. 13.

C. The PTAB Permits Post-Issuance Review and Invalidates Bozeman's Patents

The AIA authorizes a "person" other than the patent owner to challenge the validity of a patent postissuance before the Patent Trial and Appeal Board (PTAB). *See* 35 U.S.C. §§ 311(a), 321(a).

In January 2017, the Banks petitioned the PTAB to conduct a CBM review of two patents owned by Bozeman. In August 2017, the PTAB granted the Banks' petitions. Pet. App. 144a-218a.

In July 2018, the PTAB issued two final written decisions. Pet. App. 21a-72a ('640 Patent); Pet. App. 73a-143a ('840 Patent). As to the '640 patent, the PTAB held the challenged claims were directed at patent-ineligible subject matter and a majority of the claims were indefinite. Pet. App. 71a. As to the '840 patent, the PTAB likewise held the challenged claims were directed at patent-ineligible subject matter. Pet. App. 142a.

Bozeman timely appealed to the United States Court of Appeals for the Federal Circuit. Pet. App. 3a.

D. The Federal Circuit's Denial of Bozeman's Request to Stay Federal Circuit Briefing, and This Court's Decision in *Return Mail*

On October 26, 2018, before briefing had commenced in Bozeman's appeal before the Federal Circuit, this Court granted certiorari in *Return Mail* to decide "[w]hether the government is a 'person' who may petition to institute review proceedings under the AIA." 139 S. Ct. 397 (2018).

On December 13, 2018, Bozeman filed a motion to stay Federal Circuit briefing pending this Court's consideration of *Return Mail* because the appeal presented a closely related question: "whether the Federal Reserve Banks" are "AIA-qualified 'persons."" Motion of Appellant to Stay at 2, *Bozeman Financial LLC v. Fed. Reserve Bank of Atlanta et al.*, No. 19-1020 (Fed. Cir. Dec. 13, 2018), ECF No. 13.

The Federal Circuit denied Bozeman's stay request on December 27, 2018, and the appeal proceeded. Order at 2, *Bozeman*, No. 19-1020 (Fed. Cir. Dec. 27, 2018), ECF No. 17.

On June 10, 2019, this Court reversed the judgment of the Federal Circuit in *Return Mail*. Applying the longstanding presumption that the term "person" does not apply to the Government, the Court held the Federal Government is not a "person" for purposes of the AIA, and may not seek post-issuance patent review under the statute. 139 S. Ct. at 1861–62, 1867.⁸

E. Supplemental Federal Circuit Briefing Concerning this Court's Decision in *Return Mail*

Soon after the Court issued its decision in *Return Mail*, Bozeman filed a motion asking the Federal Circuit to permit supplemental briefing about the impact of *Return Mail* on its appeal. The Federal Circuit granted each side permission to file a ten-page supplemental brief. Order, *Bozeman*, No. 19-1020 (Fed. Cir. July 29, 2019), ECF No. 55. Those

⁸ The year before *Return Mail* was decided, the Court observed: "To be sure, a *private party* files the petition for review." *Oil States Energy Serv.*, *LLC v. Greene's Energy Grp.*, 138 S. Ct. 1365, 1378 n.5 (2018) (emphasis added).

supplemental briefs were filed in August 2019. Supplemental Briefs, *Bozeman*, No. 19-1020 (Fed. Cir. Aug. 2019), ECF Nos. 57, 62.

The Federal Circuit heard oral argument on November 6, 2019. Submission Order, *Bozeman*, No. 19-1020 (Fed. Cir. Nov. 6, 2019), ECF No. 69.

F. The Federal Circuit Holds the Banks Are "Distinct" From the Federal Government

On April 10, 2020, the Federal Circuit issued a precedential decision in which it held "the Banks are 'persons' under the AIA and [the PTAB] had authority to resolve the issue raised in their petitions." Pet. App. 6a.⁹ That holding rested on the Federal Circuit's determination that the Banks "are distinct from the government for purposes of the AIA." Pet. App. 6a, 9a. The court of appeals reached that conclusion by focusing on three considerations.

First, that "[t]he Federal Reserve Banks were chartered corporate instrumentalities of the United States under the Federal Reserve Act of 1913." Pet. App. 7a (citing 12 U.S.C. § 221).

Second, that Congress chose in the Federal Reserve Act of 1913 to permit the Banks to be sued in any court," while the later-enacted 28 U.S.C. § 1498(a) requires certain patent lawsuits against or concerning the United States be brought in the Court of Federal Claims. Pet. App. 7a-8a.

⁹ The Federal Circuit also affirmed the PTAB's determinations with respect to Bozeman's patents. Pet. App. 20a. That aspect of the Federal Circuit's decision is not at issue in this Petition.

Third, that "[t]he Banks are not structured as government agencies," "do not receive congressionally appropriated funds," and "cannot promulgate regulations with the force of law." Pet. App. 8a (citations omitted).

Bozeman timely filed a petition for rehearing en banc, asking the full Federal Circuit to review the panel's holding that the Banks are distinct from the Federal Government and are "persons" for purposes of the AIA. Petition for Rehearing En Banc, *Bozeman*, No. 19-1020 (Fed. Cir. Apr. 30, 2020), ECF 73. The Federal Circuit denied the petition on June 3, 2020. Pet. App. 219a-22a.

REASONS FOR GRANTING THE PETITION

I. The Federal Circuit's Precedential Decision Is Wrong and Important

In *Return Mail* this Court held the Federal Government "is not a 'person' who may petition for post-issuance review under the AIA." 139 S. Ct. at 1867. Because "[t]he patent statutes do not define the term 'person," *id.* at 1861, in reaching that holding the Court applied a "longstanding interpretive presumption" that the term "person" does not include the Federal Government. *Id.* at 1861-62.

In this case, the Federal Circuit acknowledged *Return Mail*'s holding that the Federal Government is not a "person" for purposes of the AIA, Pet. App. 6a, but then erred in concluding the Banks are "distinct" from the government and thus "persons" under the AIA.

A. The Federal Circuit Applied the Wrong Test and Reached the Wrong Outcome

The AIA is silent about whether the Banks are "persons" under the statute. The Federal Circuit filled this void by fashioning a formalistic test of its own creation which ignored numerous relevant features of the Federal Reserve System.

The Federal Circuit's approach conflicts with this Court's functional analyses employed in other cases assessing whether an entity is part of the Federal Government. In those cases this Court focused on the functions of the entities at issue and how they are controlled, emphasizing "practical reality" over labels and formalities. See, e.g., Dep't of Transp. v. Ass'n of *Am. R.R.*, 575 U.S. 43, 54 (2015) (finding Amtrak is "a actor federal or instrumentality under the Constitution" on the basis of "the practical reality of federal control and supervision"): Lebron v. Nat'l R.R. Passenger Corp., 513 U.S. 374, 397-99 (1995) (corporation created for governmental objectives and operated under governmental direction and control is "part of the Government" for constitutional purposes); Rainwater v. United States, 356 U.S. 590, 591-92 (1958) (engaging in functional analysis to determine that Commodity Credit Corporation was part of the Government for purposes of the False Claims Act).

None of the bases for the Federal Circuit's conclusion that the Banks are "distinct" from the Federal Government, individually or taken together, provide a reasonable basis for its holding that the Banks are "distinct" from the Federal Government. 1. The fact that an entity is organized as a corporation does not mean it is "distinct" from the Federal Government. As this Court has explained, the corporate label is not determinative: "That the Congress chose to call it a corporation does not alter its characteristics so as to make it something other than what it actually is, an agency selected by Government to accomplish purely Governmental purposes." *Cherry Cotton Mills v. United States*, 327 U.S. 536, 539 (1946); *see also Lebron*, 513 U.S. at 393 (quoting *Cherry Cotton Mills*).

Congress has created many government corporations. See $\mathbf{5}$ U.S.C. § 103 (defining "government corporation"); Kevin R. Kosar, Cong. Research Serv., Federal Government Corporations: An Overview (2011). And this Court has made clear on numerous occasions that a corporation can be part of the Federal Government. See, e.g., Assoc. of Am. R.R., 575 U.S. at 55 (National Railroad Passenger Corporation, known as Amtrak, "is a governmental entity"); Lebron, 513 U.S. at 394-96 (discussing the "public and judicial understanding" that corporations can be "part of the Government"); FDIC v. Meyer, 510 U.S. 471, 486 (1994) (Bivens action could not lie against Federal Deposit Insurance Corporation because it was a federal agency); *Rainwater*, 356 U.S. at 592 (Commodity Credit Corporation is "part of the Government of the United States").¹⁰

¹⁰ The Federal Circuit did not rely on the definition of "person" in the Dictionary Act, 1 U.S.C. § 1, and there is no reason to believe *government* corporations are covered by the term "corporation" in that statute.

The structure and practical realities of the Federal Reserve System also demonstrate the irrelevance of the Banks' status as corporations. The Banks bear virtually no resemblance to any "private" financial institution—a fact their corporate disclosure statements in this case all-but-concede:

> Although stock of each individual Federal Reserve Bank is owned by member commercial banks within that Federal Reserve Bank's district, none of the member commercial banks control any Federal Reserve Bank. Stock of Federal Reserve Banks, unlike stock in a private corporation, is not acquired for investment purposes or for purposes of control. Rather, such stock is acquired because its ownership is a condition of membership in the Federal Reserve System. Unlike owners of a private corporation, Federal Reserve Bank stockholders do not possess a residual equity interest in Reserve Bank assets. That residual interest remains always with the United States.¹¹

Focused on the Banks' designation as "corporations," the Federal Circuit failed to grapple

¹¹ Certificate of Interest at 3-4, *Bozeman*, No. 19-1020 (Fed. Cir. Oct. 18, 2018), ECF No. 5; *see also* TIMOTHY F. GEITHNER, STRESS TEST: REFLECTIONS ON FINANCIAL CRISES 89 (2014) (Head of the Federal Reserve Bank of New York during 2008 financial crisis, explaining: "the New York Fed's bank shareholders do not control its operations").

with the Board of Governors's control over the Banks—confining itself to a curious and inaccurate remark about the government's *"limited* control over the operation of the Banks." Pet. App. 8a (emphasis added).

The Banks operate under the direction and ultimate control of federal governmental appointees specifically, the Board of Governors of the Federal Reserve System, which has been empowered by Congress to exercise "general supervision" over the "Federal reserve banks." 12 U.S.C. § 248(j). The Board approves (and may remove) the president and vice president of each Bank, and directly elects certain members of each Bank's board of directors. *See, e.g.*, 12 U.S.C. §§ 248, 302, 304, 341. The Banks are also subject to annual examinations conducted by the Board, 12 U.S.C. § 485, and to "specialized accounting principles and practices," imposed by the Board, in light of the "unique powers and responsibilities of the nation's central bank."¹²

The reality that the Banks are fundamentally public institutions was on full display during the Financial Crisis of 2008. For example, in a 2015 amicus brief, the Federal Reserve Bank of New York ("FRBNY") described its efforts "to stabilize" failing insurance giant AIG during the Crisis, including its "assistance in the form of the largest rescue loan in history, an \$85 billion credit facility." Brief for FRBNY as Amicus Curiae Supporting Defendant-Cross-Appellant at 2, *Starr Int'l Co. v. United States*, 856 F.3d 953 (Fed. Cir. 2017) (No. 15-5103).

¹² See Accounting Manual, supra, at 1.

Explaining *its* role, FRBNY made one point crystal clear: "There was no prospect of a private rescue; no private entity had the capacity to stabilize AIG" *Id.* Indeed, it took the *government*—including FRBNY—to save AIG.¹³

¹³ Reinforcing the point that FRBNY was acting as part of the Federal Government in extending loans and credit to AIG, in exchange for assistance from FRBNY "the United States ('Government') received a majority stake in AIG's equity." Starr, 856 F.3d at 957; see Starr Int'l Co., Inc. v. Fed. Reserve Bank of N.Y., 742 F.3d 37, 39 (2d Cir. 2014) (AIG equity provided in exchange for FRBNY assistance issued to Trust "with the U.S. Treasury named as the sole beneficiary"); see also BEN S. BERNANKE, TIMOTHY F. GEITHNER & HENRY M. PAULSON, JR., FIREFIGHTING: THE FINANCIAL CRISIS AND ITS LESSONS 135 (2019) (discussing response of "the government" to the financial crisis); ANDREW ROSS SORKIN, TOO BIG TO FAIL xix (2018) (listing FRBNY as part of U.S. Government); id. at 65 (FRBNY "is the government's eyes and ears in the nation's financial capital, in addition to being responsible for managing much of the Treasury's debt"). The Banks are similarly acting on behalf of the Federal Government during the current economic crisis to "achieve the goals Congress has assigned [them]: maximum employment and price stability" by taking "critical actions . . . to support our nation's economy" during the COVID-19 pandemic. Neel Kashkari, COVID-19 and the Minneapolis Fed: What we're doing, how we're working, Fed. Reserve Bank of Minneapolis (Mar. 17, 2020), https://www.minneapolisfed.org/article/2020/co vid-19-and-the-minneapolis-fed-what-were-doing-how-wereworking; see also New York Fed Actions Related to COVID-19, of Fed. Reserve Bank N.Y.. https://www.newyorkfed.org/markets/new-york-fed-actionsrelated-to-covid-19 (last visited Sept. 7, 2020) ("The New York Fed, as part of the Federal Reserve System, is . . . implementing monetary policy as directed by the" FOMC and "administering a number of Federal Reserve facilities that provide liquidity to a range of markets"); A message from Loretta J. Mester, President and CEO, Federal Reserve Bank of Cleveland, Fed. Reserve Bank

This reality is also reflected in a 2019 Federal Register notice announcing the Board of Governors had "determined that the Federal Reserve Banks (Reserve Banks) should develop a new interbank 24x7x365 real-time gross settlement service with integrated clearing functionality to support faster payments in the United States," in which the Board repeatedly contrasted Reserve Bank payments and settlement services with those of the "private sector." Federal Reserve Actions to Support Interbank Settlement of Faster Payments, 84 Fed. Reg. 39,297 (Aug. 9, 2019); id. at 39298 ("Throughout its history, the Federal Reserve has provided these services alongside, and in support of, similar services offered by the private sector."); id. at 39301 ("Serving such an operational role would be consistent with the Federal Reserve's historical role as a provider of payment services alongside the private sector.").

Consistent with the overall statutory scheme of the Federal Reserve System, and the practical role of the Banks in that System, courts have described the Banks as "conduct[ing] important governmental functions." See Starr Int'l Co., Inc. v. Fed. Reserve Bank of N.Y., 742 F.3d 37, 40 (2d Cir. 2014) (quoting Fed. Reserve Bank of St. Louis v. Metrocentre Improvement Dist. # 1, 657 F.2d 183, 185–86 (8th Cir. 1981), aff'd mem., 455 U.S. 995 (1982)); see also Fed. Reserve Bank of Bos., 499 F.2d at 62 (Banks' "interests seem indistinguishable from those of the sovereign").

of Cleveland, https://www.clevelandfed.org/newsroom-andevents/covid-19.aspx (last visited Sept. 7, 2020) ("[W]e continue to carry out our critical responsibilities on behalf of the American public").

Courts have also recognized that "despite the ostensibly private ownership of Federal Reserve Banks . . . the affairs of each Federal Reserve Bank are conducted under the close supervision and ultimate control of the Board [of Governors], an independent federal regulatory agency." Lee Const. Co. v. Fed. Reserve Bank of Richmond, 558 F. Supp. 165, 177 (D. Md. 1982); see also Am. Bankers Assoc. v. United States, 932 F.3d 1375, 1386 (Fed. Cir. 2019) (describing banks' ownership of Bank stock as mere "regulatory scheme"); United States v. Hollingshead, 672 F.2d 751, 754 (9th Cir. 1982) ("Further evidence of the federal character of the federal reserve banks is seen in the fact that the Federal Reserve Board exercises general supervision over the banks. Consequently, all federal reserve bank expenditures are subject to Federal Reserve Board approval and control."): Berini v. Fed. Reserve Bank of St. Louis, 420 F. Supp. 2d 1021, 1028 (E.D. Mo. 2005) ("[C]ontrol and supervision of the federal reserve banks is vested in a Board of Governors appointed by the President with the advice and consent of the Senate").

The Department of Justice previously reached a similar conclusion, rejecting an argument by the Banks that they are not part of "the United States" as that term in used in the Service Contract Act of 1965. As the Department observed, the Banks "are under strict governmental control and perform important government functions." *See* Service Contract Act of 1965 (41 U.S.C. § 351 *et seq.*)—Applicability to Federal Reserve Banks, 2 Op. O.L.C. 211, 212 (1978).

The Federal Circuit failed to account for any of this, and erred in finding that the Banks' designation

as "corporations" supports the conclusion they are "distinct" from the Federal Government.¹⁴

2. The Federal Circuit wrongly concluded the language in 12 U.S.C. § 341, providing the Banks may "sue and be sued . . . in any court of law or equity," is inconsistent with the notion that the Banks are part of the Federal Government in light of 28 U.S.C. § 1498(a)'s requirement that patent lawsuits against or concerning the United States be brought only in the Court of Federal Claims. *See* Pet. App. 7a.

As an initial matter, Section 341 is a waiver of sovereign immunity, but the Federal Circuit failed to explain why Congress waived the Banks' **sovereign** immunity in enacting their organic statute if the Banks are "distinct" from the sovereign. See Starr Int'l Co. v. Fed. Reserve Bank of N.Y., 906 F. Supp. 2d 202, 247 n.35 (S.D.N.Y. 2012) (noting "statutory waiver of sovereign immunity for Federal Reserve Banks, codified at 12 U.S.C. § 341"); Research Triangle Inst. v. Bd. of Governors of the Fed. Reserve Sys., 132 F.3d 985, 989 (4th Cir. 1997) (describing § 341 as a waiver of sovereign immunity); see also Thacker v. TVA, 139 S. Ct. 1435, 1439 (2019) (without "sue and be sued" clause in TVA's organic statute, "the

¹⁴ In *Ass'n of Am. R.R.*, the Court determined the National Railroad Passenger Corporation, commonly known as Amtrak, is "a federal actor or instrumentality under the Constitution" on the basis of "the practical reality of federal control and supervision," which "prevail[ed] over Congress' disclaimer of Amtrak's governmental status" and over Amtrak's corporate status. 575 U.S. at 55. Among the Federal Circuit's errors here was its disregard for the "practical reality of federal control and supervision" of the Banks by the Federal Government, in contrast with this Court's analysis in *Ass'n of Am. R.R*.

TVA (as an entity of the Federal Government) would have enjoyed sovereign immunity from suit").

The Federal Circuit similarly ignored Congress's use of substantially identical language to permit many *government* entities to sue and be sued in any court. See, e.g., 12 U.S.C. § 1819(a) (FDIC may "sue and be sued . . . in any court of law or equity"), 12 U.S.C. § 635(a)(1) (Export-Import Bank may sue and be sued in any court of competent jurisdiction); 29 U.S.C. § 1302(b)(1) (Pension Benefit Guaranty Corporation may "sue and be sued . . . in any court, State or Federal").

Moreover, the Federal Circuit's reliance on Section 1498(a) makes little substantive sense given that provision was enacted *decades after* Congress authorized the Banks to "sue and be sued." If the Banks are best viewed as part of the Federal Government then the later-enacted Section 1498(a) displaces Section 341's older, more general language, with respect to patent lawsuits covered by Section 1498(a). The Federal Circuit previously recognized the Banks might "themselves [be] considered government agencies in a patent infringement suit" having declined to decide the issue in a prior case concerning Section 1498(a).¹⁵

The Federal Circuit also failed to consider that the patents at issue relate to activities supervised and

¹⁵ See Advanced Software Design Corp. v. Fed. Reserve Bank of St. Louis, 583 F.3d 1371, 1378 (Fed. Cir. 2009) (holding that remedies against the Banks are limited by 28 U.S.C. § 1498(a) in at least some contexts); see also Pet. App. 8a at n.3.

directed by the Board of Governors,¹⁶ which is unquestionably not a "person" under the AIA. *See* PURPOSES & FUNCTIONS at 3 (Board of Governors "is an independent agency of the federal government").

According to the Federal Circuit, the "operating arms" of the Federal Reserve System may avail themselves of post-issuance review before the PTAB while the other parts of that System, including the Board of Governors, may not. But there is no basis for reading the AIA as if Congress meant to treat the constituent parts of the Federal Reserve System differently from one another. And the Federal Circuit's view is a recipe for mischief: if the Banks can initiate post-issuance reviews, the Board may direct the Banks to do so—even though the Board is clearly not a "person" permitted to institute those proceedings itself. The Federal Circuit's decision is the kind of "odd result" courts avoid when engaging in

¹⁶ An innovation of the patents at issue was to create a "match, authentication, authorization, clearing, and settlement system" that can "reduce check fraud and verify checks," while "maintain[ing] check payment control." *See* U.S. Patent No. 6,754,640 (filed Oct. 23, 2001). The patents expressly contemplated their invention could be used by "the Federal Reserve." *Id.* The Board and Banks have had a shared role in regulating check payments, with the Board promulgating several regulations on the issue. *See*, *e.g.*, PURPOSES & FUNCTIONS, *supra* at 3, at 152-53; 15 CFR Part 210 (Regulation J. concerning the Banks collection of checks); 12 CFR Part 229 (Regulation CC, concerning availability of funds and collection of checks).

statutory interpretation. Reiter v. Cooper, 507 U.S. 258, 267 (1993).¹⁷

3. The Federal Circuit misguidedly based its holding on the notion that the Banks are "not structured as government agencies."

As a threshold matter, the court of appeals looked past the fact that Congress has, at times, defined the Banks as "agencies." See, e.g., 12U.S.C. § 1818(t)(5)(A) (describing a Federal Reserve Bank as a "Federal banking agency"); 12 U.S.C. § 5581(a)(2) (defining "transferor agency" to include "any Federal reserve bank"); 31 U.S.C. § 714(a) (including "Federal reserve banks" in definition of "agency"); 42 U.S.C. § 4601 (defining "Federal agency" to include "the Federal reserve banks"); see also Freytag v. Comm'r, 501 U.S. 868, 887 n.4 (1991) (describing Federal Reserve Bank as "one of the principal agencies" of the federal government); Fed. Reserve Bank of Bos., 499 F.2d at 62-63 (Federal Reserve Banks "are plainly and predominantly fiscal arms of the federal government" and "play a major role" as "agencies of government").

But even if the Banks had never been defined as "agencies" the Federal Circuit also ignored that an entity need not be an "agency" to be part of the Federal Government. For example, the Banks concede they are "instrumentalities of the United States." Pet App. 7a; see also Metrocentre Improvement Dist. # 1 v. Fed.

¹⁷ In *Return Mail*, the Court rejected the notion that the AIA's broad purpose of "provid[ing] a cost-effective and efficient alternative to litigation in the courts" justified interpreting "person" to include the Federal Government. 139 S. Ct. at 1867, n.11.

Reserve Bank of St. Louis, 455 U.S. 995 (1982) (affirming holding that "the federal reserve banks are instrumentalities of the federal government"). This Court has explained, in "describing the nature of a federal instrumentality," United States v. New Mexico, 455 U.S. 720, 736 (1982), that such an entity may be an "integral part[]" of a governmental department, Standard Oil Co. v. Johnson, 316 U.S. 481, 485 (1942), "incorporated into the government structure," United States v. Boyd, 378 U.S. 39, 48 (1964), and virtually "an arm of the Government," Dep't of Employment v. United States, 385 U.S. 355, 360 (1966).¹⁸

As for the Federal Circuit's reliance on the fact that "[t]he Banks do not receive congressionally appropriated funds" and instead receive funding from the Board of Governors (Pet. App. 8a (citing 12 U.S.C. § 244)), the same is true of the Consumer Financial Protection Bureau, 12 U.S.C. § 5497(a)(1), which clearly is part of the government. See Seila Law LLC v. Consumer Financial Protection Bureau, 140 S. Ct. 2183, 2191 (2020) (describing CFPB as an "agency" which, through its head, "wields vast rulemaking, enforcement, and adjudicatory authority over a significant portion of the U.S. economy"). But it is also

¹⁸ In *Return Mail*, the Court noted that allowing government entities to obtain AIA review would result in a "civilian patent owner . . . defend[ing] the patentability of her invention in an adversarial, adjudicatory proceeding initiated by one federal agency . . . overseen by a different federal agency (the Patent Office)." 139 S. Ct. at 1867. Regardless of whether the Banks themselves are defined as a federal "agency" for all purposes, the "awkward situation" the Court sought to avoid in *Return Mail* existed before the PTAB in this case. *Id*.

a distinction without a difference since the Banks are required to transfer all "profits" to the United States Treasury. 12 U.S.C. § 289(a)(3)(B); *see also Hollingshead*, 672 F.2d at 754 (citing § 248(j)).

The Federal Circuit also claimed support for its holding in the fact that "the Banks cannot promulgate regulations with the force of law" because Section 248(k) provides the Board of Governors may delegate to the Banks only functions "other than those relating to rulemaking or pertaining principally to monetary and credit policies." Pet. App. 8a-9a. But the Federal Circuit cited no support for its view that the power to promulgate rules is a prerequisite to being part of the Federal Government, and there are other governmental entities that lack authority to promulgate regulations with the force of law. See, e.g., Martin v. Occupational Safety & Health Review Comm'n, 499 U.S. 144, 154 (1991) (commission lacked rulemaking authority); see also EEOC v. Arabian Am. Oil Co., 499 U.S. 244, 259-60 (1991) (Scalia, J., concurring in part) (discussing "agencies without explicit rulemaking power").

But there is a more fundamental way in which the delegation of powers by the Board to the Banks undercuts the Federal Circuit's holding. If the Banks actually were "distinct" from the Federal Government it is doubtful the Board could delegate its powers to them in light of the private non-delegation doctrine. See Carter v. Carter Coal Co., 298 U.S. 238, 311 (1936); see also Assoc. of Am. R.R., 575 U.S. at 87-88 (Thomas, J., concurring in the judgment) (explaining the "private nondelegation doctrine' flows logically from the three Vesting Clauses" and that if Amtrak

were private "it cannot exercise these three categories of governmental power."). That constitutional problem is avoided by interpreting "person" in the AIA as excluding the Banks, just like other parts of the Federal Government. *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 516 (2009) (doctrine of constitutional avoidance is "an interpretive tool").

* *

4

The factors relied on by the Federal Circuit fail to support its conclusion that the Banks are "distinct" from the Federal Government, or the court's holding that they are "persons" under the AIA.

Had the Federal Circuit taken guidance from this Court's prior decisions it would have focused on the purposes and functions of the Banks in the Federal Reserve System, how the Banks actually operate, and the supervision and control the Board exercises over the Banks. That approach should have led readily to the conclusion that the Banks are part of the Federal Government, and that the presumption recognized in *Return Mail* applies to them.¹⁹

¹⁹ While the Banks neither look nor operate like any truly private institution, the state action doctrine nevertheless makes clear an entity can have attributes of a private organization and still be treated as a government actor. The principles underlying that doctrine further support treating the Banks under the AIA in accord with other parts of the Federal Government. See, e.g., Edmonson v. Leesville Concrete Co., Inc., 500 U.S. 614, 621–22 (1991); see also Brentwood Acad. v. Tennessee Secondary School Athletic Assoc., 531 U.S. 288, 305 (2001) (Thomas, J., dissenting) (observing that even a private organization's act can constitute state action "when the organization performed a public function, was created, coerced or encouraged by the government, or acted in a symbiotic relationship with the government").

B. The Federal Circuit's Important Decision Warrants Review

The Federal Circuit's precedential decision is important for several reasons.

1. The Banks acknowledged to the Federal Circuit that "the question whether [they] qualify as 'person[s]" under the AIA is "an important one." Opposition to Motion for Supplemental Briefing at 6, *Bozeman*, No. 19-1020 (Fed. Cir. June 28, 2019), ECF No. 53.

The Banks have previously sought post-issuance review before the PTAB—see, e.g., Fed. Reserve Bank of Bos. v. Stambler, No. IPR2013-00409 (P.T.A.B. 2013)—and presumably will in the future, emboldened by the decision below. The Federal Circuit recognized as much. Pet. App. 6a (observing that whether the Banks are "persons" under the AIA "is pertinent to multiple pending and future patent litigations involving the Banks").

This case would warrant review even if its implications were limited to the application of the AIA to the Banks.

2. But the Federal Circuit's precedential decision has implications beyond the Banks. There are hundreds of federally-created entities, including dozens of government corporations, whose status under the AIA may be affected by the Federal Circuit's decision. *See generally* Gov't Accountability Office, GAO-10-97, Federally Created Entities: An Overview of Key Attributes (2009). Because the Federal Circuit has exclusive jurisdiction over appeals from postissuance proceedings before the PTAB, 35 U.S.C. § 141, the precedential decision issued in this case will be binding on future panels of that court, and guide the resolution of any case involving any of these entities.

3. The decision below may also have important repercussions beyond the AIA. This Court's cases applying the longstanding presumption that the Federal Government is not a "person" do not resolve the antecedent question: what entities are part of the Government Federal for purposes of that presumption. The Federal Circuit's precedential decision-which turns almost entirely on factors independent of patent law—is likely to be invoked in any case where this antecedent question is presented, including those where neither the Banks nor the AIA are involved.²⁰

4. Finally, as explained in detail in Section II, the Federal Circuit's decision is difficult to reconcile with decisions from several other courts of appeals concerning the Banks.

²⁰ The presumption has been invoked by courts interpreting a wide range of statutes. See, e.g., Inyo Cty., Cal. v. Paiute-Shoshone Indians of the Bishop Comm. of the Bishop Colony, 538 U.S. 701, 711-12 (2003) (applying presumption to 42 U.S.C. § 1983); Robinson v. United States Dep't of Educ., 917 F.3d 799, 802-03 (4th Cir. 2019) (applying presumption to Fair Credit Reporting Act); Kreipke v. Wayne State University, 807 F.3d 768, 774-76 (6th Cir. 2015) (applying presumption to False Claims Act).

II. The Federal Circuit's Decision Is In Tension With Decisions By Other Courts of Appeals Concerning the Federal Reserve Banks

While ostensibly limited to the AIA, the Federal Circuit's determination that the Banks are "distinct from the government" is in tension with decisions by several other courts of appeals addressing the provenance and governmental character of the Banks.

For example, in *Fed. Reserve Bank of Bos.*, 499 F.2d 60 (1st Cir. 1974), the First Circuit held the Federal Reserve Bank of Boston was a "public governmental body" entitled to intergovernmental tax immunity—and was not "a private party performing some functions for the federal government." *Id.* at 62 & n.6. In contrast with the Federal Circuit's decision here, the First Circuit found that Congress's decision to organize the Banks in corporate form is irrelevant to their status as a "public governmental body." And unlike the Federal Circuit, the First Circuit found that the Banks' "interests seem *indistinguishable from those of the sovereign*." *Id.* at 62. (emphasis added).

The Sixth Circuit adopted a similar view in Jet Courier Servs., Inc. v. Fed. Reserve Bank of Atlanta, 713 F.2d 1221 (6th Cir. 1983), where it held the Banks are not "persons" amenable to suit under the Sherman Act because they are part of the Federal Reserve System, "an agency of the federal government." Id. at 1228. Drawing on Fed. Reserve Bank of Bos., the Sixth Circuit found "the Federal Reserve Banks are not private business corporations, but are part of a system created by Congress to perform important governmental functions. The Federal Reserve System, consisting of the Board of Governors and the twelve Federal Reserve Banks, functions as the nation's chief money manager. It is this nation's central bank, performing a vital governmental role." *Id.* (emphasis added). According to the Sixth Circuit, "[i]t is the role of the Federal Reserve System as manager of the fiscal affairs of the federal government and the money supply of the nation which places the Reserve Banks outside the Sherman Act definition of persons." *Id.* ²¹

The Tenth Circuit adopted a similar view in Schroder v. Volcker, 864 F.2d 97, 99 (10th Cir. 1988), where the court of appeals affirmed "the district court's reasoning and conclusion" which, like the Sixth Circuit in Jet Courier Servs., determined that an antitrust claim could not be asserted against defendants "affiliated with the Federal Reserve System," 646 F. Supp. 132, 134 (D. Colo. 1986). The court of appeals therefore affirmed dismissal of plaintiff's antitrust claim, including against the Federal Reserve Bank of Kansas City. 864 F.2d at 98.

The Ninth Circuit has concluded that Bank employees are public officials for purposes of the federal anti-bribery statute. *Hollingshead*, 672 F.2d at 753-54. Reviewing the Banks' organic statute, the Ninth Circuit found the Banks' purpose was of a fundamentally federal character, and that they are

²¹ See also Fed. Reserve Bank of St. Louis v. City of Memphis, 515 F. Supp. 63, 64 (W.D. Tenn. 1979) (Federal Reserve Bank immune from state assessment because "in the absence of express Congressional consent, a state or local government cannot levy a tax against the United States or its property"), aff'd sub nom. Fed. Reserve Bank v. City of Memphis, 649 F.2d 462 (6th Cir. 1981).

subject to extensive governmental control: "the Federal Reserve Board exercises general supervision over the banks. Consequently, all federal reserve bank expenditures are subject to Federal Reserve Board approval and control." *Id.* at 754 (citing 12 U.S.C. § 248(j)).

Other courts of appeals examining the nature of the Banks have reached similar conclusions. See, e.g., Starr Int'l Co., Inc. v. Fed. Reserve Bank of N.Y., 742 F.3d 37, 40 (2d Cir. 2014) (Banks "conduct important governmental functions"); Metrocentre Improvement Dist. # 1, 657 F.2d at 186 ("In light of the important governmental functions performed by the federal reserve banks . . . we hold that the federal reserve banks are instrumentalities of the federal government"), aff'd mem. 455 U.S. 995 (1982); Fed. Reserve Bank v. Kalin, 77 F.2d 50, 51 (4th Cir. 1935) (Federal Reserve Banks are "important agencies of the federal government in its control of banking and currency").²²

²² Numerous district courts have expressed similar views. See, e.g., United States ex rel. Grubea v. Rosicki, Rosicki & Assocs., P.C., 318 F. Supp. 3d 680, 704 n. 20 (S.D.N.Y. 2018) ("Although, as a legal matter the Federal Reserve Banks are federal instrumentalities, not federal agencies, they are properly conceived of as part of the federal Government under the [False Claims Act]."); Flight Int'l Grp., Inc. v. Fed. Reserve Bank of Chicago, 583 F. Supp. 674, 679 (N.D. Ga. 1984) ("Although the Federal Reserve banks are not executive departments, they are independent establishments in the executive branch of the government."), vacated after settlement, 597 F. Supp. 462 (N.D. Ga. 1984); Lee Const. Co., 558 F. Supp. at 177 ("[D]espite the ostensibly private ownership of Federal Reserve Banks . . . the affairs of each Federal Reserve Bank are conducted under the close supervision and ultimate control of the Board [of Governors], an independent federal regulatory agency."); Comm. to Save the Fox Bldg. v. Birmingham Branch of Fed. Reserve Bank of Atlanta, 497 F. Supp. 504, 509 (N.D. Ala. 1980) ("[F]or purposes of the National Environmental Policy Act and the National Historic Preservation Act, the Federal Reserve Bank of Atlanta is a 'federal agency.""); Brink's, Inc. v. Bd. of Governors of Fed. Reserve Sys., 466 F. Supp. 116, 118 (D.D.C. 1979) ("[The Federal Reserve Bank of Richmond] is an agency of the United States for purposes of the Service Contract Act").

III. This Case Is an Ideal Vehicle to Resolve the Question Presented

This case is an ideal vehicle for resolving the question presented.

First, there are no obstacles to the Court's consideration of the question presented. The "purely legal" issue (Pet. App. 5a) was posed to the Federal Circuit and passed upon by the court of appeals in a precedential decision.

Second, the question presented entirely controls the outcome of this case. If the Banks are not distinct from the Federal Government, and are not "persons" who may avail themselves of the post-issuance review procedures set forth in the AIA, then the PTAB lacked jurisdiction to invalidate the patents at issue. If the PTAB lacked jurisdiction then its actions were *ultra vires*, and the invasion of Petitioner's property rights will go unaddressed absent this Court's review. *See Oil States*, 138 S. Ct. at 1375 (patents convey "a specific form of property right"); *Florida Prepaid Postsecondary Educ. Expense Bd. v. College Sav. Bank*, 527 U.S. 627, 642 (1999) (patents "have long been considered a species of property").

Third, because the Federal Circuit has exclusive jurisdiction over appeals from post-issuance proceedings before the PTAB, 35 U.S.C. § 141, there is no need or opportunity for other lower courts to pass on the question presented.

Finally, the question presented was decided by the Federal Circuit in a precedential decision, and the full court considered Bozeman's request for en banc review, but refused to correct the panel's error. Pet. App. 221a-24a. This Court should not wait for a future case posing the question which is cleanly and squarely presented here.

CONCLUSION

For the foregoing reasons, this Petition for a Writ of Certiorari should be granted.

Respectfully submitted,

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Counsel for Petitioner

September 2020

APPENDIX

APPENDIX A

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

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*

2019-1018

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

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*

2019-1020

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. CBM2017-00036. Decided: April 10, 2020

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 & Associates LLC, Philadelphia, PA.

JEFFREY S. BUCHOLTZ, JOSHUA NATHANIEL MITCHELL, King & Spalding LLP, Washington, DC, argued for appellees. Also represented by NATASHA HORNE MOFFITT, Atlanta, GA.

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. § 101.¹ On appeal, Bozeman challenges the Board's authority to decide the

¹ 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.

petitions because it argues the Banks² 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 postissuance 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.

Ι

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, which the Supreme Court held in *Return Mail, Inc. v. U.S. Postal Serv.*, are not "persons" under the AIA. 139 S. Ct. 1853 (2019). 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

² 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).

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.³ 28 U.S.C. § 1498(a). Patent 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 postissuance 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

³ 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 to resolve whether the Banks themselves are considered government agencies in a patent infringement suit. *Id.* at 1379.

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.

Π

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 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 § 101.⁴

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

⁴ 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.

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 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 patenteligible 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. 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 patenteligible.

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 collecting the data related to financial for 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 nonobvious 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 explained Court has that the machine-ortransformation 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 generalcomputer scanner purpose and 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.

Ш

We have considered Bozeman's remaining arguments and find them unpersuasive. We hold that the Banks are "persons" who may petition for postissuance 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

APPENDIX B

Trials@uspto.gov 571-272-7822 Paper 34 Entered: July 23, 2018

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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, and FEDERAL RESERVE BANK OF ST. LOUIS, Petitioner,

v.

BOZEMAN FINANCIAL LLC, Patent Owner.

Case CBM2017-00035 Patent 6,754,640 B2

Before MICHAEL W. KIM, WILLIAM V. SAINDON, and KEVIN W. CHERRY, *Administrative Patent Judges*.

CHERRY, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

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, and Federal Reserve Bank of St. Louis ("Petitioner") filed a Petition (Paper 1, "Pet.") seeking a covered business method patent review of claims 1-26 of U.S. Patent No. 6,754,640 B2 (Ex. 1001, "the '640 patent" or the "challenged patent") under Section 18 of the Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284, 331 (2011) ("AIA"). Petitioner supports its contentions that the claims are unpatentable with the Declaration of Thomas M. Conte, Ph.D. (Ex. 1004),

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and its contentions that it was charged with infringement with the Declaration of Richard M. Fraher (Ex. 1005). Patent Owner, Bozeman Financial LLC, filed a Preliminary Response (Paper 4, "Prelim. Resp."). Patent Owner submitted the Declaration of William O. Bozeman, III with its Preliminary Response. Paper 5 ("First Bozeman Decl.").

On May 19, 2017, pursuant to our authorization, Petitioner filed a Reply to Patent Owner's Preliminary Response on the limited issue of whether Petitioner has standing to bring this proceeding. Paper 9 ("Reply"). With its Reply, Petitioner provided a second Declaration of Richard M. Fraher (Ex. 1014). On May 26, 2017, also pursuant to our authorization, Patent Owner filed a Sur-Reply on the limited issue of standing. Paper 13 ("Sur-Reply"). Patent Owner submitted a second Declaration of William O. Bozeman, III in support of its Sur-Reply. Paper 15 ("Second Bozeman Decl.").

Pursuant to 35 U.S.C. § 324, in our Decision to Institute, we instituted this proceeding as to claims 1– 26 on the all asserted grounds. Paper 23 ("Dec.").

After the Decision to Institute, Patent Owner filed a Patent Owner Response (Paper 24, "PO Resp."), and Petitioner filed a Reply to the Patent Owner Response (Paper 26, "Pet. Reply"). Patent Owner supported its Response with a third Declaration of William O. Bozeman (Ex. 2003) ("Third Bozeman Decl."). An oral hearing was held on April 5, 2018. Paper 33 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(b). This Decision is a Final Written Decision under 35 U.S.C.

328(a) as to the patentability of the challenged claims. Based on the complete record, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–26 are unpatentable.

A. Related Matters

Petitioner and Patent Owner represent that Petitioner has filed a covered business method patent review, CBM2017-00036, against a related patent, U.S. Patent No. 8,768,840 B2 ("the '840 patent," Ex. 1003). Pet. 3; Paper 7, 3; Paper 8, 1. Petitioner has also filed a declaratory judgment action of noninfringement of both the '640 patent and '840 patent— *Federal Reserve Bank of Atlanta et al. v. Bozeman Financial LLC*, Case No. 1:17-cv-00389 (N.D. Ga.). Paper 7, 2.

B. Standing to File a Petition for Covered Business Method Patent Review

A petition for covered business method review must set forth the petitioner's grounds for standing. 37 C.F.R. § 42.304(a). Rule 42.304(a) states it is Petitioner's burden to "demonstrate that the patent for which review is sought is a covered business method patent, and that the petitioner meets the eligibility requirements of § 42.302." Id. One of those eligibility requirements is that only persons (or their privies) who have been sued or charged with infringement under a patent are permitted to file a petition seeking a covered business method patent review of that patent. AIA § 18(a)(1)(B); 37 C.F.R. § Under our rules. "[c]harged 42.302(a). with infringement means a real and substantial

controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court." 37 C.F.R. § 42.302(a).

The Declaratory Judgment Act provides that "[i]n a case of actual controversy within its jurisdiction, . . . any court of the United States, upon the filing of an appropriate pleading, may declare the rights and other legal relations of any interested party seeking declaration." 28such U.S.C. § 2201(a). In MedImmune, Inc. v. Genentech, Inc., the Supreme Court stated that the test for whether an "actual controversy" exists is "whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment." 549 U.S. 118, 127 (2007) (internal quotation marks omitted).

Although it relaxed the test for establishing jurisdiction, *MedImmune* "did not change the bedrock rule that a case or controversy must be based on a *real* and *immediate* injury or threat of future injury that is caused by the defendants—an objective standard that cannot be met by a purely subjective or speculative fear of future harm." Prasco, LLC v. Medicis Pharm. Corp., 537 F.3d 1329, 1339 (Fed. Cir. 2008). Thus, post-*MedImmune* courts have explained that "jurisdiction generally will not arise merely on the basis that a party learns of the existence of a patent owned by another or even perceives such a patent to pose a risk of infringement, without some affirmative act by the patentee." SanDisk Corp. v. STMicroelecs., Inc., 480 F.3d 1372, 1381 (Fed. Cir. 2007). Instead, courts have required "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." *Hewlett-Packard Co. v. Acceleron LLC*, 587 F.3d 1358, 1363 (Fed. Cir. 2009).

In this case, Patent Owner has not sued Petitioner for infringement. Instead, Petitioner contends that Patent Owner charged it with infringing the '640 patent. Pet. 19–21. Petitioner submits, supported by the testimony of Mr. Fraher, that Patent Owner contacted Petitioner by telephone, in January 2016, and contended that Petitioner was infringing the '640 patent and '840 patents. Id. at 20 (citing Ex. 1005 ¶ 5). Petitioner also asserts that Patent Owner indicated that it intended to seek fees for the alleged infringement. Id. Petitioner contends that Patent Owner continued to contact it about potentially licensing the '640 and '840 patents. Id. Petitioner also provides an infringement claim chart Patent Owner sent Petitioner, mapping Petitioner's conduct to the claims of the '840 patent, which also mentions the '640 patent. Id. (citing Ex. 1006, 000001-5).

In its Patent Owner Response, Patent Owner contends that Petitioner has

not met the burden of establishing standing in this matter as they have not provided any evidence that [Petitioner] suffered from any real and immediate injury or threat of future injury that was caused by the Patent Owner ('Bozeman') and that they have not been sufficiently sued or charged with infringement to give rise to the immediate nature of a present or future threat of patent infringement litigation.

PO Resp. 3. Patent Owner argues that

any discussion of infringement of one of the Bozeman patents, the '840 Patent, were only provided in response to the solicitation by [Petitioner] in order to further evaluate a business agreement centered around future licensing and royalties and not past infringement and that there was never any discussion of potential infringement of the '640 Patent.

Id. at 4 (citing Ex. 2002, 5). Patent Owner further asserts that "[b]ecause [Patent Owner] was seeking only a future looking agreement, and further and more importantly, since any discussion of potential infringement was only directed to the '840 [patent] does not give rise to sufficient immediacy and reality of a serious threat to warrant such an affirmative filing by the [Petitioner] without proper standing." Id. at 4-5. Patent Owner contends that Petitioner's assertion that litigation was threatened as to the '640 patent is "patently false and unsubstantiated." Id. at 5. Patent Owner asserts that it was seeking ground for "mutual agreement and commercially reasonable treatment" from the Petitioner and other parties. Id. Patent Owner also acknowledges that it sent the claim chart to Petitioner regarding the '840 patent, but asserts that the claim chart was "very preliminary" and intended to "support a dialog" between Patent Owner and Petitioner. *Id.* Patent Owner argues that the parties' course of dealing demonstrates that Petitioner had no fear of an immediate and real threat of litigation. *Id.* at 5–6.

In its Reply, Petitioner disputes Patent Owner's characterization of the events that took place in their negotiations in 2016 and early 2017. Pet. Reply 7–10. Petitioner points to the proposal Patent Owner sent discussing Patent Owner's "IP," and broadly discussing how the "Bozeman patents" cover "multiple FRB systems." Id. at 7 (citing Ex. 1024¹, 3, 8–11). Petitioner argues that Patent Owner was seeking past damages, and threatened litigation during their discussions. Id. at 8 (citing Ex. 1024, 1, 10; Ex. 1014 \P 11–13). Petitioner contends that the lack of a claim chart for the '640 patent, or use of the word "infringement" in the communications, is "irrelevant." Id. at 9 (citing Hewlett-Packard, 587 F.3d at 1362). Moreover, Petitioner argues that Patent Owner did provide a claim chart of the '840 patent, which is related to the '640 patent and has overlapping subject matter. Id. at 10.

We have reviewed Petitioner's and Patent Owner's submissions and supporting evidence, and we determine that Petitioner has established that the facts, taken together, demonstrate that it has

¹ Exhibit 1024 is a redacted version of Exhibit 1015. On the Board's electronic filing system, it was filed by Patent Owner as Exhibit 2010.

standing to bring this covered business method review. It is undisputed that Patent Owner contacted Petitioner and the parties entered into lengthy discussions regarding the potential licensing of the '640 and '840 patents beginning in 2014. See Ex. 1005 ¶¶ 4–8; Ex. 1014 ¶¶ 3–7; First Bozeman Decl. ¶¶ 7– 14. These included a number of calls over a period of more than a year. Id. In April 2016, Patent Owner sent Petitioner a claim chart mapping Petitioner's existing services to claims of the '840 patent, and also mentioned the '640 patent. See Ex. 1005 ¶ 6; Ex. 1006, 1 (mentioning '640 patent), 2-5 (claim chart of '840 patent); Ex. 1014 ¶ 6. In addition, in August 2016, the parties held an in-person meeting to discuss Petitioner's systems, the Patent Owner's patents, and potential licensing of those patents. Ex. 1014 ¶ 10. Although Patent Owner disputes whether Mr. Bozeman mentioned infringement of the '640 patent during telephone calls and in-person meetings with Petitioner's representatives, we do not need to definitely resolve that dispute; it is enough to find that the other facts, discussed below, weigh against Patent Owner on the issue of Petitioner's standing. We find, regardless of whether infringement of the '640 patent was discussed specifically on the calls or meetings, other contacts by Patent Owner establish standing, especially when weighed in the aggregate with the above.

In particular, following the August 2016 meeting, Patent Owner sent Petitioner an email and attached licensing proposal on September 29, 2016. Ex. 1014 ¶ 12. Patent Owner's September 29, 2016 communication and Memorandum and Proposal repeatedly reference the "Bozeman patents" collectively (including both the '640 and '840 patents), and threaten litigation. *See, e.g.*, Ex. 1024, 1. In particular, in the September 29, 2016 email from Patent Owner's counsel to Mr. Fraher, Patent Owner's counsel states:

Pursuant to our ongoing discussions regarding the Bozeman patent dispute with the FRB and in the interest of attempting to move this process along at a more rapid pace we provide the attached Proposal, Memorandum, Appendix and revised preliminary Claim Chart for consideration by the Federal Reserve in addressing the current divide on past usage and *rents due by the FRB*.... As we have been going at this since late 2014 and as the Bozeman *patents* useful life continues to tick away, we are respectfully requesting that the FRB use best efforts to review the attached and to set up a follow-up meeting or conference session in the near future. If we cannot get to that point, it may leave [Mr. Bozeman] with little alternative but to begin to head down an enforcement path that would most likely be very disruptive. ... We remain very flexible in discussing alternative approaches but do want to point out the time sensitivities involved in Mr. Bozeman's] opening proposal.

Ex. 1024, 1 (emphasis added). Attached to this email is Patent Owner's Memorandum and Proposal of Bozeman Financial LLC to the Federal Reserve Bank ("FRB") ("Memorandum"). Id. 2. In at the Memorandum, Patent Owner repeatedly refers to the "Bozeman IP" and "Bozeman patents," without limiting the identification to the '840 patent. See, e.g., *id.* at 3 (noting "infringement upon the Bozeman IP"), 4 (identifying both the '640 and '840 patents), 5 ("potential applicability of the Bozeman IP to the FRB"), 6 ("Bozeman IP"), 8 ("Bozeman IP" and "Bozeman issued patents"). Furthermore, the Memorandum repeatedly alludes to, and openly discusses, the parties' dispute regarding whether Petitioner's systems infringe the Bozeman patents. See, e.g., id. at 9 (alleging "when Bozeman first made known his IP to the FRB, that the FRB was in the process of updating its systems from its dated legacy methods to those anticipated by the Bozeman I.P.," and noting, with respect to the "Bozeman patents," that the parties have "differing views of its applicability to the current and past FRB systems and service offerings"), 9–10 (noting "Bozeman[] asserts that a relatively basic reading of the Bozeman patents readily shows that ... [Petitioner's] systems ... fit well within the inventions of the Bozeman IP"), 10 (asserting Petitioner's "argument and its related technical analysis have not persuaded Bozeman and his advisors that the Bozeman interpretation of the patents is not the more likely outcome to be upheld if infringement litigation were to be undertaken"), 12 (discussing "the Bozeman interpretation of the patents" and noting that "[w]e believe that Bozeman and the FRB are at a critical crossroad in determining if they can reach an agreement recognizing that each side believes it has valid and determinative arguments and analysis to defeat the other's claims" and arguing that "with the stakes so high the relevant question is it more practical to compromise and reach a fair accord, or is it in the best interest of either party to litigate these issues on multiple fronts over the next 1–5 years"), 16–18 (discussing "settlement criteria which would substantially discount the totals from traditional patent damages").

We note that the context for these statements significantly enhances their weight in our analysis. This Memorandum was made at the culmination of almost two years of talks between the parties, including numerous calls and a technical presentation by Petitioner on how its systems operated, and why they did not infringe. See Ex. 1005 ¶¶ 4–6 (discussing early talks between the parties); Ex. 1014 ¶¶ 7–11 (discussing the parties' meetings and discussions leading up to the Memorandum). Rather than backing down from its previous assertions, Patent Owner repeatedly asserts, in the Memorandum, that Petitioner's systems are covered by (i.e., infringe) the patents. Moreover. the email Bozeman and Memorandum make clear that the time for Petitioner to license the Bozeman patents was running short, and that if Petitioner did not take a license to the Bozeman patents that Patent Owner would begin to "head down an enforcement path," Ex. 1024, 1, which could involve "litigat[ing] these issues on multiple fronts over the next 1-5 years," id. at 12.

"[A] specific threat of infringement litigation by the patentee is not required to establish jurisdiction, and a 'declaratory judgment action cannot be defeated simply by the stratagem of a correspondence that avoids magic words such as 'litigation' or 'infringement."" ABB Inc. v. Cooper Indus., LLC, 635 F.3d 1345, 1348 (Fed. Cir. 2011) (quoting Hewlett-Packard, 587 F.3d at 1362). But, of course, if "a party has actually been charged with infringement of the patent, there is, *necessarily*, a case or controversy adequate support [declaratory to judgment jurisdiction." Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 96 (1993). Here, we find the statements in the Memorandum actually charge Petitioner with infringement of both the '640 and '840 patents, which is sufficient to give rise to declaratory judgment jurisdiction. Id. Patent Owner cannot defeat this overwhelming evidence merely because the Memorandum does not utter the precise words "infringes" and "the '640 patent" in the same sentence. Instead, Patent Owner's communications make clear that its allegations were not limited to a single patent, but rather encompass both of the "Bozeman patents." See Ex. 1024, 1. Patent Owner also stated that it believed that Petitioner's products were covered by the "Bozeman patents," and that litigation was on the horizon if a license, which would include both patents, was not taken. These suggest Petitioner was reasonable in believing that Patent Owner intended to sue if its demands were not met.

Patent Owner attempts to delve into the subjective understandings of the parties, arguing that Petitioner would never fear litigation because it is so powerful, and that, regardless of Patent Owner's statements, it really never intended to sue Petitioner. Ex. 2001 ¶ 14; Ex. 2002 ¶¶ 4, 6, 19; Ex. 2003 ¶ 9. However, it is irrelevant whether Patent Owner subjectively believed Petitioner was infringing or intended to sue. "The test [for declaratory judgment jurisdiction in patent cases], however stated, is objective. ..." Hewlett-Packard, 587 F.3d at 1364 (quoting Arrowhead Indus. Water, Inc. v. Ecolochem, Inc., 846 F.2d 731, 736 (Fed. Cir. 1988)). "Indeed, it is the objective words and actions of the patentee that are controlling." BP Chems. Ltd. v. Union Carbide Corp., 4 F.3d 975, 979 (Fed. Cir. 1993). Thus, conduct that can be reasonably inferred as demonstrating intent to enforce a patent can create declaratory judgment jurisdiction. Hewlett-Packard, 587 F.3d at 1364. Here, when Patent Owner's statements, demands, and actions are considered collectively, it is difficult to reasonably infer any conclusion other than that Patent Owner was demonstrating an intent to enforce its patents. Moreover, Patent Owner's contentions that it was only seeking a forward-looking agreement (see PO Resp. 4), are not supported by the record. The Memorandum repeatedly refers to seeking compensation for past use of the Bozeman patents. See Ex. 1024, 18 ("This option allows for a one-time payment to cover all of the past rents due. . . .").

As for Patent Owner's argument that it was somehow entrapped by Petitioner, we note that (a) all through its negotiations with Petitioner, Patent Owner was represented by counsel (First Bozeman Decl. ¶ 6; Ex. 1006, 1; Ex. 1024, 1), (b) Patent Owner's head, Mr. Bozeman, appears to be a sophisticated businessman (First Bozeman Decl. ¶¶ 2, 3; Ex. 1024, 4-5), and (c) there is no credible evidence that shows that Patent Owner was coerced into making the statements it made in the Memorandum. Moreover, the law was clear at the time the statements were made that they could give rise to declaratory judgment jurisdiction. See Hewlett-Packard, 587 F.3d at 1362 ("But it is implausible (especially after MedImmune and several post MedImmune decisions from this court) to expect that a competent lawyer drafting such correspondence for a patent owner would identify specific claims, present claim charts, and explicitly allege infringement.").

As for Patent Owner's arguments that the parties had a longstanding relationship, we do not find this materially changes our analysis, even if true. Specifically, based on the evidence presented, we are persuaded that, even assuming some sort of previous non-adversarial relationship did exist, it does not change the objective import of the documented interactions beginning in January 2016. Thus, we determine that these statements and actions, when considered objectively, and even when taking into consideration any past relationships, are more than sufficient to establish that there was a substantial controversy between the parties sufficient to establish standing under relevant case law. See SanDisk, 480 F.3d at 1382 (holding demand for license fees and identification of specific allegedly infringing activity sufficient for jurisdiction); see also Hewlett-Packard Co., 587 F.3d at 1364 (finding jurisdiction where patentee took affirmative step of twice contacting alleged infringer and made implied assertion of right against particular product).

Accordingly, we conclude that Petitioner has demonstrated that it has standing to bring this covered business method review.

C. The Challenged Patent

The '640 patent, titled "Universal Positive Pay Match, Authentication, Authorization, Settlement and Clearing System," describes a universal positive pay match, authentication, authorization clearing and settlement system to reduce check fraud and verify checks, other financial instruments and documents. Ex. 1001, [54], Abstract. The '640 patent explains that "[c]heck fraud and verification of checks presented to merchants and financial institutions have always been a problem for payers who write checks." Id. at 1:19–21. According to the '640 patent, positive pay services are services "that a bank sells for a fee to its account holders whereby only checks that are preapproved are accepted at the bank," and "have been available from individual banks for a number of years." Id. at 5:8–11. According to the patent, a

check generating customer [using a prior art positive pay service] generally uploads a file of check register information daily to the bank of all checks written that day. When checks drawn on the customers' accounts are presented to the bank, their database is queried. If the check has been tampered with or if it is an unauthorized check number, the check will be rejected.

Id. at 5:11–17.

The patent explains that "[t]he existing positive pay services are bank specific," meaning that "only a bank's own account holders can utilize it and take advantage of it." *Id.* at 5:25–27. The patent suggests that it will overcome this perceived problem by offering a "universal" positive pay system that "can be used by both account holder members and nonmembers," and "accessed by all banks, depositors and account holders for issuing and tracking check data, signatures and matrixes at point of presentment, point of sale and point of payment of the item." *Id.* at 5:27–35. Figure 5A of the '640 patent is reproduced below.

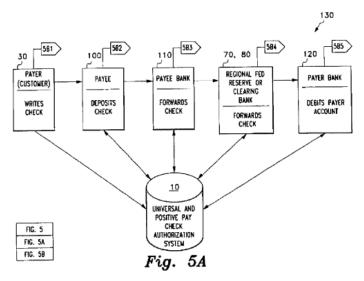


Figure 5A illustrates a flow diagram of the universal positive pay method for checking accounts according to the claimed invention. *Id.* at 4:9–11.

Figure 5A shows that "each participant in the check clearing process (payer customer 30, payee 100, payee bank 110, Federal Reserve 80, clearing bank 70, or payor bank 120), participates in a universal positive pay match, authentication, authorization, clearing and settlement system method 130 used by a payer (customer) 30 for maintaining check payment control and preventing check fraud." *Id.* at 9:46–53. According to the '640 patent,

[t]he universal positive pay match, authentication, authorization, clearing and settlement system method 130 comprises a series of steps in which payer 30 uploads check information to the universal positive pay match, authentication, authorization, clearing and settlement system 10, payee 100 deposits check in payee bank 110, payee bank 110 checks the check against database 20 in the universal positive pay match authentication, authorization, clearing and settlement system 10, check is deposited in Federal Reserve 80 or clearing bank 70, which checks it against the database 20, payor bank 120 receives check and checks it against the database 20 and reports back to the universal positive pay match authentication, authorization, clearing and settlement system 10 that the check has been debited from payer's 30 account.

Id. at 9:53–67.

D. Illustrative Claims

Petitioner challenges all twenty-six claims of the challenged patent. Claims 1 and 21 are independent claims. Claims 1 and 21 are illustrative of the claimed subject matter:

1. A universal positive pay match, authentication, authorization, clearing and settlement system comprising:

at least one server computer having a processor, an area of main memory, a storage device, and a bus connecting the processor, main memory, and the storage device;

a database stored on said storage device;

a data communications device connected to said bus for connecting said at least one server computer to an Internet; and

web-based computer program code stored in said storage device and executing in said main memory under direction of said processor, the computer program code including:

first instruction means for permitting a payer who executes a check for payment to enter and store check register information relating to the executed check in said database, the check register information including a check number, a date issued, a payee, a routing number, and an account number;

second instruction means for providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank;

third instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check register information of the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment; and

fourth instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process;

wherein said database stores check register information for payers who execute checks having accounted with a plurality of unrelated drawee banks.

Ex. 1001, 16:59–17:35.

21. A computerized method for a universal positive pay match, authentication,

authorization, clearing and settlement system, said method comprising:

(a) providing a database;

(b) storing check register information relating to a check executed by a payer for payment in said database, the check register information including a check number, a date issued, a payee, a routing number, an account number, and an amount;

(c) providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank;

(d) enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access the check register information of the executed check stored in said database via the web site at every point along a check clearing process in order to determine correspondence between the check register information stored in said database and the executed check presented for payment; and

(e) enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process.

Id. at 18:62–19:25.

E. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable based on the following grounds:

Basis	Challenged Claims
§ 101	1-26
$112 \P 2, 6^2$	1–20, 25, and 26

II. DISCUSSION

A. Claim Construction

In a covered business method patent review, a claim term in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37

² Paragraphs 2 and 6 of 35 U.S.C. § 112 were replaced with newly designated § 112(b) and § 112(f) by § 4(c) of the AIA, and AIA § 4(e) makes those changes applicable "to any patent application that is filed on or after" September 16, 2012. *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1183 n.1 (Fed. Cir. 2014). Because the application resulting in the '640 patent was filed before that date, we will refer to the pre-AIA-version of § 112.

C.F.R. § 42.300(b); *Cuozzo Speed Techs.*, *LLC v. Lee*, 136 S. Ct. 2131, 2144 (2016); *Versata Dev. Grp.*, *Inc. v. SAP Am.*, *Inc.*, 793 F.3d 1306, 1328 (Fed. Cir. 2015).

We construe the challenged claims according to these principles. Petitioner proposes constructions only for the various means-plus-function terms found in claim 1–20, 25, and 26. Pet. 23–32. We deal with the claim construction of the means-plus-function terms in the discussion of the ground based on § 112 below. Aside from the means-plus-function terms, we determine that no other terms require express construction for this Decision.

B. Covered Business Method Patent

The AIA defines a "covered business method patent" as "a patent that claims a method or apparatus for performing corresponding data processing or other operations used in the practice, administration, or management of a financial product or service" AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). Congress provided a specific exception to this definition of a covered business method patent— "the term does not include patents for technological inventions." Id. To determine whether a patent is eligible for a covered business method patent review, the focus is on the claims. See Unwired Planet, LLC v. Google Inc., 841 F.3d 1376, 1381 (Fed. Cir. 2016). For the reasons set forth below, we conclude that the challenged patent meets the definition of a covered business method patent.

1. Financial Product or Service

One requirement of a covered business method patent is for the patent to "claim[] 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." AIA § 18(d)(1); 37 C.F.R. § 42.301(a).

Petitioner contends the challenged patent meets the financial product or service requirement, because the patent claims methods or systems for allowing check clearing participants (i.e., payers, payees, drawee banks, payee banks, and banking institutions intermediate the payee and drawee banks) to access stored check register information at every point along the check clearing process in order to determine whether a check has been tampered with or altered. Pet. 12–13.

Patent Owner does not dispute Petitioner's assertions.

We agree with Petitioner that the '640 patent meets the financial product or service requirement. For example, claim 21 and its dependents are directed to "[a] computerized method for a universal positive pay match, authentication, authorization, clearing and settlement system" that includes the steps of (a) providing a database; (b) storing check register information in the database; (c) providing a website accessible to the check clearing process participants; (d) enabling the check clearing process participants to access the stored check register information via the website at every point along a check clearing process in order to determine correspondence between the stored check register information and an executed check; and (e) enabling the check clearing process participants to determine whether tampering or altering has occurred at every point along a check clearing process. Pet. 13-14. We agree with Petitioner that the processing and authentication of checks for payment meets the financial product or service requirement of Section 18 of the AIA. See, e.g., U.S. Bancorp v. Solutran, Inc., Case CBM2014-00076, slip op. 6 (PTAB Aug. 7, 2014) (Paper 16) (method of processing paper checks for payment); Jack Henry & Assocs., Inc. v. DataTreasury Corp., Case CBM2014-00056, slip op. 8 (PTAB July 10, 2014) (Paper 17) (method and system for storage and verification of checks financial in nature). Accordingly, the financial product or service requirement is satisfied.

2. Exclusion for Technological Inventions

Section 18 of the AIA states that the term "covered business method patent" does not include patents for "technological inventions." AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). To determine whether a patent is for a technological invention, we consider "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). The following claim drafting techniques, for example, typically do not render a patent a "technological invention": (a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and nonobvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012).

Petitioner submits that no "technological feature" of claim 21 is novel and non-obvious. Pet. 15. Petitioner argues that claim 21 is directed to a computerized method that uses a database for storing check register information and an Internet website. *Id.* Petitioner asserts that "[a] database and Internet website are not novel or non-obvious — they were generic, conventional computer technologies wellknown in the art in October 2000." *Id.* (citing Ex. 1004 ¶¶ 41, 44, 57). Petitioner further contends that the '640 patent does not provide a technical solution to a technical problem. *Id.* at 16–19. Petitioner argues that the '640 patent addresses the problem of check fraud, which is a business problem, not a technical problem. *Id.* at 17. Further, Petitioner contends that the solution, providing multiple users with access to a positive pay system at every point along the check clearing process, is not a technical solution to this problem. *Id.*

Patent Owner offers no arguments in its Patent Owner Response, but instead, tries to incorporate by reference its arguments from the related proceeding in CBM2017-00036. PO Resp. 7. Our rules do not allow such incorporation by reference. See 37 C.F.R. § 42.6(a)(3); see also Cisco Sys., Inc. v. C-Cation Techs., LLC, Case IPR2014-00454, slip op. (PTAB Aug. 29, 2014) (Paper 14) (informative) (declining to consider arguments incorporated by reference from another). Patent one document into Owner's arguments are directed to the claims of the '840 patent, not the claims of the '640 patent. Patent Owner has not provided any explanation of how the arguments related to the claims of the '840 patent can correlate to the claims of the '640 patent. Thus, we do not consider these arguments to be persuasive. In addition, as we explained in our final written decision CBM2017-00036, issued concurrently, those in arguments are not persuasive because they relate to unclaimed features and conventional technology that could not transform the claims of the '840 patent into a technological invention. Based on our review, the reasoning from CBM2017-00036 applies to these claims as well, so we adopt it here.

We determine that the technological features of the claimed steps are directed to using known technologies. *See* Office Trial Practice Guide, 77 Fed. Reg. at 48,764 (indicating use of known technologies does not render a patent a technological invention). For example, independent claim 21 requires only "a database," and "a web site on the Internet" (Ex. 1001, 18:62–19:24), and we do not discern that either is used in a non-conventional manner. We further agree with Petitioner that the subject matter of independent claim 21, as a whole, does not require any specific, unconventional software, computer equipment, processing capabilities, or other technological features to produce the required functional result. See Ex. 1004 ¶¶ 39–45.

We also agree with Petitioner that the challenged patent addresses the business problem of check fraud by providing multiple users access to a positive pay system at every point along the check clearing process, which is not a technical solution to a technical problem. *See Nautilus Hyosung Inc. v. Diebold, Inc.*, Case CBM2016-00034, slip op. 11–14 (PTAB Aug. 22, 2016) (Paper 9) (characterizing "reducing the risk of [check] fraud" as a "business problem").

Accordingly, we conclude that the subject matter of at least independent claim 21 does not have a technological feature that solves a technical problem using a technical solution, and is, therefore, not a technological invention. See Blue Calypso, LLC v. Groupon, Inc., 815 F.3d 1331, 1341 (Fed. Cir. 2016) (finding that using general computer components to carry out the claimed process does not "rise[] above the general and conventional" and "cannot change the fundamental character of [patent owner's] claims").

3. Eligible for Covered Business Method Patent Review

Having determined that the challenged patent 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 and does not fall within the exception for technological inventions, we determine that the challenged patent is eligible for a covered business method patent review

C. Asserted Ground that Claims 1–26 Are Unpatentable Under § 101

Petitioner asserts each of claims 1–26 is unpatentable for being directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 60–83. Petitioner supports its contentions with citations to the Declaration of Dr. Conte (Ex. 1004).

1. Principles of Law

A patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The Supreme Court has held that this statutory provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) ("Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of

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scientific and technological work."). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the practical application of these concepts may be deserving of patent protection. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 69–72 (2012).

In Alice, the Supreme Court reaffirmed 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 those concepts." Alice, 134 S. Ct. at 2355. The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." Id. If the claims are directed to a patentineligible concept, the second step in the analysis is to consider the elements of the claims "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, 566 U.S. at 77). 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. (quoting Mayo, 566 U.S. at 71-72) (alterations in original).

Noting that the two stages involve "overlapping scrutiny of the content of the claims," the Federal Circuit has described "the first-stage inquiry as looking at the 'focus' of the claims, their 'character as a whole,' and the second-stage inquiry (where reached) as looking more precisely at what the claim elements add—specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which (by assumption at stage two) the claim is directed." *Electric Power Grp, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

Furthermore, the prohibition against patenting an abstract idea "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant postsolution activity." *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation and internal quotation marks omitted); *see Electric Power*, 830 F.3d at 1355 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.").

2. Step 1 — Whether the Claims Are Directed to an Abstract Idea

In determining whether a method or process claim recites an abstract idea, we must examine the claim as a whole. *Alice*, 134 S. Ct. at 2355 n.3. Petitioner submits that claim 21 is representative for the § 101 analysis. Pet. 62. Patent Owner does not dispute this. We agree with Petitioner that claim 21 is representative.

More specifically, Petitioner asserts that claim 21, as a whole, relates to "[a] computerized method for a universal positive pay match, authentication, authorization, clearing and settlement system," comprising steps directed to storing check register information in an online database, accessing the stored check register information to determine correspondence between the stored information and an executed check, and determining whether tampering or altering has occurred. *Id.* (citing Ex. 1001, 18:62–19:24 (claim 21)). Petitioner asserts that "[c]laim 21 recites nothing more than a recitation of steps for collecting and analyzing information" for "the age-old abstract idea of reconciling check information against a ledger—a long-standing fundamental economic practice that can easily be performed using pen and paper. . . ." *Id.*

We agree with Petitioner that it has shown that claims 1–26 are drawn to an abstract idea. Specifically, we agree with Petitioner that the claims of the challenged patent are directed to collecting, displaying, and analyzing information to reconcile check information against a ledger.

For example, beginning with independent claim 21, no specific equipment is recited for executing the claimed functions. While the claim does recite a database and a website accessible over the Internet, they do not appear to perform any more than their typical and ordinary functions, unrelated to the specific functions claimed. Ex. 1001, 18:62–19:25. The remainder of the claim is simply a method of collecting and displaying information. As discussed above, the claimed method steps include (i) "providing a database," (ii) "storing check register information ... in said database," (iii) "providing a web site on the Internet ...," (iv) "enabling ... access [to] the check register information . . . stored in the database via the web site ... in order to determine correspondence between the check register information stored in said database and the executed check presented for payment," and (v) "enabling ... [a] determin[ation] whether tampering or altering has occurred to the executed check at every point along the check clearing process." Id. at 18:62–19:25. Thus, besides providing conventional computer technology in the form of a database and website, the method consists of storing, displaying, and analyzing information. Moreover, the claim language is broad enough such that a person viewing the information on a website could be the one making the determination of whether the check is fraudulent or not. Claim 1 is written as a system and includes substantially similar functions, written as computer code, as claim 21.

The specification reinforces that the focus of claims 1 and 21 is collecting and analyzing information: "The present invention relates to a universal positive pay [] system to reduce check fraud and verify checks, other financial instruments and documents." Ex. 1001 at 1:14-17. According to the specification, the customer "has the flexibility to utilize several means for inputting current check register information ... includ[ing] computerized devices such as personal computers, portable laptops and palmtops, as well as mainframe computers and servers[.]" Id. at 6:1-7.Once the customer's information is in the claimed system, the "participating commercial entity . . . may match and

compare the information from the check with the check register information in the [claimed system] . . . to verify that the check has not been altered or tampered with." *Id.* at 6:51–61. Moreover, we are persuaded that the idea of reconciling check register information is a well-known, routine economic practice commonplace in the financial services industry and is fundamentally abstract. Indeed, the specification states that "[p]ositive pay services have been available from individual banks for a number of years." *Id.* at 5:8–9.

We find this case indistinguishable from a number of cases that have found storing, displaying, and analyzing data, such as for loan application processing and fraud detection, to be abstract ideas. See Credit Acceptance Corp. v. Westlake Servs., 859 F.3d 1044, 1054–57 (Fed. Cir. 2017) (holding "system for maintaining a database of information about items dealer's inventory. obtaining financial in а 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" to be abstract): Intellectual Ventures I LLC v. Capital One Fin. Corp., 850 F.3d 1332, 1340 (Fed. Cir. 2017) (discussing abstract idea precedent related to organizing, displaying, and manipulating data); FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093-94 (Fed. Cir. 2016) (holding that claims directed to "collecting and analyzing information to detect misuse and notifying a user when misuse is detected" are abstract); Electric Power, 830 F.3d at

1354 ("[M]erely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis."); Mortg. Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1324 (Fed. Cir. 2016) (holding that claims are abstract where they "recite nothing more than the collection of information to generate a 'credit grading' and to facilitate anonymous loan shopping"); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (identifying "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"); Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1367-69 (Fed. Cir. 2015) claims adding generic (determining computer components to financial budgeting not patent eligible); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333-34 (Fed. Cir. 2012) (holding that a "computer-aided" method for "processing information through а loan clearinghouse" for car applications is patentineligible).

Patent Owner offers no arguments in its Patent Owner Response, but, instead, tries to incorporate by reference its arguments from the related proceeding in CBM2017-00036. PO Resp. 7. Our rules do not allow such incorporation by reference. *See* 37 C.F.R. § 42.6(a)(3); see also Cisco Sys., Inc. v. C-Cation Techs., LLC, Case IPR2014-00454, slip op. (PTAB Aug. 29, 2014) (Paper 14) (informative) (declining to consider arguments incorporated by reference from one document into another). Moreover, even if we did consider them, Patent Owner's arguments are directed to the claims of the '840 patent, not the claims of the '640 patent. Patent Owner has not provided any explanation of how the arguments related to the claims of the '840 patent can correlate to the claims of the '640 patent. Thus, we do not consider these arguments to be persuasive. In addition, as we explained in our final written decision in CBM2017-00036, those arguments are not persuasive because they relate to unclaimed features and conventional technology that could not transform the claims of the '840 patent from being an abstract idea. Based on our review, the reasoning from CBM2017-00036 applies to these claims as well, so we adopt it here.

The dependent claims either specify additional data processing steps (claims 2–8, 19, 20, 22–26), or append one or more instruments or devices to the claimed system (claims 9–18). Petitioner asserts, and we agree, that none of these dependent claims appear to add anything that would change the conclusion that the claims are directed to an abstract idea. See Pet. 64; Ex. 1004 ¶ 48.

In view of the foregoing, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–26 of the challenged patent are directed to a patent-ineligible abstract idea.

3. Step 2 — Whether the Challenged Claims Include Limitations that Represent Inventive Concepts

We turn to the second step of the Alice inquiry "and scrutinize the claim elements more microscopically" for additional elements that can "transform the nature of the claim" into a patent-eligible application of an abstract idea. *Electric Power*, 830 F.3d at 1353– 54. That is, we determine whether the claims include an "inventive concept," i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. Alice, 134 S. Ct. at 2357. The relevant inquiry here is whether "additional substantive limitations ... narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself." Accenture, 728 F.3d at 1341 (internal quotations and citation omitted).

Further scrutinizing the recited system and method, Petitioner asserts, and we agree, there is nothing that appears to transform the nature of the claims into patent-eligible applications of an abstract idea. Pet. 74–83.

First, the only recited technology in claim 21 is a "database" and "Internet accessible web page." Claim 1 merely adds a "server computer" with a "processor," "main memory," "storage device," and "bus connecting the processor, main memory, and the storage device." Nothing 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 the check register, and displaying the data to the users. The Federal Circuit has repeatedly held that such invocations of computers and networks that are not even arguably inventive are "insufficient to pass the test of an inventive concept in the application" of an abstract idea. buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1353 (Fed. Cir. 2014); see, e.g., FairWarning, 839 F.3d 1089, 1096 (Fed. Cir. 2016) (holding that an "interface" and "microprocessor" are generic computer elements that do not transform an otherwise abstract idea into patent-eligible subject matter); Mortgage Grader, 811 F.3d at 1324–25 (holding that generic computer components, such as an "interface," "network," and "database," fail to satisfy the inventive concept requirement); Intellectual Ventures I, 792 F.3d at 1368 ("The recited elements, e.g., a database, a user profile ... and a communication medium, are all generic computer elements."); Content Extraction, 776 F.3d at 1347–48. Second, even limiting the claims to the particular technological environment of check processing, without more, would appear to be insufficient to transform the claims into patenteligible applications of the abstract idea. See Electric *Power*, 830 F.3d at 1354 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.") (citing Alice, 134 S. Ct. at 2358; Mayo, 566 U.S. at 71–72; Bilski, 561 U.S. at 610–11;

Diamond v. Diehr, 450 U.S. 175, 191 (1981); *buySAFE*, 765 F.3d at 1355).

The specification acknowledges that the elements are well known. See Ex. 1001, 4:53–64; see also Ex. 1004 ¶¶ 40–52 (explaining how the technologies are conventional and generic).

Patent Owner offers no arguments in its Patent Owner Response, but instead, tries to incorporate by reference its arguments from the related proceeding in CBM2017-00036. PO Resp. 7. Our rules do not allow such incorporation by reference. See 37 C.F.R. § 42.6(a)(3); see also Cisco Sys., Inc., at 10 (declining to consider arguments incorporated by reference from one document into another). Moreover, even if we did consider them, Patent Owner's arguments are directed to the claims of the '840 patent, not the claims of the '640 patent. Patent Owner has not provided any explanation of how the arguments related to the claims of the '840 patent can correlate to the claims of the '640 patent. Thus, we do not consider these arguments to be persuasive. In addition, as we explained in our final written decision in CBM2017-00036, those arguments are not persuasive because the elements recited in the claims are insufficient to provide an inventive concept that would transform the claims from merely an abstract idea. Based on our review, the reasoning from CBM2017-00036 applies to these claims as well, so we adopt it here.

In view of the foregoing, we determine that, when considered individually and "as an ordered combination," the claim elements appear to do no more than apply the abstract concept of collecting, displaying, and analyzing information to reconcile check information against a ledger, and do not appear to recite anything in a manner sufficient to transform that abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2359–60 (citing *Mayo*, 132 S. Ct. at 1297–98). This weighs in favor of finding claims 1–26 are a patent-ineligible abstract idea.

4. Conclusion

Having considered all the evidence and arguments in the record, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–26 are directed to patent-ineligible subject matter under 35 U.S.C. § 101.

D. Asserted Ground Based on § $112 \P \P 2 \& 6$

Petitioner contends that the challenged patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for the means-plus-function limitations in claims 1–20, 25, and 26 and, therefore, these claims are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2. Petitioner supports its contentions with citations to the Declaration of Dr. Conte (Ex. 1004). Pet. 33–60. In its Patent Owner Response, Patent Owner merely states "Patent Owner relies on Ex. 1001 — the '640 Patent to show that the Patent is valid under Section 112." PO Resp. 7. In its Reply to the Patent Owner Response, Petitioner argues that Patent Owner's "vague and conclusory reference to the '640 Patent violates 37 C.F.R. § 42.23 . . . [and] amounts to an improper incorporation by reference." Pet. Reply 11. Therefore, Petitioner argues that we "should refuse to entertain them." *Id*.

1. Principles of Law

Under 35 U.S.C. § 112 ¶ 6, "[a]n element in a claim for a combination may be expressed as a means . . . for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6. Using the term "means" in a "means for" context creates a rebuttable presumption that 35 U.S.C. § 112 ¶ 6 applies. See Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348, 1349 (Fed. Cir. 2015) (en banc in relevant part) ("use of the word 'means' creates a presumption that § 112, ¶ 6 applies"). In determining whether a claim element falls within the ambit of § $112 \$ 6, "[t]he standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." Id. at 1349 (quoting Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed. Cir. 1996)). "When a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function." Id. (quoting Watts v. XL Sys., Inc., 232 F.3d 877, 880 (Fed. Cir. 2000)).

Once a claim limitation falls under 35 U.S.C. § 112 ¶ 6, the construction of such a limitation involves two steps: (1) identifying the claimed function and (2) identifying in the specification the corresponding structure that performs the claimed function. See Noah Sys., Inc. v. Intuit Inc., 675 F.3d 1302, 1311 (Fed. Cir. 2012). In the event the specification does not identify sufficient structure to perform the claimed functions, "the claim limitation would lack specificity, rendering the claim as a whole invalid for indefiniteness under 35 U.S.C. § 112 ¶ 2." Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1331 (Fed. Cir. 2008) (citing In re Donaldson, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc)).

2. Analysis

We determine that Petitioner has shown, by a preponderance of the evidence, that the limitations of claims 1–20, 25, and 26 that recite "means for" are governed by § 112 ¶ 6. See Ex. 1004 ¶¶ 63–68; Williamson, 792 F.3d at 1349. Furthermore, as claim 1 recites, all of the "instruction means for" limitations are "web-based computer program code" executed and stored on a server having a processor, an area of main memory, a storage device, and a bus connecting the processor, main memory, and storage device. See Ex. 1001, 16:61–17:4. In other words, the "instruction means for" limitations are all special purpose computer code executed on a general purpose computer. See Ex. 1004 ¶¶ 64–66.

As for the first step of construing these meansplus-function limitations, we further agree with Petitioner and determine that the corresponding functions for the following limitations are what is shown in the table below.

Function

first instruction means for permitting a payer who executes a check for payment to enter and store check information register relating to the executed check in said database. the check register information including a check number, a date issued, a payee, а routing number, and an account number (claim 1)

permitting a payer who executes а check for payment to enter and store check register information relating to the executed check in said database. the check register information including a check number, a date issued, a payee, a routing number, and an account number

second instruction means for providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank. and banking institutions intermediate the payee

providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank bank and the drawee bank (claim 1)

third instruction means for enabling the payer who executed the check, the payee of the executed check. the payee bank, the drawee bank. and banking institutions intermediate the payee bank and the drawee bank to access check register information of the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment (claim 1)

enabling the payer who executed the check. the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check register information of the executed check at every point along a check clearing process in order determine to between correspondence check register information stored in said database and the executed check presented for payment

fourth instruction enabling the payer who means for enabling the executed the check, the payer who executed the payee of the executed check, the payee of the check, the payee bank, the

executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process (claim 1)	drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process
fifth instruction means for searching and capturing check register information for abandoned property subject to escheat (claim 2)	searching and capturing check register information for abandoned property subject to escheat
sixth instruction means for automatically polling check register information for storage on said database (claim 3)	automatically polling check register information for storage on said database
seventh instruction means for performing a reconciliation of check registration	performing a reconciliation of check registration information

information for payers who executed checks (claim 4)	
eighth instruction means for locating lost, stolen, misplaced items and items not presented and that remain outstanding (claim 5)	locating lost, stolen, misplaced items and items not presented and that remain outstanding
ninth instruction means for archiving and storing check register, matching data, verification data and authentication data for up to a period of seven years (claim 6)	archiving and storing check register, matching data, verification data and authentication data for up to a period of seven years
eleventh instruction means for making a credit history compilation for a payer who executes checks based upon check register information (claim 19)	making a credit history compilation for a payer who executes checks based upon check register information
twelfth instruction means for compiling a	compiling a behavior matrix for payers who

behavior matrix for

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payers who execute checks based upon check register information (claim 20)	execute checks based upon check register information
fourteenth instruction means for enabling payers who execute checks to view their check register information in real- time (claim 26)	enabling payers who execute checks to view their check register information in real-time
meansfordemodulatingcheckregisterinformationfromatelephonecarriersignal (claim 9)	demodulating check register information from a telephone carrier signal

Pet. 26–32.

As for the second step of identifying the corresponding structure, we agree with Petitioner that the specification of the '640 patent fails to provide adequate corresponding structure for performing these functions. See Pet. 36–60. "A patent applicant who employs means-plus-function language 'must set forth in the specification an adequate disclosure showing what is meant by that language." Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1367 (Fed. Cir. 2008) (quoting In re Donaldson, 16 F.3d at 1195). In cases such as this one, which involve a computer-implemented means-plus-function

limitation, courts have required "that the structure disclosed in the specification be more than simply a purpose computer or microprocessor." general Aristocrat, 521 F.3d at 1333. The specification must "disclose an algorithm for performing the claimed function." Net MoneyIN, 545 F.3d at 1367. The specification can express the algorithm "in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." Finisar Corp. v. DirecTV Grp., Inc., 523 F.3d 1323, 1340 (Fed. Cir. 2008) (internal citation omitted). Simply disclosing software, however, "without providing some detail about the means to accomplish the function[,] is not enough." Id. at 1340–41 (citation omitted).

As claim 1 makes clear, the "instruction means for" limitations are "web-based computer program code" executed on the processor in the server. *See* Ex. 1001, 16:61–17:4. Because the "instruction means for" are software running on a processor, the specification must also disclose an algorithm.³ *Net MoneyIN*, 545 F.3d at 1367.

³ Because the '640 patent requires a server computer specifically programmed to carry out the recited functions associated with the various "instruction means for," we determine that the exception to the algorithm requirement, set forth in *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011), for situations involving functions that can be accomplished by "any general purpose computer without special programming," does not apply.

We agree with Petitioner that the specification of the '640 patent fails to provide an adequate algorithm for the "instruction means for" limitations identified above. For example, with respect to the "first instruction means for permitting a payer who executes a check for payment to enter and store check register information relating to the executed check in said database," we agree with Petitioner that there does not appear to be a step-by-step explanation, in any way shape or form, of how the web-based code would both allow a person to enter and store the recited information. See Pet. 36-39; Ex. 1004 ¶¶ 72-79. Instead, we agree with Petitioner that all that appears is a generalized recitation of the function, and an indication that the software can perform it. See Ex. 1001, 6:9-15, 10:1-9, 10:16-26. As Petitioner notes, the fact that a person of ordinary skill might understand how to write code to perform these functions is not relevant. See Blackboard, Inc. v. Desire2Learn, Inc., 574 F.3d 1371, 1385 (Fed. Cir. 2009) ("A patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function.").

Patent Owner's reliance on the '640 patent as a whole, without any particular citation or argument, is not persuasive to the contrary. We agree with Petitioner that Patent Owner's vague and conclusory reference to the entirety of the '640 patent violates 37 C.F.R § 42.23, which requires a party's briefing to provide "[a] full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence including material facts, and the governing law, rules, and precedent." We further determine that this vague reference also amounts to an improper incorporation by reference. *See* 37 C.F.R § 42.6(a)(3). Accordingly, we determine Patent Owner's arguments are insufficient to overcome the significant and persuasive evidence that Petitioner has submitted establishing that the meansplus-function elements lack corresponding structure. *See Tobii Tech. AB v. Eye Tribe APS*, No. C 13-05877-SBA, 2016 WL 269890, at *4 (N.D. Cal. Jan. 22, 2016) (finding plaintiff's vague reference to prior art article incorporated by reference in patent as "ineffectual" to provide corresponding structure).

We also agree with Petitioner that it has shown, by a preponderance of the evidence, that the other "means for" limitations of claims 1-9, 19, 20, and 26 identified in the Petition similarly contain limitations that lack adequate corresponding structure in the specification. See Pet. 39-60; Ex. 1004 ¶¶ 80-164. As for claims 10–18 and 25, those claims depend from at least one claim that contains a limitation that has been shown to lack adequate corresponding structure. Accordingly, based on the foregoing discussion, we agree that Petitioner has shown, by a preponderance of the evidence, that claims 1-20, 25, and 26 are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2 because the '640 patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for the meansplus-function limitations in those claims.

III. CONCLUSION

We have reviewed the information in the Petition as well as Patent Owner's arguments and evidence. With the record now developed fully, we have determined that Petitioner has shown by a preponderance of the evidence that (i) claims 1–26 are directed to patent-ineligible subject matter, and (ii) claims 1–20, 25, and 26 are indefinite for failing to disclose adequate structure.

IV. ORDER

For the foregoing reasons, it is

ORDERED that, based on a preponderance of the evidence, claims 1–26 of the '640 patent are held unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of it must comply with the notice and service requirements of 37 C.F.R. § 90.2.

For PETITIONER:

Natasha H. Moffitt Holmes J. Hawkins III Abby L. Parsons KING & SPALDING LLP nmoffitt@kslaw.com hhawkins@kslaw.com aparsons@kslaw.com

For PATENT OWNER:

John W. Goldschmidt, Jr. Thomas J. Maiorino FERENCE AND ASSOCIATES jgoldschmidt@ferencelaw.com tmaiorinolaw@comcast.net

APPENDIX C

Trials@uspto.gov 571-272-7822 Paper 38 Entered: July 23, 2018

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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, and FEDERAL RESERVE BANK OF ST. LOUIS, Petitioner,

v.

BOZEMAN FINANCIAL LLC, Patent Owner.

Case CBM2017-00036 Patent 8,768,840 B2

Before MICHAEL W. KIM, WILLIAM V. SAINDON, and KEVIN W. CHERRY, *Administrative Patent Judges*.

CHERRY, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

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, and Federal Reserve Bank of St. Louis ("Petitioner") filed a Petition (Paper 1, "Pet.") seeking a covered business method patent review of claims 1-20 of U.S. Patent No. 8,768,840 B2 (Ex. 1001, "the '840 patent" or the "challenged patent") under Section 18 of the Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284, 331 (2011) ("AIA"). Petitioner supports its contentions that the claims are unpatentable with the Declaration of Thomas M. Conte, Ph.D. (Ex. 1007),

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and its contentions that it was charged with infringement with the Declaration of Richard M. Fraher (Ex. 1008). Patent Owner, Bozeman Financial LLC, filed a Preliminary Response (Paper 5, "Prelim. Resp."). Patent Owner submitted the Declaration of William O. Bozeman, III with its Preliminary Response. Paper 6 ("First Bozeman Decl.").

On May 19, 2017, pursuant to our authorization, Petitioner filed a Reply to Patent Owner's Preliminary Response on the limited issue of whether Petitioner has standing to bring this proceeding. Paper 8 ("Reply"). With its Reply, Petitioner provided a second Declaration of Richard M. Fraher (Ex. 1023). On May 26, 2017, also pursuant to our authorization, Patent Owner filed a Sur-Reply on the limited issue of standing. Paper 12 ("Sur-Reply"). Patent Owner submitted a second Declaration of William O. Bozeman, III in support of its Sur-Reply. Paper 13 ("Second Bozeman Decl.").

Pursuant to 35 U.S.C. § 324, in our Decision to Institute, we instituted this proceeding as to claims 1– 20 on all asserted grounds. Paper 22 ("Dec.").

After the Decision to Institute, Patent Owner filed a Patent Owner Response (Paper 24, "PO Resp."), and Petitioner filed a Reply to the Patent Owner Response (Paper 27, "Pet. Reply"). Patent Owner supported its Response with a third Declaration of William O. Bozeman, III (Ex. 2003) ("Third Bozeman Decl.").

Patent Owner also filed a Contingent Motion to Amend. Paper 25 ("Mot."). Petitioner filed an Opposition to the Motion to Amend. Paper 29 ("Opp."). Patent Owner filed a Reply in Support of its Motion to Amend. Paper 31 ("PO Reply"). Pursuant to our authorization, Petitioner filed a Sur-Reply to Patent Owner's Motion to Amend. Paper 33 ("Pet. Sur-Reply").

An oral hearing was held on April 5, 2018. Paper 37 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(b). This Decision is a Final Written Decision under 35 U.S.C. § 328(a) as to the patentability of the challenged claims. Based on the complete record, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–20 are unpatentable. We further *deny* Patent Owner's Motion to Amend.

A. Related Matters

Petitioner and Patent Owner represent that Petitioner has filed a covered business method patent review, CBM2017-00035, against a related patent, U.S. Patent No. 6,754,640 B2 ("the '640 patent," Ex. 1006). Pet. 6–7; Paper 7, 1. Petitioner has also filed a declaratory judgment action of non-infringement of both the '640 patent and the '840 patent—*Federal Reserve Bank of Atlanta et al. v. Bozeman Financial LLC*, Case No. 1:17-cv-00389 (N.D. Ga.). Paper 7, 2.

B. Standing to File a Petition for Covered Business Method Patent Review

A petition for covered business method review must set forth the petitioner's grounds for standing. 37 C.F.R. § 42.304(a). Rule 42.304(a) states it is Petitioner's burden to "demonstrate that the patent for which review is sought is a covered business method patent, and that the petitioner meets the eligibility requirements of § 42.302." Id. One of those eligibility requirements is that only persons (or their privies) who have been sued or charged with infringement under a patent are permitted to file a petition seeking a covered business method patent review of that patent. AIA § 18(a)(1)(B); 37 C.F.R. § 42.302(a). Under our rules, "[c]harged with and infringement means а real substantial controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court." 37 C.F.R. § 42.302(a).

The Declaratory Judgment Act provides that "[i]n a case of actual controversy within its jurisdiction, ... any court of the United States, upon the filing of an appropriate pleading, may declare the rights and other legal relations of any interested party seeking declaration." 28U.S.C. § such 2201(a). In MedImmune, Inc. v. Genentech, Inc., the Supreme Court stated that the test for whether an "actual controversy" exists is "whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment." 549 U.S. 118, 127 (2007) (internal quotation marks omitted).

Although it relaxed the test for establishing jurisdiction, *MedImmune* "did not change the bedrock rule that a case or controversy must be based on a *real*

and *immediate* injury or threat of future injury that is caused by the defendants—an objective standard that cannot be met by a purely subjective or speculative fear of future harm." Prasco, LLC v. Medicis Pharm. Corp., 537 F.3d 1329, 1339 (Fed. Cir. 2008). Thus, explained post-MedImmune courts have that "jurisdiction generally will not arise merely on the basis that a party learns of the existence of a patent owned by another or even perceives such a patent to pose a risk of infringement, without some affirmative act by the patentee." SanDisk Corp. v. STMicroelecs., Inc., 480 F.3d 1372, 1381 (Fed. Cir. 2007). Instead, courts have required "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." Hewlett-Packard Co. v. Acceleron LLC, 587 F.3d 1358, 1363 (Fed. Cir. 2009).

In this case, Patent Owner has not sued Petitioner for infringement. Instead, Petitioner contends that Patent Owner charged it with infringing the '840 patent. Pet. 37–40. Petitioner submits, supported by the testimony of Mr. Fraher, that Patent Owner contacted Petitioner by telephone, in January 2016, and contended that Petitioner was infringing the '640 and '840 patents. *Id.* at 38 (citing Ex. 1008 ¶¶ 2, 4, 5). Petitioner also asserts that Patent Owner indicated that it intended to seek fees for the alleged infringement. *Id.* Petitioner argues that Patent Owner continued to contact it about potentially licensing the '640 and '840 patents. *Id.* Petitioner also provides an infringement claim chart Patent Owner sent Petitioner, mapping Petitioner's conduct to the claims of the '840 patent. *Id.* at 38–39 (citing Ex. 1022, 000001-5).

In its Patent Owner Response, Patent Owner contends "Petitioner's unclean hands and deceptive actions, along with the fact the only controversy regarding infringement was created and induced by the Petitioner's own bad faith, should bar it from this forum." PO Resp. 17. To support this contention, Patent Owner argues that it "had a 15 year relationship with the Petitioner." Id. at 13. Patent Owner claims that its discussions with Petitioner have only been about a "cooperative business arrangement" with Petitioner. Id. Patent Owner argues that it only discussed infringement at Petitioner's "urging" and that it never had any interest in litigation. Id. at 13-14. Patent Owner asserts that Petitioner had no fear that it infringed the '840 patent. Id. at 14-15. Patent Owner further argues that Petitioner "misled" it, because Petitioner never informed Patent Owner that Petitioner thought that the '840 patent was invalid, and Petitioner never informed Patent Owner that it intended to file these proceedings. Id. at 15–16. Patent Owner asserts that "[t]hese lack of disclosures, along with the inducement of Patent Owner to present infringement allegations," were because "Petitioner was entrapping the Patent Owner to present such allegations as to the '840 Patent . . . in order to gain standing." Id. at 16.

In its Reply, Petitioner disputes Patent Owner's characterization of the events that took place in their negotiations in 2016 and early 2017. Reply 1–5. Petitioner points to the testimony of Mr. Fraher about

the details of the discussions that took place before the parties signed their NDA, including confidential discussions that took place between the parties, and detailing Patent Owner's actions through the course of those discussions. *Id.* (citing Ex. 1023 ¶¶ 1–14).

We have reviewed Petitioner's and Patent Owner's submissions and supporting evidence, and we determine that Petitioner has established sufficiently the facts, taken together, demonstrate that it has standing to bring this covered business method review. Here, it is undisputed that Patent Owner contacted Petitioner in October 2014 and the parties entered into lengthy discussions regarding the potential licensing of the '840 patent. See Ex. 1008 ¶¶ 4-8; Ex. 1023 ¶¶ 3-7; First Bozeman Decl. ¶¶ 7-14. In April 2016, Patent Owner sent Petitioner a claim chart mapping existing services offered by Petitioner to claims of the '840 patent. See Ex. 1022, 1 (seeking licensing discussions), 2–5 (claim chart of '840 patent). Although Patent Owner attempts to characterize these communications as an effort to reach a business partnership (PO Resp. 14), the email's statement that Patent Owner sought a "commercially reasonable treatment" and mapped *existing* products to claim 1 of the '840 patent suggest otherwise (Ex. 1022, 1-5), and, in any case, is, at a minimum, "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." Hewlett-Packard Co., 587 F.3d at 1363.

Furthermore, the April 2016 communication and claim chart, Patent Owner's September 29, 2016 communication and Memorandum and Proposal repeatedly references the "Bozeman patents" collectively (including both the '640 and '840 patents), and threaten litigation. *See, e.g.*, Ex. 1024¹, 1. For example, in the September 29, 2016 email from Patent Owner's counsel to Mr. Fraher, Patent Owner's counsel states:

Pursuant to our ongoing discussions regarding the Bozeman patent dispute with the [Federal Reserve Banks ("FRB")] and in the interest of attempting to move this process along at a more rapid pace we provide the attached Proposal, Memorandum, Appendix and revised preliminary Claim Chart for consideration by the Federal Reserve in addressing the current divide on past usage and rents due by the FRB.... As we have been going at this since late 2014 and as the Bozeman patents useful life continues to tick away, we are respectfully requesting that the FRB use best efforts to review the attached and to set up a follow-up meeting or conference session in the near future. If we cannot get to that point, it may leave [Mr. Bozeman] with little alternate but to begin to head down an enforcement path that would most likely be very disruptive. ... We remain very flexible in discussing alternative approaches but do want to point out the time

¹ Patent Owner has filed a redacted version of Exhibit 1024 as Exhibit 2011 in the PTAB E2E System.

sensitivities involved in [Mr. Bozeman's] opening proposal.

Ex. 1024, 1 (emphasis added).

Attached to this email is Patent Owner's Memorandum and Proposal of Bozeman Financial LLC to the Federal Reserve Bank ("FRB") ("Memorandum"). Id. at 2. The Memorandum repeatedly alludes to, and openly discusses, the parties' dispute regarding whether Petitioner's systems infringe the Bozeman patents. See, e.g., id. at 9 (alleging "when Bozeman first made known his IP to the FRB, that the FRB was in the process of updating its systems from its dated legacy methods to those anticipated by the Bozeman I.P.," and noting, with respect to the "Bozeman patents," that the parties have "differing views of its applicability to the current and past FRB systems and service offerings"), 9-10 (noting "Bozeman[] asserts that a relatively basic reading of the Bozeman patents readily shows that . . . [Petitioner's] systems ... fit well within the inventions of the Bozeman IP"), 10 (asserting Petitioner's "argument and its related technical analysis have not persuaded Bozeman and his advisors that the Bozeman interpretation of the patents is not the more likely outcome to be upheld if infringement litigation were to be undertaken"), 12 (discussing "the Bozeman interpretation of the patents;" noting that "[w]e believe that Bozeman and the FRB are at a critical crossroad in determining if they can reach an agreement recognizing that each side believes it has valid and determinative arguments and analysis to defeat the other's claims;"

and arguing that "with the stakes so high the relevant question is it more practical to compromise and reach a fair accord, or is it in the best interest of either party to litigate these issues on multiple fronts over the next 1-5 years"), 16-18 (discussing "settlement criteria which would substantially discount the totals from traditional patent damages").

We note that the context for these statements significantly enhances their weight in our analysis. This Memorandum was sent at the culmination of almost two years of talks between the parties, including numerous calls and a technical presentation by Petitioner on how its systems operated, and why they did not infringe. See Ex. 1005 ¶¶ 4–6 (discussing early talks between the parties); Ex. 1014 ¶¶ 7–11 (discussing the parties' meetings and discussions leading up to the Memorandum). Rather than back down from its previous assertions, Patent Owner repeatedly asserts, in the Memorandum, that Petitioner's systems are covered by (i.e., infringe) the Moreover, Bozeman patents. the email and Memorandum make clear that the time for Petitioner to license the Bozeman patents was running short, and that if Petitioner did not take a license that Patent Owner would begin to "head down an enforcement path" (Ex. 1024, 1), which could involve "litigat[ing] these issues on multiple fronts over the next 1-5 years," id. at 12.

Mr. Bozeman's efforts to re-characterize these actions in his Declarations (*see, e.g.*, Second Bozeman Decl. $\P\P$ 4, 18; Third Bozeman Decl. \P 11), are inconsistent with the Memorandum and other written

communications he sent to Petitioner, and is contradicted by the testimony of Mr. Fraher. In view of the Memorandum and other written communications, we find Mr. Bozeman's assertions, in his Declarations, that he never threatened to sue not to be credible, and give that testimony little weight.

"[A] specific threat of infringement litigation by the patentee is not required to establish jurisdiction, and a 'declaratory judgment action cannot be defeated simply by the stratagem of a correspondence that avoids magic words such as 'litigation' or 'infringement."" ABB Inc. v. Cooper Indus., LLC, 635 F.3d 1345, 1348 (Fed. Cir. 2011) (quoting Hewlett-Packard, 587 F.3d at 1362). But, of course, if "a party has actually been charged with infringement of the patent, there is, necessarily, a case or controversy adequate support [declaratory to iudgmentl jurisdiction." Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 96 (1993). Here, we find the statements in the Memorandum actually charge Petitioner with infringement of the '840 patent, which is sufficient to give rise to declaratory judgment jurisdiction. Id.

We are unpersuaded by Patent Owner's arguments regarding the subjective understanding of the parties. PO Resp. 13–15. Most importantly, it is irrelevant whether Patent Owner subjectively believed Petitioner was infringing or actually intended to sue. "The test [for declaratory judgment jurisdiction in patent cases], however stated, is *objective*. . . ." *Hewlett-Packard*, 587 F.3d at 1364 (quoting *Arrowhead Indus. Water, Inc. v. Ecolochem, Inc.*, 846 F.2d 731, 736 (Fed. Cir. 1988)). "Indeed, it is

the objective words and actions of the patentee that are controlling." BP Chems. v. Union Carbide Corp., 4 F.3d 975, 979 (Fed. Cir. 1993). Thus, conduct that can be reasonably inferred as demonstrating intent to enforce a patent can create declaratory judgment jurisdiction. Hewlett-Packard, 587 F.3d at 1364. Here, when Patent Owner's statements, demands, and actions are considered collectively, it is difficult to reasonably infer any conclusion other than Patent Owner was demonstrating an intent to enforce its patents. Moreover, Patent Owner's contentions that it was only seeking a forward-looking agreement, see PO Resp. 13–14, are not supported by the record. The Memorandum repeatedly refers to seeking compensation for past use of the Bozeman patents. See Ex. 1024, 18 ("This option allows for a one-time payment to cover all of the past rents due. . . .").

As for Patent Owner's argument that it was somehow entrapped by Petitioner, we note that (a) all through its negotiations with Petitioner, Patent Owner was represented by counsel (see First Bozeman Decl. ¶ 6; Ex. 1022, 1; Ex. 1024, 1), (b) Patent Owner's head, Mr. Bozeman, appears to be a sophisticated businessman (First Bozeman Decl. ¶¶ 2, 3; Ex. 1024, 4–5), and (c) there is no credible evidence showing that it was coerced into making the statements it made in the Memorandum. Moreover, the law was clear at the time the statements were made that they could give rise to declaratory judgment jurisdiction. See Hewlett-Packard, 587 F.3d at 1362 ("But it is implausible (especially after MedImmune and several post MedImmune decisions from this court) to expect that a competent lawyer drafting such correspondence for a patent owner would identify specific claims, present claim charts. and explicitly allege infringement."). In addition, Patent Owner fails to explain why Petitioner had any legal obligation to reveal to Patent Owner that it believed the '840 patent was invalid or that it planned to file these CBM proceedings. See, e.g., Nat'l Westminster Bank, U.S.A. v. Ross, 130 B.R. 656, 679 (S.D.N.Y. 1991) ("Where parties deal at arms length in a commercial transaction, no relation of confidence or trust find the existence of sufficient to а fiduciary will relationship arise absent extraordinary circumstances."); see also Williams v. Dresser Indus., Inc., 120 F.3d 1163, 1167–68 (11th Cir. 1997) (no general duty to disclose in commercial transactions under Georgia law).

Accordingly, we conclude that Petitioner has demonstrated that it has standing to bring this covered business method review.

C. The Challenged Patent

The '840 patent, titled "Universal Positive Pay Match, Authentication, Authorization, Settlement, and Clearing System," describes a universal positive pay match database to reduce financial transaction fraud. Ex. 1001, [54], Abstract. The '840 patent explains that check fraud is a significant problem in the financial system, and although many solutions have been proposed, "[o]ne area where [the solutions] all fall short is in the elimination of check fraud." *Id*. at 1:64–65. The patent acknowledges the existence of numerous prior art systems aimed at verifying financial transactions and combatting checking fraud: "[m]any techniques have been developed to inhibit check fraud, such as Positive Pay [and] different forms of electronic check verification and electronic check presentment." *Id.* at 1:57–60. The '840 patent explains that positive pay services "have been available from individual banks" for a number of years, and are "recognized as an effective service to fight against check fraud." *Id.* at 13:11–12, 13:22–23. According to the patent, a

check generating customer [using a prior art positive pay service] generally uploads a file of transaction records associated with financial transactions daily to the bank of all checks written that day. When checks drawn on the customers['] accounts are presented to the bank, their database is queried. If the transaction record for a check has been tampered with or if transaction record includes an unauthorized check number, the transaction record will be rejected.

Id. at 13:14–21.

The patent explains that "[t]he existing positive pay services are bank specific," meaning that "only a bank's own account holders can utilize it and take advantage of it." *Id.* at 13:30–32. The patent suggests that it will overcome this perceived problem by offering a "universal" positive pay system that "can be used by both account holder members and nonmembers," and "accessed by customers, payers, payees, payee banks, drawee banks, and banking institutions intermediate the payee banks and the drawee banks for issuing and tracking transaction records associated with financial transactions at every point along the financial transaction clearing process." *Id.* at 13:32–39. Figure 5A of the '840 patent is reproduced below.

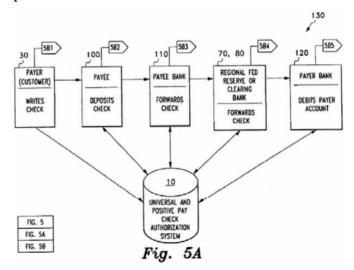


Figure 5A illustrates a flow diagram of the universal positive pay database method for checking accounts according to the claimed invention. *Id.* at 7:10–11. Figure 5A shows that "each participant in the check clearing process (payer customer 30, payee 100, payee bank 110, Federal Reserve 80, clearing bank 70, or payor bank 120), participates in a [universal positive pay database ("UPPD")] method 130 used by a payer (customer) 30 for maintaining

check payment control and preventing check fraud." *Id.* at 17:56–61. According to the '840 patent,

[t]he UPPD method 130 includes a series of steps in which payer 30 uploads check information to the UPPD system 10, payee 100 deposits check in payee bank 110, payee bank 110 checks the check against the UPPD database 20 in the UPPD system 10, check is deposited in Federal Reserve 80 or clearing bank 70, which checks it against the UPPD database 20, payer bank 120 receives check and checks it against the UPPD database 20 and reports back to the UPPD system 10 that the check has been debited from payer's 30 account.

Id. at 17:61–18:3.

D. Illustrative Claim

Petitioner challenges all twenty claims of the challenged patent. Claims 1, 8, and 15 are independent claims. Claim 1 is illustrative of the claimed subject matter:

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.

Ex. 1001, 28:39–29:8.

E. Instituted Ground of Unpatentability

We have instituted review on the sole asserted ground—that claims 1–20 are unpatentable as directed to patent-ineligible subject matter under 35 U.S.C. § 101.

II. DISCUSSION

A. Claim Construction

In a covered business method patent review, a claim term 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. § 42.300(b); *Cuozzo Speed Techs., LLC v. Lee,* 136 S. Ct. 2131, 2144 (2016); *Versata Dev. Grp., Inc. v. SAP Am., Inc.,* 793 F.3d 1306, 1328 (Fed. Cir. 2015).

We construe the challenged claims according to these principles. Petitioner proposes constructions only for the term "behavior matrix." Pet. 41–43. However, we determine that no terms require express construction for this Decision.

B. Covered Business Method Patent

The AIA defines a "covered business method patent" as "a patent 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" AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). Congress provided a specific exception to this definition of a covered business method patent-"the term does not include patents for technological inventions." Id. To determine whether a patent is eligible for a covered business method patent review, the focus is on the claims. See Unwired Planet, LLC v. Google Inc., 841 F.3d 1376, 1381 (Fed. Cir. 2016).

For the reasons set forth below, we conclude that the challenged patent meets the definition of a covered business method patent.

1. Financial Product or Service

One requirement of a covered business method patent is for the patent to "claim[] 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." AIA § 18(d)(1); 37 C.F.R. § 42.301(a).

Petitioner contends the challenged patent meets the financial product or service requirement, because the patent claims computer-implemented methods for detecting fraud or errors in financial transactions. Pet. 27–30. Patent Owner does not dispute Petitioner's assertions.

We agree with Petitioner that the '840 patent meets the financial product or service requirement. For example, claim 1 and its dependents are generally directed to "[a] computer implemented method for detecting fraud in financial transactions during a payment clearing process," comprising: (a) receiving a first record relating to a financial transaction: (b) storing that record in a database accessible to each party to the payment clearing process; (c) receiving a second record relating to the same financial transaction; (d) determining whether there is a match between the first and second records; and (e) sending a notification based on the outcome of that determination. Pet. 28. We agree with Petitioner that the detecting fraud in financial transactions during a payment clearing process meets the financial product or service requirement of Section 18 of the AIA. See, e.g., Jack Henry & Assocs., Inc. v. DataTreasury Corp., Case CBM2014-00056, slip op. 8 (PTAB July 10, 2014) (Paper 17) (method and system for storage and verification of checks financial in nature). Accordingly, the financial product service or requirement is satisfied.

2. Exclusion for Technological Inventions

Section 18 of the AIA states that the term "covered business method patent" does not include patents for "technological inventions." AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). To determine whether a patent is for a technological invention, we consider "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). The following claim drafting techniques, for example, typically do not render a patent a "technological invention":

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and nonobvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012).

Petitioner submits that no "technological feature" of any of independent claims 1, 8, or 15 is novel and non-obvious. Pet. 31. Petitioner argues that the only technological features recited in claim 1 are a database, a computer, a point-of-sale terminal, a portable electronic device, and a notification. *Id.* Petitioner also submits that the only technological features recited in claim 8 are a computer having a database, a network interface, and an electronic notification. *Id.* Petitioner further argues that the only technological features recited in claim 15 are a computer having a processor, an area of main memory, and a storage device having a database; a point of sale terminal; a portable electronic device; and a notification. *Id.* Petitioner asserts that "[t]hese technological features are not novel or non-obvious — they are generic, conventional computer technologies that were well known at the time the provisional application was filed in October 2000." *Id.* (citing Ex. 1007 ¶¶ 32–38).

Petitioner further contends that the '840 patent does not provide a technical solution to a technical problem. *Id.* at 34–37. Petitioner argues that the '840 patent addresses the problem of reducing financial transaction fraud and verifying checks and other financial instruments and documents, which are business problems, not technical problems. *Id.* at 34– 35. Further, Petitioner contends that solution, providing multiple users with access to a positive pay system at every point along the check clearing process, is not a technical solution to this problem. *Id.* at 35.

Patent Owner argues that its claimed invention qualifies as a technological invention because "[t]he core of the claimed invention of the '840 Patent is the specific configuration of the UPPD system, files and tools which solve the technical problems with the timing and fraud related to clearing paper checks." PO Resp. 7–8. Patent Owner contends that "this novel system for reducing check fraud is wholly based in technology in nature and ahead of its time." Id. at 8. Patent Owner argues that, even if transaction fraud is a business problem, "that does not negate the technological problems solved by the claimed invention." Id. Patent Owner asserts that, in our Institution Decision, we "confuse[d] the use of the invention and effect of the problem with the actual problem—namely, accurate and faster check clearing which also eradicates check fraud by configuration and utilization of the underlying technology." Id. Patent Owner contends that the claims of the '840 patent solve "a technological problem, that being the failure of the prior art to accurately match, authenticate, authorize, settle and clear a check in real-time in order to eradicate paper check fraud prior to the conclusion of the clearing process, while also speeding up the accuracy and settlement of check payments, a technological goal admitted as much by the Petitioner in expressing its own desire to assist in developing such a system." Id. at 9. Patent Owner points to statements related to various payment systems developed by Petitioner to contend that the claimed inventions are technological. Id. at 9-11. Patent Owner argues that the fact that its system is implemented on a conventional computer is irrelevant, because the system overall is novel. Id. at 11 - 13.

We determine that the technological features of the claimed steps are directed to using known technologies. *See* Office Trial Practice Guide, 77 Fed. Reg. at 48,764 (indicating use of known technologies does not render a patent a technological invention). For example, independent claim 1 recites only "a database," "a computer," "a point-of-sale terminal," "a portable electronic device," and "a notification" (Ex. 1001, 28:39–29:8), and none of these components are used a non-conventional manner. We agree with Petitioner that the subject matter of independent claim 1, as a whole, does not require any specific, unconventional software, computer equipment, processing capabilities, or other technological features to produce the required functional result. *See* Ex. 1007 ¶¶ 32–38.

We also agree with Petitioner that the challenged patent addresses the business problem of fraud by providing multiple users access to a positive pay system at every point along the financial transaction process, which is not a technical solution to a technical problem. *See Nautilus Hyosung Inc. v. Diebold, Inc.*, Case CBM2016-00034, slip op. 11–14 (PTAB Aug. 22, 2016) (Paper 9) (characterizing "reducing the risk of [check] fraud" as a "business problem").

Patent Owner's arguments do not persuade us otherwise, because they are not commensurate with the scope of claim 1. In particular, Patent Owner's arguments about the "specific configuration" of the "UPPD system," "files," and "tools" do not reflect the actual limitations of claim 1. Claim 1 does not require any specific configuration for the "system," other than a database on a computer connected to a network that can receive data. As for the "files," the only limitation recited in the claim is that the files have at least two of the same parameters. We agree with Petitioner that these are extremely conventional arrangements for a database system, and do not amount to "specific configuration," as Patent Owner argues. See Ex. 1007 $\P\P$ 33–41. This use of generic computer components in a conventional way does not render a patent a technological invention. See Office Trial Practice Guide, 77 Fed. Reg. at 48,764.

As for Patent Owner's contentions about problems with clearing paper checks, claim 1 is not limited to paper checks and involves financial transactions generally. Thus, claim 1 does not reflect any specific solution to technological problems in the clearing of paper checks, as Patent Owner contends. As for Patent Owner's argument that we confuse the use of the invention and effect with the "actual" problem, we disagree. The '840 patent is clear that financial transaction fraud is business problem that costs participants a great deal of money. See Ex. 1001, 1:27-52. Moreover, we agree with Petitioner that even if financial transaction fraud reducing were a technological problem, the '840 patent does not offer a technological solution. Pet. Reply 5. Instead, it merely uses a conventional database that is accessible to multiple users along the transaction process. This does not qualify as a technological solution to a technological problem. See Monster Worldwide Inc. v. Career Destination Dev., LLC, Case No. CBM2014-00077 (PTAB Aug. 20, 2014) (Paper 9) (finding that "creating a centralized location for all employers and candidates to search" did not involve a technical solution to a technical problem).

Accordingly, we conclude that the subject matter of at least independent claim 1 does not have a technological feature that solves a technical problem using a technical solution, and is, therefore, not a technological invention. See Blue Calypso LLC v. Groupon, Inc., 815 F.3d 1331, 1341 (Fed. Cir. 2016) (finding that using general computer components to carry out the claimed process does not "rise[] above the general and conventional" and "cannot change the fundamental character of [patent owner's] claims").

3. Eligible for Covered Business Method Patent Review

Having determined that the challenged patent 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 and does not fall within the exception for technological inventions, we determine that the challenged patent is eligible for a covered business method patent review

C. Asserted Ground that Claims 1–20 Are Unpatentable Under § 101

Petitioner asserts each of claims 1–20 is unpatentable for being directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 43–67. Petitioner supports its contentions with citations to the Declaration of Dr. Conte (Ex. 1007).

1. Principles of Law

A patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The Supreme Court has held that this statutory provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014); Gottschalk v. Benson, 409 U.S. 63, 67 (1972) ("Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work."). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the practical application of these concepts may be deserving of patent protection. Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 72 (2012).

In *Alice*, the Supreme Court reaffirmed 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 those concepts." Alice, 134 S. Ct. at 2355. The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." Id. If the claims are directed to a patentineligible concept, the second step in the analysis is to consider the elements of the claims "individually and 'as an ordered combination' to determine whether the additional elements [that] 'transform the nature of the claim' into a patent-eligible application." Id. (quoting Mayo, 566 U.S. at 77). 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.* (quoting *Mayo*, 566 U.S. at 71–72) (alterations in original).

Noting that the two stages involve "overlapping scrutiny of the content of the claims," the Federal Circuit has described "the first-stage inquiry as looking at the 'focus' of the claims, their 'character as a whole,' and the second-stage inquiry (where reached) as looking more precisely at what the claim elements add—specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which (by assumption at stage two) the claim is directed." *Electric Power Grp, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

Furthermore, the prohibition against patenting an abstract idea "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant postsolution activity." *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation and internal quotation marks omitted); *see Electric Power*, 830 F.3d at 1355 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.").

2. Step 1 — Whether the Claims Are Directed to an Abstract Idea

In determining whether a method or process claim recites an abstract idea, we must examine the claim as a whole. Alice, 134 S. Ct. at 2355 n.3. Petitioner submits that claim 1 is representative. Pet. 46. More specifically, Petitioner asserts that claim 1, as a whole, recites steps directed to collecting and storing financial transaction information, comparing received financial transaction information against the stored information, and notifying the parties of any matches or mismatches between the sets of financial transaction information. Id. (citing Ex. 1001, 28:39-29:8 (claim 1)). Petitioner contends that independent claims 8 and 15 recite substantially identical corresponding limitations, but add the step of providing a computer having a database. Id. Petitioner further asserts that the claims are "directed towards the abstract idea of financial transaction fraud or error detection, a fundamental economic practice," for "the abstract idea of collecting and analyzing information and presenting the results—simple steps that can be performed in the human mind or by a human using a pen and paper." Id. at 45.

We agree with Petitioner that claims 1–20 are drawn to an abstract idea. Specifically, we agree with Petitioner that the claims of the challenged patent are directed to collecting and analyzing information for financial transaction fraud or error detection. We note that Patent Owner does not dispute that claim 1 is representative or offer arguments directed specifically

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at claims 8 or 15. We agree with Petitioner that claim 1 is representative, and treat it as such.

For example, beginning with independent claim 1, the only specific items recited are a computer, a database, a point of sale terminal, and a portable electronic device. Ex. 1001, 28:39-29:8. The remainder of the claim is simply a method of collecting and analyzing information. As discussed above, the claimed method steps include (i) "receiving . . . a first record," (ii) "storing in a database ... said first record ...," (iii) "receiving ... a second record ...," (iv) where each of the first and second records have at least two parameters in common, (v) "determining ... when there is a match" between at least two of the parameters in the first and second records, (vi) "sending a notification to said payee bank ... with authorization to process said electronic financial transaction when said parameters match," and (vii) "sending a notification to said payee bank ... to not process said electronic financial transaction when said parameters do not match." Id. at 28:40-29:8. Thus, besides providing conventional computer technology in the form of computer, a database, a point of sale terminal, and a portable electronic device-all performing nothing more than their typical ordinary functions, the method consists of collecting, storing, analyzing, and transmitting information. We agree with Petitioner that claims 8 and 15 have similar limitations.

The specification reinforces the focus of claims 1, 8, and 15 on collecting and analyzing information: "The 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." Ex. 1001, 1:22–25. According to the specification, "[t]he present invention" includes a "UPPD database ... configured to store thereon transaction records associated with financial transactions associated with customers of the UPPD database." Id. at 5:29-34. Moreover, the specification explains that "[a] particular financial transaction is initiated between a payer and a payee by providing parameters associated with the particular financial transaction to the UPPD database." Id. at 5:36-38. In addition, the specification states that "[a] correspondence determination is made between the parameters associated with the particular financial transaction . . . and the parameters associated with the particular financial transaction provided to the UPPD database to initiate the particular financial transaction." Id. at 5:43–48. The participants in the financial transaction process "are able clearing to access the correspondence determination at every point along a financial transaction clearing process." Id. at 5:51–53.

Moreover, we are persuaded that the idea of reconciling transaction information is a well-known, routine economic practice commonplace in the financial services industry and is fundamentally abstract. Indeed, the specification further explains that the idea of reconciling financial information was a well-known, routine business practice commonplace in the financial industry. *See, e.g., id.* at 1:57–60, 2:4–14, 3:34–42, 3:47–58, 3:59–65.

We find this case indistinguishable from a number of cases that have found storing, displaying, and analyzing data, such as for loan application processing and fraud detection, to be abstract ideas. See Credit Acceptance Corp. v. Westlake Servs., 859 F.3d 1044, 1054-57 (Fed. Cir. 2017) (holding "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" to be abstract); Intellectual Ventures I LLC v. Capital One Fin. Corp., 850 F.3d 1332, 1340 (Fed. Cir. 2017) (finding claimed invention is directed to the abstract concept of collecting, displaying, and manipulating data of particular documents not patent eligible); FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093-94 (Fed. Cir. 2016) (holding that claims directed to "collecting and analyzing information to detect misuse and notifying a user when misuse is detected" are abstract); *Electric Power*, 830 F.3d at 1354 ("[M]erely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis."); Mortg. Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1324 (Fed. Cir. 2016) (holding that claims are abstract where they "recite nothing more than the collection of information to generate a 'credit grading' and to facilitate anonymous loan shopping"); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n,

776 F.3d 1343, 1347 (Fed. Cir. 2014) (identifying "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"); Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1367-69 (Fed. Cir. 2015) (determining claims adding generic computer components to financial budgeting not patent eligible); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333-34 (Fed. Cir. 2012) (holding that a "computer-aided" method for "processing information through a clearinghouse" for car loan applications is patent ineligible).

Patent Owner's arguments to the contrary do not persuade us otherwise. Patent Owner argues that we missed "key components of the invention," including "the timing, speed and accuracy of the universal matching of data, the authentication and settlement of the transaction and the notification mechanisms which are significant in the patented invention." PO Resp. 17. However, we do not discern any limitations in the claims, nor does Patent Owner identify them, related to timing, speed, or accuracy or even a particular "mechanism" for notification. To the extent Patent Owner contends that computerized methods are faster and more accurate and capable of sending notifications, the same is true of any computerized method, which has been clearly held not sufficient to take an otherwise abstract method out of the realm of abstract ideas.

Patent Owner attempts to argue that this case is similar to recent Federal Circuit cases finding claims related to improvements in computer functionality to be patent eligible, such as, Enfish, LLC v. Microsoft Corp., 822 F.3d 1327 (Fed. Cir. 2016), Trading Technologies International, Inc. v. CQG, Inc., 675 F. App'x 1001 (Fed. Cir. 2017) (non-precedential), McRO, Inc. v. Bandai, Namco Games America Inc., 837 F.3d 1299 (Fed. Cir. 2016), and Amdocs (Israel) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288 (Fed. Cir. 2016). Specifically, Patent Owner contends that "the '840 patent discloses a technical solution which embodies a new and unique system" for various entities "to present a checking-account payment to a 3rd party through a universal system which vastly improves the accuracy and efficiency of a payment clearing process." PO Resp. 18. As the court explained in Electric Power Group, Enfish

relied on the distinction made in *Alice* between, on one hand, computer-functionality improvements, and, on the other, uses of existing computers as tools in aid of processes focused on "abstract ideas" (in *Alice*, as in so many other § 101 cases, the abstract ideas being the creation and manipulation of legal obligations such as contracts involved in fundamental economic practices).

Elec. Power Grp., 830 F.3d at 1354. The court in *Electric Power Group* went on to explain that in

Enfish, "the claims at issue focused not on asserted advances in uses to which existing computer capabilities could be put, but on a specific improvement—a particular database technique—in how computers could carry out one of their basic functions of storage and retrieval of data." Id. With those distinctions in mind, it becomes apparent that the claims of the '840 patent fall on the abstract side of divide of using a computer as a tool exemplified by Electric Power Group, and not the non-abstract improvement in computer functionality exemplified by *Enfish*. In this case, there is no improvement in the operation of the computer. Instead, the computer is used as a tool to automate and improve an existing process-financial transaction clearing. The cases cited by Patent Owner-McRO, Amdocs, and Trading Technologies—are similar to Enfish, and suggest a similar result.

In McRO, the claims were directed to an "improvement ... allowing computers to produce 'accurate and realistic lip synchronization and facial expressions in animated characters' that previously could only be produced by human animators." 837 1313. The invention F.3d at realized this improvement "through 'the use of rules, rather than artists, to set the morph weights and transitions between phonemes." Id. The claims were deemed patent eligible because "the automation goes beyond merely 'organizing [existing] information into a new form' or carrying out a fundamental economic practice"; "[t]he claimed process uses a combined order of specific rules that renders information into a specific format that is then used and applied to create desired results: a sequence of synchronized, animated characters." *Id.* at 1315. In contrast, the claims here do not employ a specific set of rules, but instead recite a series of conventional steps—collecting, storing, analyzing, and sending information—to be performed in using conventional computer technologies. But "[c]laims directed to generalized steps to be performed on a computer using conventional computer activity are not patent eligible." *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC,* 874 F.3d 1329, 1337 (Fed. Cir. 2017) (citing Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343, 1348–49 (Fed. Cir. 2015)).

As for *Amdocs*, Patent Owner quotes extensively from Judge Reyna's dissenting opinion, but the majority opinion is of no help to Patent Owner. The majority opinion based its finding of on Step 2 of *Alice*. *Amdocs*, 841 F.3d at 1300. Thus, it is not a basis for finding the claims not directed to an abstract idea.

With respect to *Trading Technologies*, again, the court found the claims there, which were directed to improvements in existing graphical user interfaces, required "a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art." 675 F. App'x at 1004. No such specific improvement in computer functionality is present here.

Finally, Patent Owner argues that the claims at issue here are similar to claims in U.S. Bancorp v. Solutran, Inc., Case CBM2014-00076, slip op. at 13 (PTAB Aug. 7, 2014) (Paper 16), where the Board denied institution of a covered business method review. PO Resp. 22–25. We disagree. In Solutran, the Board denied institution concluding that the Petitioner had not shown that claims directed to a physical process of processing paper checks was not abstract. See Solutran, at 13. "It was significant to the Board's § 101 analysis in *Solutran* that the claim was for 'a method of processing paper checks, which is more akin to a physical process than an abstract idea." Care N' Care Ins. Co., Inc. v. Integrated Claims *Sys.*, *LLC*, Case CBM2015-00064, slip op. at 20 (PTAB) June 21, 2016) (Paper 24). Here, in contrast, the '840 patent claims are directed to a computer-implemented method for detecting fraud in financial transactions an electronic process, not a physical process. Thus, the reasoning of *Solutran* does not apply here.

The dependent claims specify: (1) what financial information may be stored in a database (claims 2, 4, 10, and 17), (2) various well-known financial transaction-types that may be used with method (claims 3, 9, and 16), and (3) variations of the processing steps recited in the independent claims (claims 5–7, 11–14, and 18–20). Petitioner asserts, and we agree, that none of these dependent claims add anything that would change the conclusion that the claims are directed to an abstract idea. See Pet. 49–51.

In view of the foregoing, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1-20 of the challenged patent are directed to a patent-ineligible abstract idea.

3. Step 2 — Whether the Challenged Claims Include Limitations that Represent Inventive Concepts

We turn to the second step of the *Alice* inquiry "and scrutinize the claim elements more microscopically" for additional elements that can "transform the nature of the claim" into a patent-eligible application of an abstract idea. Electric Power, 830 F.3d at 1353-54. That is, we determine whether the claims include an "inventive concept," i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. Alice, 134 S. Ct. at 2357. The relevant inquiry here is whether "additional substantive limitations ... narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself." Accenture, 728 F.3d at 1341 (internal quotations and citation omitted).

Further scrutinizing the recited system and method, Petitioner asserts, and we agree, there is nothing that appears to transform the nature of the claims into patent-eligible applications of an abstract idea. Pet. 57–65.

Patent Owner argues that the claims satisfy Step 2 of the *Alice* inquiry, because "[c]learing, processing and settling a check payment generally is much more

than the concept of storing information and presenting it as it involves many factors and steps for the start to finish process." PO Resp. 29. Patent Owner asserts that it "involves the transfer of currency in commerce," and that this result "does not just happen by the retrieval, collection and storage of data." Id. Patent Owner contends that the '840 patent is directed to a "unique system" that uses "disparate databases accessible from multiple data entry points" and "computerized systems with multi-factor authentication to gain a more efficient, more accurate system and with the result being faster, more secure payments by utilizing these systems." Id. at 30. Patent Owner argues that Petitioner failed to analyze the claims as an "an ordered combination," as required. Id. at 31. In particular, Patent Owner asserts that considered as a whole, "the claims are directed to particular methods through the use of process to produce a more accurate and timely financial transaction clearing process and settlement, and therefore meets the tests for inventive concept under Step 2 of the Alice tests by providing limitations that represent such inventive concepts." Id. at 31–32. Patent Owner asserts that "the Claim limitations of the '840 Patent go well beyond a mere technological environment, but actually combine to create a technological improvement to financial transaction and paper check methods of the prior art." Id. at 32. Patent Owner further cites various portions of the specification that it contends provide examples of "certain non-abstract, inventive concepts which are directed to technological improvements." Id. at 32-35

(citing Ex. 1001, 20:41–58, 22:30–67, 23:1–11, Figs. 13, 14, 26E).

Patent Owner further responds that Petitioner merely cites references to "disparate and unrelated elements," but none of the references taken individually or in combination teach or suggest all of the limitations claimed in the '840 patent. PO Resp. 38–39. In other words, Patent Owner argues that the claims '840 patent satisfy Step 2 of the *Alice* inquiry because they are novel and non-obvious. *Id.* at 35–37, 39.

We agree with Petitioner that the challenged claims fail to recite sufficient inventive concept to satisfy Step 2 of the *Alice* inquiry. First, the only recited technology in the claims of the '840 patent is a "computer," a "database," a "processor," an "area of main memory," a "storage device," a "network device," a "point-of-sale terminal," a "portable electronic device," and a "notification." Nothing in the claims, understood in light of the specification, appears to anything than require more 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. The Federal Circuit has repeatedly held that such invocations of computers and networks that are not even arguably inventive are "insufficient to pass the test of an inventive concept in the application" of an abstract idea. buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1353 (Fed. Cir. 2014); see, e.g., FairWarning, 839 F.3d at 1096 (holding that an "interface" and "microprocessor" are generic computer elements that

do not transform an otherwise abstract idea into patent-eligible subject matter); *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324– 25 (Fed. Cir. 2016) (holding that generic computer components, such as an "interface," "network," and "database," fail to satisfy the inventive concept requirement); *Intellectual Ventures I*, 792 F.3d at 1368 ("The recited elements, e.g., a database, a user profile . . . and a communication medium, are all generic computer elements."); *Content Extraction*, 776 F.3d at 1347–48.

Second, even limiting the claims to the particular technological environment of financial transaction processing, without more, would appear to be insufficient to transform the claims into patenteligible applications of the abstract idea. See Electric Power, 830 F.3d at 1354 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.") (citing Alice, 134 S. Ct. at 2358; Mayo, 566 U.S. at 71–72; Bilski, 561 U.S. at 610–11; Diamond v. Diehr, 450 U.S. 175, 191 (1981); buySAFE, 765 F.3d at 1355).

The specification acknowledges that the elements are well known. See Ex. 1001, 9:30–47; see also Ex. 1007 ¶¶ 39–41 (explaining how the technologies are conventional and generic).

Patent Owner's arguments do not persuade us otherwise. To begin with, claim 1, which is the only claim that Patent Owner argues, does not recite all the steps of the check clearing process, nor does it recite the transfer of currency. Thus, Patent Owner's arguments regarding the complexity of the check currency transfer process clearing and have insufficient grounding in the claims, and, thus, are not persuasive. Instead, as we discussed above in our Step 1 analysis, the claims are merely directed to collecting, storing, analyzing, and outputting data. We also are unpersuaded that the '840 patent system are directed to "disparate databases" and "multifactor authentication" to achieve "a more efficient, more accurate system" or "faster, more secure payments." PO Resp. 30. In particular, we determine not only Patent Owner has failed to point to where these concepts exist in the challenged claims, but, as best as we can ascertain, none of these concepts are recited anywhere in the claims. See RecogniCorp, LLC v. Nintendo Co., 855 F.3d 1322, 1327 (Fed. Cir. 2017) ("To save a patent at step two, an inventive concept must be evident in the claims."). Patent Owner's citations to the specification (PO Resp. 32–37), suffer from the same problem. Namely, the problem that "the *claim*—as opposed to something purportedly described in the specification—is missing an inventive concept." Two-Way Media, Ltd. v. Comcast Cable *Commc'ns*, *LLC*, 874 F.3d 1329, 1338 (Fed. Cir. 2017); see also Secured Mail Sols. LLC v. Universal Wilde, Inc., 873 F.3d 905, 912 (Fed. Cir. 2017) (finding "sender-generated identifier" was not an "inventive concept" because "[t]he claim language does not provide any specific showing of what is inventive about the identifier or about the technology used to generate and process it").

As for Patent Owner's argument that Petitioner failed consider the claims as an ordered combination, we disagree. Instead, we agree with Petitioner 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. At most, the claims require that these processes be executed on a generic computer, but this is insufficient. *See FairWarning*, 839 F.3d at 1097. Indeed, Patent Owner does not identify any particular inventive concept in the ordered combination, and we fail to discern any. *See Credit Acceptance*, 859 F.3d at 1057.

Finally, as for Patent Owner's contention that the claims are novel and non-obvious, that is not the same as saying that they have inventive concept. See Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1151 (Fed. Cir. 2016) (explaining that, although some overlap occurs, the analysis under § 101 differs from that under the other patent-validity statutes). Thus, the fact that the claims may be novel or non-obvious does not necessarily render them patent eligible. See Bilski, 561 U.S. at 610–11. As we explain above, we determine that there is nothing in the claims that elevates the claims beyond an abstract idea, so we are not persuaded by Patent Owner's argument that the method as whole may be novel or non-obvious.

Based on our review, we further determine that the dependent claims add nothing that would transform the claims into patent-eligible subject matter either. *See* Pet. 65–67. In view of the foregoing, based on the record before us, we determine that, when considered individually and "as an ordered combination," the claim elements appear to do no more than apply the abstract concept of collecting, storing, analyzing, and communicating information to reconcile financial information, and do not appear to recite anything in a manner sufficient to transform that abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2359–60 (citing *Mayo*, 566 U.S. at 77–79). This weighs in favor of finding claims 1–20 are a patent-ineligible abstract idea.

4. Conclusion

Having considered the information and arguments of record, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–20 are directed to patent-ineligible subject matter under 35 U.S.C. § 101.

III. PATENT OWNER'S CONTINGENT MOTION TO AMEND

In a covered business method review, amended claims are not added to a patent as of right, but rather must be proposed as a part of a motion to amend. 35 U.S.C. § 326(d). We must assess the patentability of the proposed substitute claims "without placing the burden of persuasion on the patent owner." Aqua Prods., Inc. v. Matal, 872 F.3d 1290, 1296 (Fed. Cir. 2017); see also W. Digital Corp. v. SPEX Techs., Inc., Case IPR2018-00082, slip op. at 3–4 (PTAB Apr. 25, 2018) (Paper 13) (informative). Thus, we determine whether the preponderance of the evidence based on the entirety of the record shows that the substitute claims are unpatentable. Patent Owner's proposed substitute claims still must meet the statutory requirements of 35 U.S.C. § 326(d) and the regulatory requirements of 37 C.F.R. § 42.221. See "Guidance on Motions to Amend in view of Aqua Products" (Nov. 21, 2017).² Accordingly, Patent Owner must demonstrate (1) the amendment responds to a ground of unpatentability involved in the review; (2) the amendment does not seek to enlarge the scope of the claims of the patent or introduce new subject matter; (3) the amendment proposes a reasonable number of substitute claims; and (4) the original disclosure sets forth written description support for each proposed claim. See 35 U.S.C. § 326(d)(2), (3); 37 C.F.R. § 42.221.

A. Illustrative Proposed Amended Claims

Patent Owner proposes amended claims 21–40, which correspond to original claims 1–20. Patent Owner proposes amending independent claims 1, 8, and 15, and then correcting the corresponding dependencies for dependent claims 2–7, 9–14, and 16– 20, which depend from claims 1, 8, and 15, respectively. In particular, claims 21, 28, and 35 are the amended versions of claims 1, 8, and 15, respectively. Claims 21, 28, and 35 are representative of the proposed amended claims, and are reproduced

² The guidance memorandum is publicly available at https://www.uspto.gov/sites/default/files/documents/guidance_o n_motions_to_amend_11_2017.pdf

below (showing deletions and additions to the original claims).

21. A computer implemented method for detecting fraud in <u>an electronic</u> financial <u>transaction at intermediate points</u> during a payment clearing process <u>of said electronic</u> <u>financial transactions transaction, comprising</u> <u>a computerized system which comprises a</u> <u>Universal Positive Pay Database</u>, said method comprising:

receiving through one of a payer<u>, a payer</u> bank, <u>an online account</u>, and a third party, a first record of an electronic financial transaction <u>in</u> <u>Positive Pay File Format</u> from at least one of the following group:

a payer, a point-of-sale terminal, an online account, and a portable electronic device;

storing <u>on a computer usable medium</u> in—a database <u>said Universal Positive Pay Database</u> a first record in Issue File Format which is <u>converted from and coincides with said Positive</u> Pay File Format, said Universal Positive Pay Database contemporaneously accessible upon <u>such storage to each party</u> 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 Universal Positive

Pay Database in a file format coinciding with said Issue File Format at least a second record of said <u>electronic</u> financial transaction from one or more of a payee bank and any other party to said payment clearing process as said <u>electronic</u> 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

each of said first and second records received at said <u>Universal Positive Pay</u> Database comprise at least two of the same said more than one parameters;

record:

<u>automatically</u> determining by <u>a said</u> 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;

<u>dynamically</u> sending <u>via at least one of said a</u> <u>point-of-sale terminal and said portable</u> <u>electronic device</u> a notification to said payee bank participant with authorization to process said electronic financial transaction when said parameters match; and

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<u>dynamically</u> sending <u>via at least one of said a</u> <u>point-of-sale terminal and said portable</u> <u>electronic device</u> a notification to said payee bank participant to not process said electronic financial transaction when said parameters do not match; and³

in response to said notification, either dynamically or selectively via said computerized system permitting or disallowing said transaction to proceed through said payment clearance process.

Mot. 4–5.

28. A computer implemented method for detecting fraud in a check clearing process an <u>electronic check clearing process</u>, at intermediate points during said check clearing process of said electronic financial transaction, comprising a computerized system which comprises a Universal Positive Pay Database, said method comprising:

providing <u>a computer having a access to said</u> <u>Universal Positive Pay</u> Database accessible by each participant to said check clearing process;

receiving at said <u>computer <u>computerized</u></u> <u>system</u> a first record of a check <u>in Positive Pay</u>

³ There is no "and" following this clause in original claim 1, so it is unclear what Patent Owner intends. We reproduce it exactly as Patent Owner has written it in the Motion.

<u>File Format</u> from a payer including check register information;

storing in said database storing in said Universal Positive Pay Database in Issue File Format, which coincides with said Positive Pay File Format, said first record of said check received by said payer, said first record comprising at least two of the following parameters:

a check number, a date issued, a payee, a routing number, an account number, and an amount;

providing a network interface to said <u>Universal</u> <u>Positive Pay</u> Database accessed by one or more participants in said check clearing process selected from the group comprising:

a payee of said check, a payee bank, a payer bank, banking institutions intermediate said payee bank and said payer bank, a clearing bank, a Federal Reserve Bank, and a third party processor;

enabling said one or more participants in said check clearing process to electronically communicate separately with said <u>Universal</u> <u>Positive Pay</u> Database via said network interface as said check moves along said check clearing process;

receiving <u>at said Universal Positive Pay</u>

<u>Database</u> from said at least one or more participants in said check clearing process a second record <u>in a file format coinciding with</u> <u>said Issue File Format</u> of said check, said second record comprising at least two of the following parameters:

a check number, a date issued, a payee, a routing number, an account number, and an amount, and wherein any participant in said check clearing process is capable of verifying said parameters at each point along said check clearing process;

determining by said <u>computer computerized</u> <u>system</u> correspondence between said parameters of said first record and said parameters of said second record of said check;

providing <u>an a dynamic</u> electronic notification to said participant <u>via said interface</u>, wherein said notification includes results of said correspondence determination;

wherein said notification informs said participant <u>via said interface</u> to process said financial transaction when said first and second records correspond; and

wherein said notification informs said participant <u>via said interface</u> to not process said financial transaction when said first and second records do not correspond; <u>and</u> in response to said notification, either dynamically or selectively via said computerized system permitting or disallowing said transaction to proceed through said payment clearance process.

Mot. 6-8.

35. A computer implemented method for detecting errors in processing <u>electronic</u> financial transactions <u>at intermediate points</u> <u>during a payment clearing process of said</u> <u>electronic financial transactions, comprising a</u> <u>computerized system which comprises a</u> <u>Universal Positive Pay Database</u>, said method comprising:

providing at least one <u>computer computerized</u> <u>system comprising said Universal Positive Pay</u> <u>Database</u> having a processor, an area of main memory, and a storage device having a database, wherein said database is accessible by each participant involved in said processing of said financial transactions;

storing in said database <u>in Issue File Format</u> which coincides with a Positive Pay File Format records of <u>said</u> financial transactions relating to payments, <u>comprising wherein each financial</u> <u>transaction comprises</u> at least a first record of <u>a first said</u> financial transaction received from at least one participant to said processing of said financial transaction <u>in said Positive Pay</u> <u>File Format</u>, said first record received from a

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source selected from the following group:

a payer, a point of sale terminal, an online account, and a portable electronic device, each financial transaction record including more than one parameter;

receiving at said <u>computer computerized</u> <u>system</u> a second record of said <u>first</u>-financial transaction <u>in a format coinciding with said</u> <u>Issue File Format</u> from a bank of first deposit as said first financial transaction moves through said error detection process, said second record including at least some of said more than one parameters that are in said first record of said first financial transaction;

determining by said <u>computer computerized</u> <u>system</u> whether there is a match between at least one of said parameters of said second record of said first financial transaction received at said computer and one of the same parameters in said first record of said first financial transaction stored in said database, and wherein any participant in said processing of said financial transaction is capable of verifying said parameters at each point along said error detection process;

providing a <u>dynamic</u> notification to said bank of first deposit with results from said matching of said parameters of said second record with said parameters of said first record; and

providing a <u>dynamic</u> notification to said payer with results from said matching; <u>and</u>

in response to said notification. either dynamically or selectively via said computerized system permitting or disallowing said transaction to proceed through said payment clearance process.

Mot. 9–10.

B. Compliance with the Motion to Amend Requirements

As we explained above, a Motion to Amend must meet four requirements: (1) the amendment must respond to a ground of unpatentability involved in the review; (2) the amendment must not seek to enlarge the scope of the claims of the patent or introduce new subject matter; (3) the amendment must propose a reasonable number of substitute claims; and (4) the original disclosure must set forth written description support for each proposed claim. Petitioner does not dispute, and we agree, that there are a reasonable number of substitute claims. Petitioner, however, disputes whether Patent Owner has complied with the remaining three requirements. Opp. 4–10; Pet. Sur-Reply 1–3.

We agree with Petitioner that Patent Owner's proposed amendment should fail, at least, because it seeks to introduce new matter. Petitioner identifies several limitations that it contends are not supported by the original specification of the '840 patent. We agree with Petitioner that these limitations introduce new matter.

1. "dynamically sending . . . a notification"/"dynamic electronic notification"/"dynamic notification"

Proposed amended claim 21 recites the step of "dynamically sending ... a notification." Mot. 5. Proposed amended claims 28 and 35 require "providing a dynamic notification." Mot. 8, 10. Petitioner argues that the addition of the terms "dynamically" and "dynamic" to the claims introduces new matter. Opp. 6-8. In response, Patent Owner argues that "to the extent that 'new matter' as the term is traditionally understood, can be introduced in an amendment to a *claim*, Patent Owner has not introduced any such 'new matter' in the contingent amendments to the original claims." PO Reply 6. Instead, Patent Owner asserts that "the contingent amended claims do not exceed the scope of the original claims, and in fact, recast without broadening or, at worst, limit the scope of the original claims." Id. Patent Owner contends that "the proposed amended claims further clarify, narrow and/or limit but, by no reasonable reading, broaden the claims presented and therefore do not attempt to add 'new matter,' regardless of the definition used for that term." Id. Patent Owner argues that "Petitioner attempts to shift this burden to the Patent Owner," and that the amendments only include "additional clarifying language." Id. Patent Owner argues that the amendments "further clarify the novel and nonobvious aspects of the database and file formats of the financial records which are transformed during the payment clearing process of the invention." *Id*.

Patent Owner misses the point of the "new matter" objection to these amended claims. As our cases make clear, "[i]n determining whether claims introduce new matter, we look to whether the original application provides adequate written description support for the claims." Kapsch TrafficCom IVHS Inc. v. Neology, Inc., Case IPR2016-01763, slip op. at 47 (PTAB Mar. 20, 2018) (Paper 60). The test for determining compliance with the written description requirement is "whether the disclosure of the application [as originally filed] reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Because possession of the claimed invention is required, "a description that merely renders the invention obvious does not satisfy the requirement." Id. at 1352. Thus, "[i]t is not necessary that the application describe the claim limitations exactly, but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations." In re Wertheim, 541 F.2d 257, 262 (CCPA 1976) (citation omitted).

Going back to the specific claim language, which consists of various permutations of "dynamic notification," the specification of the '840 patent does not use the term "dynamically," and references "dynamic" only in the context of computer memory. *See* Ex. 1001, 9:16–17 ("volatile medium (e.g., dynamic RAM (DRAM) . . .)"). Patent Owner cites Ex. 1001, 5:29–6:62 and 22:61–23:4 as supporting these amendments. However, none of the cited portions refer to a notification, let alone a notification sent "dynamically" or a "dynamic notification." When we asked Patent Owner's counsel at the oral hearing what was meant by "dynamically," he stated:

MR. GOLDSCHMIDT: And then dynamically does actually -- it was intended to refer back to this dynamic RAM that's supposed to be there which is it's merely -- dynamic RAM is supposed to be -- it's a type of physical memory which is constantly being refreshed. And so in order to have a memory that actually is constantly refreshed, it means that the information that's flowing in and out of it, it's in and of itself dynamic. So that was the intent and the reasoning behind that.

JUDGE SAINDON: I guess then what is dynamically sending? So, I mean, if it had said automatically, I'd understand.

MR. GOLDSCHMIDT: I don't disagree with the reading that way. Yes, it very well could be automatically also.

JUDGE CHERRY: So there's more than one construction? So it could mean --

MR. GOLDSCHMIDT: In other words, I believe you could -- automatically is probably less restrictive than dynamic. Because if dynamic changing of a memory cell is something that's being constantly refreshed, you could still automatically refresh a memory, but not constantly. Okay. It could be longer durations and things like that and so we very well could and wouldn't be opposed to changing that term to automatically also, but dynamically would be in this context a more limiting term.

Tr. 67:12–68:5.

We do not agree that the mere disclosure of the word "dynamic" in the context of a computer memory provides adequate disclosure to support the concept of "dynamically" sending notifications or a "dynamic notification." Although there is no requirement to set out the limitations in haec verba, we neither can discern from the cited passages, nor does Patent Owner explain, how a person of ordinary skill in the art would have recognized "dynamically sending" or "dynamic notifications" from these passages. Indeed, in the context of the proposed amended claims, it is unclear what "dynamically" or "dynamic" would mean. For example, in claim 21, the limitation already provided sending a notification when the parameters matched. It is not clear to us how "dynamically" or, accepting Patent Owner's proposed construction, "constantly," would change that. As for claims 28 and 35, it is the notification itself that is "dynamic," not the sending, as in claim 21. There is no disclosure, either in the cited portions or based on our review of the remainder of the specification, that the notification itself would "constantly" change, as opposed to new notifications being sent.

Given the lack of disclosure, either expressly or implicitly, in the cited portions of the specification of "dynamically sending" or "dynamic notifications," we agree with Petitioner that Patent Owner has failed to meet its burden of showing that the proposed amended claims do not introduce new matter.

2. "in response to said notification, either dynamically or selectively . . . permitting or disallowing said transaction to proceed"

In addition to the issues with "dynamically sending" and "dynamic notification[s]" discussed above, claims 21, 28, and 35 all require the step of "in response to said notification, either dynamically or selectively via said computerized system permitting or disallowing said transaction to proceed through said payment clearance process." Mot. 5, 8, 10. We agree with Petitioner that there is no written description support for this limitation. Opp. 6–7. In particular, there is no support for the limitation that the permitting or disallowing occur "dynamically or selectively." As with the "dynamically sending" limitation discussed above, there is no disclosure in the specification of the '840 patent regarding any process occurring "dynamically." As for the term "selectively," it does not appear in the specification. When we asked Patent Owner at the oral hearing what this term meant, Patent Owner stated:

So, again, we talked about dynamics, so let's talk about selective. The selective portion is allowing — it's allowing the transaction to be — to proceed or not to proceed and it can be done

in a selective manner and so —as opposed to dynamically which would be that it would be automatically or more routinely done without any particular selective process.

Tr. 68:9–17. However, the portions of the specification cited, Ex. 1001, 5:29–6:62 and 22:61–23:4, do not discuss notifications, they do not discuss permitting or disallowing a transaction to proceed in response to the notification, let alone doing so "in a selective manner." Thus, for this additional reason, we agree with Petitioner that Patent Owner has failed to carry its burden of showing that the claims do not introduce new matter.

3. Summary

Based on the above and the entirety of the record before us, we determine that the amendments proposed in proposed substitute claims 21, 28, and 35 and proposed substitute claims 22–27, 29–34, and 36– 40 depending therefrom, introduce new matter prohibited under 35 U.S.C. § 326(d) and 37 C.F.R. § 42.221(a)(2)(ii). Patent Owner has not shown, and we do not find, written description support in the original disclosure of the '840 patent for proposed substitute claims 21, 28, and 35, or proposed substitute claims 22–27, 29–34, and 36–40 depending therefrom.

C. Unpatentability of the Amended Claims

In addition to its failure to meet requirements for a motion to amend, we determine that Patent Owner's Motion to Amend should be denied because Petitioner has shown by a preponderance of the evidence that the proposed amended claims are unpatentable as directed to patent-ineligible subject matter under § 101.

1. Step 1— Whether the Amended Claims Are Directed to an Abstract Idea

We agree with Petitioner that, like the original claims, the amended claims are directed to the abstract idea of financial transaction fraud or error detection, a fundamental economic practice that is not patent-eligible under Section 101. See Mot. 4 ("A computer implemented method for detecting fraud in an electronic financial transaction at intermediate points during a payment clearing process of said electronic financial transaction ..."); 6 ("A computer implemented method for detecting fraud in an electronic check clearing process, at intermediate points during said check clearing process of said electronic financial transaction . . ."); 9 ("A computer for detecting errors implemented method in electronic financial transactions processing at intermediate points during a payment clearing process of said electronic financial transactions ..."). We agree with Petitioner that proposed amended claim 21 is representative and merely recites steps directed to collecting and storing financial transaction information (collecting information), comparing received financial transaction information against the stored information (analyzing information), notifying interested parties of any matches or mismatches between the sets of financial transaction information (presenting information), and making a decision whether to proceed based on that determination (analyzing information). Mot. 4–5. Claims 28 and 35 recite substantively-identical corresponding limitations, adding only the step of providing, or providing access to, a "Universal Positive Pay Database." See Opp. App. A, Claim 28 ("providing access to said Universal Positive Pay Database"), Claim 35 ("providing at least one computerized system comprising said Universal Positive Pay Database"). Claim 28 also adds a network interface to the "Universal Positive Pay Database." See id. at Claim 28 ("providing a network interface to said Universal Positive Pay Database").

As we set out in detail above in our analysis of the original claims, claims directed to collecting, analyzing, and presenting information fall "into a familiar class of claims" that courts have routinely rejected as being "directed to' a patent-ineligible concept." See Elec. Power, 830 F.3d at 1353-54. Patent Owner's new limitation directed to "permitting or disallowing said transaction to proceed through said payment clearing process" is also abstract, as it simply recites yet another analysis step. Patent Owner's other proposed amendments do not save the original claims from abstractness. We agree with Petitioner that clarifying that the financial transaction is "electronic" is unnecessary, as the preambles make clear that the claims are directed to computer-implemented methods.

As for Patent Owner's addition of Positive Pay File formats, Issue File formats, and a conversion between the two, to the extent we understand these limitations, we determine that converting electronic data from one format to another is abstract, and the specification provides no substantive details concerning these formats that suggest they are inventive. See Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344, 1351 (Fed. Cir. 2014) (finding that a process of transforming electronic data into another form is not patent eligible). As for the limitations of "automatically determining," "dynamically sending," and "dynamic notification," we agree with Petitioner that simply automating steps or making them more efficient does not make a claim less abstract. See OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1363 (Fed. Cir. 2015) ("relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible"). Patent Owner's addition of certain generic computer components—a Universal Positive Pay Database, a point-of-sale terminal, and a portable electronic device (some of which were found in the dependent claims considered above)-do not make the claims any less abstract. Moreover, these components are only recited at the highest level of generality, without any description or explanation of how the particular functions are performed. See, e.g., Ex. 1001, 5:29-34 ("[t]he present invention" includes a "UPPD database . . . configured to store thereon transaction associated with financial transactions records associated with customers of the UPPD database"); 9:4-29 ("While the UPPD database 20 is illustrated as a single database, the UPPD database 20 may be configured as a plurality of separate or disparate databases interconnected through a network system via any number of switches, such as a local area

network (LAN), a wide area network (WAN), an intranet, an extranet, the Internet, etc. The UPPD system 10 includes a computer useable medium and a computer device with a processor . . ."); 10:20–25 ("A 'transaction instrument' . . . means . . . a point of sale (POS) terminal . . ."); 14:53–54 ("These include computerized devices such as personal computers, portable laptops and palmtops . . ."); *see also* Ex. 1007 $\P\P$ 33–41.

We agree with Petitioner that while the '840 patent appears to maintain that the claimed system is an advance over prior art systems, because it purportedly provides every participant in the payment clearing process access to the claimed Universal Positive Pay Database, the '840 patent does not recite or disclose any novel way of providing such "universal" access. Instead, it merely describes that functionality without any explanation of how to technologically achieve it. See Ex. 1001, 5:49-53 ("The customer, payer, payee, payee bank, drawee bank, and banking institutions intermediate the payee bank and the drawee bank are able to access the correspondence determination at every point along a financial transaction clearing process."),13:34-41 ("system 10 may be accessed by customers, payers, payees, payee banks, drawee banks, and banking institutions intermediate the payee banks and the drawee banks for issuing and tracking transaction records associated with financial transactions at every point along the financial transaction clearing process . . .), 15:42–45 ("This may be done by logging onto a web site associated with the UPPD system 10

over the Internet and simply accessing the desired transaction record in the UPPD database 20."), 28:24–26 ("[T]he UPPD system can be accessed . . ."). This is insufficient to save the claims from abstractness. See Credit Acceptance, 859 F.3d at 1057 ("Significantly, the claims do not provide details as to any nonconventional software for enhancing the financing process."); Dealertrack, 674 F.3d at 1333 (finding claims abstract because the patent did "not specify how the computer hardware and database are specially programmed to perform the steps claimed in the patent").

Patent Owner merely offers the exact same arguments, nearly verbatim, that were made in the Patent Owner Response for the original claims. For the reasons explained in detail above, we are unpersuaded by these arguments. Aside from these changes we have discussed to the independent claims, Patent Owner has made no substantive changes to the dependent claims. For the reasons discussed above, we determine that the limitations of these dependent claims do not alter this conclusion. In view of the foregoing, we determine that Petitioner has shown by a preponderance of the evidence that proposed amended claims 21–40 are directed to the abstract idea of collecting and analyzing information for financial transaction fraud or error detection.

2. Step 2 — Whether the Amended Claims Include Limitations that Represent Inventive Concepts

We agree with Petitioner that the proposed amended claims lack sufficient "inventive concept" to transform the nature of the amended claims into a patent-eligible application of the abstract idea. The amended claims' invocation of a computerized system, a "Universal Positive Pay Database," a payer bank, an online account, a "Positive Pay File Format," an "Issue File Format," a computer usable medium, a point-ofsale terminal, a portable electronic device, and a dynamic notification adds no inventive concept to the generally claimed abstract idea of collecting and analyzing information and presenting the results. See Intellectual Ventures I, 792 F.3d at 1368 ("The recited elements, e.g., a database, a user profile ... and a communication medium, are all generic computer elements."); FairWarning, 839 F.3d at 1096 (holding that an "interface" and "microprocessor" are generic computer elements that do not transform an otherwise abstract idea into patent-eligible subject matter); Mortgage Grader, Inc., 811 F.3d at 1324–25 (holding that generic computer components, such as an "interface," "network," and "database," fail to satisfy the inventive concept requirement). Here, the claims are merely directed to implementing the abstract idea on a conventional computer using conventional computing technologies. See Mot. 4, Claim 21 ("A computer implemented method for detecting fraud in an electronic financial . . . transaction ..."); id. at 6, Claim 28 ("A computer implemented method for detecting fraud in ... an electronic check clearing process . . ."); id. at 9, Claim 35 ("A computer implemented method for detecting errors in processing electronic financial transactions ..."). The specification confirms that the claimed computer device may be any type of computer device with a processor. See Ex. 1001, 9:30-47. We agree with Petitioner and its Declarant, Dr. Conte, that the specification does not provide any substantive technical details about the computer, beyond that it may include a processor, an area of main memory for executing code, a storage device for storing data and program code, and a bus connecting the processor, area of main memory, and storage device. See id.; see also Ex. 1007 ¶ 40. We also agree with Petitioner that the specification also fails to disclose anv unconventional technical details about the design or configuration of the "Universal Positive Pav Database," Issue File format, or Positive Pay File format. See Ex. 1001, 5:29-34, 9:4-29, 10:20-25, 14:53–54, 27:27–41; Ex. 1007 ¶¶ 39–41.

also agree with Petitioner We that the functionality recited in the amended claims is equally conventional and generic: a computer receives and stores information in a database, determines whether there is a match between two records of received provides information. а notification of its determination, and makes a decision based on that determination. See Claims 21, 28, 35. Claim 28 also recites the computer enables access to the UPPD database via the network interface. See id. at Claim 28. We agree with Petitioner that there is nothing inventive about a computer receiving information, storing information, providing access to information, analyzing the information to determine whether there is a match between records, sending a notification of its determination, and making further decisions based on that determination. See buySAFE, 765 F.3d at 1355 ("That a computer receives and sends the information over a network-with no further specification—is not even arguably inventive."); see also Elec. Power, 830 F.3d at 1355 ("Nothing in the claims, understood in light of the specification, anything other than off-the-shelf. requires network, conventional computer, and display technology for gathering, sending, and presenting the desired information.").

Thus, we agree with Petitioner that the amended claims recite generic computer elements for performing generic computer tasks; the claims "consist[] of nothing more tha[n] the entry of data into computer database. the breakdown а and organization of that entered data according to some criteria, ... and the transmission of information derived from that entered data to a computer user, all through the use of conventional computer components, such as a database and processors, operating in a conventional manner." Intellectual *Ventures I*, 792 F.3d at 1371 (quoting district court). "These elements do not confer patent eligibility." *Id.*

Nor does the ordered combination of the steps of collecting and analyzing information and presenting the results similarly does not present an inventive concept. Here, we agree with Petitioner that the amended claims recite the most logical sequence of steps for receiving and storing information, analyzing that information, sending a notification upon completion of that analysis, and making further decisions based on that notification. This is insufficient to confer patent eligibility. See TDE Petroleum Data Sols., Inc. v. AKM Enter., Inc., 657 F. App'x 991, 992–93 (Fed. Cir. 2016) (non-precedential) (finding that the ordered combination of storing state values, receiving sensor data, validating data, and determining the state of the oil well using that information was "the most ordinary of steps in data analysis and [that they] are recited in the ordinary order").

Patent Owner merely offers the exact same arguments, nearly verbatim, that were made in the Patent Owner Response regarding the original claims. For the reasons explained in detail above, we do not find those arguments persuasive. Aside from the changes we have discussed to the independent claims, Patent Owner has made no substantive changes to the dependent claims. For the reasons discussed above, we determine that the limitations of these dependent claims do not alter this conclusion. In view of the foregoing, we determine that Petitioner has shown by a preponderance of the evidence that proposed amended claims 21-40 do not recite any inventive concept sufficient to transform the nature of the proposed amended claims into a patent eligible invention.

3. Summary

Having considered the information and arguments of record, we determine that Petitioner has demonstrated, by a preponderance of the evidence, that proposed amended claims 21–40 are directed to patent-ineligible subject matter under 35 U.S.C. § 101.

IV. CONCLUSION

We have reviewed the information in the Petition as well as Patent Owner's arguments and evidence. With the record now developed fully, we have determined that Petitioner has shown by a preponderance of the evidence that claims 1–20 are directed to patent-ineligible subject matter. We further *deny* Patent Owner's Motion to Amend because the proposed amended claims add new matter, and because Petitioner has shown, by a preponderance of the evidence, that the proposed amended claims are unpatentable.

V. ORDER

For the foregoing reasons, it is

ORDERED that, based on a preponderance of the evidence, claims 1–20 of the '840 patent are held unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Amend is *denied*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of it must comply with the notice and service requirements of 37 C.F.R. § 90.2.

For PETITIONER:

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For PATENT OWNER:

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APPENDIX D

Trials@uspto.gov 571-272-7822 Paper 22 Entered: August 29, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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, and FEDERAL RESERVE BANK OF ST. LOUIS, Petitioner,

v.

BOZEMAN FINANCIAL LLC, Patent Owner.

Case CBM2017-00036 Patent 8,768,840 B2

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Before MICHAEL W. KIM, WILLIAM V. SAINDON, and KEVIN W. CHERRY, Administrative Patent Judges.

CHERRY, Administrative Patent Judge.

DECISION

Granting Institution of Covered Business Method Patent Review

37 C.F.R. § 42.208

I. INTRODUCTION

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, and Federal Reserve Bank of St. Louis ("Petitioner") filed a Petition (Paper 1, "Pet.") seeking a covered business method patent review of claims 1–20 of U.S. Patent No. 8,768,840 B2 (Ex. 1001, "the '840 patent" or the "challenged patent") under section 18 of the Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284, 331 (2011) ("AIA"). Petitioner supports its contentions that the claims are unpatentable with the Declaration of Thomas M. Conte, Ph.D. (Ex. 1007), and its contentions that it was charged with infringement with the Declaration of Richard M. Fraher (Ex. 1008). Patent Owner, Bozeman Financial LLC, filed a Preliminary Response (Paper 5, "Prelim. Resp."). Patent Owner submits the Declaration of William O. Bozeman, III with its Preliminary Response. Paper 6 ("First Bozeman Decl.").

On May 19, 2017, pursuant to our authorization, Petitioner filed a Reply to Patent Owner's Preliminary Response on the limited issue of whether Petitioner has standing to bring this proceeding. Paper 8 ("Reply"). With its Reply, Petitioner provided a second Declaration of Richard M. Fraher (Ex. 1023). On May 26, 2017, also pursuant to our authorization, Patent Owner filed a Sur-Reply on the limited issue of standing. Paper 12 ("Sur-Reply"). Patent Owner submitted a second Declaration of William O. Bozeman, III in support of its Sur-Reply. Paper 13 ("Second Bozeman Decl.").

Under 35 U.S.C. § 324(a),¹ a covered business method patent review may not be instituted "unless . . . the information presented in the petition . . ., 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); see 37 C.F.R. § 42.208.

¹ See 37 C.F.R. § 42.300(a).

For reasons that follow, we determine that the challenged patent qualifies as a covered business method patent. We further determine, after taking into account Patent Owner's Preliminary Response and Sur-Reply, that the information presented in the Petition sufficiently demonstrates on the present record that Petitioner has standing to bring this proceeding and at least one of the challenged claims is unpatentable. Accordingly, we institute a covered business method patent review of the challenged claims.

A. Related Matters

Petitioner and Patent Owner represent that Petitioner has filed a covered business method patent review, CBM2017-00035, against a related patent, U.S. Patent No. 6,754,640 B2 ("the '640 patent," Ex. 1006). Pet. 6–7; Paper 7, 1. Petitioner has also filed a declaratory judgment action of noninfringement of both the '640 patent and '840 patent—*Federal Reserve Bank of Atlanta et al. v. Bozeman Financial LLC*, Case No. 1:17-cv- 00389 (N.D. Ga.). *Id.* at 2.

B. Standing to File a Petition for Covered Business Method Patent Review

A petition for covered business method review must set forth the petitioner's grounds for standing. 37 C.F.R. § 42.304(a). Rule 42.304(a) states it is Petitioner's burden to "demonstrate that the patent for which review is sought is a covered business method patent, and that the petitioner meets the eligibility requirements of § 42.302." *Id*. One of those eligibility requirements is that only persons (or their privies) who have been sued or charged with infringement under a patent are permitted to file a petition seeking a covered business method patent review of that patent. AIA § 18(a)(1)(B); 37 C.F.R. § 42.302(a). Under our rules. "[c]harged with infringement real means ล and substantial controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court." 37 C.F.R. § 42.302(a).

The Declaratory Judgment Act provides that "[i]n a case of actual controversy within its jurisdiction, any court of the United States, upon the filing of an appropriate pleading, may declare the rights and other legal relations of any interested party seeking such declaration." 28U.S.C. § 2201(a). In MedImmune, Inc. v. Genentech, Inc., the Supreme Court stated that the test for whether an "actual controversy" exists is "whether the facts alleged, under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment." 549 U.S. 118, 127 (2007) (internal quotation marks omitted).

Although it relaxed the test for establishing jurisdiction, *MedImmune* "did not change the bedrock rule that a case or controversy must be based on a *real* and *immediate* injury or threat of future injury that is *caused by the defendants*—an objective standard that cannot be met by a purely subjective or speculative fear of future harm." *Prasco, LLC v. Medicis Pharm. Corp.*, 537 F.3d 1329, 1339 (Fed. Cir. 2008). Thus, courts have explained post-*MedImmune* that

"jurisdiction generally will not arise merely on the basis that a party learns of the existence of a patent owned by another or even perceives such a patent to pose a risk of infringement, without some affirmative act by the patentee." *SanDisk Corp. v. STMicroelecs., Inc.*, 480 F.3d 1372, 1381 (Fed. Cir. 2007). Instead, courts have required "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." *Hewlett-Packard Co. v. Acceleron LLC*, 587 F.3d 1358, 1363 (Fed. Cir. 2009).

In this case, Patent Owner has not sued Petitioner for infringement. Instead, Petitioner contends that Patent Owner charged it with infringing the '840 patent. Pet. 37–40. Petitioner submits, supported by the testimony of Mr. Fraher, that Patent Owner contacted Petitioner by telephone in January 2016 and contended that Petitioner was infringing the '640 patent and '840 patents. Id. at 38 (citing Ex. 1008 ¶¶ 2, 4, 5). Petitioner also asserts that Patent Owner indicated that it intended to seek fees for the alleged infringement. Id. Petitioner argues that Patent Owner continued to contact it about potentially licensing the '640 and '840 patents. Id. Petitioner also provides an infringement claim chart Patent Owner sent Petitioner, mapping Petitioner's conduct to the claims of the '840 patent. Id. at 38-39 (citing Ex. 1022, 000001-5).

In its Preliminary Response, Patent Owner contends that one of its principals, Mr. Bozeman, has "had a long relationship with the Federal Reserve in regard to [Mr. Bozeman's] inventions in this field since on or about the early 2000's when the '640 patent was filed." Prelim. Resp. 6. Patent Owner claims that its discussions with Petitioner have only been about a "business collaboration" with Petitioner. Id. Patent Owner acknowledges that it contacted Petitioner and entered into a non-disclosure agreement ("NDA") and held talks. Id. Patent Owner also acknowledges that it sent the infringement claim chart to Petitioner, but asserts that the claim chart was prepared at the request of Petitioner, and Patent Owner contends that Mr. Bozeman "made it clear that he had no intention of bringing infringement litigation and was primarily interested in the current and future payment systems and modernizations that [Petitioner] had recently announced." Id. Patent Owner argues that not only did it have no intention of bringing infringement litigation, but "if Mr. Bozeman ever did contemplate any such infringement litigation that he would provide [Petitioner] with an ample opportunity to resolve any such issues before [Mr. Bozeman] would file an action with any court." Id. at 7.

In its Reply, Petitioner disputes Patent Owner's characterization of the events that took place in their negotiations in 2016 and early 2017. Reply 1–5. Petitioner submits additional testimony from Mr. Fraher about the details of the discussions that took place before the parties signed their NDA. Ex. 1023 $\P\P$ 2–7. Petitioner also submits testimony from Mr. Fraher regarding the confidential discussions that took place between the parties, and detailing Patent Owner's actions through the course of those discussions. Reply 1–5 (citing Ex. 1023 $\P\P$ 8–14).

In its Sur-Reply, Patent Owner argues that "any discussion of infringement" was "only provided in

response to the solicitation by [Petitioner] in order to further evaluate a business agreement centered around future licensing and royalties and not past infringement." Sur- Reply 2. Patent Owner asserts that "[b]ecause Bozeman was seeking only a future looking agreement, and . . . since any discussion of potential infringement claims was instituted only upon the request of [Petitioner] in evaluating a licensing and/or royalty arrangement," Petitioner lacks standing to sue. *Id*.

We have reviewed Petitioner's and Patent Owner's submissions and supporting evidence, and we determine that, on this record, Petitioner has established sufficiently the facts taken together demonstrate that it has standing to bring this covered business method review. Here, it is undisputed that Patent Owner contacted Petitioner and the parties entered into lengthy discussions regarding the potential licensing of the '640 and '840 patent. See Ex. 1008 ¶¶ 4–8; Ex. 1023 ¶¶ 3–7; First Bozeman Decl. ¶¶ 7-14. Patent Owner sent Petitioner a claim chart mapping existing services offered by Petitioner to claims of the '840 patent. See Ex. 1022, 1 (seeking licensing discussions), 2–5 (claim chart of '840 patent). Although Patent Owner attempts to characterize these communications as an effort to reach a business partnership (Prelim. Resp. 6–7; Sur-Reply 2–5), the email's statement that Patent Owner sought a "commercially reasonable treatment" and mapped existing products to claim 1 of the '840 patent suggest otherwise (Ex. 1022, 1–5), and, in any case, is, at a minimum, "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." HewlettPackard Co., 587 F.3d at 1363. Moreover, Mr. Fraher has consistently testified that various representatives of Patent Owner contended that Petitioner was infringing the '640 and '840 patents and expected to receive licensing fees for this alleged infringement. Ex. 1008 ¶¶ 4–8; Ex. 1023 ¶¶ 3–7. Although Mr. Bozeman disputes Mr. Fraher's recollection of these telephone calls, we must, at this stage, resolve such factual disputes in favor of Petitioner.² See 37 C.F.R. § 42.208(c).

As for Patent Owner's arguments that the parties had a longstanding relationship, we do not find this materially changes our analysis. Based on the evidence presented, we are persuaded that, even assuming some sort of previous non-adversarial relationship did exist, it does not change the objective import of the documented interactions beginning in

² Although we do not need to reach the negotiations that occurred after the parties entered into their NDA because we determine the pre-NDA conduct of Patent Owner sufficient to confer standing, we note Patent Owner's objections, see Sur-Reply 3-4, that these post-NDA discussions were ostensibly subject to Federal Rule of Evidence 408 and cannot be relied on is without merit. See Rhoades v. Avon Prods., Inc., 504 F.3d 1151, 1160-62 (9th Cir. 2007) ("Here, DermaNew does not rely on the threats in an attempt to prove whose trademark is valid, or to impeach Avon. Instead, it uses the threats to satisfy the jurisdictional requirements of an action for declaratory relief. This is perfectly acceptable under Rule 408." (footnote omitted)). As Petitioner establishes, the post-NDA conduct unambiguously show that Patent Owner objectively threated to sue Petitioner for patent infringement under the '640 and '840 patents, if Patent Owner's demand for a license was not met. See Ex. 1024, 1-28 (detailing demands and threatening to sue).

January 2016. Thus, we determine that these statements and actions, when considered objectively, and even when taking into consideration any past relationships, are more than sufficient to establish that there was a substantial controversy between the parties sufficient to establish standing under relevant case law. See SanDisk, 480 F.3d at 1382 (holding that demand for license fees and identification of specific allegedly infringing activity sufficient for jurisdiction); see also Hewlett-Packard Co., 587 F.3d at 1364 (finding jurisdiction where patentee took affirmative step of twice contacting alleged infringer and made implied assertion of right against particular product).

C. The Challenged Patent

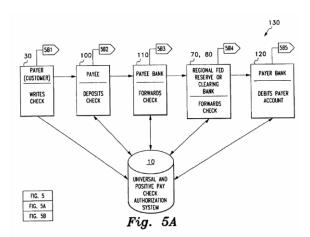
The '840 patent, titled "Universal Positive Pay Match, Authentication, Authorization, Settlement, and Clearing System," describes a universal positive pay match database to reduce financial transaction fraud. Ex. 1001, [54], Abstract. The '840 patent explains that check fraud is a significant problem in the financial system, and although many solutions have been proposed "[o]ne area where [the solutions] all fall short is in the elimination of check fraud." *Id*. at 1:64–65.

The patent acknowledges the existence of numerous prior art systems aimed at verifying financial transactions and combatting checking fraud: "[m]any techniques have been developed to inhibit check fraud, such as Positive Pay [and] different forms of electronic check verification and electronic check presentment." *Id.* at 1:57–60. The '840 patent explains that positive pay services "have been available from individual banks" for a number of years, and are "recognized as an effective service to fight against check fraud." *Id.* at 13:11–12, 13:22–23. According to the patent, a

check generating customer [using a prior art positive pay service] generally uploads a file of transaction records associated with financial transactions daily to the bank of all checks written that day. When checks drawn on the customers['] accounts are presented to the bank, their database is queried. If the transaction record for a check has been tampered with or if transaction record includes an unauthorized check number, the transaction record will be rejected.

Id. at 13:14–21.

The patent explains that "[t]he existing positive pay services are bank specific," meaning that "only a bank's own account holders can utilize it and take advantage of it." *Id.* at 13:30–32. The patent suggests that it will overcome this perceived problem by offering a "universal" positive pay system that "can be used by both account holder members and nonmembers" and "accessed by customers, payers, payees, payee banks, drawee banks, and banking institutions intermediate the payee banks and the drawee banks for issuing and tracking transaction records associated with financial transactions at every point along the financial transaction clearing process." *Id.* at 13:32–39. Figure 5A of the '840 patent is reproduced below.



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Figure 5A illustrates a flow diagram of the universal positive pay database method for checking accounts according to the claimed invention. *Id.* at 7:10–11. Figure 5A shows that "each participant in the check clearing process (payer customer 30, payee 100, payee bank 110, Federal Reserve 80, clearing bank 70, or payor bank 120), participates in a [universal positive pay database ("UPPD")] method 130 used by a payer (customer) 30 for maintaining check payment control and preventing check fraud." *Id.* at 17:56–61. According to the '840 patent,

The UPPD method 130 includes a series of steps in which payer 30 uploads check information to the UPPD system 10, payee 100 deposits check in payee bank 110, payee bank 110 checks the check against the UPPD database 20 in the UPPD system 10, check is deposited in Federal Reserve 80 or clearing bank 70, which checks it against the UPPD database 20, payer bank 120 receives check and checks it against the UPPD database 20 and reports back to the UPPD system 10 that the check has been debited from payer's 30 account.

Id. at 17:61–18:3.

D. Illustrative Claim

Petitioner challenges all twenty claims of the challenged patent. Claims 1, 8, and 15 are independent claims. Claim 1 is illustrative of the claimed subject matter:

- 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;

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- 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.

Ex. 1001, 28:39-29:8.

E. Asserted Ground of Unpatentability

Petitioner asserts that claims 1–20 are unpatentable as directed to patent-ineligible subject matter under 35 U.S.C. § 101.

II. DISCUSSION

A. Claim Construction

In a covered business method patent review, a claim term 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. § 42.300(b); Cuozzo Speed Techs., LLC, v. Lee, 136 S. Ct. 2131, 2144 (2016); Versata Dev. Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1328 (2015). Under the broadest reasonable construction standard, claim terms are generally presumed to be 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. In re Translogic Tech., Inc., 504 F.3d 1249, 1257 (Fed. Cir. 2007). To rebut this presumption by acting as a lexicographer, the patentee must give the term a particular meaning in specification with "reasonable the clarity. deliberateness, and precision." In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

We construe the challenged claims according to these principles. Petitioner proposes constructions only for the term "behavior matrix." Pet. 41–43. However, we determine that no terms require express construction for this Decision.

B. Covered Business Method Patent

The AIA defines a "covered business method patent" as "a patent 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" AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). Congress provided a specific exception to this definition of a covered business method patent—"the term does not include patents for technological inventions." *Id*. To determine whether a patent is eligible for a covered business method patent review, the focus is on the claims. *Secure Axcess, LLC v. PNC Bank N.A.*, 848 F.3d 1370, 1379 (Fed. Cir. 2017) ("It is the claims, in the traditional patent law sense, properly understood in light of the written description, that identifies a CBM patent."). One claim directed to a covered business method is sufficient to render the patent eligible for CBM patent review. *See id.* at 1381 ("[T]he statutory definition of a CBM patent requires that the patent have a claim that contains, however phrased, a financial activity element.").

For the reasons set forth below, we conclude that the challenged patent meets the definition of a covered business method patent.

1. Financial Product or Service

One requirement of a covered business method patent is for the patent to "claim[] 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." AIA § 18(d)(1); 37 C.F.R. § 42.301(a).

Petitioner contends the challenged patent meets the financial product or service requirement because the patent claims computer-implemented methods for detecting fraud or errors in financial transactions. Pet. 27–30.

At this time, Patent Owner does not dispute Petitioner's assertions.

We agree with Petitioner that the '840 patent meets the financial product or service requirement. For example, claim 1 and its dependents are generally directed to "[a] computer implemented method for detecting fraud in financial transactions during a payment clearing process," comprising: (a) receiving a first record relating to a financial transaction; (b) storing that record in a database accessible to each party to the payment clearing process: (c) receiving a second record relating to the same financial transaction; (d) determining whether there is a match between the first and second records; and (e) sending a notification based on the outcome of that determination. Pet. 28. On this record, we agree with Petitioner that the detecting fraud in financial transactions during a payment clearing process meets the financial product or service requirement of Section 18 of the AIA. See, e.g., U.S. Bancorp v. Solutran, Inc., Case CBM2014-00076, slip op. 6 (PTAB Aug. 7, 2014) (Paper 16) (method of processing paper checks for payment); Jack Henry & Assocs., Inc. v. DataTreasury Corp., Case CBM2014-00056, slip op. 8 (PTAB July 10, 2014) (Paper 17) (method and system for storage and verification of checks financial in nature).

Accordingly, the financial product or service requirement is satisfied.

2. Exclusion for Technological Inventions

Section 18 of the AIA states that the term "covered business method patent" does not include patents for "technological inventions." AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). To determine whether a patent is for a technological invention, we consider "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). The following claim drafting techniques, for example, typically do not render a patent a "technological invention":

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computerreadable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and nonobvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012).

Petitioner submits that no "technological feature" of claims 1, 8, or 15 is novel and non-obvious. Pet. 31. Petitioner argues that the only technological features recited in claim 1 are a database, a computer, a pointof-sale terminal, a portable electronic device, and a notification. *Id.* Petitioner also submits that the only technological features recited in claim 8 are a computer having a database, a network interface, and an electronic notification. *Id.* Petitioner further argues that the only technological features recited in claim 15 are a computer having a processor, an area of main memory, and a storage device having a database; a point of sale terminal; a portable electronic device; and a notification. *Id.* Petitioner asserts that "[t]hese technological features are not novel or non-obvious — they are generic, conventional computer technologies that were well known at the time the provisional application was filed in October 2000." *Id.* (citing Ex. 1007 ¶¶ 32–38).

Petitioner further contends that the '840 patent does not provide a technical solution to a technical problem. *Id.* at 34–37. Petitioner argues that the '840 patent addresses the problem of reducing financial transaction fraud and verifying checks and other financial instruments and documents, which are business problems, not technical problems. *Id.* at 34– 35. Further, Petitioner contends that solution, providing multiple users with access to a positive pay system at every point along the check clearing process, is not a technical solution to this problem. *Id.* at 35.

At this stage, Patent Owner does not dispute Petitioner's assertions.

We determine, based on the record before us, that the technological features of the claimed steps are directed to using known technologies. See 77 Fed. Reg. at 48,764 (indicating use of known technologies does not render a patent a technological invention). For example, independent claim 1 recites only "a database," "a computer," "a point-of-sale terminal," "a portable electronic device," and "a notification" (Ex. 1001, 28:39–29:8), and we do not discern that any of these components are used a non-conventional manner. At this stage, we agree with Petitioner that the subject matter of independent claim 1, as a whole, does not require any specific, unconventional software, computer equipment, processing capabilities, or other technological features to produce the required functional result. See Ex. 1007 ¶¶ 32–38.

We also agree, on this record, with Petitioner that the challenged patent addresses the business problem of fraud by providing multiple users access to a positive pay system at every point along the financial transaction process, which is not a technical solution to a technical problem. *See Nautilus Hyosung Inc. v. Diebold, Inc.*, Case CBM2016-00034, slip op. 11– 14 (PTAB Aug. 22, 2016) (Paper 9) (characterizing "reducing the risk of [check] fraud" as a "business problem").

Accordingly, we conclude that the subject matter of at least independent claim 1 does not have a technological feature that solves a technical problem using a technical solution, and is, therefore, not a technological invention. See Blue Calypso LLC v. Groupon, Inc., 815 F.3d 1331, 1341 (Fed. Cir. 2016) (finding that using general computer components to carry out the claimed process does not "rise[] above the general and conventional" and "cannot change the fundamental character of [patent owner's] claims").

3. Eligible for Covered Business Method Patent Review

Having determined that the challenged patent 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 and does not fall within the exception for technological inventions, we determine that the challenged patent is eligible for a covered business method patent review

C. Asserted Ground that Claims 1–20 Are Unpatentable Under § 101

Petitioner asserts each of claims 1–20 is unpatentable for being directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 43–67. Petitioner supports its contentions with citations to the Declaration of Dr. Conte (Ex. 1007).

1. Principles of Law

A patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The Supreme Court has held that this statutory provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014); Gottschalk v. Benson, 409 U.S. 63, 67 (1972) ("Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work."). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the practical application of these concepts may be deserving of patent protection. Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293–94 (2012).

In *Alice*, the Supreme Court reaffirmed 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 those concepts." Alice, 134 S. Ct. at 2355. The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." Id. If the claims are directed to a patentineligible concept, the second step in the analysis is to consider the elements of the claims "individually and 'as an ordered combination' to determine whether the additional elements [that] 'transform the nature of the claim' into a patent-eligible application." Id. (quoting Mayo, 132 S. Ct. at 1289, 1297). 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. (quoting Mayo, 132 S. Ct. at 1294) (alterations in original).

Noting that the two stages involve "overlapping scrutiny of the content of the claims," the Federal Circuit has described "the first-stage inquiry as looking at the 'focus' of the claims, their 'character as a whole,' and the second-stage inquiry (where reached) as looking more precisely at what the claim elements add—specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which (by assumption at stage two) the claim is directed." *Electric Power Grp, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Furthermore, the prohibition against patenting an abstract idea "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant postsolution activity." *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation and internal quotation marks omitted); *see Electric Power*, 830 F.3d at 1355 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.").

2. Step 1 — Whether the Claims Are Directed to an Abstract Idea

In determining whether a method or process claim recites an abstract idea, we must examine the claim as a whole. Alice, 134 S. Ct. at 2355 n. 3. Petitioner submits that claim 1 is representative. Pet. 46. More specifically. Petitioner asserts that claim 1, as a whole, recites steps directed to collecting and storing financial transaction information, comparing received financial transaction information against the stored information, and notifying the parties of any matches mismatches between the sets of financial or transaction information. Id. (citing Ex. 1001, 28:39-29:8 (claim 1)). Petitioner contends that independent claims 8 and 15 recite substantially identical corresponding limitations, but add the step of providing a computer having a database. Id. Petitioner further asserts that the claims are "directed towards the abstract idea of financial transaction fraud or error detection, a fundamental economic practice," for "the abstract idea of collecting and analyzing information and presenting the results—simple steps that can be performed in the human mind or by a human using a pen and paper." *Id.* At 45. At this time, Patent Owner does not dispute Petitioner's assertions.

We agree with Petitioner that, on this record, it has shown sufficiently that claims 1–20 are drawn to an abstract idea. Specifically, we agree with Petitioner that the claims of the challenged patent are directed to collecting and analyzing information for financial transaction fraud or error detection.

For example, beginning with independent claim 1, the only specific items recited are a computer, a database, a point of sale terminal, and a portable device. Ex. 1001, 28:39-29:8. electronic The remainder of the claim is simply a method of collecting and analyzing information. As discussed above, the claimed method steps include (i) "receiving . . . a first record," (ii) "storing in a database . . . said first record ...," (iii) "receiving ... a second record ...," (iv) where each of the first and second records have at least two parameters in common, (v) "determining . . . when there is a match" between at least two of the parameters in the first and second records, (vi) "sending a notification to said payee bank . . . with authorization to process said electronic financial transaction when said parameters match," and (vii) "sending a notification to said payee bank . . . to not process said electronic financial transaction when said parameters do not match." Id. at 28:40-29:8. Thus, besides providing conventional computer technology in the form of computer, a database, a point of sale terminal, and a portable electronic

device, the method consists of collecting, storing, analyzing, and transmitting information.

The Specification reinforces the focus of claim 1, 8, and 15 on collecting and analyzing information: "The 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." According to the Specification, "[t]he present invention" includes a "UPPD database [] configured to store thereon with transaction records associated financial transactions associated with customers of the UPPD database." Id. at 5:29-34. Moreover, the Specification explains that "[a] particular financial transaction is initiated between a payer and a payee by providing parameters associated with the particular financial transaction to the UPPD database." Id. at 5:36-38. In Specification addition. the states that "[a] correspondence determination is made between the parameters associated with the particular financial transaction . . . and the parameters associated with the particular financial transaction provided to the UPPD database to initiate the particular financial transaction." Id. at 5:43-47. The participants in the financial transaction clearing process "are able to access the correspondence determination at every point along a financial transaction clearing process." Id. at 5:51–53.

Moreover, we are persuaded that the idea of reconciling transaction information is a well-known, routine economic practice commonplace in the financial services industry and is fundamentally abstract. Indeed, the Specification further explains that the idea of reconciling financial information was a well-known, routine business practice commonplace in the financial industry. *See, e.g., id.* at 1:57–60, 2:4– 14, 3:34–42, 3:47–58, 3:59–65.

On this record, we find this case indistinguishable from a number of cases that have found storing, displaying, and analyzing data, such as for loan application processing and fraud detection, to be abstract ideas. See Credit Acceptance Corp. v. Westlake Servs., 859 F.3d 1044, 1054-57 (Fed. Cir. 2017) (holding "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" to be abstract); FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (holding that claims directed to "collecting and analyzing information to detect misuse and notifying a user when misuse is detected" are abstract); *Electric Power*, 830 F.3d at 1354 ("[M]erely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis."); Mortg. Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1324 (Fed. Cir. 2016) (holding that claims are abstract where they "recite nothing more than the collection of information to generate a 'credit grading' and to facilitate anonymous loan shopping"); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n,

776 F.3d 1343, 1347 (Fed. Cir. 2014) (identifying "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"); Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1367–69 (Fed. Cir. 2015) (determining claims adding generic computer components to financial budgeting not patent eligible); Accenture Global Servs., GmbHv. Guidewire Software, Inc., 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (holding that a "computer-aided" method for "processing information through a clearinghouse" for car loan applications is patent ineligible).

The dependent claims specify: (1) what financial information may be stored in a database (claims 2, 4, 10, and 17), (2) various well-known financial transaction-types that may be used with method (claims 3, 9, and 16), and (3) variations of the processing steps recited in the independent claims (claims 5–7, 11–14, and 18–20). Petitioner asserts, and we agree, that none of these dependent claims add anything that would change the conclusion that the claims are directed to an abstract idea. See Pet. 49– 51.

In view of the foregoing, we determine that Petitioner has demonstrated adequately, at least for purposes of institution, that claims 1-20 of the challenged patent are directed to a patent-ineligible abstract idea under 35 U.S.C. § 101.

3. Step 2 — Whether the Challenged Claims Include Limitations that Represent Inventive Concepts

We turn to the second step of the *Alice* inquiry "and scrutinize the claim elements more microscopically" for additional elements that can "transform the nature of the claim" into a patent-eligible application of an abstract idea. *Electric Power*, 830 F.3d at 1353. That is, we determine whether the claims include an "inventive concept," i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. Alice, 134 S. Ct. at 2357. The relevant inquiry here is whether "additional substantive limitations . . . narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself." Accenture, 728 F.3d at 1341 (internal quotations and citation omitted).

Further scrutinizing the recited system and method, Petitioner asserts, and we agree, there is nothing that appears to transform the nature of the claims into patent-eligible applications of an abstract idea. Pet. 57–65.

First, the only recited technology in the claims of the '840 patent is a "computer," a "database," a "processor," an "area of main memory," a "storage device," a "network device," a "point-of-sale terminal," a "portable electronic device," and a "notification." Nothing 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. The Federal Circuit has repeatedly held that such invocations of computers and networks that are not even arguably inventive are "insufficient to pass the test of an inventive concept in the application" of an abstract idea. buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1353 (Fed. Cir. 2014); see, e.g., FairWarning, 839 F.3d at 1096 (holding that an "interface" and "microprocessor" are generic computer elements that do not transform an otherwise abstract idea into patent-eligible subject matter); Mortgage Grader, 811 F.3d at 1324–25 (holding that generic computer components, such as an "interface," "network," and "database," fail to satisfy the inventive concept requirement); Intellectual Ventures I, 792 F.3d at 1368 ("The recited elements, e.g., a database, a user profile . . . and a communication medium, are all generic computer elements."); Content Extraction, 776 F.3d at 1347-48.

Second, even limiting the claims to the particular technological environment of financial transaction processing, without more, would appear to be insufficient to transform the claims into patenteligible applications of the abstract idea. See Electric Power, 830 F.3d at 1354 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.") (citing Alice, 134 S. Ct. at 2358; Mayo, 132 S. Ct. at 1294; Bilski, 561 U.S. at 610–11; Diamond v. Diehr, 450 U.S. 175, 191 (1981); buySAFE, 765 F.3d at 1355). The Specification acknowledges that the elements are well known. See Ex. 1001, 9:30–47; see also Ex. 1007 ¶¶ 39–41 (explaining how the technologies are conventional and generic). At this time, Patent Owner does not dispute Petitioner's assertions.

The dependent claims add nothing that would transform the claims into patent-eligible subject matter either. *See* Pet. 65–67.

In view of the foregoing, based on the record before us, we determine that, when considered individually and "as an ordered combination," the claim elements appear to do no more than apply the abstract concept of collecting, storing, analyzing, and communicating information to reconcile financial information, and do not appear to recite anything in a manner sufficient to transform that abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2359–60 (citing *Mayo*, 132 S. Ct. at 1297–98). This weighs in favor of finding claims 1–20 are a patent-ineligible abstract idea.

4. Conclusion

Having considered the information provided in the Petition and Patent Owner's Preliminary Response, we determine that Petitioner has demonstrated that it is more likely than not that claims 1–20 are directed to patent-ineligible subject matter under 35 U.S.C. § 101.

III. CONCLUSION

We have reviewed the information in the Petition as well as Patent Owner's arguments and evidence as currently developed in its Preliminary Response. On this record and as discussed in this Decision, we have determined that, more likely than not, claims 1–20 are directed to patent- ineligible subject matter.

Any discussion of facts in this Decision is made only for the purposes of institution and is not dispositive of any issue related to any ground on which we institute review. The Board has not made a final determination under 35 U.S.C. § 328(a) with respect to the patentability of the challenged claims. Our final determination will be based on the record as fully developed during trial.

IV. ORDER

For the foregoing reasons, it is

ORDERED that pursuant to 35 U.S.C. § 324(a), a covered business method patent review is hereby instituted as to claims 1–20 of U.S. Patent No. 8,768,840 B2 for the following ground:

Whether Claims 1–20 are unpatentable as being directed to patent- ineligible subject matter under 35 U.S.C. § 101;

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 commencing on the entry date of this Order; and

FURTHER ORDERED that the trial is limited to the grounds identified above and no other grounds set forth in the Petition are authorized.

For PETITIONER:

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APPENDIX E

Trials@uspto.gov 571-272-7822 Paper 23 Entered: August 29, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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, and FEDERAL RESERVE BANK OF ST. LOUIS, Petitioner,

v.

BOZEMAN FINANCIAL LLC, Patent Owner.

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Case CBM2017-00035 Patent 6,754,640 B2

Before MICHAEL W. KIM, WILLIAM V. SAINDON, and KEVIN W. CHERRY, Administrative Patent Judges.

CHERRY, Administrative Patent Judge.

DECISION

Granting Institution of Covered Business Method Patent Review

37 C.F.R. § 42.208

I. INTRODUCTION

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, and Federal Reserve Bank of St. Louis ("Petitioner") filed a Petition (Paper 1, "Pet.") seeking a covered business method patent review of claims 1–26 of U.S. Patent No. 6,754,640 B2 (Ex. 1001, "the '640 patent" or the "challenged patent") under section 18 of the Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284, 331 (2011) ("AIA"). Petitioner supports its contentions that the claims are unpatentable with the Declaration of Thomas M. Conte, Ph.D. (Ex. 1004), and its contentions that it was charged with infringement with the Declaration of Richard M. Fraher (Ex. 1005). Patent Owner, Bozeman Financial LLC, filed a Preliminary Response (Paper 4, "Prelim. Resp.").Patent Owner submits the Declaration of William O. Bozeman, III with its Preliminary Response. Paper 5 ("First Bozeman Decl.").

On May 19, 2017, pursuant to our authorization, Petitioner filed a Reply to Patent Owner's Preliminary Response on the limited issue of whether Petitioner has standing to bring this proceeding. Paper 9 ("Reply"). With its Reply, Petitioner provided a second Declaration of Richard M. Fraher (Ex. 1014). On May 26, 2017, also pursuant to our authorization, Patent Owner filed a Sur-Reply on the limited issue of standing. Paper 13 ("Sur-Reply"). Patent Owner submitted a second Declaration of William O. Bozeman, III in support of its Sur-Reply. Paper 15 ("Second Bozeman Decl.").

Under 35 U.S.C. § 324(a),¹ a covered business method patent review may not be instituted "unless . . . the information presented in the petition . . ., if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims

¹ See 37 C.F.R. § 42.300(a).

challenged in the petition is unpatentable." 35 U.S.C. § 324(a); see 37 C.F.R. § 42.208.

For reasons that follow, we determine that the challenged patent qualifies as a covered business method patent. We further determine, after taking into account Patent Owner's Preliminary Response and Sur-Reply, that the information presented in the Petition sufficiently demonstrates on the present record that Petitioner has standing to bring this proceeding and at least one of the challenged claims is unpatentable. Accordingly, we institute a covered business method patent review of the challenged claims.

A. Related Matters

Petitioner and Patent Owner represent that Petitioner has filed a covered business method patent review, CBM2017-00036, against a related patent, U.S. Patent No. 8,768,840 B2 ("the '840 patent," Ex. 1003). Pet. 3; Paper 7, 3; Paper 8, 1. Petitioner has also filed a declaratory judgment action of noninfringement of both the '640 patent and '840 patent— *Federal Reserve Bank of Atlanta et al. v. Bozeman Financial LLC*, Case No. 1:17-cv-00389 (N.D. Ga.). *Id.* at 2.

B. Standing to File a Petition for Covered Business Method Patent Review

A petition for covered business method review must set forth the petitioner's grounds for standing. 37 C.F.R. § 42.304(a). Rule 42.304(a) states it is Petitioner's burden to "demonstrate that the patent for which review is sought is a covered business method patent, and that the petitioner meets the eligibility requirements of § 42.302." Id. One of those eligibility requirements is that only persons (or their privies) who have been sued or charged with infringement under a patent are permitted to file a petition seeking a covered business method patent review of that patent. AIA § 18(a)(1)(B); 37 C.F.R. § rules. "[c]harged with 42.302(a). Under our infringement means real and substantial а controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court." 37 C.F.R. § 42.302(a).

The Declaratory Judgment Act provides that "[i]n a case of actual controversy within its jurisdiction, ... any court of the United States, upon the filing of an appropriate pleading, may declare the rights and other legal relations of any interested party seeking U.S.C. such declaration." 28§ 2201(a). In MedImmune, Inc. v. Genentech, Inc., the Supreme Court stated that the test for whether an "actual controversy" exists is "whether the facts alleged. under all the circumstances, show that there is a substantial controversy, between parties having adverse legal interests, of sufficient immediacy and reality to warrant the issuance of a declaratory judgment." 549 U.S. 118, 127 (2007) (internal quotation marks omitted).

Although it relaxed the test for establishing jurisdiction, *MedImmune* "did not change the bedrock rule that a case or controversy must be based on a *real* and *immediate* injury or threat of future injury that is *caused by the defendants*—an objective standard that cannot be met by a purely subjective or speculative

fear of future harm." Prasco, LLC v. Medicis Pharm. Corp., 537 F.3d 1329, 1339 (Fed. Cir. 2008). Thus, courts have explained post- MedImmune that "jurisdiction generally will not arise merely on the basis that a party learns of the existence of a patent owned by another or even perceives such a patent to pose a risk of infringement, without some affirmative act by the patentee." SanDisk Corp. v. STMicroelecs., Inc., 480 F.3d 1372, 1381 (Fed. Cir. 2007). Instead, courts have required "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." Hewlett-Packard Co. v. Acceleron LLC, 587 F.3d 1358, 1363 (Fed. Cir. 2009).

In this case, Patent Owner has not sued Petitioner for infringement. Instead, Petitioner contends that Patent Owner charged it with infringing the '640 patent. Pet. 19–21. Petitioner submits, supported by the testimony of Mr. Fraher, that Patent Owner contacted Petitioner by telephone in January 2016 and contended that Petitioner was infringing the '640 patent and '840 patents. Id. at 20 (citing Ex. 1005 ¶ 5). Petitioner also asserts that Patent Owner indicated that it intended to seek fees for the alleged infringement. Id. Petitioner contends that Patent Owner continued to contact it about potentially licensing the '640 and '840 patents. Id. Petitioner also provides an infringement claim chart Patent Owner sent Petitioner, mapping Petitioner's conduct to the claims of the '840 patent, which also mentions the '640 patent. Id. (citing Ex. 1006, 000001-5).

In its Preliminary Response, Patent Owner contends that one of its principals, Mr. Bozeman, has "had a long relationship with the Federal Reserve in regard to [Mr. Bozeman's] inventions in this field since on or about the early 2000's when the '640 patent was filed." Prelim. Resp. 6. Patent Owner claims that its discussions with Petitioner have only been about a "business collaboration" with Petitioner. Id. Patent Owner acknowledges that it contacted Petitioner, entered into a non-disclosure agreement ("NDA"), and held talks. Id. Patent Owner also acknowledges that it sent the claim chart to Petitioner, but asserts that the claim chart was prepared at the request of Petitioner, and Patent Owner contends that Mr Bozeman "made it clear that he had no intention of bringing infringement litigation and was primarily interested in the current and future payment systems and modernizations that [Petitioner] had recently announced." Id. Patent Owner argues that not only did it have no intention of but "if bringing infringement litigation, [Mr. Bozeman] ever did contemplate any such infringement litigation that he would provide [Petitioner] with an ample opportunity to resolve any such issues before [Mr. Bozeman] would file an action with any court." Id. at 7.

In its Reply, Petitioner disputes Patent Owner's characterization of the events that took place in their negotiations in 2016 and early 2017. Reply 1–5. Petitioner submits additional testimony from Mr. Fraher about the details of the discussions that took place before the parties signed their NDA. Ex. 1014 $\P\P$ 2–7. Petitioner also submits testimony from Mr. Fraher regarding the confidential discussions that took place between the parties, and detailing Patent

Owner's actions through the course of those discussions. Reply 1–5 (citing Ex. 1014 $\P\P$ 8–14).

In its Sur-Reply, Patent Owner argues that "any discussion of infringement" was "only provided in response to the solicitation by [Petitioner] in order to further evaluate a business agreement centered around future licensing and royalties and not past infringement." Sur-Reply 2. Patent Owner asserts that "[b]ecause Bozeman was seeking only a future looking agreement, and . . . since any discussion of potential infringement claims was instituted only upon the request of [Petitioner] in evaluating a licensing and/or royalty arrangement," Petitioner lacks standing to sue. *Id*.

We have reviewed Petitioner's and Patent Owner's submissions and supporting evidence, and we determine that, on this record, Petitioner has established sufficiently the facts taken together demonstrate that it has standing to bring this covered business method review. Here, it is undisputed that Patent Owner contacted Petitioner and the parties entered into lengthy discussions regarding the potential licensing of the '640 and '840 patent. See Ex. 1005 ¶¶ 4–8; Ex. 1014 ¶¶ 3–7; First Bozeman Decl. ¶¶ 7-14. Patent Owner sent Petitioner a claim chart mapping existing services offered by Petitioner to claims of the '840 patent and also mentioned the '640 patent. See Ex. 1006, 1 (mentioning '640 patent), 2-5 (claim chart of '840 patent). Although Patent Owner attempts to characterize these communications as an effort to reach a business partnership (Prelim. Resp. 6-7; Sur-Reply 2-5), the email's statement that Patent Owner sought a "commercially reasonable treatment" and mapped *existing* products to claim 1 of the '840 patent suggest otherwise (Ex. 1006, 1–5), and, in any case, is, at a minimum, "conduct that can be reasonably inferred as demonstrating intent to enforce a patent." *Hewlett-Packard Co.*, 587 F.3d at 1363. Moreover, Mr. Fraher has consistently testified that various representatives of Patent Owner contended that Petitioner was infringing the '640 and '840 patents and expected to receive licensing fees for this alleged infringement. Ex. 1005 ¶¶ 4–8; Ex. 1014 ¶¶ 3–7. Although Mr. Bozeman disputes Mr. Fraher's recollection of these telephone calls, we must, at this stage, resolve such factual disputes in favor of Petitioner.² See 37 C.F.R. § 42.208(c).

² Although we do not need to reach the negotiations that occurred after the parties entered into their NDA, because we determine the pre-NDA conduct of Patent Owner sufficient to confer standing, we note Patent Owner's objections, see Sur-Reply 3-4, that these post-NDA discussions are subject to Federal Rule of Evidence 408 and cannot be relied on is without merit. See Rhoades v. Avon Prods., Inc., 504 F.3d 1151, 1160-62 (9th Cir. 2007) ("Here, DermaNew does not rely on the threats in an attempt to prove whose trademark is valid, or to impeach Avon. Instead, it uses the threats to satisfy the jurisdictional requirements of an action for declaratory relief. This is perfectly acceptable under Rule 408." (footnote omitted)). As Petitioner establishes, those actions unambiguously show that Patent Owner objectively threated to sue Petitioner for patent infringement under the '640 and '840 patents, if Patent Owner's demand for a license was not met. See Ex. 1015, 1-28 (detailing demands and threatening to sue).

As for Patent Owner's arguments that the parties had a longstanding relationship, we do not find this materially changes our analysis. Based on the evidence presented, we are persuaded that, even assuming some sort of previous non-adversarial relationship did exist, it does not change the objective import of the documented interactions beginning in January 2016. Thus, we determine that these statements and actions, when considered objectively, and even when taking into consideration any past relationships, are more than sufficient to establish that there was a substantial controversy between the parties sufficient to establish standing under relevant case law. See SanDisk, 480 F.3d at 1382 (holding that demand for license fees and identification of specific for allegedly infringing activity sufficient jurisdiction); see also Hewlett-Packard Co., 587 F.3d at 1364 (finding jurisdiction where patentee took affirmative step of twice contacting alleged infringer and made implied assertion of right against particular product).

C. The Challenged Patent

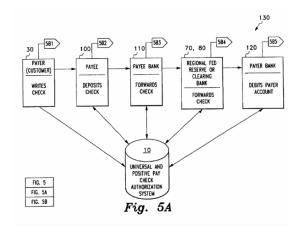
The '640 patent, titled "Universal Positive Pay Match, Authentication, Authorization, Settlement, and Clearing System," describes a universal positive pay match, authentication, authorization clearing and settlement system to reduce check fraud and verify checks, other financial instruments and documents. Ex. 1001, [54], Abstract. The '640 patent explains that "[c]heck fraud and verification of checks presented to merchants and financial institutions have always been a problem for payers who write checks." *Id.* at 1:19–21. According to the '640 patent, positive pay services, are services "that a bank sells for a fee to its account holders whereby only checks that are preapproved are accepted at the bank," and "have been available from individual banks for a number of years." *Id.* at 5:8–11.

According to the patent, a

check generating customer [using a prior art positive pay service] generally uploads a file of check register information daily to the bank of all checks written that day. When checks drawn on the customers' accounts are presented to the bank, their database is queried. If the check has been tampered with or if it is an unauthorized check number, the check will be rejected.

Id. at 5:11–17.

The patent explains that "[t]he existing positive pay services are bank specific," meaning that "only a bank's own account holders can utilize it and take advantage of it." *Id.* at 5:25–27. The patent suggests that it will overcome this perceived problem by



offering a "universal" positive pay system that "can be used by both account holder members and nonmembers" and "accessed by all banks, depositors and account holders for issuing and tracking check data, signatures and matrixes at point of presentment, point of sale and point of payment of the item." *Id.* at 5:27–35. Figure 5A of the '640 patent is reproduced below.

Figure 5A illustrates a flow diagram of the universal positive pay method for checking accounts according to the claimed invention. *Id.* at 4:9–11.

Figure 5A shows that "each participant in the check clearing process (payer customer 30, payee 100, payee bank 110, Federal Reserve 80, clearing bank 70, or payor bank 120), participates in a universal positive pay match, authentication, authorization, clearing and settlement system method 130 used by a payer (customer) 30 for maintaining check payment control and preventing check fraud." *Id.* at 9:46–53. According to the '640 patent,

The universal positive pay match. authentication, authorization, clearing and settlement system method 130 comprises a series of steps in which payer 30 uploads check information to the universal positive pay match. authentication, authorization, clearing and settlement system 10, payee 100 deposits check in payee bank 110, payee bank 110 checks the check against database 20 in the universal positive pay match authentication, authorization, clearing and settlement system 10, check is deposited in Federal Reserve 80 or clearing bank 70, which checks it against the database 20, payor bank 120 receives check and checks it against the database 20 and reports back to the universal positive pay match authentication, authorization, clearing and settlement system 10 that the check has been debited from payer's 30 account.

Id. at 9:53–67.

D. Illustrative Claims

Petitioner challenges all twenty-six claims of the challenged patent.

Claims 1 and 21 are independent claims. Claims 1 and 21 are illustrative of the claimed subject matter:

1. A universal positive pay match, authentication, authorization, clearing and settlement system comprising:

at least one server computer having a processor, an area of main memory, a storage device, and a bus connecting the processor, main memory, and the storage device;

a database stored on said storage device;

a data communications device connected to said bus for connecting said at least one server computer to an Internet; and

web-based computer program code stored in said storage device and executing in said main memory under direction of said processor, the computer program code including: first instruction means for permitting a payer who executes a check for payment to enter and store check register information relating to the executed check in said database, the check register information including a check number, a date issued, a payee, a routing number, and an account number;

second instruction means for providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank;

third instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check register information of the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment; and

fourth instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process;

wherein said database stores check register information for payers who execute checks having accounted with a plurality of unrelated drawee banks.

Ex. 1001, 16:59–17:35.

21. A computerized method for a universal positive pay match, authentication, authorization, clearing and settlement system, said method comprising:

(a) providing a database;

(b) storing check register information relating to a check executed by a payer for payment in said database, the check register information including a check number, a date issued, a payee, a routing number, an account number, and an amount;

(c) providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank;

(d) enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access the check register information of the executed check stored in said database via the web site at every point along a check clearing process in order to determine correspondence between the check register information stored in said database and the executed check presented for payment; and

(e) enabling the payer who executed the check, the payee of the executed check, the payee bank, the

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drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process.

Id. at 18:62–19:25.

E. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable based on the following grounds:

Basis	Challenged Claims
§ 101	1-26
$112, \P\P 2, 6^3$	1–20, 25, and 26

II. DISCUSSION

A. Claim Construction

In a covered business method patent review, a claim term in an unexpired patent shall be given its

³ Paragraphs 2 and 6 of 35 U.S.C. § 112 were replaced with newly designated § 112(b) and § 112(f) by § 4(c) of the AIA, and AIA § 4(e) makes those changes applicable "to any patent application that is filed on or after" September 16, 2012. *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1183 n.1 (Fed. Cir. 2014). Because the application resulting in '640 patent was filed before that date, we will refer to the pre-AIA-version of § 112.

broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.300(b); Cuozzo Speed Techs., LLC, v. Lee, 136 S. Ct. 2131, 2144 (2016); Versata Dev. Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1328 (2015). Under the broadest reasonable construction standard, claim terms are generally presumed to be 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. In re Translogic Tech., Inc., 504 F.3d 1249, 1257 (Fed. Cir. 2007). To rebut this presumption by acting as a lexicographer, the patentee must give the term a particular meaning in specification with "reasonable the clarity. deliberateness, and precision." In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

We construe the challenged claims according to these principles. Petitioner proposes constructions only for the various means-plus-function terms found in claim 1–20, 25, and 26. Pet. 23–32. We deal with the claim construction of the mean-plus-function terms in the discussion of the ground based on § 112 below. Aside from the means-plus-function terms, we determine that no other terms require express construction for this Decision.

B. Covered Business Method Patent

The AIA defines a "covered business method patent" as "a patent 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" AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). Congress provided a specific exception to this definition of a covered business method patent— "the term does not include patents for technological inventions." *Id*.

To determine whether a patent is eligible for a covered business method patent review, the focus is on the claims. *Secure Axcess, LLC v. PNC Bank N.A.*, 848 F.3d 1370, 1379 (Fed. Cir. 2017) ("It is the claims, in the traditional patent law sense, properly understood in light of the written description, that identifies a CBM patent."). One claim directed to a covered business method is sufficient to render the patent eligible for CBM patent review. *See id.* at 1381 ("[T]he statutory definition of a CBM patent requires that the patent have a claim that contains, however phrased, a financial activity element.").

For the reasons set forth below, we conclude that the challenged patent meets the definition of a covered business method patent.

1. Financial Product or Service

One requirement of a covered business method patent is for the patent to "claim[] 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." AIA § 18(d)(1); 37 C.F.R. § 42.301(a).

Petitioner contends the challenged patent meets the financial product or service requirement because the patent claims methods or systems for allowing check clearing participants (i.e., payers, payees, drawee banks, payee banks, and banking institutions intermediate the payee and drawee banks) to access stored check register information at every point along the check clearing process in order to determine whether a check has been tampered with or altered. Pet. 12–13.

At this stage, Patent Owner does not dispute Petitioner's assertions.

We agree with Petitioner that the '640 patent meets the financial product or service requirement. For example, claim 21 and its dependents are directed to "[a] computerized method for a universal positive pay match, authentication, authorization, clearing and settlement system" that includes the steps of (a) providing a database; (b) storing check register information in the database; (c) providing a website accessible to the check clearing process participants; (d) enabling the check clearing process participants to access the stored check register information via the website at every point along a check clearing process in order to determine correspondence between the stored check register information and an executed check; and enabling the check clearing process participants to determine whether tampering or altering has occurred at every point along a check clearing process. Pet. 13–14. On this record, we agree with Petitioner that the processing and authentication of checks for payment meets the financial product or service requirement of Section 18 of the AIA. See, e.g., U.S. Bancorp v. Solutran, Inc., Case CBM2014-00076, slip op. 6 (PTAB Aug. 7, 2014) (Paper 16) (method of processing paper checks for payment); Jack Henry & Assocs., Inc. v. DataTreasury Corp., Case CBM2014-00056, slip op. 8 (PTAB July

10, 2014) (Paper 17) (method and system for storage and verification of checks financial in nature). Accordingly, the financial product or service requirement is satisfied.

2. Exclusion for Technological Inventions

Section 18 of the AIA states that the term "covered business method patent" does not include patents for "technological inventions." AIA § 18(d)(1); see 37 C.F.R. § 42.301(a). To determine whether a patent is for a technological invention, we consider "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). The following claim drafting techniques, for example, typically do not render a patent a "technological invention":

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012).

Petitioner submits that no "technological feature" of claim 21 is novel and non-obvious. Pet. 15. Petitioner argues that claim 21 is directed to a computerized method that uses a database for storing check register information and an Internet website. Id. Petitioner asserts that "[a] database and Internet website are not novel or non-obvious — they were generic, conventional computer technologies wellknown in the art in October 2000." *Id.* (citing Ex. 1004 ¶¶ 41, 44, 57). Petitioner further contends that the '640 patent does not provide a technical solution to a technical problem. Id. at 16–19. Petitioner argues that the '640 patent addresses the problem of check fraud, which is a business problem, not a technical problem. *Id.* at 17.

Further, Petitioner contends that solution, providing multiple users with access to a positive pay system at every point along the check clearing process, is not a technical solution to this problem. *Id.*

At this stage, Patent Owner does not dispute Petitioner's assertions.

We determine, based on the record before us, that the technological features of the claimed steps are directed to using known technologies. See 77 Fed. Reg. at 48,764 (indicating use of known technologies does not render a patent a technological invention). For example, independent claim 21 requires only "a database," and "a web site on the Internet" (Ex. 1001, 18:62–19:24), and we do not discern that either is used in a non- conventional manner. At this stage, we agree with Petitioner that the subject matter of independent claim 21, as a whole, does not require any specific, unconventional software, computer equipment, processing capabilities, or other technological features to produce the required functional result. *See* Ex. 1004 $\P\P$ 39–45.

We also agree, on this record, with Petitioner that the challenged patent addresses the business problem of check fraud by providing multiple users access to a positive pay system at every point along the check clearing process, which is not a technical solution to a technical problem. *See Nautilus Hyosung Inc. v. Diebold, Inc.*, Case CBM2016-00034, slip op. 11– 14 (PTAB Aug. 22, 2016) (Paper 9) (characterizing "reducing the risk of [check] fraud" as a "business problem").

Accordingly, we conclude that the subject matter of at least independent claim 21 does not have a technological feature that solves a technical problem using a technical solution, and is, therefore, not a technological invention. See Blue Calypso, LLC v. Groupon, Inc., 815 F.3d 1331, 1341 (Fed. Cir. 2016) (finding that using general computer components to carry out the claimed process does not "rise[] above the general and conventional" and "cannot change the fundamental character of [patent owner's] claims").

3. Eligible for Covered Business Method Patent Review

Having determined that the challenged patent 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 and does not fall within the exception for technological inventions, we determine that the challenged patent is eligible for a covered business method patent review.

C. Asserted Ground that Claims 1–26 Are Unpatentable Under § 101

Petitioner asserts each of claims 1–26 is unpatentable for being directed to patent-ineligible subject matter under 35 U.S.C. § 101. Pet. 60–83. Petitioner supports its contentions with citations to the Declaration of Dr. Conte (Ex. 1004).

1. Principles of Law

A patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The Supreme Court has held that this statutory provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014); Gottschalk v. Benson, 409 U.S. 63, 67 (1972) ("Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work."). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the practical application of these concepts may be deserving of patent protection. Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293–94 (2012).

In *Alice*, the Supreme Court reaffirmed 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 those concepts." Alice, 134 S. Ct. at 2355. The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." Id. If the claims are directed to a patentineligible concept, the second step in the analysis is to consider the elements of the claims "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, 132 S. Ct. at 1289, 1297). 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. (quoting Mayo, 132 S. Ct. at 1294) (alterations in original).

Noting that the two stages involve "overlapping scrutiny of the content of the claims," the Federal Circuit has described "the first-stage inquiry as looking at the 'focus' of the claims, their 'character as a whole,' and the second-stage inquiry (where reached) as looking more precisely at what the claim elements add—specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which (by assumption at stage two) the claim is directed." *Electric Power Grp, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

Furthermore, the prohibition against patenting an abstract idea "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant postsolution activity." *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (citation and internal quotation marks omitted); *see Electric Power*, 830 F.3d at 1355 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patenteligible applications of the abstract idea at their core.").

2. Step 1 — Whether the Claims Are Directed to an Abstract Idea

In determining whether a method or process claim recites an abstract idea, we must examine the claim as a whole. Alice, 134 S. Ct. at 2355 n.3. Petitioner submits that claim 21 is representative. Pet. 62. More specifically, Petitioner asserts that claim 21, as a whole, relates to "[a] computerized method for a universal positive pay match, authentication, authorization, clearing and settlement system," comprising steps directed to storing check register information in an online database, accessing the stored check register information to determine correspondence between the stored information and executed check, and determining whether an tampering or altering has occurred. Id. (citing Ex. 1001, 18:62–19:24 (claim 21)).

Petitioner asserts that "[c]laim 21 recites nothing more than a recitation of steps for collecting and analyzing information" for "the age-old abstract idea of reconciling check information against a ledger—a long-standing fundamental economic practice that can easily be performed using pen and paper...." *Id*. At this stage, Patent Owner does not dispute Petitioner's assertions.

We agree with Petitioner that, on this record, it has shown sufficiently that claims 1–26 are drawn to an abstract idea. Specifically, we agree with Petitioner that the claims of the challenged patent are directed to collecting, displaying, and analyzing information to reconcile check information against a ledger.

For example, beginning with independent claim 21, no equipment is recited, although the claim implies a web server, and the only specific items recited are a database and a website accessible over the Internet. Ex. 1001, 18:62-19:25. The remainder of the claim is simply a method of collecting and displaying information. As discussed above, the claimed method steps include (i) "providing a database," (ii) "storing check register information . . . in said database," (iii) "providing a web site on the Internet...," (iv) "enabling . . . access [to] the check register information . . . stored in the database via the web site . . . in order to determine correspondence between the check register information stored in said database and the executed check presented for payment," and (v) "enabling . . . [a] determin[ation] whether tampering or altering has occurred to the executed check at every point along the check clearing process." Id. at 18:62–19:25. Thus, besides providing conventional computer technology in the form of a database and website, the method consists of storing, displaying, and analyzing information. Moreover, there is nothing in the claim that requires that the analysis even be automatic, as the claim language is broad enough such that a person viewing the information on a website could be the one making the determination of whether the check is fraudulent or not. Claim 1 is written as a system and includes substantially similar functions, written as computer code, as claim 21.

The specification reinforces the focus of claims 1 and 21 on collecting and analyzing information: "The present invention relates to a universal positive pay [] system to reduce check fraud and verify checks, other financial instruments and documents." Ex. 1001 at 1:14–17. According to the specification, the customer "has the flexibility to utilize several means for inputting current check register information . . . includ[ing] computerized devices such as personal computers, portable laptops and palmtops, as well as mainframe computers and servers[.]" Id. at 6:1-7. Once the customer's information is in the claimed system, the "participating commercial entity . . . may match and compare the information from the check with the check register information in the [claimed system] . . . to verify that the check has not been altered or tampered with." Id. at 6:51-61. Moreover, we are persuaded that the idea of reconciling check register information is a well-known, routine economic practice commonplace in the financial services industry and is fundamentally abstract. Indeed, the specification states that "[p]ositive pay services have been available from individual banks for a number of years." Id. at 5:8-9.

On this record, we find this case indistinguishable from a number of cases that have found storing, displaying, and analyzing data, such as for loan application processing and fraud detection, to be abstract ideas. See Credit Acceptance Corp. v. Westlake Servs., 859 F.3d 1044, 1054-57 (Fed. Cir. 2017) (holding "system for maintaining a database of information about 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" to be abstract); FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (holding that claims directed to "collecting" and analyzing information to detect misuse and notifying a user when misuse is detected" are abstract); *Electric Power*, 830 F.3d at 1354 ("[M]erely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis."); Mortg. Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1324 (Fed. Cir. 2016) (holding that claims are abstract where they "recite nothing more than the collection of information to and generate a 'credit grading' to facilitate anonymous loan shopping"); Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n..776 F.3d 1343. 1347 (Fed. Cir. 2014) (identifying "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"); Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1367–69 (Fed. Cir. 2015) (determining claims adding generic computer

components to financial budgeting not patent eligible); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (holding that a "computer-aided" method for "processing information through a clearinghouse" for car loan applications is patent ineligible).

The dependent claims either specify additional data processing steps (claims 2–8, 19, 20, 22–26), or append one or more instruments or devices to the claimed system (claims 9–18). Petitioner asserts, and we agree, that none of these dependent claims appear to add anything that would change the conclusion that the claims are directed to an abstract idea. See Pet. 64; Ex. 1004 ¶ 48.

In view of the foregoing, we determine that Petitioner has demonstrated adequately, at least for purposes of institution, that claims 1-26 of the challenged patent are directed to a patent-ineligible abstract idea under 35 U.S.C. § 101.

3. Step 2 — Whether the Challenged Claims Include Limitations that Represent Inventive Concepts

We turn to the second step of the Alice inquiry "and scrutinize the claim elements more microscopically" for additional elements that can "transform the nature of the claim" into a patent-eligible application of an abstract idea. *Electric Power*, 830 F.3d at 1353. That is, we determine whether the claims include an "inventive concept," i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. *Alice*, 134 S. Ct. at 2357. The relevant inquiry here is whether "additional substantive limitations . . . narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself." *Accenture*, 728 F.3d at 1341 (internal quotations and citation omitted).

Further scrutinizing the recited system and method, Petitioner asserts, and we agree, there is nothing that appears to transform the nature of the claims into patent-eligible applications of an abstract idea. Pet. 74–83.

First, the only recited technology in claim 21 is a "database" and "Internet accessible web page." Claim 1 merely adds a "server computer" with a "processor," "main memory," "storage device," and "bus connecting the processor, main memory, and the storage device." Nothing 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 the check register, and displaying the data to the users. The Federal Circuit has repeatedly held that such invocations of computers and networks that are not even arguably inventive are "insufficient to pass the test of an inventive concept in the application" of an abstract idea. buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1353 (Fed. Cir. 2014); see, e.g., FairWarning, 839 F.3d 1089, 1096 (Fed. Cir. 2016)(holding that an "interface" and "microprocessor" are generic computer elements that do not transform an otherwise abstract idea into patent-eligible subject matter); Mortgage Grader, 811 F.3d at 1324-25 (holding that generic computer components, such as an "interface," "network," and "database," fail to satisfy the inventive concept requirement); Intellectual Ventures I, 792 F.3d at 1368 ("The recited elements, e.g., a database, a user profile . . . and a communication medium, are all generic computer elements."); Content Extraction, 776 F.3d at 1347–48. Second, even limiting the claims to the particular technological environment of check processing, without more, would appear to be insufficient to transform the claims into patenteligible applications of the abstract idea. See Electric *Power*, 830 F.3d at 1354 ("[L]imiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.") (citing Alice, 134 S. Ct. at 2358; Mayo, 132 S. Ct. at 1294; Bilski, 561 U.S. at 610–11; Diamond v. Diehr, 450 U.S. 175, 191 (1981); buySAFE, 765 F.3d at 1355).

The specification acknowledges that the elements are well known. See Ex. 1001, 4:53–64; see also Ex. 1004 ¶¶ 40–52 (explaining how the technologies are conventional and generic). At this stage, Patent Owner does not dispute Petitioner's assertions.

In view of the foregoing, based on the record before us, we determine that, when considered individually and "as an ordered combination," the claim elements appear to do no more than apply the abstract concept of collecting, displaying, and analyzing information to reconcile check information against a ledger, and do not appear to recite anything in a manner sufficient to transform that abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2359–60 (citing Mayo, 132 S. Ct. at 1297–98). This weighs in favor of finding claims 1–26 are a patent- ineligible abstract

4. Conclusion

idea.

Having considered the information provided in the Petition and Patent Owner's Preliminary Response, we determine that Petitioner has demonstrated that it is more likely than not that claims 1–26 are directed to patent-ineligible subject matter under 35 U.S.C. § 101.

D. Asserted Ground Based on § $112 \P 92 \& 6$

Petitioner contends that the challenged patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for the means-plus-function limitations in claims 1–20, 25, and 26 and, therefore, these claims are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2. Petitioner supports its contentions with citations to the Declaration of Dr. Conte (Ex. 1004). Pet. 33–60.

At this stage, Patent Owner does not dispute Petitioner's assertions.

1. Principles of Law

Under 35 U.S.C. § $112 \P 6$, "[a]n element in a claim for a combination may be expressed as a means . . . for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6. Using the term "means" in a "means for" context creates a rebuttable presumption that 35 U.S.C. § 112 ¶ 6 applies. See Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348, 1349 (Fed. Cir. 2015) (en banc in relevant part) ("use of the word 'means' creates a presumption that § 112, ¶ 6 applies"). In determining whether a claim element falls within the ambit of § $112 \ \ 6$, "[t]he standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." Id. at 1349 (quoting Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed. Cir. 1996)). "When a claim term lacks the word 'means,' the presumption can be overcome and 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function." Id. (quoting Watts v. XL Sys., Inc., 232 F.3d 877, 880 (Fed. Cir. 2000)).

Once a claim limitation falls under 35 U.S.C. § 112 ¶ 6, the construction of such a limitation involves two steps: (1) identifying the claimed function and (2) identifying in the specification the corresponding structure that performs the claimed function. See Noah Sys., Inc. v. Intuit Inc., 675 F.3d 1302, 1311 (Fed. Cir. 2012). In the event the specification does not identify sufficient structure to perform the claimed functions, "the claim limitation would lack specificity, rendering the claim as a whole invalid for indefiniteness under 35 U.S.C. § 112 ¶ 2." Aristocrat

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Techs. Austl. Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1331 (Fed. Cir. 2008) (citing *In re Donaldson*, 16 F.3d 1189, 1195 (Fed.Cir.1994) (en banc)).

2. Analysis

Based on the record now before us, we agree that Petitioner has sufficiently shown that the limitations of claims 1–20, 25, and 26 that recite "means for" are governed by § 112 ¶ 6. See Ex. 1004 ¶¶ 63–68; Williamson, 792 F.3d at 1349. Furthermore, as claim 1 recites, all of the "instruction means for" limitations are "web-based computer program code" executed and stored on a server having a processor, an area of main memory, a storage device, and a bus connecting the processor, main memory, and storage device. See Ex. 1001, 16:61–17:4. In other words, the "instruction means for" limitations are all special purpose computer code executed on a general purpose computer. See Ex. 1004 ¶¶ 64–66.

As for the first step of construing these meansplus-function limitations, we further agree that Petitioner has shown adequately that the corresponding functions for the following limitations are what is shown in the table below.

Term	Function	
first instruction means	permitting a payer who	
for permitting a payer	executes a check for	
who executes a check for	payment to enter and	
payment to enter and	store check register	
store check register	information relating to	
information relating to	the executed check in	

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Term	Function
the executed check in said database, the check register information including a check number, a date issued, a payee, a routing number, and an account number (claim 1)	said database, the check register information including a check number, a date issued, a payee, a routing number, and an account number
second instruction means for providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank (claim 1)	providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank
third instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check	enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check register information of

Term	Function
register information of the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment (claim 1)	the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment
fourth instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process (claim 1)	enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process
fifth instruction means for searching and capturing check register information for	searching and capturing check register information for

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Term	Function
abandoned property subject to escheat (claim 2)	abandoned property subject to escheat
sixth instruction means for automatically polling check register information for storage on said database (claim 3)	automatically polling check register information for storage on said database
seventh instruction means for performing a reconciliation of check registration information for payers who executed checks (claim 4)	performing a reconciliation of check registration information for payers who executed checks
eighth instruction means for locating lost, stolen, misplaced items and items not presented and that remain outstanding (claim 5)	locating lost, stolen, misplaced items and items not presented and that remain outstanding
ninth instruction means for archiving and storing check register, matching data, verification data and authentication data for up to a period of seven years (claim 6)	archiving and storing check register, matching data, verification data and authentication data for up to a period of seven years

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Term	Function
eleventh instruction means for making a credit history compilation for a payer who executes checks based upon check register information (claim 19)	making a credit history compilation for a payer who executes checks based upon check register information
twelfth instruction means for compiling a behavior matrix for payers who execute checks based upon check register information (claim 20)	compiling a behavior matrix for payers who execute checks based upon check register information
fourteenth instruction means for enabling payers who execute checks to view their check register information in real-time (claim 26)	enabling payers who execute checks to view their check register information in real-time
means for demodulating check register information from a telephone carrier signal (claim 9)	demodulating check register information from a telephone carrier signal

Pet. 26–32.

As for the second step of identifying the corresponding structure, we agree with Petitioner that the specification of the '640 patent fails to provide adequate corresponding structure for performing these functions. See Pet. 36-60. "A patent applicant who employs means-plus-function language 'must set forth in the specification an adequate disclosure showing what is meant by that language."" Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1367 (Fed. Cir. 2008) (quoting In re Donaldson, 16 F.3d at 1195). In cases such as this one, which involve computer-implemented means-plusfunction limitation, courts have required "that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor." Aristocrat., 521 F.3d at 1333. The specification must "disclose an algorithm for performing the claimed function." Net MoneyIN, 545 F.3d at 1367. The specification can express the algorithm "in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." Finisar Corp. v. DirecTV Grp., Inc., 523 F.3d 1323, 1340 (Fed. 2008) (internal citation omitted). Simply Cir. disclosing software, however, "without providing some detail about the means to accomplish the function[,] is not enough." Id. at 1340–41 (citation omitted).

As claim 1 makes clear, the "instruction means for" limitations are "web-based computer program code" executed on the processor in the server. *See* Ex. 1001, 16:61–17:4. Because the "instruction means for" are software running on a processor, the specification must also disclose an algorithm.⁴ Net MoneyIN, 545 F.3d at 1367.

On this record, we agree with Petitioner that the specification of the '640 patent fails to provide an adequate algorithm for the "instruction means for" limitations identified above. For example, with respect to the "first instruction means for permitting a payer who executes a check for payment to enter and store check register information relating to the executed check in said database," we agree with Petitioner that, on this record, there does not appear to be a step-by-step explanation of how the web-based code would both allow a person to enter and store the recited information. See Pet. 36–39; Ex. 1004 ¶¶ 72– 79. Instead, we agree with Petitioner that all that appears is a generalized recitation of the function and an indication that the software can perform it. See Ex. 1001, 6:9–15, 10:1–9, 10:16–26. As Petitioner notes, the fact that a person of ordinary skill might understand how to write code to perform these functions is not relevant. See Blackboard. Inc. v. Desire2Learn, Inc., 574 F.3d 1371, 1385 (Fed. Cir.

⁴ Because the '640 patent requires a server computer specifically programmed to carry out the recited functions associated with the various "instruction means for," we determine, on this record, that the exception to the algorithm requirement, set forth in *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011), for situations involving functions that can be accomplished by "any general purpose computer without special programming," does not apply.

2009) ("A patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function.").

We also agree with Petitioner that it has shown sufficiently that the other "means for" limitations of claims 1–9, 19, 20, and 26 identified in the Petition similarly contain limitations that lack adequate corresponding structure in the specification. See Pet. 39-60; Ex. 1004 ¶¶ 80-164. As for claims 10-18 and 25, those claims depend from at least one claim that contains a limitation that has been shown, on this record, to lack adequate corresponding structure. Accordingly, based on the foregoing discussion, we agree that Petitioner has shown, on this record, that it is more likely than not that claims 1–20, 25, and 26 are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2 because the '640 patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for the meansplus-function limitations in those claims.

III. CONCLUSION

We have reviewed the information in the Petition as well as Patent Owner's arguments and evidence as currently developed in its Preliminary Response. On this record and as discussed in this Decision, we have determined that, more likely than not, (i) claims 1–26 are directed to patent- ineligible subject matter, and (ii) claims 1–20, 25, and 26 are indefinite for failing to disclose adequate structure.

Any discussion of facts in this Decision is made only for the purposes of institution and is not dispositive of any issue related to any ground on which we institute review. The Board has not made a final determination under 35 U.S.C. § 328(a) with respect to the patentability of the challenged claims. Our final determination will be based on the record as fully developed during trial.

IV. ORDER

For the foregoing reasons, it is

ORDERED that pursuant to 35 U.S.C. § 324(a), a covered business method patent review is hereby instituted as to claims 1–26 of U.S. Patent No. 6,754,640 B2 for the following grounds:

Whether Claims 1–26 are unpatentable as being directed to patent- ineligible subject matter under 35 U.S.C. § 101; and

Whether Claims 1–20, 25, and 26 are unpatentable under 35 U.S.C.

§ 112 ¶¶ 2 & 6, as being indefinite under 35 U.S.C. § 112 ¶ 2 because the '640 patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for means-plus-function claim limitations;

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 commencing on the entry date of this Order; and

FURTHER ORDERED that the trial is limited to the grounds identified above and no other grounds set forth in the Petition are authorized.

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APPENDIX F

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

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*

2019-1018

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

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

Appellant Bozeman Financial LLC filed a petition for rehearing 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 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 June 10, 2020.

FOR THE COURT

<u>June 3, 2020</u> Date <u>/s/ Peter R. Marksteiner</u> Peter R. Marksteiner Clerk of Court

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UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

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

2019-1020

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

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

Appellant Bozeman Financial LLC filed a petition for rehearing 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 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 June 10, 2020.

FOR THE COURT

<u>June 3, 2020</u> Date <u>/s/ Peter R. Marksteiner</u> Peter R. Marksteiner Clerk of Court

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APPENDIX G

STATUTORY PROVISIONS INVOLVED

Title 35, section 311(a) of the United States Code provides: "Subject to the provisions of this chapter, a person who is not the owner of a patent may file with the Office a petition to institute an inter partes review of the patent. The Director shall establish, by regulation, fees to be paid by the person requesting the review, in such amounts as the Director determines to be reasonable, considering the aggregate costs of the review." 35 U.S.C. § 311(a).

* * *

Title 35, section 321(a) of the United States Code provides: "Subject to the provisions of this chapter, a person who is not the owner of a patent may file with the Office a petition to institute a post-grant review of the patent. The Director shall establish, by regulation, fees to be paid by the person requesting the review, in such amounts as the Director determines to be reasonable, considering the aggregate costs of the post-grant review." 35 U.S.C. § 321(a).

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APPENDIX H

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

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, and FEDERAL	CIVIL ACTION FILE NO.
RESERVE BANK OF ST. LOUIS,	
Plaintiffs,	
v.	

BOZEMAN FINANCIAL LLC,

Defendant.

COMPLAINT FOR DECLARATORY RELIEF

THE 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. and FEDERAL RESERVE BANK OF ST. LOUIS (collectively, the "Federal Reserve Banks"), plaintiffs in the above-captioned action, for their Complaint for Declaratory Relief against defendant BOZEMAN FINANCIAL LLC ("Bozeman Financial"), allege as follows:

NATURE OF THE ACTION

1. This is an action for declaratory judgment of non-infringement of U.S. Patent No. 6,754,640 B2 ("the '640 Patent") and U.S. Patent No. 8,768,840 B2 ("the '840 Patent"). True and correct copies of the '640 Patent and the '840 Patent are attached hereto as Exhibits A and B, respectively.

THE PARTIES

2. The Federal Reserve Bank of Atlanta is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913,

12 U.S.C. § 221 *et seq.*, with its principal place of business in Atlanta, Georgia.

3. The Federal Reserve Bank of Boston is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Boston, Massachusetts.

4. The Federal Reserve Bank of Chicago is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Chicago, Illinois.

5. The Federal Reserve Bank of Cleveland is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Cleveland, Ohio.

6. The Federal Reserve Bank of Dallas is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Dallas, Texas.

7. The Federal Reserve Bank of Kansas City is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Kansas City, Missouri.

8. The Federal Reserve Bank of Minneapolis is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913,

12 U.S.C. § 221 *et seq.*, with its principal place of business in Minneapolis, Minnesota.

9. The Federal Reserve Bank of New York is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in New York, New York.

10. The Federal Reserve Bank of Philadelphia is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Philadelphia, Pennsylvania.

11. The Federal Reserve Bank of Richmond is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in Richmond, Virginia.

12. The Federal Reserve Bank of San Francisco is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in San Francisco, California.

13. The Federal Reserve Bank of St. Louis is a corporation chartered under the laws of the United States pursuant to the Federal Reserve Act of 1913, 12 U.S.C. § 221 *et seq.*, with its principal place of business in St. Louis, Missouri.

14. The Federal Reserve Banks are instrumentalities of the United States that, collectively, make up the operating arm of the Federal Reserve System, the central bank of the United States. Through their employees, the Federal Reserve Banks carry out the nationwide, operational responsibilities of the nation's central bank and perform a myriad of important public functions designed to develop, implement and foster the monetary and fiscal policies of the United States. These functions include providing and maintaining the national infrastructure supporting payments, including the Federal Reserve Banks' FedLine Access Solutions ("FedLine") and related computer system, Check 21 check processing system, the FedACH Service ("FedACH") and related computer system, the Fedwire Funds Service ("Fedwire") and related computer system, and the National Settlement Service ("NSS") and related computer system (collectively, the "Federal Reserve Bank Systems"). The Federal Reserve Bank Systems form the backbone of the nation's payment systems. Each of the Federal Reserve Banks relies upon and uses the Federal Reserve Bank Systems to fulfill their statutory mandate to provide financial services, including check processing and funds transfers, to U.S. depository institutions, the U.S. Government, and foreign central banks and international organizations.

15. On information and belief, Defendant Bozeman Financial LLC ("Bozeman Financial") is a limited liability corporation organized and existing under the laws of the State of Florida, with its principal place of business located at 8022 Stimie Avenue North, Saint Petersburg, Florida 33710. Bozeman Financial may be served with process by and through its registered agent, Sandra W. Bozeman, at 8022 Stimie Avenue North, Saint Petersburg, Florida 33710.

JURISDICTION AND VENUE

16. This action arises under the patent laws of the United States, Title 35 of the United States Code, § 1 *et seq.*, with a specific remedy sought under the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202. An actual, substantial, and continuing justiciable controversy exists between the Federal Reserve Banks and Bozeman Financial that requires a declaration of rights by this Court.

17. The Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

18. This Court has personal jurisdiction over Defendant Bozeman Financial under Georgia's longarm statute, O.C.G.A. § 9-10-91, because Bozeman Financial transacts business in the State of Georgia by virtue of its purposeful and repeated contacts with the Federal Reserve Bank of Atlanta in this district concerning the '640 Patent and the '840 Patent, and its purposeful and repeated acts in this district pertaining to the enforcement of the '640 Patent and the '840 Patent against the Federal Reserve Bank of Atlanta and the other Federal Reserve Banks arising out of their alleged infringing activity occurring in Georgia and elsewhere, and the alleged infringing activity of their subscribers, some of which reside in Georgia. 19. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391.

THE CONTROVERSY

20. Bozeman Financial claims to be the owner, by assignment, of the '640 Patent, entitled "Universal Positive Pay Match, Authentication, Authorization, Settlement and Clearing System," which issued on June 22, 2004.

21. Bozeman Financial claims to be the owner, by assignment, of the '840 Patent, entitled "Universal Positive Pay Match, Authentication, Authorization, Settlement and Clearing System," which issued on July 1, 2014.

22. The '640 Patent and the '840 Patent are related to one another. Specifically, the '840 Patent is a continuation of U.S. Patent Application No. 12/893,837, which is a division of U.S. Patent Application No. 10/871,006, which is a continuationin-part of the patent application that matured into the '640 Patent. The '640 Patent and the '840 Patent are hereinafter sometimes jointly referred to as the "Patents-in-Suit."

23. Each of the Patents-in-Suit identifies William O. Bozeman ("Mr. Bozeman") as the sole inventor.

24. On information and belief, Mr. Bozeman is a manager and principal of Bozeman Financial.

25. In December 2015, Bozeman Financial, and specifically, its principal, Mr. Bozeman, contacted the Federal Reserve Bank of Atlanta by telephone. Mr. Bozeman informed the Federal Reserve Bank of Atlanta that he believes several financial institutions are infringing the Patents-in-Suit, as well as patents owned by one or more of the Federal Reserve Banks. Mr. Bozeman offered to approach these third parties on behalf of Bozeman Financial and the Federal **Reserve Banks in** an effort to extract licensing fees third parties for from these their alleged infringements. The Federal Reserve Bank of Atlanta declined Mr. Bozeman's business proposal to monetize the Federal Reserve Banks' patents on their behalf. Mr. Bozeman then informed the Federal Reserve Bank of Atlanta that he believes the Federal Reserve Banks are infringing the Patents-in-Suit. Mr. Bozeman spoke at length about his view of the scope of Bozeman Financial's patents on "universal positive pay." The Federal Reserve Bank of Atlanta informed Mr. Bozeman that while it had not researched his patents, it was confident that the Federal Reserve Banks do not offer any "positive pay" services, and therefore, the Federal Reserve Banks were not infringing.

26. On or about January 27, 2016, Mr. Bozeman and Bozeman Financial, along with their counsel, again contacted the Federal Reserve Bank of Atlanta by telephone concerning the Patents-in-Suit. Bozeman Financial reiterated that it believes that the Federal Reserve Banks have been infringing and are continuing to infringe the Patents-in-Suit, and made clear that Bozeman Financial intends to extract fees from the Federal Reserve Banks for the Banks' alleged infringement of these patents. The Federal Reserve Bank of Atlanta again informed Bozeman Financial, Mr. Bozeman, and their counsel that it does not believe the Federal Reserve Banks are infringing the '640 Patent or the '840 Patent, and requested that they provide a written explanation of the bases for their infringement claims.

27. On or about April 21, 2016, Mr. Bozeman and Bozeman Financial, through their counsel, again reached out to the Federal Reserve Bank of Atlanta, this time by e-mail, to "see if there is any mutual ground for agreement that [Bozeman Financial's] IP deserves some commercially reasonable treatment from the Fed and its subscribers, and others in the digital debit and payment ecosystem." In his email, Bozeman Financial's counsel confirmed that they had "publicly available reviewed the date [sic] surrounding the Federal Reserve's role in the verification of electronic payments in accordance with the IP owned by Mr. Bozeman." Bozeman Financial's counsel attached an infringement claim chart for the '840 Patent. This infringement claim chart presents an element-by-element comparison of independent claim 1 of the '840 Patent to the Federal Reserve Banks' electronic services, using as examples the Federal Reserve Banks' FedACH, Fedwire, and FedLine services. Bozeman Financial's counsel also attached a compilation of publicly-available materials describing the Federal Reserve Banks' electronic services, including FedLine, Check 21, FedACH, Fedwire, and NSS. A true and correct copy of the April 21, 2016 e-mail and attachments is attached hereto as Exhibit C.

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28. Since Bozeman Financial's April 21, 2016 email, Bozeman Financial and the Federal Reserve Bank of Atlanta, on behalf of itself and the other Federal Reserve Banks, have had several additional communications in writing and over the telephone, and one in-person meeting at the Federal Reserve Bank of Atlanta's offices in this District, concerning the Federal Reserve Banks' alleged infringement of the Patents-in-Suit. Bozeman Financial's claims of infringement have extended to the Federal Reserve Banks' subscribers, some of which reside in Georgia. The Federal Reserve Banks have informed Bozeman Financial and its counsel that they have not infringed and are not infringing the '640 Patent and the '840 Patent, and that a license to these patents is neither necessary nor warranted.

29. As a result of Bozeman Financial's previous and continued assertions that the Federal Reserve Banks are infringing the Patents-in-Suit, and the Federal Reserve Banks' denial of the same, an actual and justiciable controversy exists between the parties of sufficient immediacy and reality to warrant issuance of a declaratory judgment under 28 U.S.C. §§ 2201 and 2202 as to the alleged infringement of the Patents-in-Suit.

FIRST CLAIM FOR RELIEF

(Declaratory Judgment of Non-Infringement of the '640 Patent)

30. The Federal Reserve Banks incorporate herein by reference Paragraphs 1 through 29 above.

31.An actual and justiciable controversy has arisen and now exists between the parties with respect to the alleged infringement of the '640 Patent.

32. The Federal Reserve Banks have not infringed, and are not infringing, any claim of the '640 Patent, either directly or indirectly, either literally or under the doctrine of equivalents.

33. Independent claim 1 of the '640 Patent is generally directed to a "universal positive pay match, authentication, authorization, clearing and settlement system." The claimed system comprises "at least one server computer having a processor, an area of main memory, a storage device, and a bus connecting the processor, main memory, and the storage device: a database stored on said storage device; a data communications device connected to said bus for connecting said at least one server computer to an Internet; and web-based computer program code stored in said storage device and executing in said main memory under direction of said processor, the computer program code including: first instruction means for permitting a payer who executes a check for payment to enter and store check register information relating to the executed check in said database, the check register information including a check number, a date issued, a payee, a routing number, and an account number; second instruction means for providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank; third instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check register information of the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment; and fourth instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process; wherein said database stores check register information for payers who execute checks having accounted with a plurality of unrelated drawee banks."

34. By way of example only and without limitation, the Federal Reserve Banks do not infringe Claim 1 of the '640 Patent (or any of its dependent claims) because, among other reasons, the Federal Reserve Bank Systems do not comprise "web-based computer program code" that includes a "third instruction means for enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access check register information of the executed check at every point along a check clearing process in order to determine correspondence between check register information stored in said database and the executed check presented for payment," or a "fourth instruction means for enabling the payer who executed the check. the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process," as those phrases are properly construed in the context of the '640 Patent. None of these systems enable every participant in the check clearing process to access stored check register information at every point along the check clearing process to determine correspondence between stored check register information and the executed check presented for payment. Further, none of these systems enable every participant in the check clearing process to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process.

35. Independent claim 21 of the '640 Patent is generally directed to "[a] computerized method for a universal positive pay match, authentication, authorization, clearing and settlement system."

The claimed method comprises: "(a) providing a database; (b) storing check register information relating to a check executed by a payer for payment in said database, the check register information including a check number, a date issued, a payee, a routing number, an account number, and an amount; (c) providing a web site on the Internet accessible to the payer who executed the check, a payee of the executed check, a payee bank, a drawee bank, and banking institutions intermediate the payee bank and the drawee bank; (d) enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access the check register information of the executed check stored in said database via the web site at every point along a check clearing process in order to determine correspondence between the check register information stored in said database and the executed check presented for payment; and (e) enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process."

36. By way of example only and without limitation, the Federal Reserve Banks do not infringe Claim 21 of the '640 Patent (or any of its dependent claims) because, among other reasons, the Federal Reserve Bank Systems do not perform the steps of "enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to access the check register information of the executed check stored in said database via the web site at every point along a check clearing process in order to determine correspondence between the check register information stored in said database and the executed check presented for payment," or "enabling the payer who executed the check, the payee of the executed check, the payee bank, the drawee bank, and banking institutions intermediate the payee bank and the drawee bank to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process," as those phrases are properly construed in the context of the '640 Patent. None of these systems enable all of the check clearing process participants to access the stored check register information of the executed check via the web site at every point along a check clearing process in order to determine correspondence between the stored check information and the executed check register presented for payment. Further, none of these systems enable all of the check clearing process participants to determine whether tampering or altering has occurred to the executed check at every point along a check clearing process.

37. The Federal Reserve Banks are entitled to a judgment declaring that they have not infringed and that they are not infringing any claim of the '640 Patent, either directly or indirectly, either literally or under the doctrine of equivalents.

SECOND CLAIM FOR RELIEF

(Declaratory Judgment of Non-Infringement of the '840 Patent)

38. The Federal Reserve Banks incorporate herein by reference Paragraphs 1 through 37 above.

39. An actual and justiciable controversy has arisen and now exists between the parties with respect to the alleged infringement of the '840 Patent.

40. The Federal Reserve Banks have not infringed, and are not infringing, any claim of the '840 Patent, either directly or indirectly, either literally or under the doctrine of equivalents.

41. Independent claim 1 of the '840 Patent is generally directed to a "computer implemented method for detecting fraud in financial transactions during a payment clearing process." The claimed method comprises "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 match; and sending a notification to said payee bank participant to not process said electronic financial transaction when said parameters do not match."

42. By way of example only and without limitation, the Federal Reserve Banks do not infringe Claim 1 of the '840 Patent (or any of its dependent claims) because, among other reasons, the Federal Reserve Bank Systems do not comprise "a database accessible by each party to said payment clearing process of said electronic financial transaction," or the ability to enable "any party to said payment clearing process ... [to] verify[] said parameters at each point along said financial transaction payment clearing process," as those claims are properly construed in the context of the '840 Patent. None of these systems comprise such a database that is accessible by each party to the payment clearing process. Further, none of these systems can enable any party to the payment clearing process to verify parameters at each point along the financial transaction payment clearing process.

43. Claim 8 is generally directed to a "computer implemented method for detecting fraud in a check

clearing process." The method of claim 8 comprises "providing a computer having a database accessible by each participant to said check clearing process; receiving at said computer a first record of a check from a payer including check register information; storing in said database said first record of said check received by said payer, said first record comprising at of the following parameters: a check least two number, a date issued, a payee, a routing number, an account number, and an amount; providing a network interface to said database accessed by one or more participants in said check clearing process selected from the group comprising: a payee of said check, a payee bank, a payer bank, banking institutions intermediate said payee bank and said payer bank, a clearing bank, a Federal Reserve Bank, and a third party processor; enabling said one or more participants in said check clearing process to communicate separately with said database via said network interface as said check moves along said check clearing process; receiving from said at least one or more participants in said check clearing process a second record of said check, said second record comprising at least two of the following parameters: a check number, a date issued, a payee, a routing number, an account number, and an amount, and wherein any participant in said check clearing process is capable of verifying said parameters at each point along said check clearing process; determining by said computer correspondence between said parameters of said first record and said parameters of said second record of said check; providing an electronic notification to said participant, wherein said notification includes results of said correspondence determination; wherein said notification informs said participant to process said financial transaction when said first and second records correspond; and wherein said notification informs said participant to not process said financial transaction when said first and second records do not correspond."

44. By way of example only and without limitation, the Federal Reserve Banks do not infringe Claim 8 of the '840 Patent (or any of its dependent claims) because, among other reasons, the Federal Reserve Bank Systems do not perform the steps of "providing" a computer having a database accessible by each participant to said check clearing process," or enabling "any participant in said check clearing process ... [to] verify[] said parameters at each point along said check clearing process," as those phrases are properly construed in the context of the '840 Patent. None of these systems comprise such a database that is accessible by each party to the payment clearing process. Further, none of these systems can enable any party to the check clearing process to verify parameters at each point along the check clearing process.

45. Claim 15 of the '840 Patent is generally directed to a "computer implemented method for detecting errors in processing financial transactions." The claimed method comprises "providing at least one computer having a processor, an area of main memory, and a storage device having a database, wherein said database is accessible by each participant involved in said processing of financial transactions; storing in said database records of financial transactions relating payments. to comprising at least a first record of a first financial transaction received from at least one participant to said processing of said financial transaction selected from the following group: a payer, a point of sale terminal, an online account, and a portable electronic device, each financial transaction record including more than one parameter; receiving at said computer a second record of said first financial transaction from a bank of first deposit as said first financial transaction moves through said error detection process, said second record including at least some of said more than one parameters that are in said first record of said first financial transaction; determining by said computer whether there is a match between at least one of said parameters of said second record of said first financial transaction received at said computer and one of the same parameters in said first record of said first financial transaction stored in said database, and wherein any participant in said processing of said financial transaction is capable of verifying said parameters at each point along said error detection process; providing a notification to said bank of first deposit with results from said matching of said parameters of said second record with said parameters of said first record; and providing a notification to said payer with results from said matching."

46. By way of example only and without limitation, the Federal Reserve Banks do not infringe Claim 15

of the '840 Patent (or any of its dependent claims) because, among other reasons, the Federal Reserve Bank Systems do not perform the steps of "providing" ... a database, wherein said database is accessible by each participant involved in said processing of financial transactions," or enabling "any participant in said processing of said financial transaction ... [to] verify[] said parameters at each point along said error detection process," as those terms are properly construed in the context of the '840 Patent. None of these systems comprise such a database that is accessible by each participant involved in the processing of financial transactions. Further, none of these systems can enable any participant in the processing of a financial transaction to verify parameters at each point along the error detection process.

47. The Federal Reserve Banks are entitled to a judgment declaring that they have not infringed and that they are not infringing any claim of the '840 Patent, either directly or indirectly, either literally or under the doctrine of equivalents.

PRAYER FOR RELIEF

WHEREFORE, the Federal Reserve Banks pray for relief as follows:

A. For a judicial declaration that the Federal Reserve Banks have not infringed and are not infringing, either directly or indirectly, either literally or under the doctrine of equivalents, any claim of U.S. Patent No. 6,754,640 and U.S. Patent No. 8,768,840;

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B. For an order awarding the Federal Reserve Banks their costs, expenses, and reasonable attorneys' fees as provided by law; and

C. For such other and further relief as the Court deems just and proper.

Respectfully submitted, this 1st day of February, 2017.

KING & SPALDING LLP

<u>s/ Natasha H. Moffitt</u> Natasha H. Moffitt Ga. Bar. No. 367,468 Benjamin K. Jordan Ga. Bar. No. 283,371 1180 Peachtree Street, NE Atlanta, Georgia 30309 Tel.: (404) 572-4600 Fax: (404) 572-5134 Email: <u>nmoffitt@kslaw.com</u> Email: <u>kjordan@kslaw.com</u>

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PHILADELPHIA, FEDERAL RESERVE BANK OF RICHMOND, FEDERAL RESERVE BANK OF SAN FRANCISCO, FEDERAL RESERVE BANK OF ST. LOUIS