

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JPMORGAN CHASE BANK, N.A.,
Petitioner,

v.

IDENTITH LIMITED,
Patent Owner.

IPR2024-00590
Patent No. 10,984,413

Before MEREDITH C. PETRAVICK, HYUN J. JUNG, and
NEIL T. POWELL, *Administrative Patent Judges*.

PETRAVICK, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

JPMorgan Chase Bank, N.A. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–20 of U.S. Patent No. 10,984,413 B2 (Ex. 1001, “the ’413 patent”). Paper 1 (“Pet.”). Identitii Limited (“Patent Owner”) filed a Preliminary Response. Paper 8 (“Prelim. Resp.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the petition “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

After considering the Petition, the Preliminary Response, and the evidence of record, we determine the information presented fails to show a reasonable likelihood that Petitioner would prevail in establishing the unpatentability of at least one of claims 1–20 of the ’413 patent.

Accordingly, we decline to institute an *inter partes* review of claims 1–20 of the ’413 patent on the grounds asserted in the Petition.

B. *Real Parties-in-Interest*

Petitioner identifies itself as the real party-in-interest. Pet. 70.

Patent Owner identifies itself as the real party-in-interest. Paper 5, 2.

C. *Related Matters*

The parties identify the following related court proceeding: *Identitii Limited v. JPMorgan Chase & Co., et al.*, Case No. 1:23-cv-01095-GBW (U.S. District Court, District of Delaware). Pet. 70, Paper 5, 2.

Petitioner also challenges the ’413 patent in IPR2024-00593.

D. The '413 Patent

The '413 patent is titled “Computer Implemented Method for Processing a Financial Transaction and a System Therefor” and issued on April 20, 2021. *See* Ex. 1001, code (45), (54).

Figure 1 of the '413 patent is reproduced below.

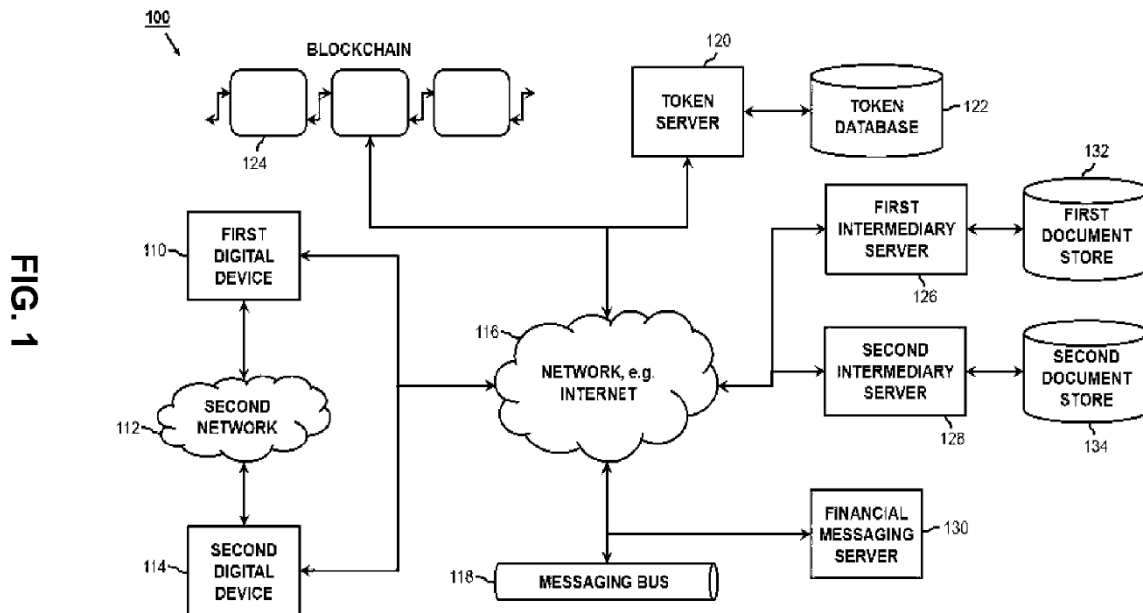


Figure 1 depicts system 100. *Id.* at 9:41–43, 10:35–37. In particular, system 100 includes first and second digital devices 110, 114 connected by network 116 to first and secondary intermediary servers 126, 128, which are connected to first document store 132 and second document store 134, respectively. *Id.* at 10:38–40, 10:56–58, 11:6–9. System 100 also includes token server 120, blockchain 124, and messaging bus 118 connected to network 116. *Id.* at 11:27–31.

Financial messaging server 130 is connected to network 116, which is a known messaging service, such as SWIFT (Society for Worldwide Interbank Financial Telecommunications) or ACH (Automated Clearing House). *Id.* at 11:17–26.

Figure 7 of the '413 patent is reproduced below.

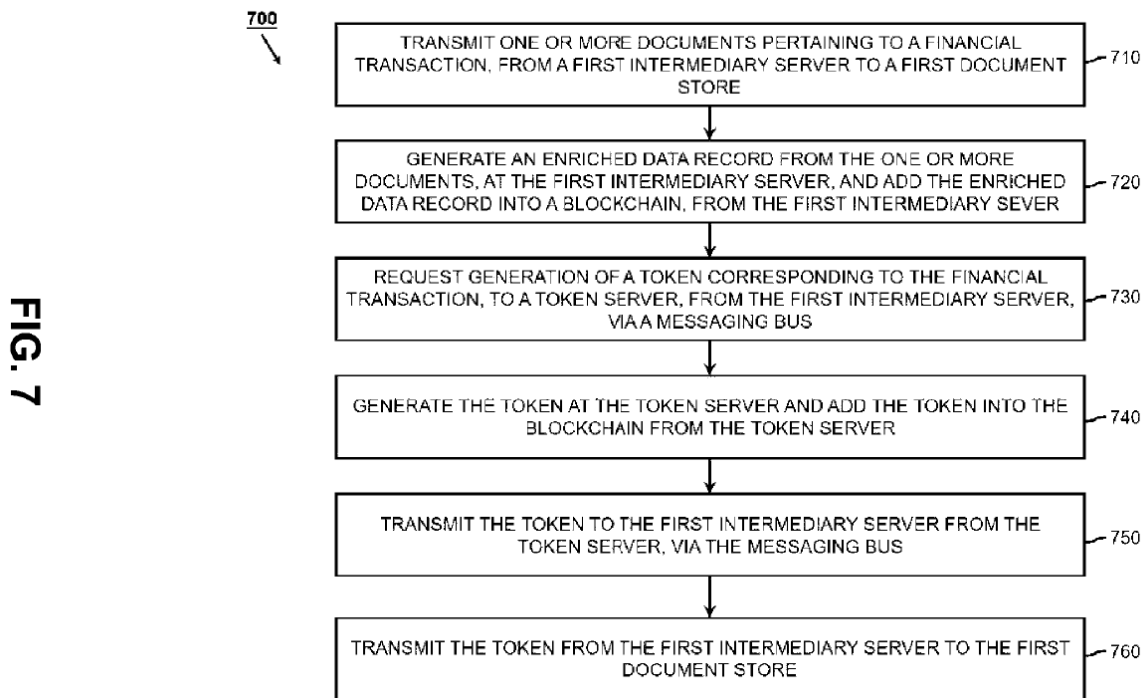


Figure 7 is a flow chart illustrating a preferred embodiment of the method of processing a financial transaction. *Id.* at 9:61–63, 18:16–20. At steps 710 and 720, first intermediary server 126 transmits a financial transaction document to first document store 132 and generates an enriched document record, which is added to blockchain 124. *Id.* at 9:20–34. At step 730, first intermediary server 126 requests a corresponding token from token server 120. *Id.* at 9:63–65. At step 740, token server 120 generates the token and adds the token to blockchain 124. *Id.* at 18:67–19:1. At steps 750 and 760, token server transmits the token to first intermediary server 126, which then stores the token in first document store 132. *Id.* at 19:1–5.

E. Illustrative Claims

Petitioner challenges claims 1–20 of the '413 patent. Claims 1, 15, and 16 are independent. Claim 2–14 depend directly or indirectly from claim 1. Claims 17–20 depend directly from claim 16.

Claim 1 is illustrative and reproduced below, with element labels added.

1. [pre] A computer implemented method for processing a financial transaction, the method comprising the steps of:

- [1] transmitting one or more documents pertaining to the financial transaction, from a first intermediary server in a centralized financial system to a first document store;
- [2] generating an enriched data record from the one or more documents, at the first intermediary server, and adding the enriched data record into a blockchain being a distributed ledger, from the first intermediary server;
- [3] requesting generation of a token corresponding to the financial transaction to identify the one or more documents, to a token server, from the first intermediary server, via a messaging bus in the centralized financial system;
- [4] generating the token at the token server and adding the token into the blockchain from the token server in association with the enriched data record;
- [5] transmitting the token to the first intermediary server from the token server, via the messaging bus; and
- [6] transmitting the token from the first intermediary server to the first document store in association with the one or more documents.

Ex. 1001, 59:2–23.

F. Asserted Grounds

Petitioner asserts that claims 1–20 would have been unpatentable on the grounds in the table below.

Ground	Claim(s) Challenged	35 U.S.C. §	Basis
1	1–2, 5–20	103	Smith ¹ , Seger ²
2	3	103	Smith, Seger, Yago ³
3	4	103	Smith, Seger, Kurani- 274 ⁴

Petitioner relies on the Declaration of Dr. Chien-Chung Shen. Ex. 1003. Patent Owner relies on the Declaration of James Olivier, Ph.D. Ex. 2001.

II. ANALYSIS

A. Legal Standards

“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d, 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)); *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

¹ U.S. Patent Application Publication No. 2015/0081553 A1 (Ex. 1004).

² U.S. Patent No. 9,397,985 B1 (Ex. 1005).

³ U.S. Patent Application Publication No. 2015/0206106 A1 (Ex. 1011).

⁴ U.S. Patent No. 11,270,274 B1 (Ex. 1007).

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). “[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S. at 416 (citing *U.S. v. Adams*, 383 U.S. 39, 50–51 (1966)).

The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Here, the record contains no evidence of objective indicia of non-obviousness.

As a factfinder, we also must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421. But so long as Petitioner’s analysis “takes into account only knowledge which was within the level of ordinary skill [in the art] at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure,” the analysis is not biased by hindsight. *In re McLaughlin* 443 F.2d 1392, 1395 (CCPA 1971).

A petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

B. Level of Ordinary Skill in the Art

Petitioner asserts:

A person of ordinary skill in the art at the time of the claimed invention (“POSITA”) would have at least a bachelor’s degree in computer science, computer engineering, applied mathematics, or equivalent and at least 2 years of experience researching, implementing, programming, or designing computer networks, distributed systems, blockchain technology, applied cryptography, or security. Additional education can supplement practical experience, and vice versa. (Ex. 1003, ¶ 46).

Pet. 6.

Patent Owner does not dispute Petitioner’s proposed definition of the level of ordinary skill in the art. Prelim. Resp. 15; *see also* Ex. 1003 ¶ 31. Patent Owner, however, notes that Dr. Shen’s testimony indicates that a POSITA would have familiarity with concepts and developments in the areas of payment networks, but that Dr. Shen does not have such experience. Prelim. Resp. 15 (citing Ex. 1003 ¶¶ 4–10, 21; Ex. 1036).

For purposes of this Decision, we adopt Petitioner’s assessment of the level of ordinary skill in the art as it is consistent with the ’413 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

C. Claim Construction

In this *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

However, a patentee may act as their own lexicographer by giving the term a particular meaning in the specification with “reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). The ’413 patent contains a section titled “Definitions,” which sets forth explicit definitions for certain claim terms. Ex. 1001, 28:64–29:21. The ’413 patent also sets forth definition terms elsewhere in its specification. *See e.g., id.* at 33:36–45. We give these claim terms the definition set forth in the ’413 patent.

“Petitioner believes no special constructions are necessary to assess whether the Challenged Claims are unpatentable.” Pet. 3. Likewise, Patent Owner does not set forth an explicit construction of any claim term not defined in the ’413 patent. *See generally* Prelim. Resp.

We do not need to explicitly construe any claim to reach our decision on institution. *See Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Analysis

1. *Ground 1 – Smith in view of Seger*

a) *Summary of Smith*

Smith is a U.S. patent application titled “Electronic Funds Transfer Consumer Authorization Verification System” and published on March 19, 2015. Ex. 1004, codes (43), (54). Smith’s Figure 2 is reproduced below.

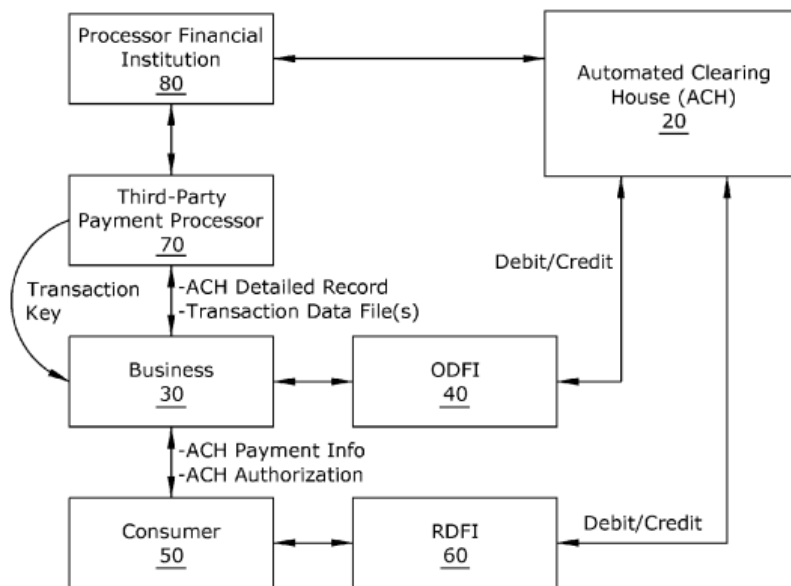


FIG. 2

Figure 2 “is a block diagram illustrating the communications of information for the present invention where a third-party processor has a separate processor financial institution.” *Id.* ¶ 19. Business 30 is an entity, such as a bank, that conducts a financial transaction with a consumer using Third-Party Payment Processor (“TPPP”) 70. *Id.* ¶¶ 35–36. TPPP 70 is an entity that facilitates the transfer of funds, such as through automated clearing

house (“ACH”) 20. *Id.* ¶ 40. TPPP 70 includes a database that has a unique transaction key, an ACH detailed transaction record, and a transaction data file for each transaction. *Id.* ¶ 41, Fig. 5.

During a transaction, business 30 sends TPPP 70 a transaction data file, that includes images, for example, of a consumer’s signature, driver’s license. *Id.* ¶ 52. TPPP 70 performs any necessary verifications, such as verifying that a business is licensed to transact in a certain state and, if so, TPPP 70 updates its database to have a unique transaction key associated with the transaction data file. *Id.* ¶ 53. “The transaction key may be comprised of any type of data such as text data, letters, numbers, characters, non-text data and any combination thereof.” *Id.* ¶ 55. TPPP 70 also attaches any additional evidence of verification, such as a copy of a document received by the state, to the transaction data file. *Id.* ¶ 53. TPPP 70 then sends the transaction key to business 30. *Id.* Business 30 enters the transaction key into an ACH transaction detail record and sends the ACH transaction detail record to TPPP 70 for processing. *Id.* ¶ 54. TPPP 70 associates the ACH transaction detail record with the corresponding transaction data file in the TPPP 70’s database using the transaction key. *Id.*

If there is a dispute as to the validity of the ACH transaction, business 30 or TPPP 70 can view the associated transaction data file to verify the transaction. *Id.* ¶ 56. TPPP 70 hosts a web interface for viewing the transaction data files. *Id.*

b) Summary of Seger

Seger is a U.S. patent titled “System and Method for Providing a Cryptographic Platform for Exchanging Information” and issued from an application filed on April 14, 2105. Ex. 1005, codes (22), (54).

Seger discloses “a cryptographic platform for exchanging information” that “enables confidential, verifiable, and immutable recording and/or reporting of information transactions.” *Id.* at 1:7–8, 1:43–44. Seger teaches that known methods of communication do not record the communications “in a log that can be audited after the fact by a third-party.” *Id.* at 1:16–21. Seger creates a log by placing “information transactions” on a distributed ledger blockchain. *Id.* at 5:7–14. Seger states that the distributed ledger may be immutable, and “[t]hus, the distributed ledger may provide a verifiable records of all of the information exchanges including various in formation transactions including encrypted information.” *Id.* at 10:19–23.

c) Analysis

Petitioner contends that claim 1 is unpatentable over Smith and Seger. Pet. 13–36. In particular, Petitioner argues that the combination of Smith and Seger teaches claim element 2’s “adding the enriched data record into a blockchain being a distributed ledger, *from the first intermediary server*” (Ex. 1001, 59:8–10 (emphasis added)). Pet. 18–26.

Petitioner equates the claimed enriched data record to Smith’s ACH detailed record for the ACH transaction along with the transaction data file (*id.* at 18–20) and the claimed first intermediary server to Smith’s business computer 30 (*id.* at 13).

To meet the claimed distributed ledger blockchain, Petitioner proposes modifying Smith to include the distributed ledger blockchain taught in Seger. *Id.* at 21–26. Specifically, Petitioner proposes to modify Smith to replace the database of Smith’s Third-Party Payment Processor (“TPPP”) 70 with a distributed ledger blockchain in order to increase security. *Id.* Petitioner contends that using a distributed ledger blockchain would increase security by providing verifiable, immutable records ensuring that transaction data cannot be altered once written. *Id.* at 25; Ex. 1003 ¶ 85. Petitioner argues:

[A] POSITA would have been motivated to apply Seger’s teaching to Smith to include the well-known benefits of a blockchain that allows entities to verify the TPPP’s transaction information against an immutable record, thereby enabling quick detection of any data alterations and providing the specific benefit of ensured integrity and accuracy of the system data if the TPPP were compromised

(*id.* at 25) and concludes:

It would have been obvious to a POSITA to apply Seger’s blockchain ledger to Smith’s centralized financial system (Smith’s “electronic funds transfer consumer authorization verification system”) to add the enriched data record into a blockchain being a distributed ledger (Seger’s ledger 142), from the first intermediary server (Smith’s business computer[]).

Pet. 23–24 (citing Ex. 1003 ¶¶ 83–87); *see also* Pet. 26. Notably, Petitioner’s proposed combination would not only replace the TPPP’s database with a distributed blockchain ledger, but also modify Smith so that business computer 30 adds the ACH transaction along with a transaction data file to the distributed ledger, as opposed to TPPP 70.

Patent Owner contends that Petitioner’s combination is based upon impermissible hindsight and that a POSITA would not have combined Smith

and Seger. *See e.g.*, Prelim. Resp. 44. Patent Owner first argues that “Petitioner and [Dr. Shen] never discuss the combination of Smith and Seger, what it would look like or how (or if) a POSITA could have combined the two.” Prelim. Resp 45 (citing Pet. 21–26; Ex. 1003 ¶¶ 81–87). Petitioner asserts that “the proposed combination is not as simple as ‘swapping out’ a database with a blockchain.” Prelim. Resp. 45.

According to Patent Owner and Dr. Olivier, Smith’s business computer 30 and TPPP 70 would need substantial modification. *Id.* at 46; Ex. 2001 ¶ 49. Smith’s TPPP 70 would service multiple business computers 30 from distinct entities (Ex. 1004 ¶ 35; Ex. 2001 ¶ 48) and, in Petitioner’s proposed combination, each would have access to the distributed ledger block chain (Ex. 2001 ¶¶ 48–49). Thus, Patent Owner argues that the proposed combination results in a less secure system. Prelim. Resp. 50.

Patent Owner further argues that having an immutable transaction data file is contrary to the purpose of Smith, because Smith teaches that the transaction data files should be updated after TPPP 70 verifies the accuracy of the data. Prelim. Resp. 54 (citing Ex. 2001 ¶ 73).

We agree with Patent Owner.

Claim element 2 requires the first intermediary server to add the enriched data file into the distributed ledger blockchain. Smith, however, discloses business computer 30 sending the ACH transaction detail record and the corresponding transaction data files (i.e., the enriched data record) to TPPP 70 and, then, TPPP 70 adding the ACH transaction detail record and the corresponding transaction data files to TPPP 70’s database. Pet. 26 (citing Ex. 1004 ¶¶ 41, 53). “The [TPPP] 70 stores the transaction key, the ACH transaction detail record and the corresponding transaction data files in

a database on a computer for the [TPPP] 70.” Ex. 1004 ¶ 41. Smith does not disclose business computer 30 adding the ACH transaction detail record and the corresponding transaction data files directly into TPPP 70’s database. Smith, thus, must not only be modified to replace TPPP 70’s database with a distributed ledger blockchain but also to have business computer 30 or multiple business computers 30 directly add the ACH transaction detail record and the corresponding transaction data files into the distributed ledger blockchain.

Petitioner does not adequately explain why a POSITA would additionally modify Smith’s method so that business computer 30 adds the ACH transaction detail record and the corresponding transaction data files directly to a distributed ledger blockchain. *See* Pet. 21–26. Likewise, Petitioner’s declarant Dr. Shen fails to provide any adequate explanation to why the proposed combination of Smith and Seger would have such a result. *See* Ex. 1003 ¶¶ 81–87.

In any event, we agree with Patent Owner that a POSITA would not be motivated to make such a modification. Smith’s TPPP 70 would service multiple business computers 30 from distinct entities (Ex. 1004 ¶ 35; Ex. 2001 ¶ 48) and each would have access to the distributed ledger block chain (Ex. 2001 ¶¶ 48–49). Petitioner equates the claimed enriched data record to Smith’s “ACH detailed record for the ACH transaction and its corresponding transaction data file, individually and together.” Pet. 20. Smith discloses that the ACH detailed record and transaction data file includes sensitive information, such as a signature of the consumer 50 for the ACH authorization, a copy of the driver’s license for the consumer 50, a copy of the Social Security card for the consumer 50, and a copy of a license

for business 30. Ex. 1004 ¶ 51; *see also* Pet. 17; Ex. 2001 ¶¶ 53–54.

Smith's TPPP 70, thus, maintains the data in a database that it completely controls and modifying Smith to include a distributed ledger which is accessed not only by TPPP 70 but by multiple distinct business entities would make Smith's system less secure. Ex. 2001 ¶¶ 52–54; *see also* Ex. 1004 ¶ 59 (“This sensitive information is to be stored in a Payment Card Industry (aka PCI) level 1 environment. This environment maintains the highest level of compliance and encryption within the Payment Card Industry”). Dr. Olivier testifies:

As the information on a public ledger is publicly accessible, the confidential information for each and every transaction would be accessible to everyone. A POSITA would not make this combination as the POSITA recognizes it would expose not only confidential information for each customer, but also confidential information for each business.

Ex. 2001 ¶ 54.

In as much, Petitioner relies upon Smith as explicitly suggesting a need for verification (*see e.g.*, Pet. 21 (“Smith expressly contemplates the need to verify transactions ‘based upon the transaction data files’ store in the TPPP’s ledger”)), we agree with Patent Owner that Smith and Seger teach two different kinds of verification. “A key purpose of Smith is [] having an independent, third-party payment processor that independently verifies data and maintains, controls, and modifies information in its secure database.” Prelim. Resp. 48 (citing Ex. 2001 ¶¶ 63–67). Smith teaches that TPPP 70 hosts a web interface so that a business can access the database to verify the accuracy of the data in the ACH detailed record and transaction data file by providing the transaction key and password. Ex. 1004 ¶ 56. Further, Smith teaches that TPPP 70 updates the transaction data files after TPPP 70

verifies the accuracy of the data. Ex. 1004 ¶ 53 (“The third-party processor 70 further attaches any additional transaction data files to the record associated with the transaction key . . .”).

Seger, however, concerns recording communication on a ledger so the record of the communication cannot be changed, regardless of the accuracy of the information in the communication. Ex. 1005, 1:16–21, 5:7–14, 10:19–23; Ex. 2001 ¶ 65. The asserted advantage of Seger’s distributed ledger blockchain is that it is immutable and ensures that the transaction data cannot be altered. Pet. 25.

We determine that Petitioner has not adequately explained how a POSITA would have incorporated Seger’s immutable distributed blockchain into Smith’s system that utilizes TPPP 70 to verify the accuracy of transaction data. We are persuaded by Patent Owner and Dr. Oliver that Petitioner’s proposed combination of Smith and Seger requires more than simply swapping out TPPP 70’s database with a blockchain. Petitioner has not adequately shown that it would have been obvious to a POSITA to replace Smith’s database in TPPP 70’s with a distributed ledger blockchain as disclosed in Seger.

Independent claims 15 and 16 recite similar limitations. Ex. 1001, 62:14–16, 62:33–34.

Claims 2 and 5–14 depend directly or indirectly from claim 1. *Id.* at 50:24–29, 59:50–61:59. Claims 17–20 depend directly or indirectly from claim 16. *Id.* at 62:39–58.

We determine that the information presented fails to show a reasonable likelihood that Petitioner would prevail in establishing that claims 1–2 and 5–20 are unpatentable over Smith and Seger.

2. *Grounds 2 and 3 — Smith and Seger in view of Yago and Smith and Seger in view of Kurani-274*

Claim 3 depends from claim 1, and claim 4 depends from claim 3.

We determine that Petitioner has not met its burden to show a reasonable likelihood that claims 3 and 4 would have been obvious over the relied upon art. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious.”).

III. CONCLUSION

After considering the evidence and arguments presented in the Petitions, Preliminary Responses, and the evidence of record, we determine that the information presented fails to show a reasonable likelihood that Petitioner would prevail in establishing that claims 1–20 are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby:
ORDERED that the Petition is denied.

IPR2024-00590
Patent No. 10,984,413

FOR PETITIONER:

How-Ying Liou
Israel Mayergoyz
Matthew Johnson
Marlee Hartenstein
Stephen Bradley
JONES DAY
aliou@jonesday.com
smayergoyz@jonesday.com
mwjohnson@jonesday.com
mhartenstein@jonesday.com
sbradley@jonesday.com

FOR PATENT OWNER:

Richard C. Lin
Jerry D. Tice II
BUNSOW DE MORY LLP
rlin@bdiplaw.com
jtice@bdiplaw.com