UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte STEVEN CHARLES DAVIS

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Appeal 2019-004127
Application 14/719,030
Technology Center 3600

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Before ERIC S. FRAHM, BETH Z. SHAW, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

FRAHM, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals the Final Rejection
of claims 1–16. We have jurisdiction under 35 U.S.C. § 6(b). An oral
hearing was conducted on July 29, 2020.[2]

We REVERSE.

INVENTION

The claimed invention, entitled "METHOD AND SYSTEM FOR
FRAUD CONTROL OF BLOCKCHAIN- BASED TRANSACTIONS"

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[1] We use the word "Appellant" to refer to "applicant" as defined in
37 C.F.R. § 1.42. According to Appellant, Mastercard International
Incorporated is the real party in interest (Appeal Br. 2).
[2] Appellant was represented at oral hearing by Nigel R. Fontenot, USPTO
Registration No. 69,688.

(Title), relates to a method (claim 1) and system (claim 9) for linking blockchain transactions to privately verified identities (*see* Spec. ¶ 1). More specifically, the disclosed invention concerns "the association of a blockchain transaction to a consumer or merchant associated with a transaction account based on transaction data and stored account profiles" (Spec. ¶ 1).

Appellant recognizes that because (i) "it often takes a significant amount of time, around ten minutes, for a blockchain-based transaction to be processed, due to the computer processing time and resources required to verify and update the blockchain" (Spec. ¶ 3); and (ii) using blockchain provides anonymity for the payor, making identity/fraud detection difficult for payees, "many entities, particularly merchants, retailers, service providers, and other purveyors of goods and services, may be wary of accepting blockchain currency for products and participating in blockchain transactions" (Spec. ¶ 3). On the other hand, "traditional fiat payment transactions that are processed using payment networks often have processing times that are measured in nanoseconds" (Spec. ¶ 3), and provide security for merchants, retailers, and service providers against fraud. As a result, Appellant has determined that "the use of traditional payment networks and payment systems technologies in combination with blockchain currencies may provide consumers and merchants the benefits of the decentralized blockchain while still maintaining security of account information and provide a strong defense against fraud and theft" (Spec. ¶ 5).

Independent claim 1 is illustrative of the invention and is reproduced below:

1. A method for linking blockchain transactions to privately verified identities, comprising:

[A] storing, in *an account database* of *a computer system*, a plurality of account profiles, wherein each account profile includes data related to a transaction account including at least an account identifier and account data;

[B] receiving, by *a receiver of the computer system*, a transaction message via *a payment network*, wherein the transaction message is formatted based on one or more standards and includes a plurality of data elements including at least a first data element configured to store a personal account number, a second data element configured to store a merchant identifier, and a third data element configured to store at least a blockchain network identifier and where the third data element or a fourth data element is configured to store a digital signature;

[C] identifying, by *a processor of the computer system*, a first account profile stored in the account database where the included account identifier corresponds to the personal account number stored in the first data element included in the received transaction message, and wherein the first account profile includes a public key;

[D] identifying, by the processor of the computer system, a second account profile stored in the account database where the included account identifier corresponds to the merchant identifier stored in the second data element included in the received transaction message;

[E] receiving, by the receiver of the computer system, a transaction notification, wherein the transaction notification indicates a transaction processed using *a blockchain network* associated with the blockchain network identifier stored in the third data element included in the received transaction message and includes at least a transaction identifier and an address identifier associated with one of the first account profile and the

second account profile, and where the address identifier is generated using the public key;

> [F] *verifying, by the processor of the computer system, the digital signature using the public key included in the first account profile*; and

> [G] storing, by the processor of the computer system upon verification of the digital signature, a linkage between the transaction identifier included in the received transaction notification and at least one of: the address identifier, the personal account number, and the merchant identifier.

Claims Appendix 1–2 (formatting, emphases, and bracketed lettering added). Remaining independent claim 9 recites "[a] system for linking blockchain transactions to privately verified identities" with commensurate limitations as limitations A through G of claim 1.

REJECTIONS

(1) Claims 1–16 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 3–10.

(2) The Examiner rejected claims 1–16 under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention (Final Act. 8–10). Because the Examiner has withdrawn the § 112(b) rejection (*see* Ans. 3), we will not address this rejection or Appellant's arguments directed thereto any further.

(3) The Examiner rejected claims 1–16 under 35 U.S.C. § 103 as being unpatentable over Sipman et al. (US 6,889,325 B1; published May 3, 2005), Azen et al. (US 2013/0185214 A1; published July 18, 2013), and

Seger, II et al. (US 9,397,985 B1; issued July 19, 2016 and filed April 14, 2015). Final Act. 10–18. Because the Examiner has withdrawn the § 103 rejection (*see* Ans. 3), we will not address this rejection or Appellant's arguments directed thereto any further.

Accordingly, only the rejection of claims 1–16 under 35 U.S.C. § 101 is before us on appeal.

ANALYSIS

SECTION 101 REJECTION

A.   *Principles of Law*

Section 101 of the Patent Act provides "[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. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4

in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and, thus, patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 176; *see also id.* at 191 ("We view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (citing *Benson* and *Flook*); *see, e.g., id.* at 187 ("It is now commonplace that an *application* of a law of nature or mathematical formula

to a known structure or process may well be deserving of patent
protection.").

If the claim is "directed to" an abstract idea, we turn to the second
step of the *Alice* and *Mayo* framework, where "we must examine the
elements of the claim to determine whether it contains an 'inventive
concept' sufficient to 'transform' the claimed abstract idea into a patent-
eligible application." *Alice*, 573 U.S. at 221 (internal quotation marks
omitted). "A claim that recites an abstract idea must include 'additional
features' to ensure 'that the [claim] is more than a drafting effort designed to
monopolize the [abstract idea].'" *Id.* (alterations in original) (quoting *Mayo*,
566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[]
fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

B.   *USPTO Section 101 Guidance*

On January 19, 2019, the PTO published revised guidance on the
application of § 101. USPTO, *2019 Revised Patent Subject Matter
Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance").[3] "All
USPTO personnel are, as a matter of internal agency management, expected
to follow the guidance." *Id.* at 51; *see also* October 2019 Update at 1.

Under the Guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of
abstract ideas (i.e., mathematical concepts, certain methods of

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[3] In response to received public comments, the Office issued further
guidance on October 17, 2019, updating and clarifying the Guidance.
USPTO, *October 2019 Update: Subject Matter Eligibility* (the "October
2019 Update") (available at
https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.p
df).

organizing human activity such as a fundamental economic practice, or mental processes) ("Step 2A, Prong 1"); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") § 2106.05(a)–(c), (e)–(h)) (9th Ed., Rev. 08.2017, 2018) ("Step 2A, Prong 2").[4]

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception ("Step 2B").

See Guidance, 84 Fed. Reg. at 54–56.

Even if the claim recites an abstract idea, the Federal Circuit explains the "directed to" inquiry is not simply asking whether the claims involve a patent-ineligible concept:

The "directed to" inquiry . . . cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon—after all, they take place in the physical world. *See Mayo*, 132 S.Ct. at 1293 ("For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.") Rather, the "directed to" inquiry

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[4] This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a practical application. *See* Guidance — Section III(A)(2), 84 Fed. Reg. 54–55.

applies a stage-one filter to claims, considered in light of the specification, based on whether "their character as a whole is directed to excluded subject matter."

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016); *see also Diehr*, 450 U.S. at 188 ("In determining the eligibility of respondents' claimed process for patent protection under § 101, their claims must be considered as a whole."); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (the question is whether the claims as a whole "focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery").

C.   Step 1

Patent eligibility under 35 U.S.C. § 101 is a question of law that is reviewable *de novo*. *See Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012). Under Step 1 of the patent-eligibility inquiry under § 101, we determine whether a claim is directed to one of the four statutory categories of invention, i.e., a process, machine, manufacture, or composition of matter.

In the instant case on appeal, claim 1 recites "[a] method for linking blockchain transactions to privately verified identities, comprising" a series of steps, including storing, receiving, identifying, and verifying certain information (*see* claim 1). The Examiner determines (*see* Final Act. 4), and Appellant does not dispute, that claims 1 through 8 are directed to one of the four statutory categories. Therefore, claim 1 and claims 2–8 depending therefrom, as method claims, recite at least one of the enumerated categories (e.g., a process having a series of steps) of eligible subject matter in 35 U.S.C. § 101.

Claim 9 recites "[a] system for linking blockchain transactions to privately verified identities, comprising: an account database of a computer system" including "a receiver of the computer system configured to receive a transaction message via a payment network" and "a transaction processed using a blockchain network," and "a processor" (*see* claim 9). The Examiner determines (*see* Final Act. 4), and Appellant does not dispute, that claims 9 through 16 are directed to one of the four statutory categories. Therefore, claim 9 and claims 10–16 depending therefrom, as apparatus claims, recite at least one of the enumerated categories (e.g., a machine or manufacture) of eligible subject matter in 35 U.S.C. § 101.

As a result, as to claims 1–16, we continue our analysis under Step 2A, Prong 1 of the Guidance to determine whether claims 1–16 recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above).

D.   Step 2A, Prong 1

Based on determinations that the claims are "directed to the use of [a] conventional or generic computer" (Final Act. 5 citing Figs. 1–4), and not to an improvement in server functionality or improvements to a technological process (*see* Final Act. 5), the Examiner concludes "that the claim[s] when viewed individually and as a whole [are] directed to an abstract idea" (Final Act. 5–6). The Examiner concludes that the present claims are directed to "the abstract idea of storing data (e.g. account profiles and a linkage between the data), receiving data (e.g. a transaction message and a transaction notification), identifying data (e.g. a first account profile and a second account profile), and verification" (Final Act. 4). The Examiner also concludes the claims recite a mental process and/or certain methods of

organizing human activity, such as tracking or organizing information (*see* Final Act. 5; *see also* Ans. 4–5).

The focus of claims 1 and 9 is commercial transaction processing, such as performing blockchain payment transactions, using both standard payment and blockchain payment elements to verify the identity of the payor (*see* claims 1, 9). In this light, we agree with the Examiner's determination (*see* Final Act. 5) that claim 1 recites limitations "which fall[] within the universe of ineligible subject matter described by the courts as being an exception to patentability," namely certain methods of organizing human activity.

Commercial transactions, like payment transactions and verifying fraud, have been consistently found by our reviewing court to be abstract ideas. *Bozeman Fin. LLC v. Fed. Reserve Bank of Atlanta*, 955 F.3d 971, 976 (Fed. Cir. 2020) (verifying a transaction to avoid fraud, however, is a fundamental economic principle or practice); *cf. also* Subject Matter Eligibility Examples: Business Methods, USPTO, *9 (Dec. 2016) ("a method of fraud prevention . . . is a fundamental business practice and is similar to ideas found abstract by the courts"). In *Bozeman Financial*, the Federal Circuit held that "[v]erifying financial documents to reduce transactional fraud is a fundamental business practice that, without more, is not eligible for patent protection." *Bozeman*, 955 F.3d 971, 978.

In addition, payment methods are characterized as fundamental economic practices in the Eligibility Guidance, which are categorized as the abstract idea of organizing human activity. Eligibility Guidance, 84 Fed. Reg. at 52 (n.13). The instant case similarly recites claims aimed at the

concept of preventing fraud (e.g., by verifying an identity) in financial transactions by verifying transactions.

Appellant does not dispute the Examiner's finding in this regard (*see generally* Appeal Br. 8–11; Reply Br. 2–4 (arguing only the mental process determination).[5] Appellant does, however, present arguments that "the claims recite the explicit use of a number of technologies that *cannot* be performed by human work or mentally, even given a significant amount of time" (Reply Br. 3), because "digital signatures are of sufficient data size and complexity to not be understood by human mental work, let alone verified through the use of a public key and overly complex (by design) signature algorithms" (Reply Br. 3).

The Guidance states that the abstract idea exception includes mental processes, which include "concepts performed in the human mind (including an observation, evaluation, judgment, opinion)." Guidance, 84 Fed. Reg. at 52. The Guidance explains that "mental processes" include acts that people can perform in their minds or using pen and paper, even if the claim recites that a generic computer component performs the acts. *See* Guidance, 84 Fed. Reg. at 52 n.14 ("If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes

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[5] Notably, although Appellant argued generally at the Oral Hearing held July 29, 2020, that the claims did not recite an abstract idea (*see* Oral Hr'g Tr. 4:18–19), this argument was both new and untimely, and conclusory. The only argument on this record based on the claims not reciting an abstract idea is in the Reply Brief. (*see* Reply Br. 2–4), that the claims do not recite a mental process that can be performed in the human mind, or with pen and paper.

category unless the claim cannot practically be performed in the mind."); *see also Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) ("[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper."), quoted in Guidance, 84 Fed. Reg. at 52 n.14.

In this light, with regard to the claims reciting a mental process capable of being performed in the human mind, or with pen and paper, Appellant's arguments (*see* Reply Br. 2–4) are persuasive. As stated by Appellant:

> In addition, transaction messages are processed in speeds that have to be measured in nanoseconds for network reliability and due to the overwhelming number of transaction processed each day, necessitating the use of specialized computer systems, which is impossible to replicate through human mental work. Thus, specially configured computer systems are used in the claimed invention, which uses technology in an unconventional way to implement the steps recited in the present claims.

Reply Br. 3. Thus, we agree with Appellant that the claimed subject matter involves steps and elements that could not be performed by a human mind, even with the aid of pen and paper.

However, the claims recite the abstract idea of a fundamental economic practice, e.g., a financial payment transaction, as discussed above. *See Innovation Sciences, LLC v. Amazon.com, Inc.*, No. 2018-1495, 2019 WL 2762976, at *1 (Fed. Cir. July 2, 2019) (affirming the district court's conclusion that a claim directed to the abstract idea of securely processing a credit card transaction with a payment server was ineligible); *see also Smart*

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Sys. Innovations, LLC v. Chicago Transit Auth., 873 F.3d 1364, 1371 (Fed. Cir. 2017) (holding that claims relating to methods of paying subway fare via bankcard including receiving a record, maintaining a balance in memory, and accounting for a fare by applying a fare to a balance are abstract ideas, and stating that "claims directed to the performance of certain financial transactions . . . must be categorized as involving abstract ideas").

According to the 2019 Revised Guidance, "fundamental economic principles or practices" include hedging, insurance, and mitigating risk. *Id.*; *see*, *e.g.*, *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378–79 (Fed. Cir. 2017) ("The idea that a customer may pay for items ordered from a remote seller at a third-party's local establishment is the type of fundamental business practice that, when implemented using generic computer technology, is not patent-eligible under *Alice*").

Consistent with Appellant's description of the claims (Spec. ¶¶ 1–8; Abstract), we determine that the limitations of claims 1 and 9 recite processing financial transactions (e.g., blockchain payment transactions) through collecting and analyzing information for identity verification (i.e., fraud detection), which is fairly characterized as a fundamental economic practice, and which falls into the "certain methods of organizing human activity" category of abstract ideas. *See* 84 Fed. Reg. at 52.

Because we conclude claims 1–16 *recite* a fundamental economic practice which is an abstract idea, we proceed to Step 2A, Prong 2 of the Guidance to determine whether claims 1–16 are "directed to" the judicial exception, by determining whether additional elements of the claim integrate the abstract idea into a practical application. Such additional elements *may* reflect an improvement to a technology or technical field. *See* Guidance, 84

Fed. Reg. at 55.

E. Step 2A, Prong 2 – Practical Application

Having determined that claims 1–16 recite an abstract idea, we next determine, under Step 2A, Prong 2 of the Guidance, whether claims 1–16 are *directed to* that abstract idea, or whether the claims have additional elements that integrate the abstract idea into a practical application of that abstract idea. Guidance, 84 Fed. Reg. at 54. In other words, we must still determine whether the abstract idea is integrated into a practical application, namely, whether the claims apply, rely on, or use the abstract idea in a manner that imposes a meaningful limit on the abstract idea, such that the claims are more than a drafting effort designed to monopolize the abstract idea. *See* Guidance, 84 Fed. Reg. at 54–55. We therefore (1) identify whether there are any additional recited elements beyond the abstract idea, and (2) evaluate those elements both individually and collectively to determine whether they integrate the exception into a practical application. *See id.*

In the instant case, the additional limitations recited beyond the judicial exception itself integrate the exception into a practical application; and, we are persuaded by Appellant's argument that the claims recite a practical application of the abstract idea (*see* Oral Hr'g Tr. 4:19–20). Claims 1 and 9 provide the security of standard payment processing systems (e.g., by identifying first and second account profiles in limitations C and D of claim 1; *see also* Spec. ¶ 120, steps 1106, 1108), and the privacy of blockchain payment transactions (e.g., by using a blockchain network to generate an address identifier using a public key (*see* Spec. ¶ 68) as set forth in limitation E of claim 1), to verify a digital signature (*see e.g.*, claim 1, limitation F; *see also* Spec. ¶ 39) stored in data elements of a receiver of the

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computer system (*see e.g.*, claim 1, limitation B) that is part of the account database (*see e.g.*, claim 1, limitation A). Our reasoning follows.

Claims 1 and 9 each recite "an account database of a computer system," "a receiver of the computer system," "a payment network," "a processor," and "a blockchain network" (claims 1, 9). These elements work together to perform a "method for linking blockchain transactions to privately verified identities" (claim 1), and as a "system for linking blockchain transactions to privately verified identities" (claim 9), that represent an ordered combination that achieves a technological improvement to a technological field (e.g., blockchain transactions performed using computers).

Thus, the claims combine the advantageous elements of both standard payment processing systems (i.e., security and fraud prevention, along with speed), and blockchain processing systems (i.e., anonymity). As recognized by Appellant, "the use of traditional payment networks and payment systems technologies in combination with blockchain currencies may provide consumers and merchants the benefits of the decentralized blockchain while still maintaining security of account information and provide a strong defense against fraud and theft" (Spec. ¶ 5; *see also* Oral Hr'g Tr. 5:4–9). And, as argued by Appellant at the Oral Hearing,[6] paragraphs 3 and 47 of

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[6] *See* Oral Hr'g Tr. 12:16–22 citing Spec. ¶¶ 3, 47; *see also* Oral Hr'g Tr. 4:22–5:9, 13:2–4 (arguing that recited invention improves blockchain technology); Oral Hr'g Tr. 6:23–7:2 (asserting inclusion of blockchain network identifier in digital signature for verifying the blockchain transaction is improvement of Appellant's invention); Oral Hr'g Tr. 9:19– 25, 10:10–11 (arguing linkage of first (i.e., payor) and second (i.e., payee/merchant) account profiles provides improvement to blockchain transactions).

the Specification support this understanding about the benefits of combining standard and blockchain processing systems (security and speed).

Claims 1–16 apply, rely on, or use the abstract idea (fundamental economic practice) in a manner that imposes a meaningful limit on the abstract idea, such that the claims are more than a drafting effort designed to monopolize the abstract idea. *See* Guidance, 84 Fed. Reg. at 54–55. Claims 1–16 thus recite element(s), and ordered combination of elements, which transform the abstract idea to patent eligible subject matter.

The Examiner (i) determines that the claims recite the additional elements, beyond the abstract idea(s), of a database, computer system, and processor (*see* Final Act. 6); and (ii) determines that the claims do not recite additional elements sufficient to transform the recited judicial exception into a patent-eligible invention, because the additional elements when considered both individually and as an ordered combination do not amount to significantly more than the abstract idea(s) (*see* Final Act. 6). The Examiner provides the following analysis and interpretation regarding the additional elements:

> The additional element(s) of processor based computer system represents as a generic computer (see Fig. 14 and corresponding Specification of instant application) that merely serves as a conduit/tools for implementing the above abstract idea. Hence, taken individually or in combination, the recited elements do not improve the functions of the processor based computer system nor any technological process, rather describes abstract idea performed on a generic computer. Insofar as the description of blockchain, the claim does not describe any technical aspect of the blockchain. Rather, the blockchain is merely used to describe a data, e.g. notification. As explained above, the claim(s) do not describe the use of the blockchain network. The blockchain is not utilized in the claims and the

claims only recite a notification being received by the computer
system which notifies the computer system that a
blockchain transaction has taken place. The blockchain network
itself is not involved in the steps of the claims.

Ans. 5. In other words, the Examiner does not find that the "receiver
of the computer system," "payment network," and/or "blockchain
network" (claims 1, 9) are recited positively enough so as to constitute
additional elements.

Appellant disagrees, and contends that the claims "are directed to an
inventive concept that is an unconventional combination of a traditional
payment processing network and a blockchain network" (Appeal Br. 8); and
(ii) that that inventive concept results in a technical improvement (*see*
Appeal Br. 10).[7] Appellant argues that "the claims recite the explicit use of
a number of technologies that cannot be performed by human work or
mentally, even given a significant amount of time" (Reply Br. 3), and
require "using both networks [i.e., payment network and blockchain] with
the computer system [to ensure] that the party in the submitted transaction
message was a party to the blockchain transaction" (Reply Br. 3). Appellant
further contends the "claims, even if generic computer hardware is used, are
still directed to an ordered combination that recites an inventive concept that
is unconventional and a solution to a technical problem" (Appeal Br. 11).
We agree. Appellant identifies persuasively how the Specification sets forth
an improvement in technology, and how the claims recite that improvement

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[7] *See supra* fn. 6 citing Oral Hr'g Tr. (arguing recited invention provides
improvements to blockchain technology).

(*see* Appeal Br. 8–11; Reply Br. 2–4; *see* Oral Hr'g Tr. 12:16–22 citing Spec. ¶¶ 3, 47).

Claims 1–16 recite an ordered combination of elements that: (i) are an improvement to blockchain or other technology or technical field (*see* MPEP § 2106.05(a)); and (ii) include meaningful limitations on the recited abstract idea (*see* MPEP § 2106.05(e)). *See also* Guidance, 84 Fed. Reg. at 55; *Ex Parte Rios*, Appeal No. 2019-004130, at 13 (PTAB Feb. 26, 2020) (concluding that a multi-currency payment transaction platform using different currencies integrate the recited judicial exception of a fundamental economic practice into a practical application).

F.   Summary

Based on the record before us, we determine that the present claims integrate the abstract idea into a practical application that uses the judicial exception in a manner that imposes a meaningful limit on the judicial exception. Therefore, we need not proceed to Step 2B.

CONCLUSION

For the reasons explained above, we do not sustain the rejection of claims 1–16 under 35 U.S.C. § 101 as being directed to patent ineligible subject matter, and we hold as follows:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–16	101	Eligibility		1–16

REVERSED