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571-272-7822

Entered: October 11, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COINBASE, INC.,
Petitioner,

v.

VERITASEUM, INC.,
Patent Owner.

IPR2023-00751
Patent 11,196,566 B2

Before MEREDITH C. PETRAVICK, LYNNE H. BROWNE, and BARRY L. GROSSMAN, *Administrative Patent Judges*.

BROWNE, *Administrative Patent Judge*.

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

I. INTRODUCTION

Petitioner, Coinbase, Inc., filed a Petition (Paper 2, "Pet.") requesting *inter partes* review of claims 1–3, 7, and 8 of U.S. Patent No. 11,196,566 B2 (Ex. 1001, "the '566 Patent"). Patent Owner, Veritaseum, Inc. [1], filed a Preliminary Response (Paper 7, "Prelim. Resp.").

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the Petition and any response thereto shows "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." Considering the Petition, the arguments presented in the Preliminary Response, as well as all supporting evidence, we determine that Petitioner has not demonstrated a reasonable likelihood of prevailing with respect to at least one of the challenged claims, and thus, we deny institution of an *inter partes* review of all challenged claims on all presented challenges.

[1] The Petition indicates that Reginal Middleton is the Patent Owner. Veritaseum, Inc. filed Mandatory Notices indicating that it is the current holder of U.S. Patent No. 11,196,566 ("the '566 patent"). Paper 6, 2; Paper 4, 2. Veritaseum, Inc. further indicated that "[p]ursuant to a judgment dated February 15, 2023 (NYSCEF Doc. No. 176), issued by the Supreme Court of the State of New York, County of New York, in a case with Index No. 655003/2019 ('the Judgment')," "Reginald Middleton assigned all of his rights, titles, and interests in the '566 patent to Veritaseum, Inc., a New York corporation" and that "[t]his assignment was duly recorded with the United States Patent and Trademark Office." *Id.* Veritaseum, Inc. also indicated that Reginald Middleton is appealing the Judgement. *Id.* We caption this proceeding in accordance with most current assignment of record (reel/frame no. 063616/0337).

A. *Real Parties in Interest*

Petitioner identifies Coinbase Global, Inc. as the real party-in-interest in this proceeding. Pet. 80.

Patent Owner identifies the real parties-in-interest as: Veritaseum, Inc., the current holder of the '566 patent; Reginald Middleton, who is appealing a judgment that ordered the assignment of the '566 patent to Veritaseum, Inc.; and Veritaseum Capital, LLC, which holds an exclusive license to the '566 patent. Paper 6, 2; Paper 4, 2.

B. Related Matters

The parties identify *Veritaseum Capital, LLC v. Coinbase Global, Inc.*, 1:22-cv-01253 (D. Del.) (dismissed without prejudice on May 5, 2023); and *Veritaseum Capital, LLC v. Circle Internet Financial Ltd. et al.*, 2:22-cv-00498 (E.D. Tex.) (dismissed without prejudice on June 9, 2023) as civil litigations involving the '566 patent. Pet. 80; Paper 6, 3; Paper 4, 3.

C. The '566 patent

The '566 patent is titled "Devices, Systems, and Methods for Facilitating Low Trust and Zero Trust Value Transfers," and describes devices, systems, and methods that "enabl[e] parties with little trust or no trust in each other to enter into and enforce value transfer agreements conditioned on input from or participation of a third party, over arbitrary distances, without special technical knowledge of the underlying transfer mechanism(s)." Ex. 1001, codes (54), (57). The devices, systems, and methods of the '566 patent also "afford[] participation of third-party mediators, substitution of transferors and transferees, term substitution, revision, or reformation." *Id.* at code (57). The '566 patent explains that its technology enables "value transfers [that] can occur reliably without

involving costly third-party intermediaries who traditionally may otherwise be required, and without traditional exposure to counterparty risk." *Id.* The '566 patent describes various embodiments that enable two forms of value transfer: arbitrary swaps and letters of credit (L/Cs). *Id.* at 5:60–67.

Figure 1 of the '566 patent, reproduced below, illustrates an embodiment for practicing the invention of the '566 patent. Ex. 1001, 7:9–14.

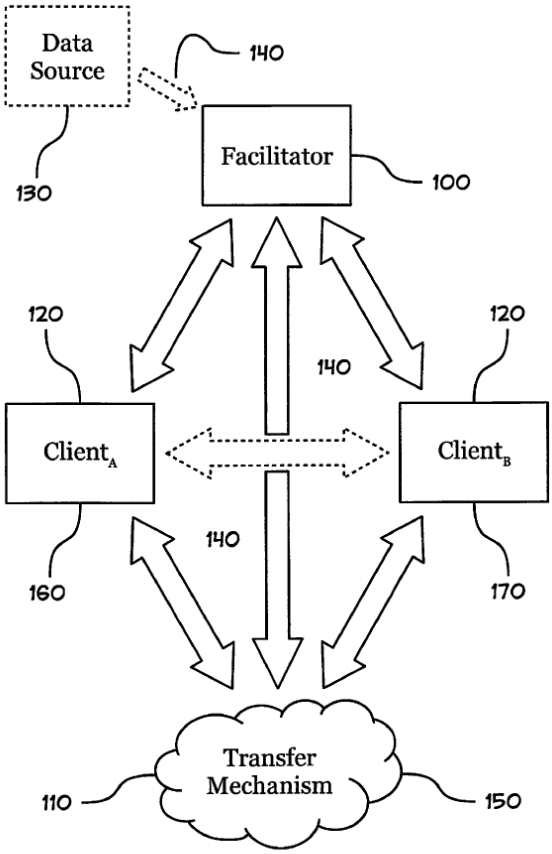

FIG. 1

Figure 1 illustrates an embodiment for practicing the invention of the '566 patent. Ex. 1001, 7:9–14.

The framework illustrated in Figure 1 employs a transfer mechanism 110, with clients 120, 160, and 170, transfer mechanism 110, decentralized

digital currency 150, facilitator 100, and data source 130 being distinct participants connected by a computer network 140. Ex. 1001, 7:9–14, 9:37–40. It is also possible for the facilitator to provide some or all aspects of the transfer mechanism, or for the facilitator to include some or all aspects of a client. *Id.* at 9:40–50.

Participants include a first client (A) typically operated for a first party coupled to the computer network, and a second client (B) typically operated for a second party coupled to the computer network. Ex. 1001, 8:49–60. Each of the first client, second client, and facilitator employ a computer processor configured to perform certain steps. *Id.* at 9:8–27. For example, when the Ethereum protocol[2] is used as the transfer mechanism, the facilitator comprises instructions for computation which are evaluated by network participants in a proof-of-work protocol, and a network participant comprises a computer processor configured to evaluate the instructions for computation. *Id.* The computer processor of the first client is configured to monitor aspects of the transfer mechanism, the facilitator, the data source, the second client, or some other input, and is configured to interact automatically with the various participants based on an observed change of state. *Id.* When the transfer mechanism includes the Bitcoin protocol, each of the clients and the facilitator comprises a non-transitory data store for storing key pairs and inchoate transactions. *Id.* at 9:28–36. The first client is configured such that, when it observes that it has acquired new ownership of bitcoin (BTC), it initiates an offer via the facilitator to trade exposure to

[2] A Bitcoin protocol progeny. Ex. 1001, 2:40–41.

one financial instrument or asset class (e.g., BTC) in exchange for exposure to another financial instrument or asset class (e.g., USD). *Id.*

D. Illustrative Claim

Petitioner challenges claims 1–3, 7, and 8. Pet. 1, 3. Claims 1 and 7 are independent claims.

Claim 1 is reproduced below.

> 1. [1P] A computing device for processing a transaction between a first client device, and a second client device via a transfer mechanism, the transfer mechanism comprising a decentralized digital currency, the computing device comprising:
>
> [1A] a memory for storing a first asymmetric key pair, the first asymmetric key pair comprising a first private key and a first public key;
>
> [1B] a network interface for receiving terms, the terms comprising:
>
> [1B.1] at least one of a first principal data or a second principal data;
>
> [1B.2] a reference to at least one of a first data source or a second data source; and
>
> [1B.3] an expiration timestamp;
>
> [1.C] a computer processor coupled to the memory and the network interface, the computer processor configured to:
>
> [1C.1] read the first private key from the memory;
>
> [1C.2] compute a first cryptographic signature from the first private key;
>
> [1C.3] create an inchoate data record comprising:
>
> [1C.3a] a commit input for receiving a commit data from a commit transaction;
>
> [1C.3b] one or more output data obtained from at least one of the first principal data or the second principal data, and a value data from at least one of the first data source or the second data source; and
>
> [1C.3c] the first cryptographic signature; and

[1C.4] publish the inchoate data record to at least one of the first client device or the second client device,

[1D] wherein the decentralized digital currency comprises a distributed ledger that enables processing the transaction between the first client device and the second client device without the need for a trusted central authority,

[1E] wherein the inchoate data record is used by at least one of the first client device or the second client device to create a complete data record and to create the transaction by broadcasting the complete data record for transmitting and receiving among network participants in the computer network for recording in the distributed ledger,

[1F] wherein at least one of the first client device or the second client device signs the inchoate data record and saves a copy of the inchoate data record on at least one of the first client device or the second client device; and

[1G] wherein the at least one of the computing device, the first client device, or the second client device verifies the recording of the complete data record in the distributed ledger by observing an external state.

Ex. 1001, 38:18–67 (bracketed designations added by Petitioner (*see* Pet. Claim App. 1–2)).

E. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–3	103	Hearn,[3] Armstrong[4]
7, 8	103	Hearn, Armstrong, Ziegler[5]

[3] Hearn, *Contracts*, available at https://web.archive.org/web/20140209124419/https://en.bitcoin.it/wiki/Contracts (Ex. 1009) ("Hearn").

[4] Armstrong, U.S. Pat. Appl. Pub. 2015/0262168 A1, published Sept. 17, 2015 (Ex. 1006) ("Armstrong").

[5] Ziegler, U.S. Patent No. 7,387,240 B2, issued June 17, 2008 (Ex. 1010) ("Ziegler").

Pet. 3. In addition to the references listed above, Petitioner relies on the Declaration of Andrew Miller, Ph.D. (Ex. 1003).

II. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining the level of skill in the art, we consider the type of problems encountered in the art, the prior art solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology, and the educational level of active workers in the field. *Custom Accessories, Inc. v. Jeffrey-Allan Indus. Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); *Orthopedic Equip. Co. v. U.S.*, 702 F.2d 1005, 1011 (Fed. Cir. 1983).

Petitioner contends that a person of ordinary skill in the art at the time of the invention of the '566 patent

> would possess either (i) a Bachelor of Science degree in computer science, computer engineering, electrical engineering, or mathematics, or equivalent and 2-3 years of experience in implementation, programming, or design of cryptocurrencies or blockchain technologies; or (ii) a doctoral degree in computer science, computer engineering, electrical engineering, or mathematics, or equivalent with experience in cryptography including the study, design, or implementation thereof for use in computer systems.

Pet. 14–15 (citing Ex. 1003 ¶ 55).

At this stage of the proceeding, Patent Owner does not dispute the level of ordinary skill in the art, but "reserves the right to more clearly characterize a POSITA should the Board decide to institute review." Prelim. Resp. 4,

For purposes of this Decision, we also adopt Petitioner's proposal as reasonable and consistent with the prior art. *See Okajima v. Bourdeau*,

261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art may reflect an appropriate level of skill in the art).

B. Claim Construction

We apply the same claim construction standard used in district court actions under 35 U.S.C. § 282(b), namely that articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b) (2021). In applying that standard, claim terms generally are given their ordinary and customary meaning as would have been 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. *Phillips*, 415 F.3d at 1312–13. "In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

Petitioner states that it "does not believe any claims require construction to resolve the patentability disputes in this proceeding" and urges the application of "the plain and ordinary meaning for each term in the challenged claims." Pet. 14. Patent Owner "agrees with Petitioner that the claims are entitled to their plain and ordinary meaning" and "reserves the right to further address claim construction issues should the Board decide to institute review." Prelim. Resp. 5.

Based on the current record, we see no need for express construction of any term at this stage of the proceeding.

C. Overview of the Asserted Prior art

1. Hearn

Hearn is an Internet article that describes distributed contracts, which are "method[s] of using Bitcoin to form agreements with people via the block chain" with "[m]inimal trust [which] often makes things more convenient by allowing human judgements to be taken out of the loop, thus allowing complete automation." Ex. 1009, 1. Hearn explains that low trust protocols that interact with Bitcoin allow creation of new financial tools and contracts on top of the block chain. *Id.* at 1–2. Hearn explains that there are two general patterns for safely creating contracts that ensure people always know what they are agreeing to: (1) in one pattern, transactions are passed around outside of a P2P network, in partially-complete or invalid forms; and (2) in another pattern, two transactions are used including a contract that created and signed but not broadcast right away, and a payment that is broadcast after the contract is agreed to lock in the money, with the contract being broadcast thereafter. *Id.* at 2. Hearn describes multiple examples of financial tools created on top of the block chain. *See id.* at 2–5. One example (Hearn's Example 7) describes a protocol for making rapidly-adjusted (micro)payments to a pre-determined party. *See id.* at 5.

With respect to Example 7, Hearn explains that Bitcoin transactions are cheap relative to traditional payment systems, but still have a cost due to the need for mining and storage. Ex. 1009, 5. Hearn describes a situation in which an entity/person wants to rapidly and cheaply adjust the amount of money sent to a particular recipient without incurring the cost of a broadcast transaction. *Id.* Such a situation could include, for example, the desire to pay 0.001 BTC (Bitcoin) per 10 kilobytes of usage of an untrusted Internet

access point (e.g., a WiFi hotspot in a coffee shop), without opening an account with the coffee shop. *Id.* A zero-trust solution could automatically implement such a transaction, such that the entity/person could just pre-allocate a budget on one's own phone mobile wallet at the start of the month, and the mobile device would then automatically negotiate and pay for internet access on demand. *Id.* In parallel, the coffee shop wants to allow anyone to easily and securely pay for Internet access. *Id.* Hearn describes the following protocol to implement such transactions. *Id.*

The client is defined as the party sending value, and the server is the party receiving the value. Ex. 1009, 5. From the client's perspective, the protocol includes the following steps. *Id.* At step 1, a public key (K1) is created, and a public key (K2) is requested from the server. *Id.* Step 2 creates and signs but does not broadcast a transaction (T1) that sets up a payment of (for example) 10 BTC to an output requiring both the server's public key and one of the client's keys to be used. *Id.* The value to be used is chosen as an efficiency tradeoff. *Id.* Step 3 creates a refund transaction (T2) that is connected to the output of T1 and sends all the money back to oneself (to the client). *Id.* The transaction has a time lock set for some time in the future (for example, a few hours in the future). *Id.* The client does not sign the transaction, and provides the unsigned transaction to the server. *Id.* At step 4, the server signs T2 using its public key K2, and returns the signature to the client. *Id.* At this point, the server has not seen T1, and has seen only a hash (which is in the unsigned T2). *Id.* At step 5, the client verifies that the server's signature is correct, and aborts if it is not correct. *Id.*

At step 6, the client signs T1 and passes the signature to the server, which now broadcasts the transaction. Ex. 1005, 5. This locks in the money. *Id.* At step 7, the client creates a new transaction T3, which connects to T1 like the refund transaction does, and has two outputs—one that goes to K1, and another that goes to K2. *Id.* This transaction starts out with all value allocated to the first output (K1) (that is, it does the same thing as the refund transaction, but is not time-locked). *Id.* The client signs T3 and provides the transaction and signature to the server. *Id.* At step 8, the server verifies that the output to itself is of the expected size, and verifies that the client's provided signature is correct. *Id.* Then, when the client wishes to pay the server (step 9), the client adjusts its copy of T3 to allocate more value to the server's output and less value to itself, re-signs the new T3, and sends the signature to the server. *Id.* The server then adjusts its copy of T3 to match the new amounts, verifies the signature, and continues. *Id.* This protocol continues until the session ends, or until the 1-day period is getting close to expiry. *Id.* The refund transaction is needed to handle a case where the server disappears or halts at any point, leaving the allocated value in limbo. *Id.* If this happens, the client can broadcast the refund transaction and get back all the money then once the time lock has expired. *Id.*

2. Armstrong

Armstrong is titled "Instant Exchange" and "relates to a computer system and method for transacting bitcoin." Ex. 1006, code (54), ¶ 3. Armstrong explains that Bitcoin can be sent to an email address, with no miner's fee being paid by a host computer system. *Id.* at code (57). Hot wallet functionality is provided to transfer values of some Bitcoin addresses

to a vault for purposes of security, the vault having multiple email addresses to authorize a transfer of bitcoin out of the vault, and a private key of a Bitcoin address of the vault being split and distributed to keep the vault secure. *Id.* at code (57), ¶¶ 63 (explaining that "[a] wallet is maintained within a range so that only a portion of the wallet is 'hot' in the sense that a user of the wallet can use the 'hot' portion for transacting with another user"), 118 (describing "the use of a 'hot' wallet in combination with 'cold storage'"). Instant exchange allows for merchants and customers to lock in a local currency price, and "[a] bitcoin exchange allows for users to set prices that they are willing to sell or buy bitcoin and execute such trades." *Id.* at code (57).

Figure 1A of Armstrong, reproduced below, illustrates a network environment 10, including a Bitcoin network 12, a first host computer system 14 "within which the invention [of Armstrong] manifests itself," a second host computer system 16, first and second user devices 18 and 20 connected over the Internet 22 to first host computer system 14, a third user device 24 connected to second host computer system 16, a bitcoin exchange computer system 26, and a miner computer system 28. Ex. 1006 ¶ 81.

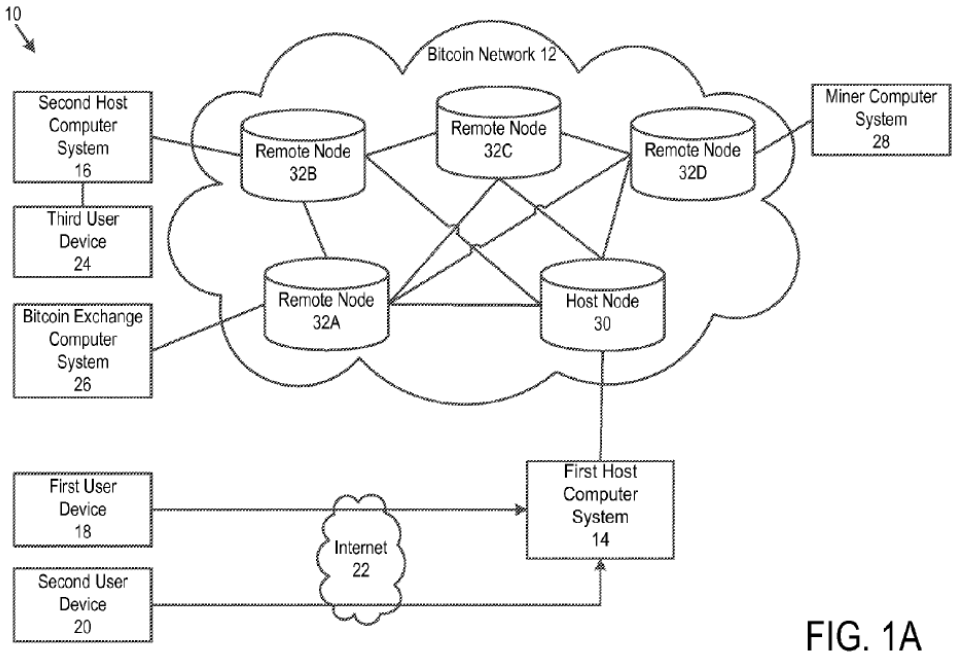

FIG. 1A

Figure 1A illustrates a network environment 10, including Bitcoin network 12, first host computer system 14, second host computer system 16, first and second user devices 18 and 20 connected over Internet 22 to first host computer system 14, third user device 24 connected to second host computer system 16, bitcoin exchange computer system 26, and miner computer system 28. Ex. 1006 ¶ 81.

Bitcoin network 12 illustrated in Figure 1A includes a host node 30 and a plurality of remote nodes 32A–32D that are connected to one another. Ex. 1006 ¶ 82. First host computer system 14 is connected to host node 30, bitcoin exchange computer system 26 is connected to remote node 32A, second host computer system 16 is connected to remote node 32B, and miner computer system 28 is connected to remote node 32D (or could reside on the same computer system). *Id.*

Figure 1B of Armstrong, reproduced below, is a block diagram of a first host computer system, and first and second user devices connected thereto. Ex. 1006 ¶¶ 42, 83.

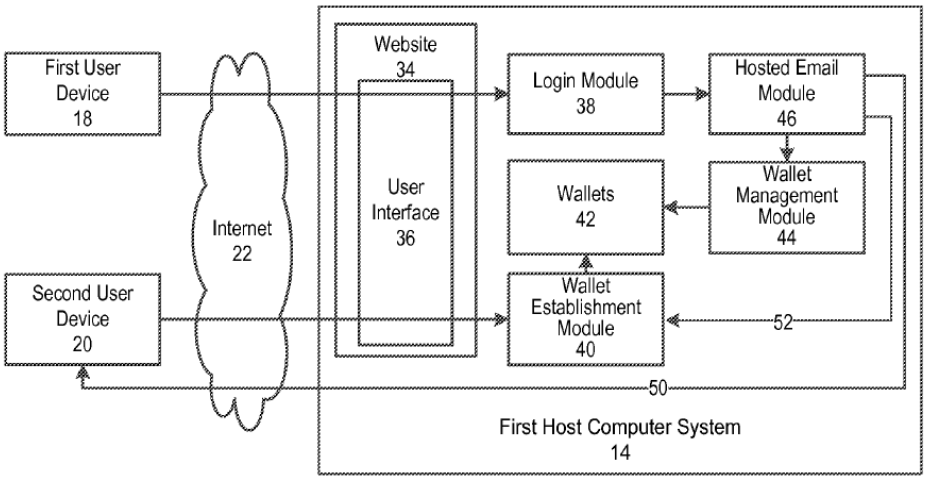

FIG. 1B

Figure 1B is a block diagram of a first host computer system, and first and second user devices connected thereto. Ex. 1006 ¶¶ 42, 83.

First host computer system 14 is used primarily for transacting bitcoin and, as shown in Figure 1B, includes a website 34 having a user interface 36, a login module 38, a wallet establishment module 40, a plurality of wallets 42, a wallet management module 44, and a hosted email module 46. Ex. 1006 ¶ 83. Login module 38 is connected to website 34, hosted email module 46 is connected to login module 38, wallet establishment module 40 is connected to wallets 42, hosted email module 46 is connected via wallet management module 44 to wallets 42, first user device 18 is connected over Internet 22 and user interface 36 to login module 38, hosted email module 46 is connected over Internet 22 to second user device 20, and second user device 20 is connected over Internet 22 and user interface 36 to wallet establishment module 40. *Id.* First host computer system 14 may have one wallet (Wallet A) stored among wallets 42 corresponding to first user device 18. *Id.* ¶ 84. First wallet (Wallet A) includes an email address (email

address A), login details for the wallet, and a number of Bitcoin addresses (e.g., Bitcoin address 1 and Bitcoin address 2) that have been created due to respective transfers or purchases (e.g., Transfer 1 and Transfer 2). *Id.* Wallet establishment module 40 and wallet management module 44 (in Figure 1B) are used to record the transfers and purchases (Transfer 1 and Transfer 2), their Bitcoin addresses (Bitcoin address 1 and Bitcoin address 2), their values, and other details within the wallet. *Id.*

A browser application on first user device 18 in Figure 1B transmits a user interface request over Internet 22 to website 34, and website 34 responds to the user interface request by transmitting user interface 36 over Internet 22 to first user device 18. Ex. 1006 ¶ 85. User interface 36 includes fields for entering login credentials, which are then transmitted from first user device 18 over Internet 22 to login module 38, which verifies whether the login credentials match the login details for the wallet (Wallet A), and if the login credentials match the login details, then login module 38 logs first user device 18 into the wallet (Wallet A). *Id.* If the login credentials do not match the login details, then first user device 18 is not logged in to the wallet. *Id.* If first user device 18 is logged in to the wallet, login module 38 also provides access for first user device 18 to hosted email module 46 and transmission of an email by a user of first user device 18 to an email address of second user device 20. *Id.* ¶ 86. User interface 36 provides a field for entering the email address of second user device 20, and a field for entering an amount in bitcoin (or an amount in local currency that is converted to bitcoin using an exchange rate) that is being transferred from the wallet (Wallet A) to a respective wallet among wallets 42 corresponding to second user device 20. *Id.* The user of first user device 18 then uses hosted email

module 46 to send an email to second user device 20, and hosted email module 46 instructs wallet management module 44 to record the amount of bitcoin that is being transferred from Wallet A. *Id.*

3. Ziegler

Ziegler is titled "System and Method of Secure Information Transfer" and relates to "secure information transfer for open-network transactions." Ex. 1010, code (54), 1:12–15. Ziegler explains its system may enable "PIN [(Personal Identification Number)] exchange." *Id.* at 6:34–37. More particularly, Ziegler's system and method enables information to be securely transferred from a first device to a second device over an open network, by transferring software to the first device and executing the software. *Id.* at code (57). Data representing the information is entered at the first device and transferred to the second device, which uses the data to determine the information. *Id.*

D. Principles of Law

A petition must show how the construed claims are unpatentable under the statutory grounds it identifies. 37 C.F.R. § 42.104(b)(4). Petitioner bears the burden of demonstrating a reasonable likelihood that it would prevail with respect to at least one challenged claim for a petition to be granted. 35 U.S.C. § 314(a).

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). 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).[6] *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We analyze the asserted grounds with these principles in mind.

E. Obviousness under 35 U.S.C. § 103

1. Obviousness of Claims 1–3 Over Hearn and Armstrong

Petitioner contends that claims 1–3 are unpatentable over the combined teachings of Hearn and Armstrong. Pet. 3, 15–64. Patent Owner disputes Petitioner's contentions. Prelim. Resp. 6–18. In particular, Patent Owner disputes Petitioner's assertions regarding limitations [1B.2], [1B.3], and [1C.3b]. *Id.* Our determination with respect to these limitations is dispositive. Accordingly, we focus our analysis of this challenge on limitations [1B.2], [1B.3], and [1C.3b].

a) [1B.2] – "a reference to at least one of a first data source or a second data source;"

Petitioner asserts that "[t]he local currency instrument (e.g., USD[7]) entered with the principal data over the network interface is a '*reference*' to '*a data source.*'" Pet. 42 (citing Ex. 1003 ¶¶ 108–110; Ex. 1001, 11:55–56, 66, 67). Petitioner asserts that "Armstrong's user interface further presents the 'exchange rate between bitcoin and the local currency,'" a person of ordinary skill in the art "would have been motivated to use an exchange rate

[6] Patent Owner does not present any objective evidence of nonobviousness at this stage of the proceeding.
[7] United States dollars.

to automatically convert an entered local currency amount to a bitcoin amount so that the user does not have to manually convert between a local currency and bitcoin." *Id.* (citing Ex. 1003 ¶ 9). Petitioner asserts further that use of an exchange rate gives the parties confidence that "the most recent exchange rate is being used and the conversion amount is accurate." *Id.* In addition, Petitioner asserts that a person of ordinary skill in the art "would have understood the exchange rate used in Armstrong is provided from a '*data source*' such as an external feed from an exchange rate provider or a database internal to the first host computer." *Id.* (citing Ex. 1012, 6–7; Ex. 1001, 15:38–49).

Patent Owner contends that "[t]he Petition's combination of Hearn and Armstrong fails to teach or suggest limitation 1B.2, 'a reference to at least one of a first data source or a second data source.'" Prelim. Resp. 6. Specifically, Patent Owner contends that "[t]he local currency instrument is not a 'reference' to a data source that could be argued to meet limitation 1B.2; rather, it is mere value data itself." Prelim. Resp. 8. Noting that "[t]he Petition cites the '566 patent at 11:55–56 after the statement that the local currency instrument is a reference to a data source," Patent Owner asserts that "[t]his passage in the '566 specification merely states that, in the example given, the reference to a data source *comprises* one of a base instrument and a quote instrument." *Id.* at 8–9 (citing Pet. 42; Ex. 1001, 11:55–56).[8]

[8] We note that we understand the cited portion of the '566 Patent to identify the data source as one of a base instrument or a quote instrument, rather than identifying the reference as one of these instruments.

Patent Owner provides examples illustrating the difference between a *reference* to a date source and the data source itself on pages 9–11 of its response. Although, not specifically identified by Patent Owner, we find the following disclosure in the '566 most instructive on this issue. In discussing one embodiment, the '566 Patent states that "associated data comprises one or both of terms and a reference to the terms." Ex. 1001, 31:22–23. This disclosure makes clear that a reference to something is not the same as that thing itself.

In its challenge, Petitioner asserts that USD is a reference to a data source. Pet. 42. We disagree. Petitioner has not directed us to any persuasive evidence that identification of the currency used in the transaction (i.e. USD) is a reference to a "data source" as that term is used in the '566 Patent.

Patent Owner further contends that the exchange rate in Armstrong is not a reference to a data source. Prelim. Resp. 11. Specifically, Patent Owner contends that "*reference* is not the same as the thing (data source) that it *references*, nor can a *reference* be equated to value data obtained from the underlying source being referenced." *Id.* Patent Owner contend further that "[i]t is not even clear from Armstrong itself that there is, in fact, any data source that provides an exchange rate." *Id.* Noting that the Petition asserts that a person of ordinary skill in the art would be motivated to add a data source for Armstrong's exchange rate, Patent Owner contends that even if this statement is presumed to be correct, it makes no difference because there is no disclosure in Armstrong of a reference to this data source (i.e. exchange rate). *See id.* at 12.

We agree with Patent Owner, even if we assume that a person of ordinary skill in the art would understand Armstrong to disclose an exchange rate, such disclosure would not constitute disclosure of a reference to that exchange rate. Moreover, we do not understand an exchange rate to be a data source as required by claim 1.

For these reasons, we determine that Petitioner has not shown a reasonable likelihood of prevailing for this limitation of claim 1.

b) [1B.3] – "an expiration timestamp"

Petitioner asserts that "[i[n Hearn, the micropayment channel between Party A and Party B expires after a pre-determined time, effectively ending the contract between the parties." Pet. 43 (citing Ex. 1009, 5) (emphasis omitted). According to Petitioner, "[t]his pre-determined time-period sets the duration of the payment channel and is therefore an '*expiration timestamp*.'" *Id.* at 44 (citing Ex. 1009, 5).

Noting that claim 1 requires "terms comprising" an "expiration timestamp," Patent Owner contends that Petitioner's challenge ignores this context. Prelim. Resp. 13. Patent Owner contends that Petitioner's position is only supported by "attorney argument and characterization" and "[t]he language 'predetermined time' does not come from Hearn (or Armstrong). The one quote from Hearn is that the process continues until the session ends 'or the 1-day period is getting close to expiry.'" *Id.* (citing Ex. 1009, 5; Pet. 43).

Patent Owner contends that "[t]he Petition thus engages in two separate leaps from the actual, limited disclosure of Hearn . . . (1) that the 1-day period actually stated in Hearn is a "pre-determined time," and (2) that the time in advance of this 1-day period would have to be offset by a set

amount." Prelim. Resp. 14. Patent Owner contends further that "[t]hen, the Petition makes a *further* leap that a POSITA would have been motivated to alter Hearn to allow Party A to enter a duration to provide, *e.g.*, flexibility." *Id.* (citing Pet. 44). Patent Owner asserts that "[t]hese leaps from the actual disclosure of Hearn to an alleged mapping onto the claim language at issue, are bridged purely by reference to conclusory expert argument . . . But such conclusory arguments are entitled to little, if any, weight." *Id.* at 14–15 (citing Pet. 44; *Xerox Corp. v. Bytemark, Inc.*, Case IPR2022-00624, slip op. at 15–16 (August 24, 2022) (Paper 9) (precedential); 37 CFR § 42.6(a)(3)). Thus, according to Patent Owner, "there is no disclosure in Hearn (or Armstrong) that any 'expiration timestamp' is part of 'terms' capable of receipt by a network interface of the argued-for computing device," such that "[a]ltering the combination to add this limitation would be classic hindsight, unsupported by the references actually relied upon in the Petition." *Id.* at 15.

We agree with Patent Owner, that Petitioner does not provide adequate evidence in support of the proposed combination and relies on unsupported attorney argument in that the Petition does not adequately explain how Hearn's disclosure of a 1-day period of expiry equates to the disclosure of a term (specifically the "expiration timestamp" term) for receipt by a network interface as require by claim 1. For these reasons, we determine that Petitioner has not demonstrated a reasonable likelihood of prevailing for this limitation of claim 1.

> *c) [1C.3b] – "create an inchoate data record comprising . . . one or more output data obtained from at least one of the first principal data or the second principal data, and a value data from at least one of the first data source or the second data source; and"*

Petitioner asserts "Hearn's initial payment transaction T3 has two outputs." Pet. 51 (citing Ex. 1009, 5). Petitioner asserts further that these two outputs correspond to the claimed "one or more output data." *Id.* In addition, Patent Owner asserts that "the *'principal data'* for Hearn's Example 7 are received in local currency (e.g., U.S. Dollars) in the combination of Hearn and Armstrong" and "[a]s taught by Armstrong, 'an amount in local currency [ ] is converted to bitcoin using an exchange rate.'" *Id.* at 51–52 (citing Ex. 1006 ¶ 86; Ex. 1007 ¶ 52; Ex. !008 P 67). Then, Petitioner asserts that "[a]n exchange rate is '*a value data from at least one of the first data source*,'" such that "*'one or more output data'* in the combination of Hearn and Armstrong is '*obtained from at least one of the first principal data* [maximum contract amount in local currency] … *and a value data* [exchange rate] *from at least one of the first data source* [exchange rate provider or internal database].'" *Id.* at 52 (citing Ex. 1003 ¶¶ 134–135.)

Patent Owner contends that "[f]ollowing from the failure of Ground 1 of the Petition to disclose or suggest limitation 1B.2, the computing device also does not have a computer processor configured to create an inchoate data record comprising 'a value data from at least one of the first data source or the second data source.'" Prelim. Resp. 16 (citing Ex. 1001, 38:33–35, 39, 42–45). Patent Owner contends further that "[b]ecause the alleged computing device of the combination does not have any reference to a data

source, and certainly not as part of any terms, the alleged device cannot obtain value data from such a data source for use in creating the inchoate data record." *Id.*

For the reasons discussed above in reference to limitation 1B.3 we agree with Patent Owner. Thus, Petitioner fails to demonstrate a reasonable likelihood of prevailing for limitation 1C.3b.

d) *Conclusion re Claim 1*

We have reviewed the parties' arguments, evidence, and testimony of record for the preamble and the limitations of claim 1, and more particularly for limitations [1B.2], [1B.3], and [1C.3b]. On the record before us, we determine that Petitioner fails to demonstrate a reasonable likelihood of prevailing for independent claim 1.

e) Dependent Claims 2 and 3

Petitioner asserts that claims 2 and 3 are unpatentable over the combined teachings of Hearn and Armstrong. Pet. 3, 59–64. Claims 2 and 3 depend from claim 1. Petitioner's challenge to claims 2 and 3 does not cure the deficiencies in its challenge to claim 1, outlined above. On the record before us, we determine that Petitioner fails to demonstrate a reasonable likelihood of prevailing for claims 2 and 3.

2. Obviousness of Claims 7 and 8 Over Hearn, Armstrong, and Ziegler

Petitioner contends that claims 7 and 8 are unpatentable over the combined teachings of Hearn, Armstrong, and Ziegler. Pet. 3, 64–79. Patent Owner disputes Petitioner's contentions. Prelim. Resp. 18–21.

a) Independent Claim 7

Petitioner asserts that "Claim 7's '*computing device*' limitations [7A.1]-[7A.3] are identical to claim 1's limitations [1A]-[1C]." Pet. 68. For these limitations, the Petition refers back to the challenge to claim 1. *Id.*

Patent Owner contends that "[b]ecause of this common language between claims 7 and 1, and because no new arguments with regard to Ground 2 are advanced by the Petition on this limitation" the arguments for limitations [1A]–[1C] "apply equally to claim 7." Prelim. Resp. 19.

We agree with Patent Owner. Limitation [7A.2b) suffers from the same deficiencies as limitation [1B.2] discussed in Section II.E.1.b(1) above. Limitation [7A.2C] suffers from the same deficiencies as limitation [1B.3] discussed in Section II.E.1.b(2) above. And, limitation [7A.3C.ii] suffers from the same deficiencies at limitation [1C.3b] discussed in Section II.E.1.b(3) above. Zeigler does not cure these deficiencies. Thus, on the record before us, we determine that Petitioner fails to demonstrate a reasonable likelihood of prevailing for claim 7.

b) Dependent Claim 8

Petitioner asserts that claim 8 is unpatentable over the combined teachings of Hearn, Armstrong, and Ziegler. Pet. 79. Claim 8 depends from claim 7. Petitioner's challenge to claim 8 does not cure the deficiencies in its challenge to claim 7 outlined above. On the record before us, we determine that Petitioner fails to demonstrate a reasonable likelihood of prevailing for claim 8.

III. CONCLUSION

For the foregoing reasons, the Petition fails to demonstrate a reasonable likelihood of prevailing in showing the unpatentability of at least one of the challenged claims of the '566 patent.

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that the Petition is denied, and no trial is instituted.

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