

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COINBASE, INC.,
Petitioner

v.

VERITASEUM, INC.
Patent Owner

U.S. Patent No. 11,196,566

Inter Partes Review Case No. IPR2023-00751

PATENT OWNER PRELIMINARY RESPONSE

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I. INTRODUCTION

Petitioner has challenged the validity of claims 1-3 and 7-8 of U.S. Patent No. 11,196,566 (the “’566 patent”). Patent Owner Veritaseum, Inc. (“Patent Owner”) opposes institution.

Any case for invalidity must be made, in the first instance, in the Petition. If the Petition does not show a reasonable likelihood that the Petitioner would prevail as to at least one of the challenged claims, institution should be denied.

As shown below, the Petition has failed to make the required showing of a reasonable likelihood of success on at least three separate limitations common to all challenged claims of the ’566 patent, any one of which would be fatal to the Petition.

The computing device of claim 1, which is for processing a transaction between a first and a second client device, recites a network interface for receiving terms comprising, among other things, (1) at least a *reference* to a data source, and (2) an expiration timestamp, two separate limitations. The Petition fails to show how the proposed Ground 1 combination of Hearn and Armstrong discloses or suggests that any computing device can receive terms including any reference to a data source or expiration timestamp, failing on both of these limitations. Further, the computing device of claim 1 has a processor configured to create an inchoate data record comprising, among other things, value data from at least one of the

previously recited data sources, for which the terms of the transaction include a reference. The Petition fails to show how the inchoate data record includes value data from any such data source, failing on this third limitation. Ground 1 of the Petition therefore fails to show a reasonable likelihood of success for challenged claims 1-3.

Ground 2 of the Petition adds a third reference to the combination of Ground 1, but puts forward no other arguments on substantially similar limitations in challenged claim 7, and therefore Ground 2 of the Petition also fails to show a reasonable likelihood of success on challenged claims 7-8.

Institution should therefore be denied.

II. LEGAL STANDARDS FOR INSTITUTION

Institution requires “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). In the first instance, this showing must be made *in the Petition*. See 35 U.S.C. § 312(a) (“A petition filed under section 311 may be considered only if . . . (3) *the petition* identifies, in writing and with particularity . . . the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim” (emphasis added)).

It is Petitioner who must specify “[h]ow the challenged claim is to be construed” and “[h]ow the construed claim is unpatentable,” including

“specify[ing] where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 CFR § 42.104(b)(3)-(4). “[I]t is Petitioner’s burden to establish, in the Petition, a reasonable likelihood of success, which includes, inter alia, explaining how a challenged claim is construed and how the prior art teaches that claim.” *World Bottling Cap, LLC v. Crown Packaging Tech., Inc.*, Case IPR2015-00296, slip op. at 5 (PTAB May 27, 2015) (Paper 8).

Key requirements and burdens applicable to the Board’s institution decision in an IPR were summarized by the Federal Circuit in *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356 (Fed. Cir. 2016):

In an IPR, the petitioner has the burden *from the onset* to show with particularity why the patent it challenges is unpatentable. *See* 35 U.S.C. § 312(a)(3) (requiring IPR *petitions* to identify ‘with particularity ... the evidence that supports the grounds for the challenge to each claim.’).

Id. at 1363 (emphasis added).

This submission addresses only the issue of institution of trial. Should a trial be instituted, Patent Owner reserves any and all arguments not expressly addressed herein.

III. BACKGROUND ON THE ’566 PATENT

A. Overview of the disclosure

The ’566 patent discloses systems and methods for enabling parties with little or no trust in each other to enter into and enforce value transfer agreements,

optionally with a third-party facilitator. Disclosed embodiments in the '566 patent specification include arbitrary swaps and letters of credit.

Challenged independent claims 1 and 7, and their dependents, are directed to computing devices and systems for processing a transaction between two client devices via a transfer mechanism. The limitations recited in the challenged claims include features of the claimed computing device itself. As made clear in the arguments below, the combinations asserted by the Petition fail to disclose or suggest multiple features of the computing device recited in the challenged claims.

B. Level of Ordinary Skill in the Art

Petitioner alleges that a person having ordinary skill in the art (“POSITA”) would have had 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, cryptography including the study, design, or implementation thereof for use in computer systems. Petition at 14-15. For purposes of this Preliminary Response only, Patent Owner does not dispute this characterization of a POSITA. Patent Owner, however, reserves the right to more clearly characterize a POSITA should the Board decide to institute review.

IV. CLAIM CONSTRUCTION

“In an *inter partes* review proceeding, a claim of a patent, or a claim proposed in a motion to amend under § 42.121, shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100.

For purposes of the instant Preliminary Response, Patent Owner agrees with Petitioner that the claims are entitled to their plain and ordinary meaning. *See* Petition at 14. Patent Owner reserves the right to further address claim construction issues should the Board decide to institute review.¹

¹ Petitioner has challenged the priority of the '566 patent to U.S. Provisional Patent No. 61/990,795 (the “'795 provisional”) for alleged lack of support for the claimed subject matter of the '566 patent in the '795 provisional. Patent Owner disputes this argument from Petitioner, but since the arguments in this Preliminary Response do not turn on this dispute, Patent Owner does not make such arguments herein, but specifically reserves the right to make such arguments.

V. EACH ALLEGED GROUND OF PATENTABILITY FAILS THE “REASONABLE LIKELIHOOD” TEST

Patent Owner addresses below specific shortcomings that militate against institution.

A. Ground 1 – Obviousness over Hearn (Ex. CB-1009) in view of Armstrong (Ex. CB-1006)

1. [1B.2] “a reference to at least one of a first data source or a second data source”²

The 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”.

When considering limitation 1B.2, its context within claim 1 is important. Limitation 1B.2 is a sub-limitation of limitation 1B, as indicated by the labelling in the Petition, *i.e.*, “a reference to at least one of a first data source or a second data source” is one of the recited “terms” for receipt over a “network interface” by the computing device for processing a transaction between a first client device and a second client device. *See* Petition at 38. The “reference to at least one of a first data source or a second data source” is thus one of the recited “terms” of a

² For convenience, Patent Owner will use the numbering scheme of the Petition.

transaction for receipt by the computing device recited in claim 1. The Petition's arguments with respect to both limitations 1B.2 and 1B.3 ignore this context³.

It is also important to note that this recitation in 1B.2 is a *reference* to one or two data sources, and not mere data. '566 patent at 38:30-31. Later in the claim, the inchoate data record is created comprising, among other things, "a value data from" at least one of the recited data sources. *Id.* at 38:44-45. Hence, within the context of claim 1, there is a *reference* to a data source as recited in limitation 1B.2, and then, in limitation 1C.3b, a *value data* is derived from at least one of the references to the data source and utilized in obtaining the output data that is part of the created inchoate data record.

The Petition points to two potential references to data sources in its arguments concerning limitation 1B.2. First, the petition argues that "[t]he local currency instrument (e.g., USD) entered with the principal data" is a reference to a data source. Petition at 42. Second, the Petition argues that "Armstrong's user interface further presents the "exchange rate between bitcoin and the local currency," which exchange rate a "POSITA would have understood . . . is provided from a 'data source' such as an external feed," is the recited reference to a data

³ Limitation 1B.3 is argued separately below.

source. *Id.* As separately addressed below, neither of these alleged references to data sources meet limitation 1B.2.

a) The Local Currency Instrument is not a Reference to a Data Source

The 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.

The Petition argues that “[t]he local currency instrument (e.g., USD) entered with the principal data over the network interface” is a “reference” to “a data source.” Petition at 42.⁴

The Petition cites the ’566 patent at 11:55-56 after the statement that the local currency instrument is a reference to a data source. Petition at 42. This 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

⁴ Though this specific statement in the Petition makes it appear as if the Petition is arguing that the local currency instrument itself is the claimed reference to the data source, this is not actually the Petition’s real argument. This is clear, as the Miller declaration ignores this point and instead argues only that the exchange rate source is the recited reference to the data source (CB-1003 at ¶¶ 108-110), which argument is addressed below. However, Patent Owner will address the Petition’s statement that the local currency instrument is itself a reference to a data source.

instrument. '566 patent at 11:55-56. This statement does not mean that the base instrument and/or the quote instrument themselves qualify as a reference to a data source. These instruments are value data, rather than references to any source of data. This is made clear from the example terms listed further down in the cited example in the specification, "Example Terms: Base: USD Quote: AUD." '566 patent at 11:64-66. These are mere text or value data rather than a reference to a data source.

Other passages in the specification are instructive on the meaning of the recited *reference* to the data. A pertinent example in the '566 specification discloses:

the facilitator performs a calculation in accordance with the terms for determining a first disbursement amount and a second disbursement amount, optionally *requesting information from one or more data sources* for use in the calculation (e.g., the most recent price of a publicly traded financial instrument, the price of the instrument at the time the offer was accepted, etc.).

'566 patent at 15:31-38 (emphasis added)⁵. In this example, "given a time t, the data source provides the value at t of one or more of: the base instrument, the quote

⁵ See also *id.* at 20:3-7 (" . . . the facilitator performs a calculation in accordance with the terms . . . optionally requesting information from one or more data sources for use in the calculation."); 23:53-56 ("The facilitator performs a calculation in

instrument, the base instrument in terms of the denominating asset *b*, . . .” or a number of other potential values. ’566 patent at 15:41-48. This passage shows the difference between value data from a data source and the data source itself, or a reference to the data source, as recited. This further shows that the base instrument is data that can be used in conjunction with a data source, but is not a data source itself, or a reference to a data source.

This is made even clearer with the further limitation in claim 1 that the computer processor of the computing device is configured to create an inchoate data record comprising “one or more output data obtained from . . . a value data *from* at least one of the first data source or the second data source.” ’566 patent at 38:42-45 (emphasis added). The local currency, of course, is not a reference to a

accordance with the terms . . . optionally requesting information from one or more data sources for use in the calculation.”); 28:61-29:6 (“ . . . the facilitator performs a calculation in accordance with the terms for determining a first disbursement amount . . . optionally requesting information from the data source for use in the calculation (e.g., whether an anticipated shipment has been delivered to a shipper, a destination address, etc., etc.). This could be via an external API, internal database query, etc.”).

data source that can or does provide value data, as recited in claim 1 of the '566 patent.

The argued local currency instrument, if actually argued in the Petition, is thus not a reference to a data source.

b) The exchange rate in Armstrong is not the recited reference to a data source

The Petition's second argument is that "A POSITA 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." Petition at 42. The problem is that, in the steps that the Petition takes to arrive at this argument, the Petition completely ignores the context of claim 1 and the recited "reference" to a "data source" in limitation 1B.2.

Limitation 1B.2 is not merely a "data source," which is what the Petition argues, *i.e.*, "the exchange rate is provided from a 'data source'" and "therefore" the proposed combination of Hearn and Armstrong teaches or suggests a reference to a data source." Petition at 42-43. The logic does not follow, as the actual claim language recites a *reference* to a data source, and a *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.

It is not even clear from Armstrong itself that there is, in fact, any data source that provides an exchange rate. The Petition has to argue that "a POSITA

would have been motivated to use an exchange rate to automatically convert an entered local currency amount to a bitcoin amount” to avoid the need for manual entry by the user. Petition at 42. This motivation and alteration to Armstrong is not clear, but it does not make a difference for the present argument, because even assuming, for the sake of argument, that a POSITA were motivated to add a data source for Armstrong’s exchange rate, there is no disclosure in Armstrong about how this data source is provided, nor any disclosure of how *reference* to such a data source may be used as part of a “term” to the underlying transaction.

More specifically, there is no disclosure or suggestion within any of Armstrong, Hearn, or combination thereof, to include a “reference” to this purported data source as a “term” for a transaction received over a network interface by the computing device, as required by limitation 1B.2.

Indeed, the Petition itself fails to make this connection (*see* Petition at 42-43), alleging only that a “POSITA 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” (Petition at 42 (emphasis in original)) and then concluding without any further analysis that “[t]he combination of Hearn and Armstrong therefore teaches or suggests ‘a reference to at least one of a first data source or a second data source’ is received over the ‘network interface’ of the first host computer” (Petition at 43), without

explaining where or how any alleged “reference” to such data source is part of a “term.”

The Petition is wholly silent on the issue, simply arguing that a POSITA would modify Armstrong to provide a data source for an exchange rate *somewhere*, but nowhere does the Petition argue that this data source has a *reference* and that this *reference* is a part of a *term* to the transaction received by the computing device over a network interface for use in subsequently obtaining output data as part of an inchoate data record. Therefore, the purported data source of the exchange rate does not disclose or suggest limitation 1B.2.

* * *

Because neither the base instrument nor the exchange rate of the Petition’s combination meets limitation 1B.2, the combination of Armstrong and Hearn fails to render claim 1 obvious. This infirmity alone is fatal to Ground 1 of the Petition. As discussed below in Section B.1, this is also fatal to Ground 2 of the Petition, since claim 7 has substantially similar language and no new arguments are advanced for Ground 2 in the Petition.

2. [1B.3] “an expiration timestamp”

Limitation 1B.3 recites “an expiration timestamp,” but its context is that the recited expiration timestamp is part of the “terms” capable of being received by the

network interface of the computing device. '566 patent at 38:21-22; 38:26-27; 38:32.

The Petition argues that Hearn discloses or suggests limitation 1B.3 because “[i]n Hearn, the micropayment channel between Party A and Party B **expires after a pre-determined time.**” Petition at 43 (emphasis in Petition). This “pre-determined time” is attorney argument and characterization. The language “pre-determined 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.” CB-1009 at 5 (quoted in Petition at 43). The Petition further argues that the time in advance of the 1-day period – from the “getting close” quote in Hearn – would have to be offset from the 1-day period ending by a “set amount.” Petition at 44. This does not come from Hearn (or Armstrong), finding support only from Petitioner’s expert.

The Petition thus engages in two separate leaps from the actual, limited disclosure of Hearn to allege that limitation 1B.3 is met: (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.

Then, 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. Petition at 44. These 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. *See id.* But such conclusory arguments are entitled to little, if any, weight. *See Xerox Corp. v. Bytemark, Inc.*, Case IPR2022-00624, slip op. at 15-16 (August 24, 2022) (Paper 9) (precedential) (“conclusory and unsupported” expert opinion “is entitled to little weight,” particularly when it “is offered not simply to provide a motivation to combine prior-art teachings, but rather to supply a limitation missing from the prior art.”); *see also* 37 CFR § 42.6(a)(3) (“Arguments must not be incorporated by reference from one document into another document.”). Improper incorporation by reference is a particular concern in this case, where the Petition is a mere 63 words from the word limit of 37 C.F.R. § 42.24(a). *See* Petition, Certification of Word Count Under 37 CFR § 42.24(d) (certifying 13,937 word count).

Regardless of Hearn’s stated 1-day period, 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. Altering the combination to add this limitation would be classic hindsight, unsupported by the references actually relied upon in the Petition, and thus improper.

As with limitation 1B.2, above, the failure of the Petition’s combination to disclose or suggest limitation 1B.3 is fatal to the petition, as substantially similar

language is recited in claim 7, as argued below, and no new arguments are presented in Ground 2 of the Petition.

3. [1C.3b] “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”

Following 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.” ’566 patent at 38:33-35; 39; 42-45. Because 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.

The Petition’s argument on this limitation is merely that Armstrong discloses a conversion from local currency to bitcoin using an exchange rate, which rate comes from a data source. Petition at 51. The Petition (again) ignores the context of the claims. The computing device is the claimed entity that creates the inchoate data using the value data from the data source, for which it has a reference as part of the terms.

The alleged computing device of the Petition’s Ground 1 is “Armstrong’s first host computer 14.” Petition at 30. The conversion that the Petition shows

takes place on a web page that is shown on the alleged client device. *See* Petition at 37 (“Website 34 responds ‘by transmitting the user interface 36’ to the user device.”). It is the *user device* of Armstrong that displays the web page shown on page 38 of the Petition, Figure 42 of Armstrong, not the *host computer*.

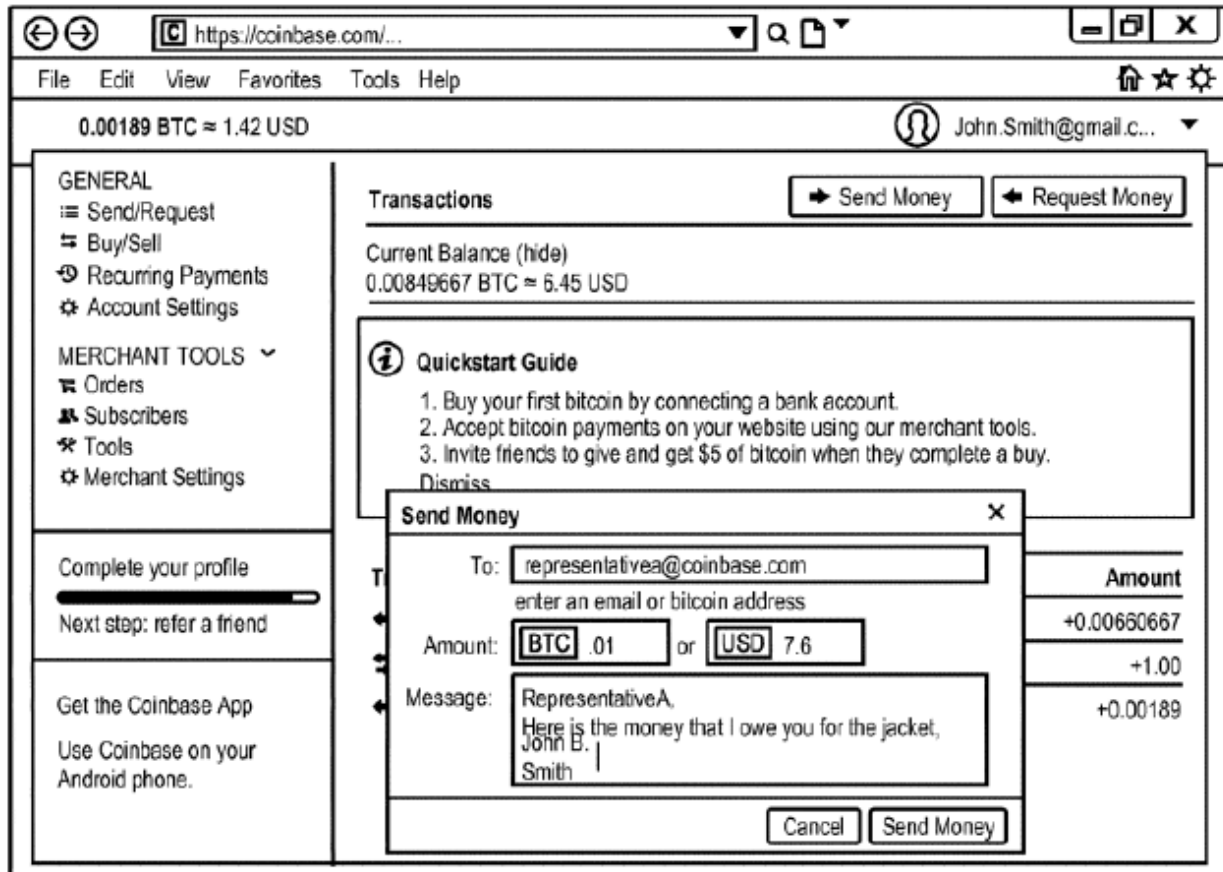


FIG. 42

This conversion shown, from .01 BTC to 7.6 USD is done on this web page, on the user device, not on the alleged computing device of Ground 1's combination, the host computer. What is sent from the user device to the host computer is the *already-converted* amount, in BTC, after the conversion is

complete and the user on the user device clicks the “Send Money” button shown in Figure 42 of Armstrong.

Therefore, the combination of Ground 1 fails to disclose or suggest the computing device having 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.” The alleged computing device of Ground 1 of the Petition does not get a value data from the alleged data source and does not create the alleged inchoate record therefrom.

This is a further and separate reason why Ground 1 of the Petition fails, and it is fatal to the Petition.

4. Claims 2-3

Challenged claims 2-3 depend from claim 1 and are patentable over the combination of Ground 1 of the Petition for at least the same reasons as claim 1.

B. Ground 2 – Obviousness over Hearn (Ex. CB-1009) in view of Armstrong (Ex. CB-1006) and Ziegler (CB-1010)

1. [7A.2b] “a reference to at least one of a first data source or a second data source”

The Petition argues that Claim 7’s ““computing device”” limitations,” labelled as [7A.1]-[7A.3], “are identical to claim 1’s limitations [1A]-[1C]” and

presents a chart that cross references the two sets of limitations and makes no new arguments. Petition at 68-69.⁶

As with claim 1, claim 7 recites “a reference to at least one of a first data source or a second data source” which reference to a data source is part of the terms for receipt over a network interface by the computing device. ’566 patent at 39:51; 55-56; 59-60 (limitation 7A.2b; and limitation 1B.2, argued above in Section A.1).

Because 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 from Section A.1 of this Preliminary Response apply equally to claim 7.

Because both combinations in the Petition fail to disclose or suggest the recited reference to a data source, the Petition fails to make the required showing of a reasonable likelihood that the Petitioner would prevail with respect to at least one of the challenged claims and institution should be denied.

⁶ There are some slight differences in the text of claims 1 and 7. Patent Owner does not herein take a position that the differences are material to the arguments in this Preliminary Response. Patent Owner reserves the right to make such arguments if institution should be granted.

2. [7A.2C] “an expiration timestamp”

As with claim 1, claim 7 recites “an expiration timestamp” which is part of the terms for receipt over a network interface by the computing device. ’566 patent at 39:51; 55-56; 61 (limitation 7A.2C; and limitation 1B.3, argued above in Section A.2).

Because 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 from Section A.2 of this Preliminary Response apply equally to claim 7.

Because both combinations in the Petition fail to disclose or suggest the recited expiration timestamp, the Petition fails to make the required showing of a reasonable likelihood that the Petitioner would prevail with respect to at least one of the challenged claims and institution should be denied.

3. [7A.3C.ii] “one or more outputs 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*”

As with claim 1, claim 7 recites that a computer processor is configured to create an inchoate data record comprising one or more outputs obtained from at least “a value data from at least one of the first data source or the second data source.” ’566 patent at 39:62-64; 40:1; 40:4-7 (limitation 7A.3C.ii; and limitation 1C.3b, argued above in Section A.3).

Because 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 from Section A.3 of this Preliminary Response apply equally to claim 7.

Because both combinations in the Petition fail to disclose or suggest the recited computer processor creating an inchoated data record from value data from the data source, the Petition fails to make the required showing of a reasonable likelihood that the Petitioner would prevail with respect to at least one of the challenged claims and institution should be denied.

4. Claim 8

Challenged claim 8 depends from claim 7 and is patentable over the combination of Ground 2 of the Petition for at least the same reasons as claim 7.

VI. CONCLUSION

Because Petitioner has failed to show that it is reasonably likely to invalidate at least one claim in the '566 patent, the Board should deny the Petition and decline to institute *inter partes* review of the '566 patent.

Dated: July 17, 2023

Respectfully submitted,

/Ari J. Jaffess/

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CERTIFICATION UNDER 37 CFR § 42.24(d)

Pursuant to 37 CFR §42.24(d), the undersigned hereby certifies that the word count for the foregoing Patent Owner Preliminary Response totals 4,648 words, which is less than the 14,000 allowed under 37 CFR §42.24(a)(1)(i).

Dated: July 17, 2023

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Ari J. Jaffess

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Reg. No. 74,558

212-257-1630

CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.205(b), the undersigned certifies that on July 17, 2023, a complete and entire copy of this Patent Owner Preliminary Response was provided to the Petitioner by filing through the Patent Trial and Appeal Case Tracking System (P-TACTS) and via email to gordon-ptab@perkinscoie.com and kaganptab@perkinscoie.com as authorized in Petitioner's mandatory notices.

Dated: July 17, 2023

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