

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASSA ABLOY AB, ASSA ABLOY INC.,
ASSA ABLOY RESIDENTIAL GROUP, INC., AUGUST HOME, INC.,
HID GLOBAL CORPORATION, and
ASSA ABLOY GLOBAL SOLUTIONS, INC.,
Petitioner,

v.

CPC PATENT TECHNOLOGIES PTY, LTD,
Patent Owner.

IPR2022-01093
Patent 8,620,039 B2

Before SCOTT A. DANIELS, AMBER L. HAGY and
FREDERICK C. LANEY, *Administrative Patent Judges*.

DANIELS, *Administrative Patent Judge*.

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

I. INTRODUCTION

ASSA ABLOY AB, ASSA ABLOY Inc., ASSA ABLOY Residential Group, Inc., August Home, Inc., HID Global Corporation, and ASSA ABLOY Global Solutions, Inc., (“ASSA” or “Petitioner”) filed a Petition requesting *inter partes* review (“IPR”) of claims 1, 2, 13, 14, 19, and 20 of U.S. Patent No. 8,620,039 B2 (Ex. 1001, “the ’039 patent”). Paper 2 (“Pet”). CPC Patent Technologies PTY, Ltd, (“CPC” or “Patent Owner”) filed a Preliminary Response to the Petition. Paper 12 (“Prelim. Resp.”). With our email authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response. Paper 16 (“Prelim. Reply”). Also, with our authorization Patent Owner filed a Sur-Reply to Petitioner’s Reply. Paper 19 (“Prelim. Sur-Reply”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the arguments and evidence presented by Petitioner and Patent Owner, we are persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the challenged claims. *See* 35 U.S.C. § 314(a). Accordingly, we institute an *inter partes* review of the challenged claims.

A. *Real Parties in Interest*

Petitioner states that ASSA ABLOY AB, ASSA ABLOY Inc., ASSA ABLOY Residential Group, Inc., August Home, Inc., HID Global Corporation, and ASSA ABLOY Global Solutions, Inc., are the real parties in interest. Pet. 1. Patent Owner states that CPC Patent Technologies PTY, LTD is the real party in interest. Paper 4, 2.

B. Related Matters

Petitioner indicates that it filed a declaratory judgement against Patent Owner with respect to the '039 patent in *ABLOY AB, et al. v. CPC Patent Technologies Pty Ltd., et al.*, No. 3-22-cv-00694, in the United States District Court for the District of Connecticut. Pet. 1–2. And, Petitioner points out that the '039 Patent is asserted against Apple, Inc., in *CPC Patent Technologies Pty Ltd v. Apple Inc.*, No. 5:22-cv-02553 in the United States District Court for the Northern District of California, San Jose Division. *Id.* Petitioner also indicates that the '039 patent has been challenged in IPR2022-00600, currently pending at the Board. *Id.* at 2.

In addition to the proceedings noted by Petitioner, Patent Owner indicates that “the following judicial and/or administrative matters [] may affect, or be affected by, a decision in this proceeding:” *CPC Patent Technologies PTY Ltd. v. HMD Global Oy*, Case No. 6:21-cv-00166 in the United States District Court for the Western District of Texas; IPR2022-00601; IPR2022-00602; IPR2022-01006; IPR2022-01045; IPR2022-01089; IPR2022-01093; and IPR2022-01094. Paper 4, 2–3.

C. The '039 Patent (Ex. 1001)

The '039 patent, titled “Card Device Security Using Biometrics,” relates to a biometric card pointer (BCP) system intended to more efficiently and securely permit a user to store biometric information during a user enrollment process, and in future verification processes permits the user access their account using an identification (ID) card and biometric information such as a fingerprint. Ex. 1001, 2:51–3:11.

The '039 patent explains that in the enrollment phase “[t]he card user’s biometric signature is automatically stored the first time the card user uses the verification station in question (this being referred to as the

enrolment phase).” *Id.* at 2:62–64. The ’039 patent explains further that “[t]he biometric signature is stored at a memory address defined by the (‘unique’) card information on the user’s card as read by the card reader of the verification station.” *Id.* at 2:64–67. Following the enrollment phase, the ’039 patent describes that

[a]ll future uses (referred to as uses in the verification phase) of the particular verification station by someone submitting the aforementioned card requires the card user to submit both the card to the card reader and a biometric signature to the biometric reader, which is verified against the signature stored at the memory address defined by the card information thereby determining if the person submitting the card is authorised to do so.

Id. at 3:4–11.¹ For both enrollment and future uses, the use of the ID card at a verification station “is identical from the card user’s perspective, requiring merely input of the card to the card reader, and provision of the biometric signature ([e.g.] thumb print or retinal scan etc.) to the biometric reader.” *Id.* at 3:12–15.

Figure 4 of the ’039 patent is reproduced below.

¹ The words “enrolment,” “authorise,” and “authorisation” are the British spellings of “enrollment,” “authorize,” and “authorization.” *See, e.g.*, <https://www.merriam-webster.com/dictionary/authorisation>, last visited Jan. 5, 2023. We will use the American spelling of these words except where quoted from the ’039 patent.

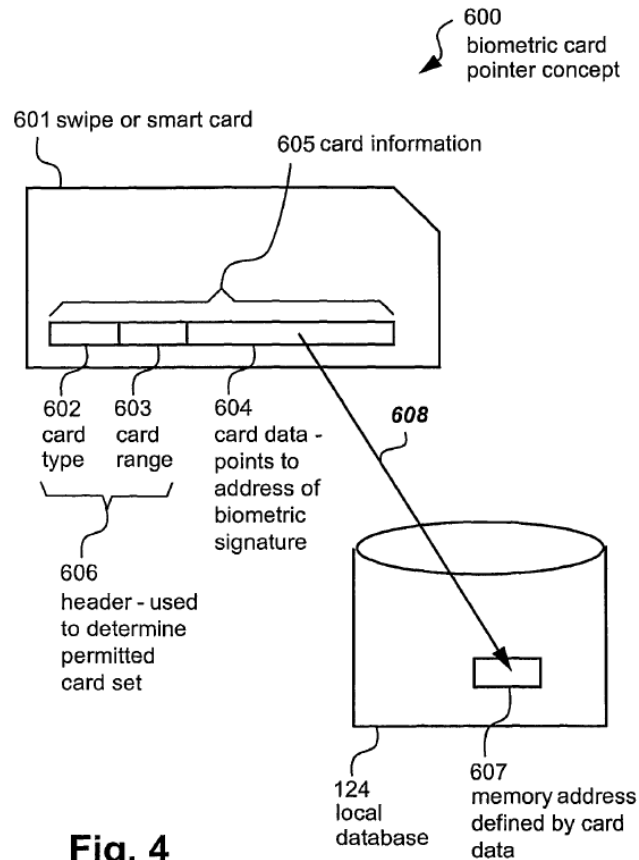


Fig. 4

Figure 4, of the '039 patent, above, illustrates swipe or smart card 601 including card information 605 encompassing fields for card type 602, card range 603, and card data 604. The '039 patent describes that “the card data 604 acts as the memory reference which points, as depicted by an arrow 608, to a particular memory location at an address 607 in the local database 124.” *Id.* at 7:31–35. Information 605 can be encoded on a magnetic strip on the card, for example. *Id.* at 7:28–29. The '039 patent explains that for a specific user “[i]n an initial enrolment phase, . . . [t]he card data 604 defines the location 607 in the memory 124 where their unique biometric signature is stored.” *Id.* at 7:43–49. And, the '039 patent explains further that “in later verification phases, . . . [t]his signature is compared to the signature

stored at the memory location 607 in the memory 124, the memory location 607 being defined by the card data 604 read from their card 601 by the card reader 112.” *Id.* at 7:50–56.

Figures 6 and 7, reproduced below, depict the differences between enrollment process 207 shown in Figure 7 and verification process 205 shown in Figure 6.

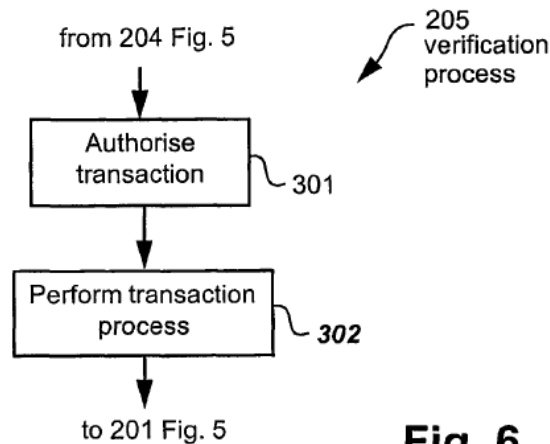


Fig. 6

Figure 6, above, illustrates verification process 205, which occurs after the enrollment process, illustrated below in Figure 7.

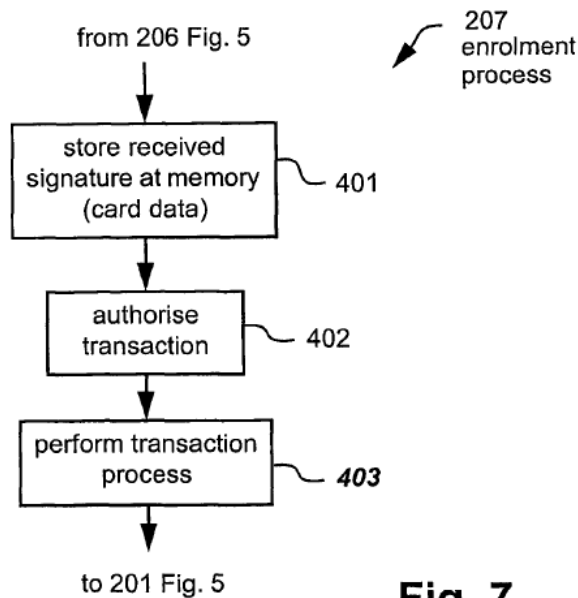


Fig. 7

Figure 7 of the '039 patent illustrates enrollment process 207 where the system at “step 401 stores the biometric signature received by the step 203 in the memory 124 at a memory address defined by the card data 604.” *Id.* at 9:64–66 (referring to elements 203 and 124 described in Figure 5). Figure 6 illustrates that verification process 205

is entered from the step 204 in FIG. 5, after which a step 301 authorises the transaction. This authorisation step 301 indicates that the biometric signal received by the biometric reader 102 in the step 203 matches the biometric signature previously stored in the local database 124 by a previous enrolment process 207.

Id. at 9:43–48. And, “the step 204 reads the contents stored at a single memory address defined by the card data 604 and checks these contents against the biometric signature received in the step 203.” *Id.* at 8:34–37.

A difference between verification process 205 and enrollment process 207 is that the enrollment process includes step 401, which *stores* the biometric signature “at a memory address defined by the card data 604,” whereas in verification process 205 “step 204 *reads* the contents stored at a single memory address defined by the card data 604” and compares the stored biometric signature with the input biometric signature. *Id.* at 9:65–66, 8:24–26.

D. Illustrative Claim

Claims 1 and 19 are independent. Each of claims 2 and 20 depend, respectively, from independent claims 1 and 19. Claim 1, a method claim, including disputed limitations highlighted in italics, illustrates the claimed subject matter and is reproduced below:

1. [1P] A method of enrolling in a biometric card pointer system, the method comprising the steps of:
1[A] receiving card information;

1[B] receiving the biometric signature;

1[C] *defining, dependent upon the received card information, a memory location in a local memory external to the card;*

1[D] determining if the defined memory location is unoccupied; and

1[E] storing, if the memory location is unoccupied, the biometric signature at the defined memory location.

Ex. 1001, 12:29–38.² Limitations 1[A]–1[E] are similarly recited in independent claim 19 in the context of “a processor to execute a method of enrolling in a biometric card pointer system.” *Id.* at 15:25–16:11. For example, limitation 19[A] recites “code for receiving card information.” *Id.* at 16:3.

E. Prior Art and Asserted Grounds

Petitioner asserts that claims 1, 2, 13, 14, 19, and 20 would have been unpatentable based on the following grounds:

Ground	Claim(s) Challenged	35 U.S.C. § ³	Reference(s)/Basis
1	1, 2, 13, 14, 19, 20	103(a)	Hsu, ⁴ Sanford, ⁵
2	1, 2, 13, 14,	103(a)	Hsu, Sanford,

² We adopt and apply below Petitioner’s alphanumeric designations for the elements of the challenged claims. *See, e.g.*, Pet. 17–37.

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 296–07 (2011), took effect on September 16, 2011. The changes to 35 U.S.C. §§ 102 and 103 in the AIA do not apply to any patent application filed before March 16, 2013. Because the application for the patent at issue in this proceeding has an effective filing date before March 16, 2013, we refer to the pre-AIA version of the statute.

⁴ Ex. 1003, European Patent Appl’n No. EP 0924655 A2 (pub. June 23, 1999).

⁵ Ex. 1004, PCT Appl’n No. PCT/US03/07238 (pub. Sept. 18, 2003).

Ground	Claim(s) Challenged	35 U.S.C. § ³	Reference(s)/Basis
	19, 20		Tsukamura ⁶

Petitioner also relies on the testimony of Stuart Lipoff. Ex 1006 ¶¶ 1–138.⁷

II. REAL PARTY-IN-INTEREST SECTION 315(B) TIME BAR

Patent Owner asserts the Petition should be denied as time-barred under 35 U.S.C. § 315(b) because Apple, an argued real party-in-interest or privy, was served with a complaint for infringement of the '039 patent on March 1, 2021, more than a year before the Petition was filed. Prelim. Resp. 1 (citing Ex. 2003; Ex. 2004). Patent Owner explains that the original case, *CPC Patent Technologies Pty Ltd. v. Apple, Inc.*, No. 6:21-cv-00165 (W.D. Tex., Waco Division), has been transferred, and is now pending in the United States District Court for the Northern District of California, *CPC Patent Technologies Pty Ltd. v. Apple, Inc.*, No. 5:22-cv-02553-NC (N.D. Cal., San Jose Division). *Id.*

Under 35 U.S.C. § 315(b), an *inter partes* review may not be instituted “if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party-in-interest, or privy of the

⁶ Ex. 1005, US Patent No. 6,963,660 B1 (Nov. 8, 2005).

⁷ Exhibit 1006 is a 203-page declaration from Mr. Lipoff, including a mapping of the disclosures of the applied references to the challenged claims. Ex. 1006 ¶¶ 66–266. Mr. Lipoff has a B.S. in Engineering Physics as well as a B.S. in Electrical Engineering from Lehigh University and earned a M.S. degree in Electrical Engineering from Northeastern University as well as an MBA from Suffolk University. *Id.* ¶ 7. Mr. Lipoff currently is the President of IP Action Partners Inc., a consulting practice serving the telecommunications, information technology, media, electronics, and e-business industries. *Id.* ¶ 8.

petitioner is served with a complaint alleging infringement of the patent.”
“The IPR petitioner bears the burden of persuasion to demonstrate that its petitions are not time-barred under § 315(b).” *Game & Tech. Co. v. Wargaming Grp. Ltd.*, 942 F.3d 1343, 1349 (Fed. Cir. 2019) (citing *Worlds Inc. v. Bungie, Inc.*, 903 F.3d 1237, 1242 (Fed. Cir. 2018)). Thus, Petitioner bears the burden of establishing that no RPI or privy was served with a complaint alleging infringement more than one year prior to the May 31, 2022, filing date (*see* Paper 3) of the Petition in this proceeding.

There is no dispute that Apple was served with a complaint alleging infringement of the ’039 patent on March 1, 2021. *See* Ex. 2003, 6 (Complaint alleging as its “Third Cause of Action” “Infringement of the ’039 Patent”); Ex. 2004, (Affidavit of Service on Apple on March 1, 2021).

In *Power Integrations, Inc. v. Semiconductor Components Industries, LLC*, 926 F.3d 1306, 1314 (Fed. Cir. 2019), the Federal Circuit stated,

[t]he Board’s decision under § 315(b) is whether to institute or not. The condition precedent for this decision is whether a time-barred party (a party that has been served with a complaint alleging infringement of the patent more than one year before the IPR was filed) is the petitioner, real party in interest, or privy of the petitioner.

There is no dispute that Apple was served with a complaint for infringing the ’039 patent on March 1, 2021. The dispositive issue before us is whether Apple is an RPI or privy with Petitioner.

A. RPI Status

Section 315(b) “is unambiguous: Congress intended that the term ‘real party in interest’ have its expansive common-law meaning.” *Applications in Internet Time, LLC v. RPX Corp.*, 897 F.3d 1336, 1351 (Fed. Cir. 2018) (hereinafter “*AIT*”). “Determining whether a non-party is a ‘real party in

interest’ demands a flexible approach that takes into account both equitable and practical considerations, with an eye toward determining whether the non-party is a clear beneficiary that has a preexisting, established relationship with the petitioner.” *Id.* at 1351.

“The statutory terms ‘real party in interest’ and ‘privy’ are not defined in Title 35. However, they are well-established common law terms.” *Power Integrations*, 926 F.3d at 1315. The Federal Circuit has determined “that Congress intended to adopt common law principles to govern the scope of the section 315(b) one-year bar.” *Id.* The Federal Circuit therefore looks “to common law preclusion principles for guidance.” *Id.*

Whether a party who is not a named participant in a given proceeding nonetheless constitutes a “real party-in-interest” or “privy” to that proceeding “is a highly fact-dependent question.” PTAB Trial Practice Guide (“TPG”) at 13 (citing *Taylor v. Sturgell*, 553 U.S. 880 (2008) (summarizing common law preclusion principles)). “[A]t a general level, the ‘real party-in-interest’ is the party that desires review of the patent.” TPG at 14. Thus, the “real party-in-interest” may be the petitioner itself, and/or it may be the party or parties “at whose behest the petition has been filed.” *Id.*; see *AIT*, 897 F.3d at 1351 (recognizing the “fact-dependent” nature of the RPI inquiry, and explaining that the two questions lying at its heart are whether a non-party “desires review of the patent” and whether a petition has been filed at a nonparty’s “behest”). A common meaning of “behest” is “because someone has ordered or requested it.” See Ex. 3002.

In *Uniloc 2017 LLC v. Facebook Inc.*, 989 F.3d 1018 (Fed. Cir. 2021), the Federal Circuit stated that:

[Determining whether a party is a RPI] has no bright-line test—relevant considerations, however, may include, “whether a

[] party exercises [or could exercise] *control* over a petitioner’s participation in a proceeding, or whether a [] party is *funding* the proceeding or directing the proceeding.”

Id. at 1028 (emphasis added) (quoting *AIT*, 897 F.3d at 1342, which cited “Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012)”); *see also* TPG, 16 (“A common consideration is whether the non-party exercised or could have exercised control over a party’s participation *in a proceeding*. The concept of control generally means that ‘it should be enough that the nonparty has the actual measure of control or opportunity to control that might reasonably be expected between two formal coparties.’” (citing 18A CHARLES ALAN WRIGHT, ARTHUR R. MILLER & EDWARD H. COOPER, FEDERAL PRACTICE & PROCEDURE § 4451 (2d ed. 2011) (hereinafter cited generally as “WRIGHT & MILLER”))). Thus, factors such as “control” and “funding” clearly are relevant.

Consistent with *Uniloc 2017*, and as further explained in the Trial Practice Guide, “[c]ourts and commentators agree . . . that there is no ‘bright-line test’ for determining the necessary quantity or degree of participation to qualify as a ‘real party-in-interest’ or ‘privy’ based on the control concept.” TPG at 16 (emphasis added) (citing *Gonzalez v. Banco Cent. Corp.*, 27 F.3d 751, 759 (1st Cir. 1994); WRIGHT & MILLER § 4451 (“The measure of control by a nonparty that justifies preclusion cannot be defined rigidly.”)).

As stated in *Gonzalez*, the evidence as a whole must establish that “the nonparty possessed *effective* control over a party’s conduct . . . *as measured from a practical, as opposed to a purely theoretical, standpoint.*” *Gonzalez*, 27 F.3d at 759 (emphases added). Theoretical, hypothetical, or

speculative assertions about effective control, unsupported by evidence, are neither probative nor persuasive.

Additional relevant factors include: the non-party's relationship with the petitioner; the non-party's relationship to the petition itself, including the nature and/or degree of involvement in the filing; and the nature of the entity filing the petition. TPG at 17–18. Generally, a party does not become a “real party-in-interest” merely through association with another party in an unrelated endeavor. *Id.* at 17. A party also is not considered a real party-in-interest in an *inter partes* review solely because it is a joint defendant with a petitioner in a patent infringement suit or is part of a joint defense group with a petitioner in the suit. *Id.*

According to Patent Owner, “whether a party is a RPI or privy ‘demands a flexible approach that takes into account both equitable and practical considerations, with an eye toward determining whether the non-party is a clear beneficiary that has a preexisting, established relationship with the petitioner.’” Prelim. Resp. 15 (citing *AIT*, 897 F.3d at 1351).

1. Apple's Prior IPR Petition

Apple timely filed its own petition, IPR2022-00600, challenging some, but not all, claims, of the '039 patent. *See Apple, Inc. v. CPC Patent Technologies, PTY, LTD.*, IPR2022-00600, Paper 1 (PTAB February 23, 2022) (the “Apple '600 petition”). The Apple '600 petition challenges claims 1–2 and 19–20 based on three references: Bradford, Foss, and Yamane. *Id.* The Petition now before us challenges claims 1, 2, 13, 14, 19, and 20 of the '039 patent based on Hsu and Sanford, as well as Hsu, Sanford, and Tsukamura. Pet. 3. In the Apple '600 petition, the Board instituted trial on all asserted grounds and all asserted claims. *Apple*,

IPR2022-00600, Paper 8 (PTAB Oct. 17, 2022). The instituted proceeding based on the Apple '600 petition is still pending.

In *Unified Patents v. Uniloc USA, Inc. et al*, IPR2018-00199, Paper 33 (PTAB May 31, 2019), the Board determined that the fact that Apple, also asserted to be an unnamed RPI in that case, filed its own similar petition around the same time as the petitioner in that case “does not suggest Apple is an unnamed RPI. To the contrary, it suggests that Apple did not need Petitioner to file this Petition on its behalf, and chose to file its own similar petition, giving Apple control over its own proceeding.” *Unified Patents*, IPR2018-00199, Paper 33 at 9. Based on the record before us, a similar determination can be made here. The fact that Apple filed the Apple '600 petition on February, 23, 2022, about three months *before* the Petition in the case before us was filed, suggests that Apple did not need Petitioner to file the Petition in this case on its behalf, because Apple had previously filed its own similar petition, giving Apple control over its own proceeding.

2. *Apple's Relationship to Petitioner*

There is no dispute that Apple has a relationship with Petitioner. Petitioner filed a Declaratory Judgment complaint against “CPC Patent Technologies Pty. Ltd.” (Patent Owner in the proceeding before us) and “Charter Pacific Corporation Ltd.” (collectively referred to in the complaint as “Charter Pacific”). Ex. 2007 ¶ 1. In the Declaratory Judgment complaint, Petitioner states, “Charter Pacific is also engaged in an aggressive litigation campaign that includes Apple Inc. (‘Apple’), *a business partner* of the ASSA ABLOY Entities.” *Id.* ¶ 30 (emphasis added); *see also, e.g., id.* ¶¶ 21, 43, 98–106 (referring to products sold by Petitioner to Apple).

The business relationship between Apple and Petitioner is that Petitioner, or one of the named entities collectively referred to as Petitioner,

makes products that interface with Apple products and may be sold on Apple's website. For example, ASSA ABLOY Residential Group, Inc., a named entity included as a Petitioner in this proceeding, makes and sells security locks under the brand name "Yale." *See* Ex. 2007 ¶¶ 53–73 (discussing the infringement allegation against "Yale Smart Locks"); Ex. 2027 (screen shots from Apple's website concerning the "Yale Assure Lock SL Touchscreen Deadbolt"). As described in Exhibit 2007, the Yale Assure Lock uses a software application ("App") on one's mobile phone, here on an iPhone sold by Apple, to lock and unlock doors. The App is developed by Petitioner, or one of its business partners, and distributed to iPhone users through the Apple App store.

a) Petitioner's Assertions

Petitioner asserts "Petitioners and Apple have a standard business relationship like that of over 34 million application developers on Apple's platform (EX-1024 at 6-7) and hundreds of MFi Program⁸ participants (collectively its business partners)." Prelim. Reply. 1 (citing Ex. 1025). Essentially, Petitioner sells its products with and through Apple, and creates software applications that allows those products to interface with Apple's iPhone and other Apple products.

⁸ The acronym "MFi" refers to "Made for iPhone/iPod/iPad." Apple's Developer Program License Agreement (Ex. 2009) defines "MFi Program" to mean "a separate Apple program that offers developers, among other things, a license to incorporate or use certain Apple technology in or with hardware accessories or devices for purposes of interfacing, communicating or otherwise interoperating with or controlling select Apple-branded products." (Ex. 2009, 6); *see also* Ex. 2017 (explaining how the MFi program works).

Our rules provide that “[t]he parties may agree to additional discovery between themselves.” 37 C.F.R. § 42.51(b)(2)(i). Our rules do *not* provide for interrogatories between the parties. Apparently, Petitioner agreed to respond to interrogatories from Patent Owner. Petitioner asserts that its “verified responses to CPC’s Interrogatories confirm that Apple never provided any direction, control, or financing in this proceeding.” Prelim. Reply 2 (citing Ex. 102[3], responses to Interrogatories Nos. 3, 4).

Exhibit 1022 contains responses to five interrogatories posed by Patent Owner to Petitioner regarding this IPR proceeding and its related proceedings. Ex. 1022, 1 (“These answers are made solely for the purpose of IPR2022-01006, IPR2022-01045, IPR2022-01089, IPR2022-01093, and IPR2022-01094”).

In the interrogatories, Petitioner states:

1. “Petitioners do not have any insurance policy or policies that name Apple as an additional insured” (*id.* at 7);
2. “Petitioners have not had any communications with Apple, directly or through counsel, . . . other than communications that relate solely to Petitioners seeking Apple’s permission to produce documents in response to CPC’s discovery request” (*id.* at 8);
3. “Petitioners and other ASSA ABLOY entities have not had any communications with Apple, directly or through counsel, regarding the validity or invalidity of the . . . ’039 Patent” (*id.* at 10); and
4. “There have been no communications between Petitioners and Apple, directly or through counsel, relating to indemnification or obligation to indemnify based on assertion of . . . U.S. Patent No. 8,620,039) (*id.* at 11–12).

Additionally, Petitioner states in its interrogatory responses:

- Apple had no role whatsoever in Petitioners’ IPRs.
- Petitioners never informed Apple that the IPR petitions were being prepared, never communicated with Apple regarding the

substance of the IPR petitions, and never told Apple when or why the IPR petitions would be filed.

- Petitioners provide all direction to their outside counsel regarding the IPRs and the district court litigation between Petitioners and Apple [sic].⁹
- Apple previously filed its own IPR petitions regarding the subject patents (IPR2022-00600, IPR2022-00601, and IPR2022-00602). Petitioners likewise had no involvement whatsoever in Apple's IPR petitions. Petitioners never knew that Apple's IPR petitions were being prepared or that they would be filed.
- Petitioners did not file any of Petitioners' IPR petitions at Apple's behest. Apple never requested that Petitioners file any IPR petitions challenging any of the patents-at-issue.
- Apple has never had any control or say whatsoever in Petitioners' IPR petitions.
- Apple has not contributed financially or in any other manner to any of Petitioners' IPR petitions.

Ex. 1023, 8–9.

Based on the record before us, there is no evidence that refutes or contradicts these interrogatory responses. The record before us contains no evidence of communications between Petitioner and Apple regarding this proceeding or the preparation of the Petition filed in this proceeding.

b) Patent Owner's Assertions

Patent Owner asserts essentially two factual reasons to support its argument that Apple should be named a real party-in-interest in this proceeding:

⁹ This appears to be a misstatement. We have not been informed of any litigation between "Petitioners and Apple." The only litigation cited by the parties involves Petitioner and Patent Owner, Patent Owner and Apple, or Patent Owner and HMD Global. See Section I.C ("Related Matters") of this Decision.

(1) Petitioner is an App developer for Apple and entered into Apple’s standard “Apple Developer Program License Agreement” (the “Developer Agreement”) (Prelim. Resp. 10–12, 21–28 (citing Ex. 2010)); and

(2) Petitioner enjoys an intimate business relationship with Apple and participates in Apple’s MFi certification program for non-Apple products made to be compatible with Apple products and Apple Wallet functionality. (Prelim. Resp. 34–36).

Patent Owner states that “the Apple Agreement appears to be at least one important agreement governing the relationship between Apple and Petitioners with respect to the products-at-issue.” Prelim. Resp. 25. Patent Owner relies on several specific clauses in the Apple Developer Agreement to establish the asserted RPI relationship, including: (1) representations and warranties of noninfringement (*id.* at 28–31); indemnification clauses (*id.* at 31–34); product inspection and insurance coverage clauses (*id.* at 34–37); and appointment of Apple as an agent for distribution of Petitioner’s “software on the Apple App Store;” (*id.* at 37).

Patent Owner also relies on *Bungie v. Worlds Inc.*, IPR2015-01264, Paper 64 (PTAB Jan. 14, 2020) for support of its arguments. *See, e.g., id.* at 26.

c) Developer Agreement (Ex. 2009)

The Apple Developer Agreement is an 88-page agreement between Apple and software developers who need to use Apple software “to develop one or more Applications . . . for Apple-branded products.” Ex. 2009, 1. The Developer Agreement provides “a limited license” to use Apple software “to develop and test” the Developer’s software applications for Apple products. *Id.* “In order to use the Apple” software and related

services,” the prospective developer “must first accept” the Developer Agreement. *Id.*

(1) *representations and warranties
of noninfringement (Prelim. Resp. 28–31);*

Patent Owner cites Section 3.2(d) of the Developer Agreement for its “warranties of noninfringement.” Prelim. Resp. 28–29. Section 3.2(d) states “[t]o the best of Your knowledge and belief. . . the Developer’s products don’t infringe any Apple or third party intellectual property or other rights.” Ex. 2009, 16. We do *not* consider Section 3.2(d) to be a “warranty.” It is not a guarantee that products will not infringe. It is a representation of the developer’s current “knowledge and belief.” It is far different from the obligations created by the App developer’s agreement in *Bungie*.

In *Bungie*, Bungie represented and warranted to Activision that Bungie owns or controls all the rights in “the Licensor Product Intellectual Property.” *Bungie*, IPR2015-01264, Paper 64 at 29. In *Bungie*, there also was a representation that “the use, development, distribution and publishing [of the Licensor Product] as contemplated by and set forth in [the *Bungie*] Agreement, *shall not infringe upon or violate the rights of, nor require the consent of, any other party.*” *Id.* (citations to the evidentiary record omitted). The representation in Section 3.2(d) of the Developer Agreement (Ex. 2009) in the case before us is *not* a similar warranty of noninfringement.

Patent Owner also cites Schedule 1, Section 4.1, of the Developer Agreement as evidence of a representation and warranty of noninfringement. Prelim. Resp. 29–30.

The Developer Agreement refers to three “Schedules”: Schedule 1, Schedule 2, and Schedule 3. *See* Ex. 2009, 1 (“Purpose,” referring to the

different purposes of Schedules 1 and 2); *id.* § 7.1 (“Delivery of Free Licensed Applications”); § 7.2 (delivery of “Fee-Based Licensed”); (*see also* 73–88 (Schedule 1)).

Schedules 2 and 3 of the Developer Agreement were not included with Patent Owner’s filed Exhibit 2009.

The Developer Agreement defines when Schedule 1 will apply:

Distribution of free (no charge) Applications (including those that use the In-App Purchase API for the delivery of free content) via the App Store or Custom App Distribution will be subject to the distribution terms contained in Schedule 1 to this Agreement.

Ex. 2009, 1 (“Purpose” section).

The Developer Agreement also defines when Schedule 2 will apply:

If You would like to distribute Applications for which You will charge a fee or would like to use the In-App Purchase API for the delivery of fee-based content, You must enter into a separate agreement with Apple (“Schedule 2”).

Id.

Schedule 3 applies to “Custom App Distribution.” *Id.*

We have not been directed to any evidence establishing the financial terms of how Petitioner’s applications will be distributed. Thus, we do not know whether Petitioner’s applications will be distributed for free, and thus subject to Schedule 1; whether Petitioner’s applications will be distributed for a fee, and thus subject to Schedule 2; or whether Petitioner’s applications will be distributed by “Custom App Distribution,” and thus subject to Schedule 3.

Without evidence of the which of the three schedules apply to Petitioner, Patent Owner’s arguments about the scope of the warranty in Schedule 1 are not probative evidence that Apple is an RPI in this proceeding.

Moreover, a contractual obligation of a representation and warranty, without more, does not establish that Apple is an RPI in this proceeding.

In *Bungie*, one responsibility of Bungie under the terms of the agreement in that case was to conduct “legal reviews.” *Bungie*, IPR2015-01264, Paper 64 at 29. These “legal reviews were *in addition to* the representations and warranty of noninfringement. In *Bungie*, the agreement identified as an item to “be managed by and be the responsibility of Licensor [Bungie]”: “[c]onducting legal reviews of the Products to ensure that all Intellectual Property and other rights are fully cleared for use.” *Id.* The responsibilities of Bungie listed in the agreement, including these “legal reviews,” were “subject to prior review and approval of [Licensee] Activision, (budget to [be] mutually approved) such approval not to be unreasonably withheld.” *Id.* (citations to evidentiary record omitted). The stated purpose or required result of the “legal reviews” was “to ensure that all Intellectual Property and other rights are fully cleared for use.” *Id.* at 29–30.

In *Bungie*, the Board determined that “unlike an opinion letter that opines merely as to *whether* rights are clear for use, the Agreement requires the ‘legal reviews’ to be conducted so as ‘to ensure’ the rights are ‘fully cleared for use.’” *Bungie*, IPR2015-01264, Paper 64 at 30. The Board concluded:

[t]he reference to Activision being involved in mutually approving the budget further suggests that Activision would be funding, at least in part, the legal reviews. Thus, non-party Activision had a contractual interest in Petitioner Bungie’s commitment to take actions “to ensure that all Intellectual Property and other rights are fully cleared for use.”

Id.

In the case before us, we have not been directed to evidence of Petitioner being obligated to conduct for Apple “legal reviews” of allegedly infringed patents. Patent Owner reiterates in their Sur-Reply that “[t]he Apple Agreement requires Petitioners to warrant that ‘none of the Licensed Applications . . . violate or infringe any patent . . . or other intellectual property or contractual rights of any other person.’” Prelim. Sur-Reply 3. Therefore, according to Patent Owner “[c]ontrary to the Board’s finding in the prior institution decisions, the warranties are not merely opinions on whether the rights are clear.” *Id.* (citing IPR2022-01006, Paper 27 at 23–24). Again, we have not been directed to evidence of Apple being involved in funding and/or managing such “legal reviews” of allegedly infringed patents.

(2) *indemnification clauses (Prelim. Resp. 31–34)*

Patent Owner asserts that the Developer Agreement “provides broad indemnification rights to Apple.” Prelim. Resp. 31 (citing Ex. 2009, 43).

The Developer Agreement provides the following indemnification clause:

To the extent permitted by applicable law, You agree to indemnify and hold harmless, and upon Apple’s request, defend, Apple, its directors, officers, employees, independent contractors and agents (each an “Apple Indemnified Party”) from any and all claims, losses, liabilities, damages, taxes, expenses and costs, including without limitation, attorneys’ fees and court costs (collectively, “Losses”), incurred by an Apple Indemnified Party and arising from or related to any of the following: . . . (ii) any claims that Your Covered Product or the distribution, sale, offer for sale, use or importation of Your Covered Product (whether alone or as an essential part of a combination), Licensed Application Information, metadata, or Pass Information violate or infringe any third party intellectual property or proprietary rights; . . .

In no event may You enter into any settlement or like agreement with a third party that affects Apple's rights or binds Apple in any way, without the prior written consent of Apple.

Ex. 2009 § 10.

While it is clear that there is an indemnification clause, we note that Petitioner states “[t]here have been no communications between Petitioners and Apple, directly or through counsel, relating to indemnification or obligation to indemnify based on assertion of . . . U.S. Patent No. 8,620,039. Ex. 1023 11–12. As discussed above, Apple has been sued for infringement by Patent Owner based on products provided by Petitioner. Thus, based on the record before us, Apple and Petitioner do not share Patent Owner’s understanding of the applicability of the indemnification clause.

According to Patent Owner, the “Board has previously found such indemnification arrangements to be significant evidence of RPI status.” Prelim. Resp. 31 (citing *Ventex Co., Ltd., v. Columbia Sportswear North America, Inc.*, IPR2017-00651, Paper 148 at 7, 10, 12 (PTAB Jan. 24, 2019) (precedential)).

Patent Owner mischaracterizes the holding in *Ventex*. The existence of an indemnification agreement was not the determining factor in finding the existence of an RPI relationship. Moreover, the Board has held repeatedly that an indemnification agreement, without something more, is insufficient to establish a RPI relationship. See *Bae Sys. Info. & Elec. Sys. Integration, Inc. v. Cheetah Omni, LLC*, IPR2013-00175, Paper 20 at 4 (PTAB July 23, 2013) (holding indemnity provisions do not establish a right of control of a proceeding, and noting “indemnification is not one of the ‘substantive legal relationships’ cited in *Taylor*, 553 U.S. at 894, as binding a person not a party to a lawsuit to a judgment in that suit); *Dep’t of Justice*

v. Discovery Patents, LLC., IPR2016-01041, Paper 29 at 8 (PTAB Nov. 9, 2017) (noting that “we are unaware of any *inter partes* review decision in which a real party in interest finding was based solely on evidence of an indemnification clause”).

In *Ventex*, the parties had a preexisting substantive legal relationship in the form of two contracts: (1) a Supplier Agreement with an obligation to indemnify and defend; and (2) an Exclusive Manufacturing Agreement. *Ventex*, IPR2017-00651, Paper 148 at 12. The Board determined that it was “clear” that the parties “had a specially structured, preexisting, and well established business relationship with one another, including indemnification *and exclusivity arrangements.*” *Id.* at 10 (emphasis added). In *Ventex*, the Board stated “[t]he exclusive business relationship between [the parties] . . . , and Ventex’s express desire to shield its customers and potential buyers from infringement lawsuits by Columbia *strongly suggest* that Ventex filed the Petition, at least in part, on Seirus’s behalf.” *Id.* at 9.

There is no exclusive manufacturing or exclusive licensing agreement between Petitioner and Apple.

In *Ventex*, the Board also determined that “Seirus was, in effect, funding the *inter partes* reviews, whether wittingly or unwittingly” based on the “timing, structure, and amounts” of payments made by Seirus to the petitioner. These payments “suggest[ed] a correlation with legal fees incurred by Ventex in connection with the preparation and prosecution of these IPRs by its counsel.” *Ventex*, IPR2017-00651, Paper 148 at 13. An internal email linked these payments as “necessary to cover the attorney’s fees in these *inter partes* reviews.” *Id.*

Based on the record before us, we have not been directed to any persuasive evidence or argument that Apple is funding this IPR proceeding.

The Board specifically determined that it was the “totality of the circumstances” that “calls into considerable question Ventex’s premise that Seirus is an entity divorced from this proceeding.” *Id.* Our facts and circumstances here are significantly different.

Based on the record before us, we find no reason to doubt Petitioner’s statement in the interrogatory responses that “[t]here have been no communications between Petitioners and Apple, directly or through counsel, relating to indemnification or obligation to indemnify based on assertion of . . . U.S. Patent No. 8,620,039.” Ex. 1023, 11–12. Also, there is no exclusive agreement between the parties and no evidence that Apple is funding this proceeding. Indeed, the evidence is to the contrary. *See id.* at 8–9 (Response to Interrogatory No. 3, stating “Petitioners have not had any communications with Apple, directly or through counsel, regarding any of IPR2022-01006, IPR2022-01045, IPR2022-01089, IPR2022-01093, and IPR2022-01094”; “Apple had no role whatsoever in Petitioners’ IPRs”; “Petitioners provide all direction to their outside counsel regarding the IPRs and the district court litigation between Petitioners and Apple”; “Petitioners did not file any of Petitioners’ IPR petitions at Apple’s behest”; and “Apple has never had any control or say whatsoever in Petitioners’ IPR petitions.”).

(3) *product inspection and insurance
coverage clauses (Prelim. Resp. 34–37; PO Reply 2)*

Patent Owner asserts that “Petitioners have admitted that numerous ASSA ABLOY products identified in the Parallel Litigation were sent to Apple for ‘compliance’ and/or ‘certification’ purposes.” Prelim. Resp. 35 (citing Ex. 2032). Patent Owner also refers to the Board’s previous RPI and privity determination with respect to the Apple ’600 petition arguing that “the Board did not consider that Petitioners are amongst an infinitesimally

small percentage of developers that have such a close partnership with Apple that Apple inspects their physical products.” PO Reply 2.

Regardless of which app developers’ products Apple decides to inspect, we still fail to see how a standard business relationship that may allow a business partner to inspect products to be sold and may allow a business partner to obtain insurance for those products provides any right to control or be involved in this IPR proceeding as a real party-in-interest. Petitioner represents that it has a “platform-developer” relationship with Apple. Pet. Reply. 5. In other words, Apple provides a platform for Petitioner’s products to operate, and in order for Petitioner’s products and services to work well there must be an operationally consistent integration with Apple’s platforms. Both Apple and Petitioner have an interest in ensuring that this integration performs to some standard. But the mutual interest of Petitioner and Apple in product / platform integration does not, alone, support a determination that Apple is somehow funding or directing this proceeding. To the contrary, as a product and app developer separate and apart from Apple, Petitioner has a significant interest in challenging the ’039 patent for its own sake. *See, e.g., Wi-Fi One, LLC v. Broadcom Corp.*, 887 F.3d 1329, 1340 (Fed. Cir. 2018) (“While Wi-Fi has speculated that Broadcom may have been serving the interests of the D-Link defendants when it sought *inter partes* review, Broadcom clearly has an interest of its own in challenging the ’215 patent, based on its manufacture of the assertedly infringing chips.”)

Patent Owner asserts that the Developer Agreement “also imposes certain insurance obligations upon Petitioners related to the physical devices.” Prelim. Resp. 36 (citing Ex. 2009 § 6.1). However, the evidence before us establishes that Petitioners do not have any insurance policy that

names Apple as an insured party. *See* Ex. 1023, 7 (response to Interrogatory No. 2).

- (4) *appointment of Apple as an agent for distribution of Petitioner's software on the Apple App Store (Prelim. Resp. 37).*

Patent Owner also asserts that Apple's appointment as Petitioner's agent is probative of Apple's RPI status to this IPR proceeding. Petitioner asserts "Exhibit A to Schedule 1 sets out that *Apple is to be appointed Petitioners' agent* with respect to the distribution of Petitioners' software on the Apple App Store." Prelim. Resp. 31 (citing Ex. 2009, 79–80). Patent Owner then quotes the cited language from Schedule 1:

You appoint Apple Inc. as Your agent pursuant to California Civil Code §§ 2295 et seq. for the marketing and end-user download of the Licensed Applications by end-users located in the following regions: United States

Id. The cited California code merely defines agency and states the authority, obligations, and other aspects of a principal and agent relationship.

As noted above, we have not been directed to evidence that Schedule 1 applies to Petitioner's relationship to Apple. Assuming it does, Patent Owner has not sufficiently explained how a standard agency appointment for Apple to advertise Petitioner's products in a typical business transaction establishes or suggests that Apple is an RPI to this IPR proceeding. *See e.g.*, Ex. 2027. Exhibit 2027 appears to be a four page screen shot of Apple's website on September 6, 2022, advertising the "Yale Assure Lock Touchscreen Deadbolt – Black." There is no supporting declaration or other evidence to verify its authenticity. Exhibit 2027 states that the product is "Currently unavailable." Ex. 2027, 1. Exhibit 2027 also states under the heading "Warranty" that this product is "serviced and supported" exclusively by their manufacturers, and customers should "contact the

manufacturer directly for technical support and customer service.” *Id.* at 2–3.

Again, we do not see that this special purpose agency appointment establishes or suggests that Apple meets the requirements to be an RPI in this IPR proceeding.

3. *Conclusion on RPI*

Based on the record before us, considering the totality of the circumstances discussed above, and further considering the controlling legal authority discussed above, we determine for purposes of this Decision that the evidence establishes that Apple is not a real party-in-interest.

Apple initiated and is presently involved in an IPR proceeding challenging claims of the ’039 patent. We have not been directed to any persuasive evidence that Apple needs, wants, funds, controls, or benefits from a second, later-filed petition, such as the one before us. Apple has its own, earlier filed, IPR proceeding pending before the Patent Trial and Appeal Board.

Based on the record before us there is no evidence that this IPR proceeding was filed at Apple’s behest.

We recognize that Apple will derive some benefit if the claims of the ’039 patent are determined to be unpatentable in a post-grant proceeding at the PTO, or found invalid by a district court. This derived benefit does not, however, make Apple an RPI to this proceeding. *See WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1321 (Fed. Cir. 2018) (stating in the context of the broader concept of privity that “[a]s a general proposition, we agree with the Board that a common desire among multiple parties to see a patent invalidated, without more, does not establish privity”).

Here, we determine for purposes of this decision that, similar to the determination in *Uniloc 217*, “[w]ithout such evidence of control, in addition to no evidence of joint funding, or even any evidence of substantial coordination between the parties as to their respective decisions to bring these proceedings, a finding that [a non-party to this IPR proceeding] is an RPI of or in privity with [Petitioner] here would be improper.” *Uniloc 2017*, 989 F.3d at 1029.

Thus, based on the evidence before us and the analysis above, we determine, for purposes of this Decision, that Apple is not an RPI in this IPR proceeding.

4. *Privity Status*

Patent Owner asserts that “Apple is a privy to this proceeding based at least on its pre-existing substantive legal relationship with Petitioners.” Prelim. Resp. 43. According to Patent Owner, “[t]he facts discussed above [in the context of Patent Owner’s RPI arguments] concerning Petitioners’ relationship with Apple equally demonstrate a privy relationship between Petitioners and Apple.” *Id.* at 44. Patent Owner asserts that “analysis under any one of the *Taylor* factors can support a finding of privity.” *Id.* (citing *Ventex*, IPR2017-00651, Paper 148 at 12).

The issue of privity in the context of an IPR proceeding was discussed in *RPX Corp. v. Applications in Internet Time, LLC*, IPR2015-01750, Paper 125 at 36–38 (PTAB Sept. 9, 2020) (precedential) (hereinafter “*RPX*”).¹⁰ As stated in *RPX*, § 315(b) explicitly imposes time bars on privies to “prevent successive challenges to a patent by those who previously

¹⁰ *RPX* addressed three related IPRs, IPR2015-01750, IPR2015-01751, and IPR2015-01752. The Board’s *RPX* decision was issued following a remand by the Federal Circuit in *AIT*.

have had the opportunity to make such challenges in prior litigation.” *RPX*, IPR2021-01750, Paper 125 at 36 (citing *WesternGeco*, 889 F.3d at 1319; *AIT*, 897 F.3d at 1360 (Reyna, J., concurring)). In his concurrence, Judge Reyna explained: “privity is ‘[t]he connection or relationship between two parties, each having a legally recognized interest in the same subject matter (such as a transaction, proceeding, or piece of property).’” *AIT*, 897 F.3d at 1359 (Reyna, J., concurring) (quoting *Privity*, Black’s Law Dictionary (10th ed. 2014)).

The Leahy-Smith America Invents Act does not define “privity.” *WesternGeco*, 889 F.3d at 1317. Rather, “privity” has a common-law meaning. *Id.* “Privity is essentially a shorthand statement that collateral estoppel is to be applied in a given case.” *Id.* at 1318 (quoting Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012)¹¹). The privity “analysis seeks to determine whether the relationship between the purported ‘privity’ and the relevant other party is sufficiently close such that both should be bound by the trial outcome and related estoppels.” TPG at 14–15.

The Supreme Court has identified a number of circumstances where privity exists between two otherwise independent parties: (1) where there is an agreement between the parties to be bound; (2) where there is a pre-existing substantive legal relationship between the parties; (3) where there is adequate representation by the named party; (4) where the non-party had control of the prior litigation; (5) where the non-party acts as a proxy for the named party to relitigate the same issues; and (6) where special statutory schemes foreclose successive litigation by the non-party (e.g., bankruptcy

¹¹ See the updated, consolidated TPG at 15 (including the same quotation).

and probate). *See Taylor*, 553 U.S. at 894–95; *AIT*, 897 F.3d at 1360 (Reyna, J., concurring).

The Board explains in the TPG that “privity” is even more expansive than RPI, “encompassing parties that do not necessarily need to be identified in the petition as a ‘real party-in-interest.’” TPG at 14. The Board “evaluate[s] what parties constitute ‘privies’ in a manner consistent with the flexible and equitable considerations established under federal caselaw.” *Id.* “This approach is consistent with the legislative history of the AIA, which indicates that Congress included ‘privies’ within the parties subject to the statutory estoppel provisions in an effort to capture ‘the doctrine’s practical and equitable nature,’ in a manner akin to collateral estoppel.” *Id.* at 15 (quoting 154 Cong. Rec. S9987 (daily ed. Sept. 27, 2008) (statement of Sen. Kyl)).¹² As stated in *WesternGeco*, when considering privity, “the [PTAB’s] Trial Practice Guide observes: ‘The emphasis is not on a concept of identity of parties, but on the practical situation.’” 889 F.3d at 1318. “[T]he standards for the privity inquiry must be grounded in due process.” *Id.* at 1319.

Here, the practical situation presented was created by Patent Owner. Patent Owner first sued Apple for allegedly infringing the ’039 patent. *See* Section I.B of this Decision (Related Matters). Patent Owner did not sue or join Petitioner to this suit. Apple answered the allegations in the complaint and timely filed the Apple ’600 Petition challenging the ’039

¹² As explained by the Federal Circuit, “the related concept of privity ‘is an equitable rule that takes into account the “*practical situation*,” and should extend to parties to transactions and other activities relating to the property in question.’” *AIT*, 897 F.3d at 1350 (emphasis altered) (quoting Trial Practice Guide, 77 Fed. Reg. at 48,759 (citing 157 Cong. Rec. S1376 (Mar. 8, 2011) (statement of Sen. Kyl))).

patent. Patent Owner separately wrote to Yale (Ex. 2005) asserting that Yale infringed the '039 patent. Yale, one of the named Petitioners, filed the present IPR proceeding along with its related companies.

Patent Owner asserts that “the existence of a pre-existing substantive legal relationship between Apple and Petitioner cannot be reasonably disputed.” Prelim. Resp. 45. Additionally, Patent Owner asserts that it cannot “be reasonably disputed that Apple has ‘a direct relationship to the petitioner with respect to the allegedly infringing product or service.’” *Id.* Patent Owner concludes that the pre-existing substantive business relationship, involving legally binding contractual relationships between Apple and Petitioner, is sufficient under *Taylor* to make Apple a privy to this IPR proceeding. *Id.* Patent Owner also asserts that Apple is a privy to this IPR proceeding because Petitioner is capable of adequately representing Apple’s interests in this IPR proceeding. *Id.* On the record before us, for purposes of this Decision, we disagree with Patent Owner’s conclusion that Apple is a privy for purposes of this IPR proceeding. Patent Owner ignores the practical consequences of its own actions that precipitated the current situation.

Control is one factor we consider in determining whether Apple is a privy to this IPR proceeding. As stated in *WesternGeco*, “‘control’ is not the exclusive analytical pathway for analyzing privity . . . it is but one of a variety of considerations.” *WesternGeco*, 889 F.3d at 1320. We determine, as noted above in our RPI analysis, that there is no persuasive evidence of that Apple has any control in the context of this IPR proceeding. We reach the same conclusion, based on the evidentiary record, regarding privity.

We do not, however, focus only on the “control” factor. We also look to all of the non-exclusive factors identified in *Taylor*, 553 U.S. at 894–95,

and reach the same conclusion – there is no persuasive evidence in the record before us that Apple should be considered a privy in this IPR proceeding.

Patent Owner argues that the indemnification agreement between Petitioner and Apple is distinguishable from that in *WesternGeco* because “the indemnity clauses in the Apple Agreement are in no way ambiguous or undefined” as the Board found in *WesternGeco*. PO Reply 3 (citing Prelim. Resp. 27–29). *WesternGeco* recognized that a pre-existing business alliance, as well as indemnity provisions contained in the purchase agreements for the product accused of infringing, were “insufficient to make PGS and ION privies within the meaning of the statute.” *WesternGeco*, 889 F.3d at 1321. In this case, the indemnification agreement is only effective if Apple exercises its option for Petitioner to defend Apple. See Ex. 2009 § 10 (not requiring Petitioner to indemnify Apple, except “upon Apple’s request . . . from any and all claims, losses, liabilities, damages, taxes, expenses and costs”). There is no evidence before us that Apple has done so. Here, as found in *WesternGeco*, the parties “had a contractual and fairly standard customer-manufacturer relationship regarding the accused product.” *Id.* “This finding does not necessarily suggest that the relationship is sufficiently close that both should be bound by the trial outcome and related estoppels, nor does it suggest, without more, that the parties were litigating either the district court action or the IPRs as proxies for the other.” *Id.* We determine, for purposes of this Decision, that a similar analysis applies to this IPR proceeding.

Thus, based on the evidence of record and our analysis above, we determine that Apple is not a privy to Petitioner.

5. *Conclusion Concerning Section 315(b)*

The totality of the evidence before us does not establish anything other than a traditional business relationship between Apple and Petitioner. This common form of conducting business, without more, does *not* establish a relationship sufficient to make Apple a real party-in-interest or a privy of Petitioner in this *inter partes* review. There is no persuasive evidence that Apple has any control or substantive involvement over the Petition or over Petitioner's role in this proceeding.

Accordingly, based on the totality of the evidence of record and our analysis above, we conclude for purposes of this Decision that Apple is *not* an RPI or in privity with Petitioner, and thus Petitioner is *not* time-barred under Section 315(b).

III. ANALYSIS

A. *Legal Standards*

A patent claim is unpatentable under 35 U.S.C. § 103 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. 35 U.S.C. § 103; *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). “[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S. at 416 (citing *United States v. Adams*, 383 U.S. 39, 50–51 (1966)). The question of obviousness is resolved based on 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 ordinary skill in the art; and (4) when in evidence, objective evidence of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art at the time of the '039 patent “would have had at least an undergraduate degree in electrical engineering, or equivalent education, and at least two years of work experience in the field of security and access-control.” Pet. 10–11 (citing Ex. 1006 ¶ 26).

Patent Owner does not address the level of ordinary skill in the art. *See generally* Prelim. Resp.

On this record, Petitioner’s proposed level of ordinary skill in the art is not disputed and is consistent with our review and understanding of the technology and descriptions in the '039 patent and the asserted prior art references. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). For purposes of this Decision, we rely on Petitioner’s proposed level of ordinary skill in the art.

C. Claim Construction

We interpret a claim “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).” 37 C.F.R. § 42.100(b) (2020). Under this standard, we construe 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.” *Id.* Furthermore, at this stage in the proceeding, we expressly construe the claims only to the extent necessary to determine whether to institute *inter partes* review. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017)

(“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

1. Defining

Claim 1, method step limitation 1[C], recites “*defining*, dependent upon the received card information, a memory location in a local memory external to the card,” and limitation 1[D] recites, “determining if the *defined* memory location is unoccupied.” Ex. 1001, 12:33–35. Petitioner provides two alternative interpretations:

First interpretation: a memory location is somehow determined from (or is dependent on) the card information (“First Construction”). Under this interpretation, the system can look up or otherwise determine a specific memory location from a user’s card information.

Second interpretation: a memory location is specified by the card information itself (“Second Construction”). Under this interpretation, the card information itself must specify the physical memory address where the user’s biometric signature is stored, without the need to look up the memory address in a database or other data structure.

Pet. 11–12 (citing Ex. 1006 ¶¶ 44–45). Petitioner indicates that it believes “the Second Construction was intended by the patentee and should be adopted.” *Id.* at 12.

One thing that gives us pause with the second interpretation for which Petitioner advocates is the exclusion of “the need to *look up* the memory address in a database or other data structure.” *Id.* (emphasis added). We agree, as Petitioner argues, that “the ‘039 Patent consistently refers to a ‘biometric card *pointer* system,’ *i.e.*, the card acts as a *pointer* (specifies the physical memory address) to the memory location where the user’s biometric signature is stored,” yet Petitioner does not draw to our attention

any particular evidence in the written description for excluding “the need to look up the memory address in a database in the specification.” *See* Pet. 13 (citing Ex. 1001, claims 1, 13, 14; 2:51–52). Even if true, this language is problematic, for one reason because the term “look up” can be understood as a term of art with respect to database structures, for example a “lookup table.”¹³ In addition, the specification of the ’039 patent describes an embodiment that does not point to a single memory address, but where “the card data 604 can be associated with a group of memory locations, *rather than being the address for a specific memory location.*” Ex. 1001, 8:44–46 (emphasis added).

What appears to be somewhat clearer is the concept of a pointer. Although the specification does not specifically define what a “pointer” is, or how it works, the specification does explain that “any segment of the card information 605 can be used as *the memory reference* which points to the particular memory location in the local database 124.” *Id.* at 7:39–42 (emphasis added). After considering both interpretations, Petitioner’s declarant, Mr. Lipoff, testifies that “I believe the Second Construction was intended by the patentee . . . the ’039 Patent consistently refers to a ‘biometric card *pointer* system,’ *i.e.*, the card acts as a *pointer* (specifies the physical memory address) to the memory location where the user’s biometric signature is stored.” Ex. 1006 ¶ 46. Mr. Lipoff’s testimony here

¹³ The MICROSOFT COMPUTER DICTIONARY, Fifth Ed., defines “lookup *n.* A function, often built into spreadsheet programs, in which a previously constructed table of values called a lookup table is searched for a desired item of information. A lookup table consists of rows and columns of data. A lookup function examines the table either horizontally or vertically and then retrieves the data that corresponds to the argument specified as part of the lookup function.” Microsoft Press, © 2002 by Microsoft Corporation.

does not clarify the exclusion portion of the second interpretation we noted above. However, Mr. Lipoff does explain in his declaration that a person of ordinary skill in the art “would have understood that the user’s card information itself specifies the physical memory address (such as by acting as a pointer) for the user’s biometric signature.” Ex. 1006 ¶ 47. On this record, we find Mr. Lipoff’s explanation as to the understanding of a person of ordinary skill in the art to be the most consistent with our consideration of the written description and figures in the ’039 patent. *See* Ex. 1001, 7:31–34 (explaining that in one embodiment “the card data 604 acts as the memory reference which points, as depicted by an arrow 608, to a particular memory location at an address 607 in the local database 124”). For purposes of institution, on this record, we determine that “*defining*, dependent upon the received card information” as recited in claim 1, means, “the user’s card information itself specifies the physical memory address (such as by acting as a pointer) for the user’s biometric signature.”

At this preliminary stage of the proceeding we acknowledge that Patent Owner has not yet provided any substantive claim construction in its Preliminary Response. Both parties will have the opportunity to address this matter in additional briefing, including in Patent Owner’s Response and Petitioner’s Reply.

2. *Unoccupied*

Petitioner argues that the term “occupied” is expressly defined in the specification of the ’039 patent which states:

The term “occupied” in this context means that the memory location in question has been used in the enrolment process for a user, and that the information stored at the memory location in question has not been deleted by a BCP system administrator.

Pet. 14 (quoting Ex. 1001, 9:29–33). Based on this definition, Petitioner proposes that “**“unoccupied”** should likewise be construed as follows: a **memory location** that has not been used in the enrollment process for a user, or the information stored at the memory location has been deleted.” *Id.* (citing Ex. 1006 ¶ 49).

Because it finds support in the written description, we find Petitioner’s proposed interpretation of this term to be reasonable on this record. In the current absence of a competing claim construction from Patent Owner, we apply Petitioner’s construction, to the extent necessary, in this Decision.

3. *Means-plus-function terms – “means for” and “code for”*

Petitioner argues that certain limitations in claims 13, 14, 19, and 20 include means-plus-function terms. Pet. 15. For example, claims 13 and 14 recites several “means for” limitations and, Petitioner proposes consistent with the District Court proceeding in the Western District of Texas, that for claims 19 and 20 “‘code for’ is an equivalent recitation for ‘means for.’” *Id.* Petitioner provides the following constructions below for each of the respective “means for” and “code for” limitations in each of respective claims 13, 14, 19, and 20.

a) *Claim limitation 13[C] – Means for defining, dependent upon the received card information, a memory location in a local memory external to the card*

Petitioner proposes that:

[t]he **function** of this limitation is “**defining, dependent upon the received card information, a memory location in a local memory external to the card.**”

Structure corresponding to the claimed means is a **computer system** with a **processor** executing an **application**

that **uses any segment of card information 605 from a card 601 (1) as a memory reference as shown in Fig. 4 or (2) to determine a group of associated memory references or 3)** all equivalents of (1) and (2). Structure is found in '039 Patent, col. 6, line 66 – col. 7, line 23; col. 7, lines 31-35, 39-42, 47-48; col. 8, lines 44- 46; col. 11, lines 29-37; col. 12, lines 1-9; Fig. 4.

Pet. 51–52 (citing Ex. 1012, 1–2).¹⁴

b) Claim limitation 13[D] – Means for determining if the defined memory location is unoccupied

Petitioner proposes:

Function: determining if the defined memory location is unoccupied

Structure: processor unit 105 running software process(es) 206

Id. at 54 (citing Ex. 1013, 3).

c) Claim limitation 13 [E] – Means for storing, if the memory location is unoccupied, the biometric signature at the defined memory location

Petitioner proposes:

Function: storing, if the memory location is unoccupied, the biometric signature at the defined memory location.

Structure: a computer system with a processor unit 105 running software process(es) 401 and at least one of: a storage device 109 or memory 106. Structure is found in '039 Patent, col. 6, line 66 – col. 7, line 23; col. 5, lines 13-18 & lines 19-22 & 23-30; Fig. 7, step 401.

Id. at 56 (citing Ex. 1012, 2).¹⁵

d) Claim limitation 14[B] – Means for verifying (i) a subsequent presentation of card information to the card

¹⁴ Petitioner notes this is the same claim construction determined by the Court in the current litigation in the Western District of Texas. Pet. 51.

¹⁵ Petitioner notes this is the same claim construction determined by the Court in the current litigation in the Western District of Texas. Pet. 56.

device reader and (ii) a subsequent presentation of a biometric signature to the biometric reader if said subsequently presented biometric signature matches the biometric signature at the memory location, in said local memory, defined by the subsequently presented card information,”

Petitioner proposes:

Function: verifying (i) a subsequent presentation of card information to the card device reader and (ii) a subsequent presentation of a biometric signature to the biometric reader if said subsequently presented biometric signature matches the biometric signature at the memory location, in said local memory, defined by the subsequently presented card information.”

Structure: a **computer system** with a **processor** 105 executing an application that compares an inputted biometric signature to a stored biometric signature, a biometric reader 102, a card reader 112, and a database 124; and equivalents thereof.

Id. at 58–59.

e) Claim limitation 19[A] – code for receiving card information

Petitioner proposes:

Function: receiving card information

Structure: a card reader 112 capable of communicating with a processor via an I/O interface 11, and equivalents thereof.

Id. at 61 (citing Ex. 1001, Fig.1, 6:55–56, 8:6–7, 8:11–13, 10:31–33).

f) Claim limitation 19[B] – code for receiving the biometric signature

Petitioner proposes:

Function: receiving [a] biometric signature

Structure: a biometric reader 102 capable of communicating with a processor via an I/O interface 11; and equivalents thereof.

Id. at 65 (citing Ex. 1001 Fig.1, 6:55–56, 8:27–31).

g) Claim limitation 19[C] – code for defining, dependent upon the received card information, a memory location in a local memory external to the card

Petitioner proposes that “code for” in claim limitation 19[C] be construed the same as “means for” in claim limitation 13[C] above. *Id.* at 67–68.

h) Claim limitation 19[D] – code for determining if the defined memory location is unoccupied

Petitioner proposes that “code for” in claim limitation 19[D] be construed the same as “means for” in claim limitation 13[D] above. *Id.* at 68.

i) Claim limitation 19[E] – code for storing, if the memory location is unoccupied, the biometric signature at the defined memory location

Petitioner contends that “[t]his limitation is the same as Limitation 13[E] except that ‘means for’ in Limitation 13[E] is substituted with ‘code for.’” *Id.* at 69.

j) Claim limitation 20[A] – code for storing a biometric signature according to the enrolment method of claim 19

Petitioner proposes that “code for” in claim limitation 20[A] be construed as “means for” and, like claim limitation 19[E], should be construed the same as limitation 13[E]. *Id.* at 70.

k) Claim limitation 20[B] – code for subsequently presenting card information and a biometric signature

Petitioners propose the following construction:

Function: presenting card information and a biometric signature

Structure: a card reader 112 capable of communicating with a processor via an I/O interface 11 (EX-1001 Fig. 1, 6:55-56, 8:6-7, 8:11-13, 10:31-33) and a biometric reader 102 capable of communicating with a processor via an I/O interface 11 (EX-1001 Fig. 1, 6:55-56, 8:27:31); and equivalents thereof.

Id. at 71 (citing Ex. 1006 ¶¶ 123–128, 206).

l) Claim limitation 20[C] – code for verifying the subsequently presented presentation of the card information and the biometric signature if the subsequently presented biometric signature matches the biometric signature at the memory location, in said local memory, defined by the subsequently presented card information

Petitioner argues that like limitation 14[B], limitation 20[C] should be construed the same as limitation 13[C]. *Id.* at 72–73.

Because they find support in the written description, we find Petitioner’s proposed constructions of these term under 35 U.S.C. § 112(6) consistent with the record in this case. On this record, and in the absence of a competing claim constructions from Patent Owner, to the extent necessary, we apply Petitioner’s constructions in this Decision.

4. Claim terms agreed upon and terms construed by the District Court

Petitioner indicates that the following terms are not material to patentability, but have been construed by the District Court as follows.¹⁶

¹⁶ Petitioner asserts that these are claim terms which “need not be construed (and which Petitioners do not necessarily agree with).” Pet. 16 (citing Ex. 1006 ¶¶ 51–54).

“biometric card pointer system” – Nonlimiting preamble term with no patentable weight.

“biometric card pointer enrollment system” – Nonlimiting preamble term with no patentable weight.

Pet. 16 (citing Ex. 1012, 1).

Petitioner indicates that the following additional constructions have been agreed to between Apple and Patent Owner, but “are not material to the unpatentability.” *Id.* (citing Ex. 1006 ¶¶ 55–57).

“dependent upon” – Plain and ordinary meaning, defined as ‘contingent on or determined by’.

“biometric signature” – Plain and ordinary meaning.

Id. (citing Ex. 1013, 2).

Considering the above discussed constructions, our analysis does not turn on any particular claim construction, and we do not expressly determine any other specific claim construction at this time. And, because no claim terms are currently in dispute, we apply the plain and ordinary meaning of any remaining claims terms as discussed to any extent necessary in our analysis below. The parties are free to develop any claim construction arguments and supporting evidence they believe necessary during trial.

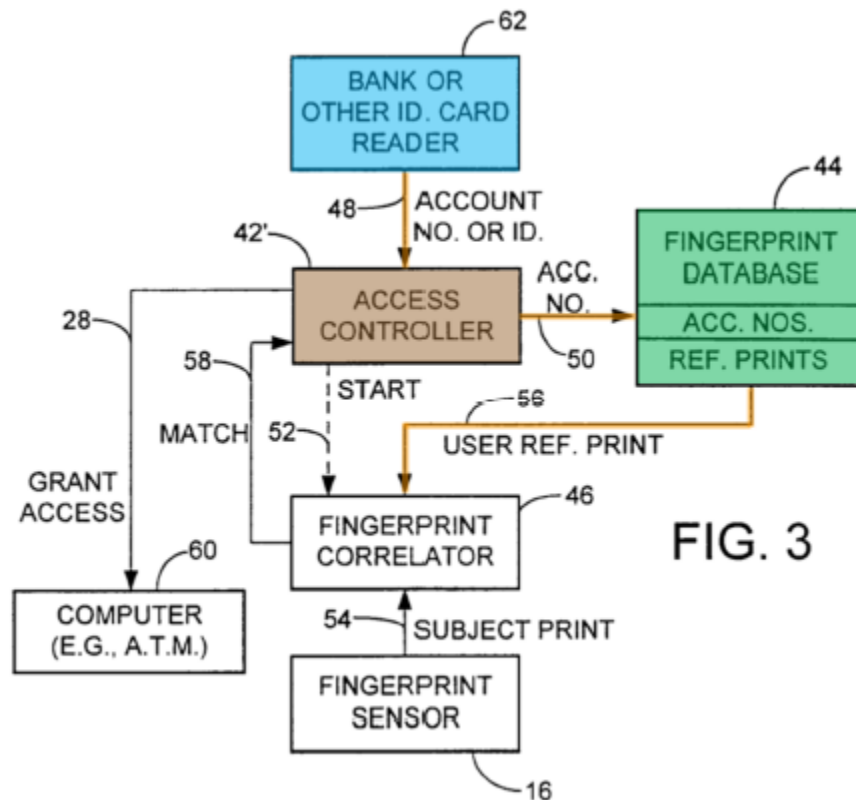
D. Ground 1: Claims 1, 2, 13, 14, 19, and 20 – Alleged Obviousness over Hsu (Ex. 1003) and Sanford (Ex. 1004)

On this record, Petitioner has established a reasonable likelihood of prevailing on its assertion that at least one of the challenged claims would have been obvious over Hsu and Sanford for the reasons explained below.

1. Hsu (Ex. 1003)

Titled “Controlled Access to Doors and Machines Using Fingerprint Matching,” Hsu relates to “[a] system and related method for controlling access to building doors or to machines, such as automatic teller machines

(ATMs).” Ex. 1003, Abstract, codes (54), (57). Hsu describes using “an account number or employee number, to access a fingerprint database (44) and retrieve reference fingerprint data previously stored there during an enrollment procedure.” *Id.* Figure 3 from Hsu, as annotated by Petitioner, is reproduced below.



Hsu’s Figure 3 is a block diagram illustrating card reader 62 (blue) reading “an account number or other type of identification unique to the user, and passes this data to the access controller 42’ [(brown)] over line 48.” *Id.* at 6:10–12. Based on the user’s unique identification access controller 42’ communicates with finger print database 44 (green) “to access the fingerprint database 44 and obtain a user reference fingerprint on line 56 from the database.” *Id.* at 6:14–16. Hsu explains that

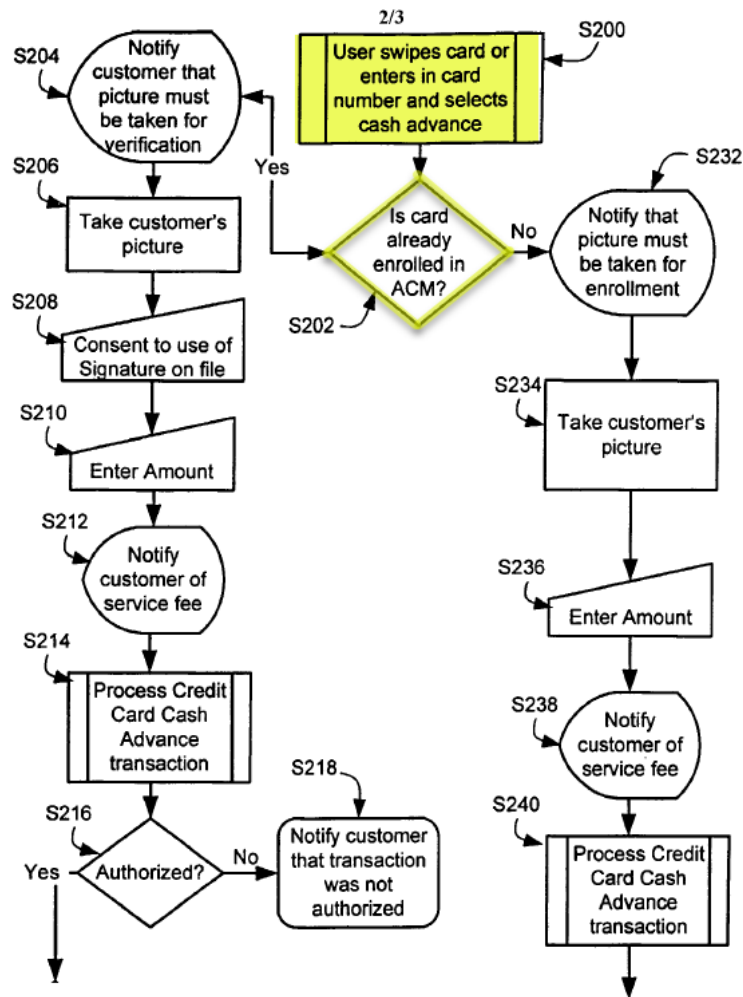
[t]he controller 42’ also sends a “start” signal on line 58 to the fingerprint correlator 46, which compares the reference

fingerprint with a subject fingerprint image supplied from the sensor 16 over line 54. If the correlator 46 finds a match, the correlator sends a signal over line 58 to the access controller 42', which transmits an appropriate signal to the computer 60 on line 28, indicating that access has been granted.

Id. at 6:16–24.

2. *Sanford (Ex. 1004)*

Sanford is titled “Credit Card Transaction without using a Pin with Automated Cashier Machine” and describes “[a]n automated cashier machine (ACM) is provided that offers a secure and convenient way for users to access cash from their card without using a PIN.” Ex. 1004, Abstract, codes (54), (57). Sanford describes that “[b]y verifying a user’s image using facial biometrics, transactions may be conducted without using a pin.” *Id.* ¶ 7. Sanford explains further that “[o]ther methods of verification known in the art may also be used, such as iris, voice signature, and fingerprint technology.” *Id.* ¶ 20. The relevant part of Sanford’s Figure 2, as annotated by the Board, is reproduced below.



Sanford's figure 2 is a block diagram illustrating a method for performing a PIN-less credit card transaction using an ACM (automated cashier machine). *Id.* ¶ 24. After swiping card at step 200, the system determines whether the user's card information is already stored, i.e. enrolled, and "the ACM 12 determines if the credit card account number of the user is enrolled to use the PIN-less credit card **system**." *Id.* In determining if the user is enrolled, "ACM 12 may communicate with ACM computer system 18 to look up the user's credit card number." *Id.* ¶ 25. At step 202, highlighted yellow, ACM 12 determines an enrollment course of action, if card is not enrolled, moving to step 232, or, if enrolled, a verification course of action is conducted via step 204. *Id.*

3. *Independent Claim 1*

We consider initially the elements of claim 1.

a) *Petitioner's Arguments*

(1) *Preamble – 1[P]*¹⁷ *A method of enrolling in a biometric card pointer system,*

To the extent the preamble is limiting, Petitioner argues that Hsu teaches “a biometric card pointer system” where “the access control unit 14 includes an access controller (42 or 42’) that “uses the account number [or user number] . . . to access the **fingerprint database** 44 [green] and obtain a **user reference fingerprint.**” Pet. 19 (citing Ex. 1006 ¶¶ 20, 24). With respect to “enrolling,” Petitioner contends that Hsu’s Figure 4 “discloses ‘a method of enrolling’ in its biometric card pointer system. Specifically, ‘FIG. 4 is a block diagram showing a fingerprint **enrollment process** as used in FIG[]. 3.’” *Id.* at 20 (quoting Ex. 1003 ¶ 14). Hsu’s Figure 4, as annotated by Petitioner, is reproduced below.

¹⁷ The designation “Pre” refers to the preamble portion of the claim. “Whether to treat a preamble as a limitation is a determination ‘resolved only on review of the entire[] . . . patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim.’” *Shoes by Firebug LLC v. Stride Rite Children’s Grp., LLC*, 962 F.3d 1362, 1367 (Fed. Cir. 2020) (citing *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (quoting *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989))).

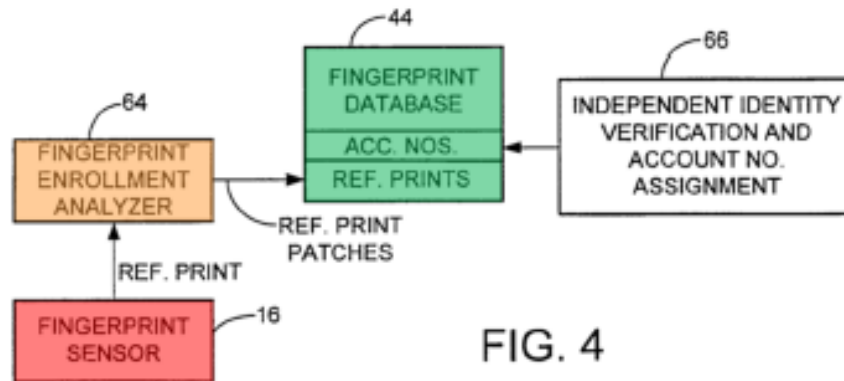


Figure 4 is a block diagram illustrating “a fingerprint enrollment process as used in either of the systems of FIGS. 2 and 3.” Ex. 1003 ¶ 14. Mr. Lipoff testifies that considering Hsu’s Figure 4 “[a]s shown, ‘[t]he account number is stored in the database 44 [green] in association with the user’s fingerprint image data.’ Once a user is enrolled, he or she may use his or her card to access his or her reference fingerprint for verification purposes.” Ex. 1006 ¶ 73 (quoting Ex. 1003 ¶ 24).

(2) *Limitation 1[A] – receiving card information;*

Petitioner points to Hsu’s Figure 3 and argues that a person of ordinary skill in the art “would have understood that Hsu’s **received ‘account number’** is the claimed **‘card information.’**” Pet 23 (citing Ex. 1006 ¶ 78). Petitioner argues that “Hsu’s enrollment process also includes ‘receiving card information.’ Hsu includes various disclosures of ‘reading data from a card reader,’ which confirm that the card reader (or its equivalent, a polling transceiver) in the access controller is receiving card information.” *Id.* (citing Ex. 1003 ¶ 9). Mr. Lipoff testifies that based on Hsu’s “various disclosures of **‘reading data from a card reader,’**” . . . a person of ordinary skill in the art “would have understood that regardless of the type of card used, Hsu’s enrollment process includes receiving card

information (e.g., account number or employee number).” Ex. 1006 ¶¶ 79–80 (citing Ex 1009 ¶¶ 9, 26).

(3) *Limitation 1[B]—receiving the biometric signature;*

Petitioner argues that as shown in Hsu’s Figure 1, “the access control unit includes a ‘fingerprint sensor 16’ (red) for ‘scan[ning] the user’s fingerprint.’” Pet. 26 (citing Ex. 1003 ¶¶ 20–21, 24). Hsu’s Figure 1 as annotated by Petitioner is reproduced below.

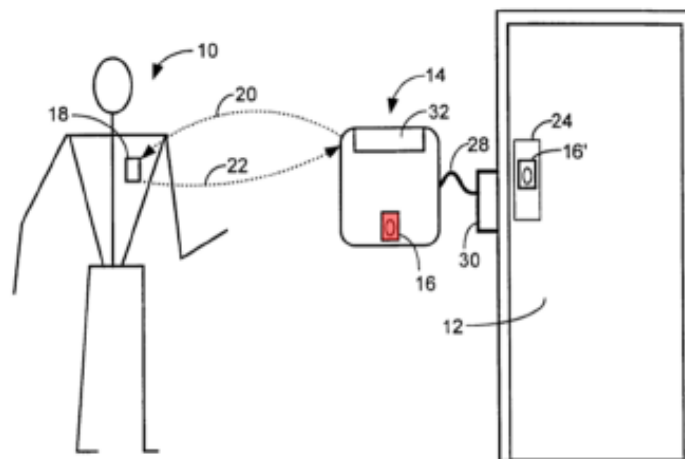


FIG. 1

Hsu’s Figure 1 depicts access controller 14 having fingerprint sensor 16 (highlighted red) for receiving a fingerprint from user 10. *See* Ex. 1003 ¶ 17 (“When the user 10 reaches the door, he or she places a finger on the fingerprint sensor 16.”).

(4) *Limitation 1[C]—defining, dependent upon the received card information, a memory location in a local memory external to the card;*

Petitioner argues that Hsu teaches this limitation. Pet. 28. Petitioner argues specifically that Hsu’s Figure 1 “discloses ‘a local memory external to the card.’ As shown in Figure 1, the ‘access control unit 14’ (yellow) is

external to the ‘identification badge 18 [card]’ (pink).” *Id.* Hsu’s Figure 1 as annotated by Petitioner is reproduced below.

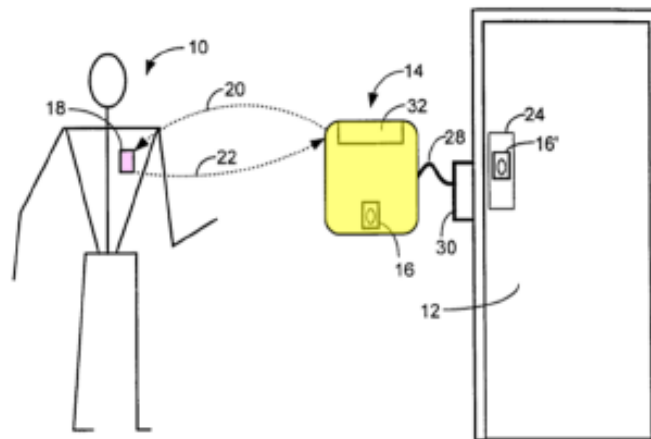
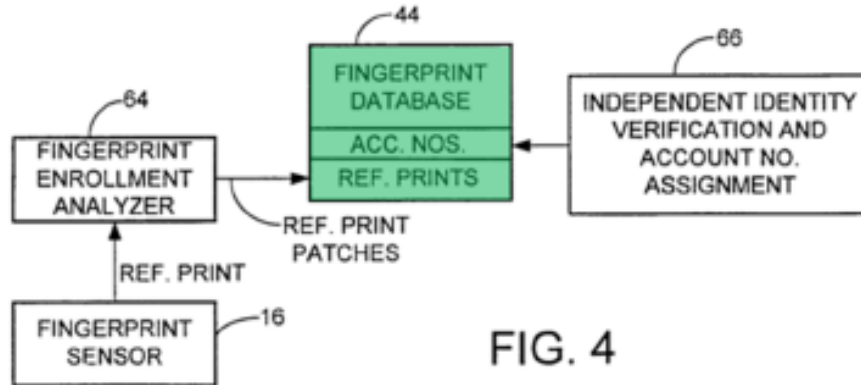


FIG. 1

Hsu’s Figure 1 depicts access controller 14 (highlighted yellow) which is separate, i.e. external to the card or ID badge 18 (highlighted pink) worn by user 10. *See* Ex. 1003 ¶ 20 (access controller 14 includes “fingerprint database 44, and a fingerprint correlator 46”). Mr. Lipoff testifies that a person of ordinary skill in the art “would also have understood that a database is stored in a memory. Thus, in my opinion, the ‘fingerprint database (44)’ in Figure 2 of Hsu discloses ‘a local memory external to the card.’” Ex. 1006 ¶ 90.

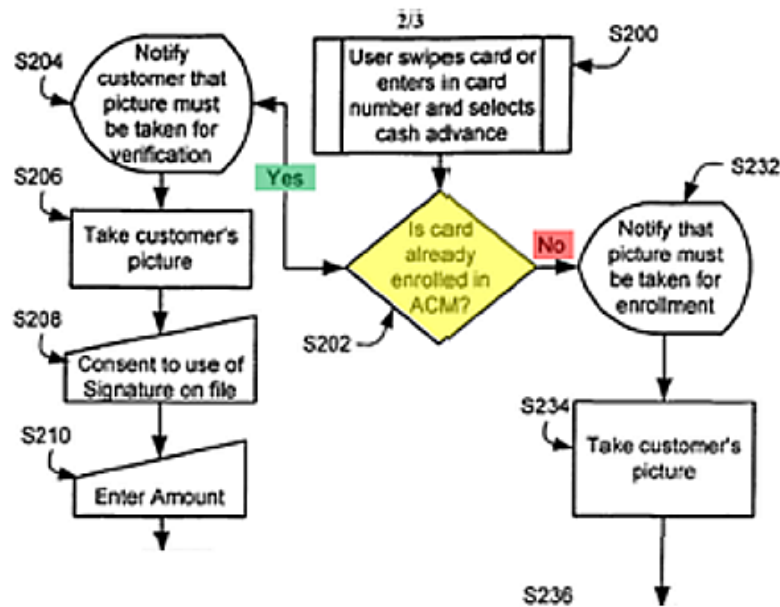
Petitioner argues with respect to the phrase “defining dependent upon the received card information, a memory location . . . ,” that Hsu specifically discloses “[t]he database is basically **a table that associates each user number with a stored fingerprint image**, or with selected distinctive attributes or features of the user’s fingerprint image.” Pet. 31 (quoting Ex. 1003 ¶ 20). Hsu’s Figure 4, as annotated by Petitioner, is reproduced below.



Hsu's Figure 4 is a block diagram illustrating fingerprint database 44 (highlighted green) including reference prints and related account number for each user or employee. Ex. 1003 ¶ 26. Mr. Lipoff testifies that a person of ordinary skill in the art "would have understood that, given a user number, Hsu's system easily determines from fingerprint database 44 the specific memory location for storing the associated fingerprint." Ex. 1006 ¶ 93.

(5) Limitation 1[D] – determining if the defined memory location is unoccupied

Petitioner argues that Hsu in combination with Sanford renders claim limitation [1d] obvious. Pet. 32. Petitioner asserts that Hsu discloses the "defined memory location," but does not explicitly discuss determining whether a memory location is occupied or not. *Id.* Petitioner turns to Sanford, arguing that "Sanford discloses in step S202 (yellow) 'determin[ing] if the credit card account number of the user is enrolled to use the PIN-less credit card system.'" Sanford's Figure 2, in relevant part, and as annotated by Petitioner, is reproduced below.



Sanford's Figure 2, reproduced in part above, as annotated by Petitioner, is a block diagram illustrating a decision making process at step 202 (highlighted yellow) based on whether a user's card is enrolled (yes) or not (no) in the ACM.

With respect to a motivation to combine Hsu and Sanford, Mr. Lipoff testifies that a person of ordinary skill in the art, understanding that Hsu has a database that may include a fingerprint associated with a user or employee number, "would not want to enroll a user who already enrolled. Ex. 1006 ¶ 112 (citing Ex. 1004 ¶ 38). Mr. Lipoff explains that "[r]e-enrollment is usually unnecessary because fingerprints do not change. Re-enrollment also consumes unnecessary system resources, takes time, and is generally undesirable. Therefore, before enrolling a user, it is my opinion that a POSITA would have been motivated to first check whether the user is already enrolled, as disclosed by Sanford." *Id.* Mr. Lipoff explains further, among other things, that "checking whether a user is enrolled also makes the

system more user-friendly. If the user is enrolled, the user can seamlessly proceed with biometric verification.” *Id.* ¶ 114.

(6) *Limitation 1[E] – storing, if the memory location is unoccupied, the biometric signature at the defined memory location*

Following from limitation 1[D], Petitioner argues that Hsu in combination with Sanford renders claim limitation 1[E] obvious, because “Sanford discloses that if a user is not enrolled (*i.e.*, if Hsu’s memory location is unoccupied), the user is directed to complete enrollment, which involves storing the user’s biometric information (*e.g.*, picture or fingerprint) in the database.” Pet. 36 (citing Ex. 1004 ¶ 37). Mr. Lipoff testifies that because both Hsu and Sanford disclose an enrollment process for a user, where Sanford teaches checking if a storage location is unoccupied, a person of ordinary skill in the art, would have known to, “*e.g.*, check[] Hsu’s database to see if a user is not yet enrolled per Sanford, and if so, storing], **the biometric signature** [*e.g.*, user’s fingerprint] **at the defined memory location** [*e.g.*, at the memory address in Hsu’s database assigned to the user].” Ex. 1006 ¶ 107.

(7) *Analogous Art and Motivation to Combine Hsu and Sanford*

At this stage of the proceeding, Petitioner’s assertion that Hsu and Sanford are analogous art to the ’039 Patent, and Petitioner’s evidence and arguments as to motivation to combine, are undisputed by Patent Owner. *See generally* Prelim. Resp. In any event, we next address Petitioner’s foundational arguments and evidence as to analogous art and motivation to combine to ensure that Petitioner has met its burden under 35 U.S.C. §§ 312 (a)(3), 316(e).

(a) *Analogous Art*

Petitioner argues that Hsu and Sanford are analogous prior art with respect to the '039 patent. Pet. 37. Petitioner contends that “[b]oth references (and the '039 Patent) are directed to ways of performing efficient biometric authentication, including using fingerprints.” *Id.* Petitioner argues that “[b]oth references (and the '039 Patent) teach authenticating a user by comparing a fingerprint captured by a sensor to a stored fingerprint.” *Id.* (citing Ex. 1003, Abstract; Ex. 1004, Abstract).

As to analogous art, we consider two criteria when evaluating whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *In re Clay*, 966 F.2d 656, 658–59 (Fed. Cir. 1992).

The '039 patent is directed broadly to “security issues associated with use of card devices such as credit cards, smart cards, and wireless card-equivalents such as wireless transmitting fobs.” Ex. 1001, 1:14–16. More specifically, the '039 patent explains that its disclosure addresses “problems relating to secure access and/or secure processes, by automatically storing a card user’s biometric signature in a local memory in a verification station comprising a card reader, [and] a biometric signature reader.” *Id.* at 2:53–57. Based on this, a reasonable field of endeavor involves enrollment and user verification systems including card devices and biometric signatures.

As Petitioner points out, both Hsu and Sanford expressly disclose enrollment and biometric user verification systems that compare a user fingerprint to a stored fingerprint for identity verification purposes. *See, e.g.*, Ex. 1003 ¶¶ 4, 13, 20, 24, Fig. 3, *see also* Ex. 1004 ¶¶ 4, 8–9, 16,

36. For example, Hsu explains that “FIG. 2 shows the principal components of the access control unit 14 in block diagram form, including an identification polling transceiver 40, a door controller 42, a fingerprint database 44, and a fingerprint correlator 46.” *Id.* at ¶ 20. Similarly, Sanford describes that in “a secure and convenient way for users to access cash from their card without using a PIN . . . [a]n identifying image of a user is taken and an amount for withdraw is received. If the amount for withdrawal is approved, the ACM verifies the identifying image of the user to an image of the user in a profile.” Ex. 1004 ¶ 6. Also, Sanford states that “[o]ther methods of verification known in the art may also be used, such as iris, voice signature, and fingerprint technology.” *Id.* ¶ 20.

On the record at this early stage in the proceeding, we are persuaded that Hsu and Sanford are analogous art to the ’039 patent as they are directed to the same field of endeavor, which is enrollment and user verification systems including card devices and biometric signatures.

(b) Motivation to Combine

With respect to a motivation to combine, Petitioner argues that although Hsu does not expressly disclose checking if the memory location in Hsu’s database assigned to the user is unoccupied “this would be obvious to a POSITA.” Pet. 32. To this end, Petitioner argues that Sanford describes an algorithm including a “check of whether a user is enrolled into Hsu’s system.” *Id.* at 37 (citing Ex. 1006 ¶ 108). Petitioner points out that Hsu describes an embodiment “where the user already has an account/user/employee number but has not yet enrolled their fingerprint.” *Id.* at 26 (citing Ex. 1006 ¶ 110). Petitioner argues that “[i]n this context, a POSITA would have been **motivated** to implement Sanford’s check to determine whether a

user (*e.g.*, with a user/account number) is enrolled in Hsu’s system.” *Id.* (citing Ex. 1006 ¶ 111).

In support, Petitioner’s declarant, Mr. Lipoff, testifies that a person of ordinary skill in the art would have implemented Sanford’s check to determine whether a user is enrolled, or not, in Hsu’s system for several reasons. Ex. 1006 ¶¶ 111–114. First, Mr. Lipoff explains, “in most instances, a POSITA would not want to enroll a user who already enrolled . . . [r]e-enrollment also consumes unnecessary system resources, takes time, and is generally undesirable.” *Id.* ¶ 112. Second, Mr. Lipoff explains that “checking whether a user is enrolled helps prevent fraud whereby an unauthorized user is able to overwrite the fingerprint of an authorized user by using the authorized user’s user number or account number.” *Id.* ¶ 113. Also, Mr. Lipoff testifies that “checking whether a user is enrolled also makes the system more user-friendly. If the user is enrolled, the user can seamlessly proceed with biometric verification.” *Id.* ¶ 114.

On this record, we find persuasive Petitioner’s explanations for a motivation to combine Hsu and Sanford. Sanford, as Mr. Lipoff testifies persuasively, describes *how* a person of ordinary skill in the art would construct a system to check to see if a user is enrolled, or not, in a biometric identity verification system before determining a further course of action. *Id.* ¶¶ 98–100. In addition, Mr. Lipoff provides several reasons *why* a person of ordinary skill in the art would look to Sanford for “the simple and straightforward way to determine whether such user has been enrolled [and] to check if the user’s data is already stored in Hsu’s database.” *Id.* ¶ 115; *see also KSR*, 550 U.S. at 420 (explaining that “any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed”).

b) Patent Owner's Arguments and Analysis

Patent Owner's chief argument is that the Petition is time-barred under 35 U.S.C. § 315(b). Prelim. Resp. 1. We addressed this issue, above, in Section II. Patent Owner does not, at this stage, provide substantive arguments with respect to the merits of Petitioner's unpatentability arguments. *See, generally, id.*

c) Conclusion as to Claim 1

We have considered and, on the record at this point in the proceeding, we find persuasive Petitioner's arguments and evidence as set forth at pages 17–40 of the Petition. Based on the arguments and evidence in the record before us, and our analysis above, Petitioner has established a reasonable likelihood it will prevail on claim 1.

5. *Analysis of Claims 2, 13, 14, 19, and 20*

Petitioner provides an element-by-element analysis of where each element in the challenged claims 2, 13, 14, 19, and 20 is disclosed in, or would have been obvious in view of, the cited references. Pet. 40–73. For clauses in independent claim 19 that are similar to those in claim 1, Petitioner refers to its arguments for claim 1. *See, e.g.*, Pet. 60–69 (referring to its analysis for claim 1). Petitioner also provides a reason why it would have been obvious to modify and combine the references with a reasonable expectation of success, as proposed by Petitioner. *Id.* at 37–40, 78–84. Petitioner also relies throughout the analysis of these claims on the testimony of Mr. Lipoff (Ex. 1006) for evidentiary support.

We have considered and, on the record at this point in the proceeding, we find persuasive Petitioner’s arguments and evidence as set forth at pages 40–73 of the Petition.

As for claim 1, Patent Owner’s chief argument is that the Petition is time-barred under 35 U.S.C. § 315(b). Prelim. Resp. 1. We addressed this issue, above, in Section II. Patent Owner does not, at this stage, provide substantive arguments with respect to the merits of Petitioner’s arguments. *See, generally, id.*

Based on the arguments and evidence of parties on the record before us, we determine, for purposes of this Decision, that Petitioner has established a reasonable likelihood of prevailing on claims 2, 13, 14, 19, and 20.

IV. CONCLUSION

We determine Petitioner has established a reasonable likelihood of prevailing in showing that one or more claims are unpatentable over the cited prior art. That said, Petitioner’s remaining obviousness challenge

based on Hsu, Sanford, and Tsukamura, is best left for trial after full development of the record. 37 C.F.R. § 42.108(c); *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (“Equal treatment of claims and grounds for institution purposes has pervasive support in *SAS*.”). We therefore institute trial on all claims and all challenges included in the Petition.

Our factual findings and determinations at this stage of the proceeding are preliminary, and based on the evidentiary record developed thus far. This is not a final decision as to the patentability of claims for which inter partes review is instituted. Our final decision will be based on the record as fully developed during trial.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that *inter partes* review of the '039 patent is hereby instituted as to claims 1, 2, 13, 14, 19, and 20 on all grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial on the grounds of unpatentability authorized above; the trial commences on the entry date of this decision.

IPR2022-01093
Patent 8,620,039 B2

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