

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KIA CORP. and TOYOTA MOTOR CORP.,
Petitioners,

v.

EMERGING AUTOMOTIVE LLC,
Patent Owner.

IPR2024-00981
Patent 9,365,188 B1

Before GEORGIANNA W. BRADEN, BARBARA A. PARVIS, and
JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

BRADEN, *Administrative Patent Judge*.

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

I. INTRODUCTION

Kia Corp. and Toyota Motor Corp. (collectively “Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting *inter partes* review of claims 1–20 of U.S. Patent No. 9,365,188 B1 (Ex. 1001, “the ’188 patent”). Emerging Automotive LLC (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”).

With our authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 8, “Prelim. Reply”) and Patent Owner filed a Sur-reply to Petitioner’s Reply (Paper 9, “Prelim. Sur-reply”) to address whether we should deny institution under 35 U.S.C. §§ 314(a), 325(d), and *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). For reasons provided below, we decide not to invoke this discretion to deny institution.

Under 35 U.S.C. § 314(a) and 37 C.F.R. § 42.4(a), we have authority to determine whether to institute review. Based on the current record and for the reasons explained below, Petitioner has shown that there is a reasonable likelihood that it would prevail with respect to at least one of the challenged claims. Therefore, pursuant to § 314, we institute an *inter partes* review of claims 1–20 in the ’188 patent on all challenges included in the Petition.

A. *Real Parties in Interest*

Petitioner identifies Toyota Motor Corp., Toyota Motor North America, Inc., and Toyota Motor Sales, U.S.A., Inc., Kia Corp., and Kia America Inc., as the real parties-in-interest. Pet. 68. Patent Owner identifies Emerging Automotive LLC as the real party-in-interest. Paper 4 (Patent Owner’s Mandatory Disclosures), 2.

B. Related Matters

The parties indicate that the '188 patent has been asserted in the following district court litigations: (1) *Emerging Automotive LLC v. Toyota Motor North America, et al.*, 2:23-cv-00434 (E.D. Tex.); and (2) *Emerging Automotive LLC v. Kia Corp., et al.*, 2:23-cv-00437 (E.D. Tex.). Pet. 68–69; Paper 4, 2. Petitioner further indicates that the cases have been consolidated for pretrial issues with the lead case being *Emerging Automotive LLC v. Kia Corp.*, No. 2:23-cv-00437-JRG (E.D. Tex.). Pet. 72.

C. The '188 patent

The '188 patent is titled “Methods and Systems for using Cloud Services to Assign E-Keys to Access Vehicles” and it issued on June 14, 2016. Ex. 1001, codes (45), (54). It is a continuation-in-part of a U.S. patent application and claims priority to several other continuation and continuation-in-part applications, as well as two provisional applications, the earliest of which was filed on April 22, 2011. *Id.* at codes (60), (63).

I. Written Description

The '188 patent relates to systems and methods for generating and sharing electronic keys (e-Keys) with users and cloud-based processing systems. Ex. 1001, 1:33–35. In some embodiments, the '188 patent discloses providing vehicle access to individuals, including an owner or “guest driver,” e.g., a friend, service person, or valet. *Id.* at 8:40–51. According to the '188 patent, this access can be provided by an electronic key, or e-key, which allows the holder of the e-key to use the vehicle. *Id.* at 8:52–54. The '188 patent discloses that an e-key may be sent from a vehicle owner to another person, such as a guest. *Id.* at 8:54–63. The e-key allows use of the vehicle, and can further include privileges for the user, including speed limits, geographic restrictions, amount of time, etc. *Id.*

The '188 patent describes creating profiles for users that have privileges set by an administrator. *Id.* at 14:52–57. For example, accounts for a driver may be created with “defined roles,” which can “include a set of privileges,” such as speed limit or geographic privileges. *Id.* at 36:24–35. In this way, according to the '188 patent, logins of user profiles can be dynamically controlled. For example, “[a]dministrators can decide which settings are locked for specific logins or roles, which are open for the login user to toggle and which settings are to be enforced.” *Id.* at 15:29–31. “[U]se of the vehicle can be restricted to predefined rules,” including those based on the user profile. *Id.* at 20:23–24.

In one embodiment of the '188 patent, a vehicle owner or administrator may initiate transfer of e-keys to a user's device, such as a smartphone. *Id.* at 40:35–37, 26:3–6. The '188 patent discloses that an e-key may provide access to the vehicle, but otherwise have a “set[] level of privileges for the vehicle during the use of the electronic keys.” *Id.* at 39:58–60. Via the privileges, “specific vehicle aspects are enabled for the vehicle.” *Id.* at 39:67–40:2. The user can “then use the electronic Keys to use the vehicle in accordance with the privileges.” *Id.* at 40:45–47

One embodiment of the '188 patent is illustrated in Figure 29, which is reproduced below:

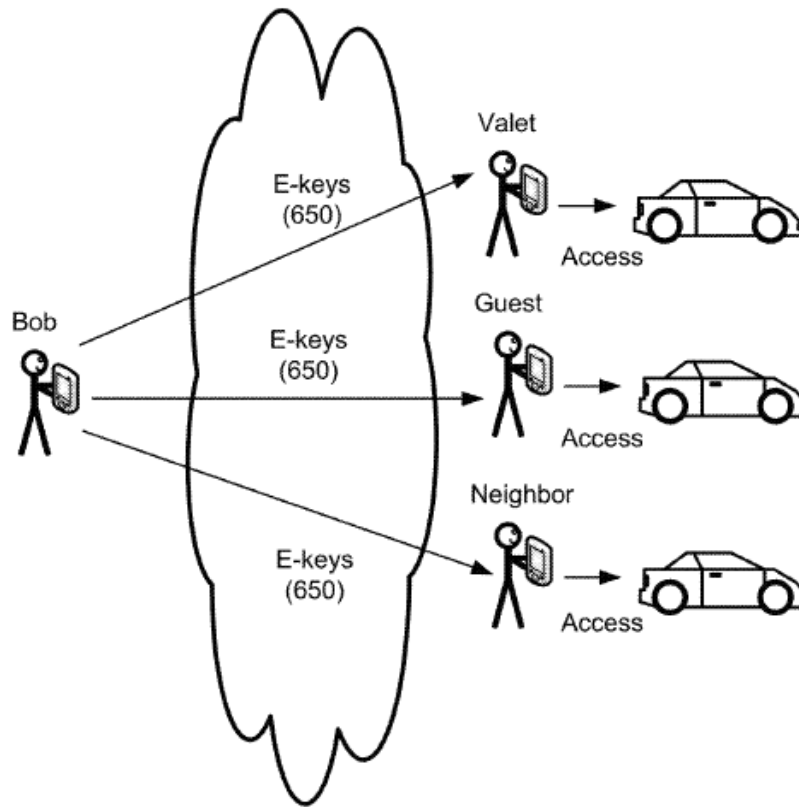


FIG. 29

Figure 29 of the '188 patent, above, is an illustration showing the assignment of “e-keys for enabling access of a vehicle to a remote user.” *Id.* at 8:14–15. In Figure 29, vehicle owner Bob shares electronic keys 650 with users “valet,” “guest,” and “neighbor,” each having “various privilege settings.” *Id.* at 40:64–66, 41:12–13.

Another embodiment of the '188 patent is illustrated in Figure 31A, which is reproduced below:

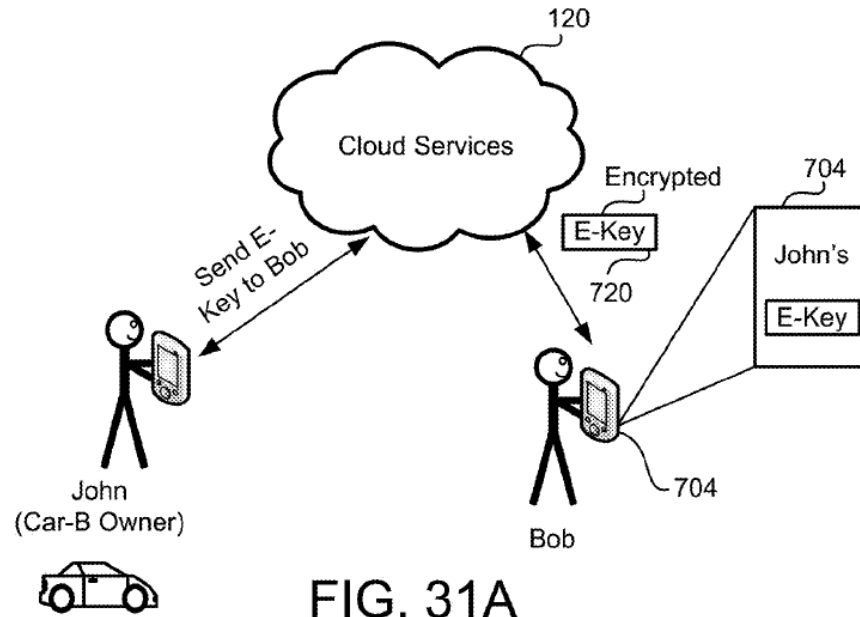


Figure 31A of the '188 patent, above, is an illustration showing a user (John) sending e-keys to another user (Bob) via mobile devices 702 (not labeled) and 704. *Id.* at 42:9–11. Per the '188 patent, the sending of the e-keys includes sending a request to a service, which may be operated by cloud services 120. *Id.* at 42:11–13. The '188 patent discloses that “[a]t the server, the server will generate an access code for the vehicle (carB)” and the “access code will then be encrypted by the server and then sent as encrypted e-keys 722 to Bob’s device 704.” *Id.* at 42:13–16. According to the '188 patent, Bob’s device 704 may be a mobile device, such as a smart phone. *Id.* at 42:16–17.

The '188 patent explains that “[e]ach e-key, in one embodiment, will include a unique access code or substantially unique access code.” *Id.* at 41:12–13. “The unique access code can be generated by a server, such as cloud services 120.” *Id.* at 41:13–15. “The unique generation of access codes enables each electronic keyed [sic] to be different for each user and each e-key can expire at any time set by a requesting user.” *Id.* at 41:20–24;

see also id. at 43:43–45 (“Each unique code can then be used to associate those e-keys with the same vehicle, but assigned to different devices/people with different privileges.”). The unique access code “can be generated by a number generator, and [sic] alphanumeric random generator, in [sic] incremental number generator, or any other generation device that can generate codes that are unique or substantially unique.” *Id.* at 43:25–28.

Another embodiment of the ’188 patent is illustrated in Figure 33, which is reproduced below:

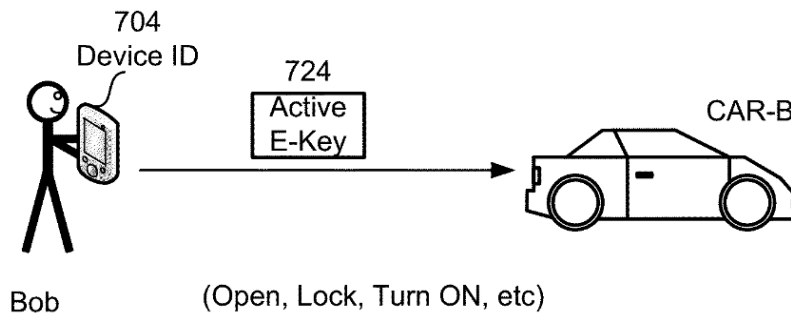


FIG. 33

Figure 33 shows Bob using an e-key to unlock and start John’s vehicle (Car-B). *Id.* at 43:57–59. The ’188 patent discloses that “access by Bob is facilitated by the activated e-keys 724, which are used via device 704 having the device ID that is paired or associated with the access code associated with the activated e-keys 724.” *Id.* at 42:59–62.

2. Illustrative Claim

As noted previously, Petitioner challenges claims 1–20. Pet. 2. Claims 1, 16, and 19 are independent claims. Claim 1 is representative of the challenged subject matter and is reproduced below with Petitioner’s identifiers in brackets, which do not impact our analysis (*see* Pet. 3, List of Challenged Claims):

1. [1 preamble] A method, comprising,
 - [1a] receiving, by a server, a request from a user via a user account that has a vehicle associated therewith to generate an electronic key (e-key) for an identified recipient to use the vehicle, the request includes identifying information for enabling sending of the e-key to the recipient via an electronic transmission, the request includes a condition of use of the vehicle as set by the user via the user account;
 - [1b] generating, by the server, the e-key, the e-key being assigned with the condition of use of the vehicle;
 - [1c] transmitting, by the server, the e-key to the recipient using the identifying information so that a device of the recipient is implemented to use the e-key;
 - [1d] transmitting, by the server, data to the vehicle to enable use of the vehicle via the e-key; and
 - [1e] receiving, by the server, use data regarding use of the vehicle for when the vehicle is used via the e-key;
 - [1f] wherein the use data identifies information regarding the use of the vehicle, and the information identifies a violation of the condition of use;
 - [1g] wherein the server processes logic for generating the e-key and processes logic for analyzing the data regarding use of the vehicle when the e-key is used for the vehicle, the server or other servers connected to the server being accessible over the Internet, the vehicle having wireless communication systems for communicating with the server or other servers and for communicating with devices local to the vehicle.

Ex. 1001, 49:29–57.

D. Asserted Challenges to Patentability and Evidence of Record

Petitioner challenges the patentability of claims 1–20 of the '188 patent based on the following reference or combination of references:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–9, 11–20	103	Kleve ¹
1–9, 11–20	103	Kleve, Sekiyama ²
10	103	Kleve, Mottla ³ , Sekiyama
1, 3, 5–7, 9, 11–16, 18–20	103	Zaid ⁴ , Harris ⁵
2, 4, 8, 10	103	Zaid, Harris, Mottla
17	103	Zaid, Harris, Patenaude ⁶
17	103	Kleve, Patenaude

Pet. 2. In support of its patentability challenge, Petitioner relies on, *inter alia*, the Declaration of Kevin C. Almeroth, Ph.D. (“Dr. Almeroth”).

Ex. 1003. Patent Owner contests the challenges to patentability and supports its position with the Declaration of Sam Malek, Ph.D. (“Dr. Malek”).

Ex. 2001.

II. PRELIMINARY MATTER

A. Claim Construction

A claim “shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b).” 37 C.F.R. § 42.100(b). Under that standard, the “words of a claim ‘are generally given their ordinary and customary

¹ U.S. Patent Application Publication No. 2014/0129053 A1, published May 8, 2014 (Ex. 1004) (“Kleve”).

² JP Patent Application No. 2008-301427, published June 10, 2010, filed Nov. 26, 2008 (Ex. 1005) (“Sekiyama”).

³ U.S. Patent Application Publication No. 2011/0060480 A1, published Mar. 10, 2011 (Ex. 1010) (“Mottla”).

⁴ U.S. Patent Application Publication No. 2011/0112969 A1, published May 12, 2011 (Ex. 1008) (“Zaid”).

⁵ U.S. Patent Application Publication No. 2011/0312273 A1, published Dec. 22, 2011 (Ex. 1009) (“Harris”).

⁶ U.S. Patent Application Publication No. 2006/0136106 A1, published June 22, 2006 (Ex. 1007) (“Patenaude”).

meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

Petitioner contends express claim construction is unnecessary at this stage of the proceeding and states that all terms should be given their plain and ordinary meaning. Pet. 8. Patent Owner does not address claim construction in its Preliminary Response.

Construction is needed only for those terms “that are in controversy, and only to the extent necessary to resolve the controversy.” *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). There are no claim terms in controversy at this stage of the proceeding. Consequently, we need not construe any terms for our analysis.

B. Principles of Law Regarding Obviousness

1. Priority of Filing Date

“[A] patent application is entitled to the benefit of the filing date of an earlier filed application only if the disclosure of the earlier application provides support for the claims of the later application, as required by 35 U.S.C. § 112.” *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306 (Fed. Cir. 2008). “To satisfy the written description requirement [in § 112,] the disclosure of the prior application must ‘convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [the inventor] was in possession of the invention.’” *Id.* (alteration in original) (quoting *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991)).

Although the burden of proof for showing unpatentability remains on a petitioner, the patent owner may have a burden of production. A patent

owner has the burden for showing it is entitled to priority. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1379 (Fed. Cir. 2015) (discussing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)); *see also In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1376 (Fed. Cir. 2016) (“[A] patentee bears the burden of establishing that its claimed invention is entitled to an earlier priority date than an asserted prior art reference.”).

2. *Obviousness*

A claim is unpatentable under 35 U.S.C. § 103 if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, objective evidence of non-obviousness.⁷ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we must also “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of prior art elements would have produced a predictable result is an issue we weigh in the ultimate determination of obviousness. *Id.* at 416–417.

⁷ At this stage of the proceeding, Patent Owner has not presented objective evidence of non-obviousness.

In an *inter partes* review, the petitioner must show with particularity why each challenged claim is unpatentable. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016); 37 C.F.R. § 42.104(b). The burden of persuasion never shifts to the patent owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

We analyze the challenges presented in the Petition in accordance with the above-stated principles.

C. Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quoting *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962, (Fed. Cir. 1986)). Furthermore, the prior art itself can reflect the appropriate level of ordinary skill in the art. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

Here, Petitioner asserts a person of ordinary skill in the art at the time of the invention of the ’188 patent, would have “had at least a four-year undergraduate degree in electrical engineering, automotive engineering, or a closely related field and [at] least two years of experience in the field of access control systems, vehicle electronics, and/or cryptography.” Pet. 2 (citing Ex. 1003 ¶¶ 79–82). Dr. Almeroth supports Petitioner’s position and further testifies that “[a]dditional education could substitute for professional experience and vice versa.” Ex. 1003 ¶ 79.

Patent Owner does not assert a different level of skill in the art at the time of the alleged invention and uses Petitioner’s proposed level of skill. Prelim. Resp. 10–11 (citing Ex. 2001 ¶ 36).

For the purposes of this Decision, we too adopt Petitioner’s level of ordinary skill in the art because it appears consistent with the problems addressed in the ’188 Patent and the prior art of record.

D. *Request for Discretionary Denial under 35 U.S.C. § 325(d)*

The Patent Office may deny institution under 35 U.S.C. § 325(d), which provides, in pertinent part, that “[i]n determining whether to institute or order a proceeding under this chapter . . . the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.”

Patent Owner asserts that we should discretionarily deny the Petition under § 325(d). Prelim. Resp. 15–24. Specifically, Patent Owner asserts that we should exercise our discretion under 35 U.S.C. § 325(d) to deny the petition because the Zaid and Mottla references relied on in the Petition were already considered by the Office. *Id.* at 17. Patent Owner also asserts that Petitioner has failed to show material error in that consideration. *Id.* at 22–23. For its part, Petitioner argues that we should not exercise our discretion under § 325(d) because “Zaid was submitted with an IDS containing 364 other references” and “there is no evidence that the Examiner considered Zaid.” Pet. 68 (citing Ex. 1002, 95–103); Prelim. Reply 4–5. For the reasons given below, we decline to exercise our discretion to deny.

1. The Legal Standard

In evaluating matters under § 325(d), the Board uses the two-part framework set forth under *Advanced Bionics, LLC v. Med-El*

Electromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 7 (PTAB Feb. 13, 2020) (precedential) (“*Advanced Bionics*” or “*AB*”). Under the first prong of that framework, we must determine whether the same or substantially the same art or arguments previously were presented to the Office. If so, we turn to the second prong which focuses on whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of the challenged claims. *Id.* at 8.

In evaluating whether the same or substantially the same prior art or arguments were previously presented to the Office, the Board has identified several non-exclusive factors for consideration. *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, Case IPR2017-05666, slip op. at 17–18 (PTAB Dec. 15, 2017) (Paper 8) (informative) (“the *Becton Dickinson* factors”). Those factors are as follows:

1. the similarities and material differences between the asserted art and the prior art involved in examination;
2. the cumulative nature of the asserted art and the prior art evaluated during examination;
3. the extent to which the asserted art was evaluated during examination;
4. the extent of the overlap between the arguments made during examination and the manner in which a petitioner relies on the prior art or a patent owner distinguishes the prior art;
5. whether a petitioner has pointed out sufficiently how the Office erred in evaluating the asserted prior art; and
6. the extent to which additional evidence and facts presented in this petition warrant reconsideration of the prior art or arguments.

Id. The *Becton Dickinson* factors are framed as comparing the art or arguments in a petition against what was before an examiner during prosecution.

- a. *Advanced Bionics Prong One: whether “the same or substantially the same art or arguments previously were presented to the Office”*

Petitioner acknowledges that Zaid is listed on the face of the ’188 patent and was submitted by the Patentee in an IDS during production.

Pet. 68. Petitioner, nonetheless, argues that Zaid was not considered by the Examiner. *Id.* Additionally, the Petition does not provide a single challenge based on Zaid alone. *Id.* at 2. In fact, there are four challenges based on other references besides Zaid. *Id.*

Patent Owner contends that Zaid and Mottla (including the Zaid-Mottla combination) were “substantively discussed and applied by multiple Examiners against substantially similar claims.” Prelim. Resp. 17–18. Patent Owner argues that Zaid was considered during the prosecution of the ’188 patent itself and is listed on its face. *Id.* at 17 (citing Ex. 1001, 3; Ex. 1002, 52). Patent Owner further argues that the Examiner’s notation indicates the reference was considered. *Id.* at 17–18 (citing *Advanced Bionics*, IPR2019-01469, Paper 6 at 7–8 (precedential) (“[p]reviously presented art includes art made of record . . . such as on an Information Disclosure Statement (IDS).”).

Patent Owner next contends that Petitioner recognized there were problems with the challenges based on Zaid and Mottla and chose to “throw in Kleve as a primary reference for” other challenges. Prelim. Resp. 23. Patent Owner specifically argues that we “should reject Petitioners’ attempt to end-run Section 325(d) by including additional grounds that lack merit”

because “Kleve fail[s] to teach or suggest numerous limitations” and “is a statutorily prohibited reference.” *Id.* at 23–24.

We agree with Patent Owner that Examiner’s notation indicates that Zaid was considered. We do not agree, however, with Patent Owner’s position regarding Petitioner’s challenges based on Kleve.

The challenges over Kleve alone or in combination with Sekiyama, Mottla, and/or Patenaude counsel us not to discretionarily deny institution. Patent Owner does not dispute that Kleve, Sekiyama, Mottla, and/or Patenaude were not before the Office. *See* Prelim. Resp. 15–24; Prelim. Sur-reply 5. Although Patent Owner characterizes the Petition’s challenges based on Kleve as an “attempt to end-run Section 325(d) by including additional grounds that lack merit” (Prelim. Resp. 23–24), we disagree. Rather, explained in detail below, we are persuaded by Petitioner’s challenges based on Kleve and it is the reason for institution. Accordingly, at this stage of the proceeding, Petitioner’s challenges based on Zaid are not relevant. As such, we determine any analysis under *Advanced Bionics* is inapplicable, and we do not exercise our discretion under § 325(d) to deny institution.

b. Advanced Bionics Prong Two: whether “the Office erred in a manner material to the patentability of the challenged claims”

Because the Board is persuaded to instituted based on challenges not involving Zaid, , we will not consider the second part of the *Advanced Bionics* framework.

2. Conclusion Regarding Discretionary Denial under § 325(d)

The *Advanced Bionics* framework “reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 9. Under the

present circumstances, we determine that the Office has not considered the same or substantially the same art or arguments previously. Accordingly, we decline to exercise our discretion to deny institution under § 325(d).

E. *Request for Discretionary Denial under 35 U.S.C. § 314(a)*

In exercising the Director’s discretion under § 314(a), the Board may consider “events in other proceedings related to the same patent, either at the Office, in district court, or the ITC.” Patent Trial and Appeal Board Consolidated Trial Practice Guide, 58 & n.2 (Nov. 2019) (“CTPG”). *NHK Spring* explains that the Board may consider the advanced state of a related district court proceeding, among other considerations, as a “factor that weighs in favor of denying the Petition under § 314(a).” *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential). Additionally, the Board’s precedential order in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–16 (PTAB Mar. 20, 2020) (precedential) (“the *Fintiv* Order”) identifies several factors for analyzing issues related to the Director’s discretion to deny institution in view of related litigation, with the goal of balancing efficiency, fairness, and patent quality.

When considering related litigation, the Board evaluates the following factors (“*Fintiv* factors”):

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;

5. whether the petitioner and the defendant in the parallel proceeding are the same party; and

6. other circumstances that impact the Board's exercise of discretion, including the merits.

Fintiv Order at 5–6. In considering these factors, we apply the guidance set forth in a Memorandum regarding the “Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation” issued by the Director of the United States Patent and Trademark Office (hereinafter, “Guidance Memo”).⁸

1. First Factor – Likelihood of Stay

Petitioner has not requested a stay in the related district court litigation and argues that factor one is neutral. Pet. 67; Prelim. Reply 1. Patent Owner argues that the related district court litigation is unlikely to be stayed based on that court’s low grant rate in other cases. Prelim. Resp. 49–50.

On this record, we decline to speculate as to how the district court might rule on a motion that Petitioner has not filed. Thus, we determine that this factor is neutral.

2. Second Factor – District Court Trial Date

The related district court litigation is currently scheduled for trial on July 21, 2025. Pet. 8; Prelim. Resp. 50. Patent Owner argues that this schedule is consistent with the district court’s median time-to-trial, which Patent Owner states is 21.1 months. Prelim. Resp. 52; *see* Ex. 2006; *see Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings*

⁸ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

with Parallel District Court Litigation (USPTO June 21, 2022) (“Guidance Memo”)⁹ at 8–9 (providing that “[p]arties may present evidence regarding the most recent statistics on median time-to-trial for civil actions in the district court in which the parallel litigation resides for the PTAB’s consideration”). Patent Owner further notes that “the median time from filing to case disposition in the Eastern District of Texas is 7.8 months.” *Id.* at 52 (citing Ex. 2006). According to Patent Owner, “Judge Gilstrap’s time-to-trial statistics predict an even earlier trial date,” which “lends credibility to the July 2025 scheduled jury trial and weighs significantly in favor of denial.” *Id.* at 53. Therefore, Patent Owner argues that factor two favors discretionary denial. *Id.*

Petitioner does not dispute Patent Owner’s evidence regarding time-to-trial, but argues that delays in Judge Gilstrap’s cases are common and noting that “case filings have skyrocketed.” Prelim. Reply 1 (citing Ex. 1040, 7, 24; Ex. 1041, 2; Ex. 1042, 1). Petitioner then argues that “[f]or Judge Gilstrap, statistics for 12 months prior confirm that time-to-trial is on the rise,” and “Judge Gilstrap now has fifteen trials set for July 21, 2025.” *Id.* (citing Ex. 1047; Ex. 1043). Thus, Petitioner contends that Patent Owner’s “speculation that this case would be prioritized *and* that EDTX’s trial backlog would be clear is extremely unlikely.” *Id.*

Patent Owner’s representation of median time-to-trial of 21 months is consistent with the most recent available data from the judiciary.¹⁰ *See*

⁹ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

¹⁰ Available at https://www.uscourts.gov/sites/default/files/fcms_na_distprofile1231.2023_0.pdf.

Ex. 2006. Additionally, Petitioner agrees that trial is scheduled for July 21, 2025, which is almost five months before the Board would issue its Final Decision in this proceeding. *See* Prelim. Reply 1.

Accordingly, we determine that this factor weighs in favor of discretionary denial.

3. Third Factor – Investment in Related District Court Litigation

Patent Owner argues that Factor 3 strongly weighs in favor of denial because both parties “will have expended considerable resources in the parallel litigation, including on the merits of Petitioners’ invalidity positions, by the time the Board issues an institution decision.” Prelim. Resp. 53.

According to Patent Owner, “Judge Gilstrap has already conducted a hearing and issued decisions for five motions pertaining to technical aspects of the asserted patents,” including motions to compel discovery, a motion to amend invalidity contentions, and a motion to strike infringement contentions. *Id.* at 54–55 (citing Ex. 2007). Additionally, Patent Owner argues that the parties will have (1) already exchanged interrogatory responses, exchanged document productions, and completed several depositions; (2) completed numerous witness depositions, and substantially completed document productions; (3) submitted the Joint Claim Construction Statement, completed claim construction discovery and substantially completed claim construction briefing. *Id.* at 55 (citing Ex. 2003, 4–5). Patent Owner notes that although “claim construction may not be completed before the institution decision, it will be close to completion (*Markman* hearing will be completed less than a month following institution decision deadline), and since neither party has contended that claim construction is necessary to resolve the merits of the Petition (Pet. 8), an order coming shortly after the

institution deadline does not overcome the substantial resources expended by the court and parties.” *Id.*

Petitioner argues that factor three does not warrant denial because as Patent Owner “has described the case” “to the Federal Circuit,” it is “in the initial stages.” Prelim. Reply 2 (citing Ex. 1044). Petitioner specifically argues that all but one of the “technical motions” mentioned by Patent Owner were denied as moot by agreement of the parties, and the last was summarily denied. *Id.* (citing Exs. 1045, 1046). According to Petitioner, “[b]y time of institution, fact discovery and claim construction will be ongoing (*Markman* scheduled for January 16, 2025)” and “[t]he district court’s substantive investment regarding invalidity will be nil.” *Id.* (citing *Samsung Electronics America, Inc. v. Cobblestone Wireless, LLC*, IPR2024-00606-13 at 40–41 (PTAB Sept. 10, 2024) (claim construction and close of fact discovery occurring after institution weighs against denial)).

The record before us indicates that the related district court proceeding is still in relatively early stages. Fact and expert discovery are ongoing until March 3, 2025 and April 7, 2025, respectively. Ex. 2003, 4. Claim construction briefing is underway, and the Markman Hearing is scheduled for January 16, 2025. *Id.* at 4–5. We are not persuaded that the discovery motions identified by Patent Owner represent a significant investment in the case. As a result, we determine that this factor weighs against discretionary denial.

4. Fourth Factor – Overlap of Issues

Petitioner argues that “[f]actor four favors institution” because the Petitioner “offer[s] a ‘*Sand plus*’ stipulation” where it “will not pursue any invalidity ground that includes *Kleve*, *Sekiyama*, *Mottla*, *Zaid*, *Harris*, or *Patenaude* against the ’ 188 patent in the related litigation.” Prelim. Reply

2. Additionally, the Petition challenges seven claims not asserted in the parallel litigations. Pet. 68.

Patent Owner contends factor four weighs in favor of denial “because there is substantial overlap between the claims, arguments, and evidence raised in the Petition and in Petitioners’ invalidity contentions in the parallel district court proceeding.” Prelim. Resp. 57. Patent Owner also argues that Petitioner declined to offer a *Sotera* stipulation and “Petitioners’ lesser stipulation, while mitigating, does not fully resolve concerns about overlap, duplicative efforts, and conflicting decisions—and does not prevent denial.” Prelim. Sur-Reply 5. According to Patent Owner an “IPR is intended to be a ‘quick and cost effective alternative[] to litigation,’ not an avenue for Petitioners to argue invalidity a second time in a second venue.” *Id.* (citing *WesternGeco LLC v. ION Geophysical Corp.*, 889 F.3d 1308, 1317 (Fed. Cir. 2018) (quoting H. REP. NO. 112-98, at 40, 48 (2011))).

We agree with Patent Owner that the language in Petitioner’s stipulation does not eliminate completely any overlap with district court invalidity arguments. Petitioner’s stipulation allows Petitioner to use any prior art reference that is not relied on in the Petition. This may not fully address “concerns of inefficiency and the possibility of conflicting decisions.” *See Fintiv*, Paper 11 at 12. Nonetheless, Petitioner’s stipulation does decrease the overlap in issues and mitigates to a great degree the concerns regarding duplicative efforts and potentially conflicting decisions. Additionally, we agree with Petitioner that the fact that the Petition challenges claims that are not asserted in the litigation weighs marginally in its favor.

Based on the foregoing discussion, we determine that factor four weighs against discretionary denial.

5. *Fifth Factor – Defendant in District Court*

Petitioner is the defendant in the related district court litigation. Prelim. Resp. 60. We find that this factor favors denial. *See Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 19 (PTAB Dec. 1, 2020) (precedential as to § II.A).

6. *Sixth Factor – Other Circumstances, Including the Merits*

The sixth *Fintiv* factor takes into account other circumstances that may bear on the decision to exercise discretion to deny, such as the merits of the patentability challenges. *Fintiv*, Paper 11 at 14–16. Under this factor, “the PTAB will not deny institution based on *Fintiv* if there is compelling evidence of unpatentability.” Guidance Memo 5. Board precedent provides that we should only consider the compelling merits standard if the first five *Fintiv* factors favor discretionary denial. *CommScope Techs. LLC. v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 4–5 (PTAB February 27, 2023) (precedential).

The first factor is neutral, the second and fifth factors favor discretionary denial, and the third and fourth factors weigh against discretionary denial. As set forth above, we determine that balance of the first five *Fintiv* factors do not favor discretionary denial, and thus, we need not assess compelling merits. *CommScope*, Paper 23 at 5 (“In circumstances where, however, the Board’s analysis of *Fintiv* factors 1–5 favors denial of institution, the Board shall then assess compelling merits.”).

7. *Fintiv Determination*

The balance of all *Fintiv* factors do not favor the exercise of our discretionary powers to deny institution. Therefore, we determine that discretionary denial is not appropriate in this case.

III. ANALYSIS

A. Summary of References

1. Kleve (Ex. 1004)

Kleve is a U.S. patent application publication titled “Credential Check and Authorization Solution for Personal Vehicle Rental.” Ex. 1004, code (54). Kleve discloses a vehicle computing system (“VCS”) that includes the ability to use a vehicle rental micro-business that is integrated into the VCS. *Id.* ¶ 36.

One embodiment of Kleve is shown in Figure 2, reproduced below.

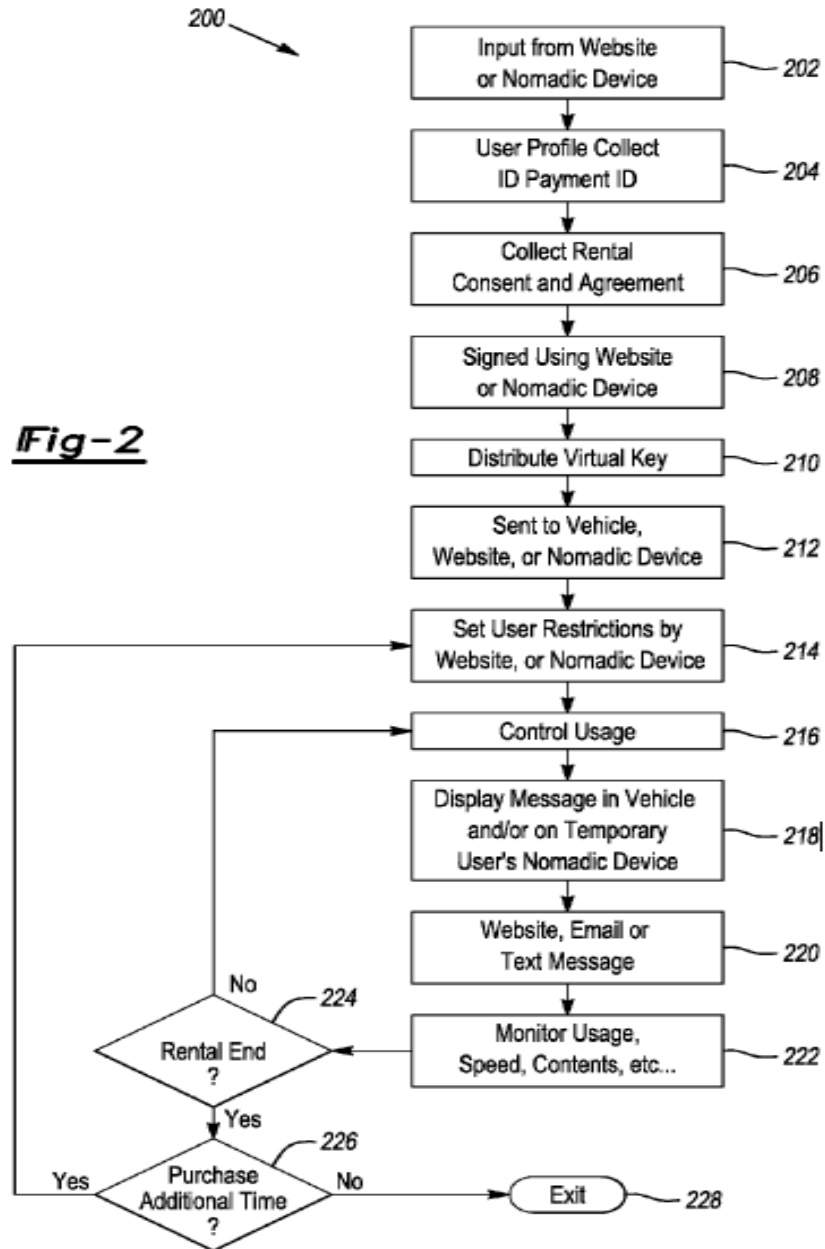


Figure 2, above, is a flow chart illustrating the steps of a vehicle rental micro-business as taught by Kleve. *Id.* ¶ 11. As part of Kleve’s system, an Owner and Temporary User “may set up a user profile using a website or a nomadic device communicating” with a site that is stored in a database. *Id.* ¶ 37, Fig. 2 at step 202. According to Kleve, a “Temporary User may also fill out a user profile using the website or nomadic device to include, but not limited to, photos of credit cards, photo of forms of ID, facial recognition,

voice print recognition, matrix barcode (ex. two-dimensional code), code word or phrase for speech recognition, temporary mobile web login IDs and password, or other types of unique Temporary User identification to validate and pay for the rental service at step 204.” *Id.* ¶ 37, Fig. 2 at step 204.

Using this system, an Owner can rent out their vehicle and the Temporary User may agree to terms to rent a vehicle. *Id.* ¶ 38.

Per Kleve, the Owner and Temporary User “may agree to terms and conditions for the rental period using the website or nomadic device” as shown at step 206 in Figure 2. *Id.* ¶ 38. Kleve discloses the use of an identifier from a vehicle rental administrative system that is configured to activate a vehicle during a prescribed rental period. *Id.* ¶¶ 7, 39. Kleve specifically discloses that in Figure 2 at step 210, the system generates a virtual key to distribute to the Temporary User and VCS (located within the vehicle itself). *Id.* ¶¶ 35, 39. Kleve then discloses that at step 214 of Figure 2, the Owner may have access to control use of the vehicle being rented by the Temporary User. *Id.* ¶ 40. According to Kleve, these restrictions “may be based on, but not limited to, the owner's selection of parameters including, but not limited to, speed, global position coordinates, or load weight restrictions.” *Id.*

Kleve additionally explains that during the rental term the VCS may monitor the Temporary User's utilization of the vehicle including, but not limited to, renter verification, driving behavior, vehicle location, speed, fuel level, and other vehicle information requested by the vehicle owner.” *Id.* ¶ 73. “The continuous monitoring of the Temporary User’s behavior during the rental period may be transmitted to the server.” *Id.* ¶ 76.

Kleve explains that Temporary User’s use of the shared vehicle may be subject to “restriction limits [privileges] initially set by the Owner at the

beginning of the rental term.” *Id.* ¶43. According to Kleve, “[t]he restrictions may be based on, but not limited to, the [O]wner's selection of parameters including, but not limited to, speed, global position coordinates, or load weight restrictions.” *Id.* ¶40. Kleve specifies that during the rental term, the “control parameters” of the shared vehicle are “monitor[ed]” to determine whether a “restriction” has been exceeded. *Id.* ¶¶40, 53. When a restriction is exceeded, Kleve teaches that “the Temporary User and Owner may be notified.” *Id.* ¶40. Kleve discloses that “an in-vehicle display message may be sent [from the server] to notify the Temporary User if a restriction limit has been exceeded.” *Id.* ¶¶40, 53. Kleve states that “[t]he display message to alert the Temporary User of a restriction violation may be sent to the vehicle display information console.” *Id.* ¶53.

2. *Sekiyama (Ex. 1005)*

Sekiyama is a Japanese patent application publication titled “Electronic Key System.” Ex. 1005, code (54). Sekiyama provides an electronic key system that allows restrictions on functions that can be executed with a duplicate electronic key to be imposed when a duplicate electronic key is generated. *Id.* at code (57). Sekiyama discloses a server that generates an e-key. *Id.* ¶26 (“[A]n electronic key [is] outputted from the center server 20.”). This key performs “door lock locking/ unlocking” and “the permission for engine start.” *Id.* ¶18.

3. *Mottla (Ex. 1010)*

Mottla is a U.S. patent application publication titled “Mobile Device Application for Communicating with Vehicles.” Ex. 1010, code (54). Mottla explains that a mobile device can communicate directly with a vehicle-associated control module or through a reservation server using either a TCP/IP communications channel or near-field communications. *Id.*

at code (57). A member enters a request using the user interface provided by the mobile-device application. *Id.* After the identity of the member is validated, the vehicle-associated control module executes the request by sending a signal to a computer or sensor in the vehicle through the vehicle wiring or the vehicle CANbus. *Id.* The request can be a function, such as unlocking the vehicle doors, illuminating the interior or exterior lights, honking the horn, or activating a panic alarm. *Id.*

4. *Harris (Ex. 1009)*

Harris is a U.S. patent application publication titled “Cellular Phone Entry Techniques.” Ex. 1009, code (54). Harris explains that cell phones can be mated with a vehicle system and thereafter used to obtain access to the vehicle. *Id.* at code (57). A user who has a cell phone automatically can obtain access to the vehicle. *Id.* An embodiment describes a USB key that provides access to the vehicle, and in an emergency, either a complete or partial version of the key can be downloaded from a server. *Id.*

5. *Zaid (Ex. 1008)*

Zaid is a U.S. patent application publication titled “Vehicle Access Control Services and Platform.” Ex. 1008, code (54). Zaid discloses a car sharing system where renters use mobile devices to find vehicles, rent them for limited time periods, and use mobile devices to unlock and start the vehicle. *Id.* ¶¶ 67–69. During the rental, a mobile device receives an electronic key from a server and sends an encrypted vehicle reservation to the vehicle for access and use. *Id.* ¶ 70.

One embodiment of Zaid is shown in Figure 1, a block diagram, reproduced below. *Id.* ¶ 5.

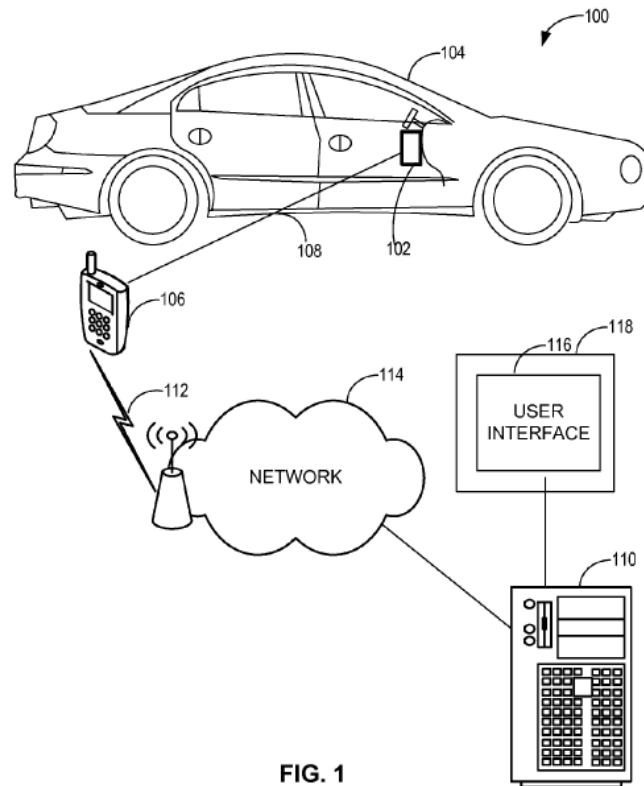


FIG. 1

Figure 1, above, is a block diagram illustrating an embodiment of system 100 for vehicle access control. *Id.* ¶ 5. Vehicle access component 102 provides access to vehicle 104 when a vehicle reservation is received from wireless communication device 106 via communication link 108. *Id.* ¶ 75. The wireless communication device 106 is connected to data network 114 via long-range wireless communication link 112, such as cellular communication link and/or satellite communication link. *Id.* ¶ 76. A vehicle reservation is received by wireless communication device 106 from central server 110 sitting on data network 114 via long-range wireless communication link 112 or a wired link. *Id.*

Zaid's vehicle access component can be integrated into a "vehicle access kit," containing electronic components such as a microprocessor, memory, and a communication interface (WiFi or Bluetooth) for communicating to a remote server via the user's mobile device. *Id.* at Fig. 2,

¶¶ 83, 86–87. Additionally, a long-range communication function can be added to the communication interface to “act as a backup” in case communication via the user’s mobile phone is unavailable. *Id.* ¶ 106.

Zaid discloses that server 110 interacts with a plurality of vehicle access control systems for providing access control to a plurality of vehicles, which may be geographically distributed across different locations. *Id.* ¶ 80. According to Zaid, a customer uses their wireless communication device 106 to search for and make a reservation for a vehicle, which is communicated to central server 110. *Id.* ¶¶ 76–77. The vehicle reservation is booked at the server 110 via a user interface 116 displayed on a computing device 118. *Id.* ¶ 80. In various embodiments in Zaid, computing device 118 can be any suitable computing device that has connection to central server 110 and can support user interface 116. *Id.*

Another embodiment of Zaid is shown in Figure 5, which is a flow chart reproduced below:

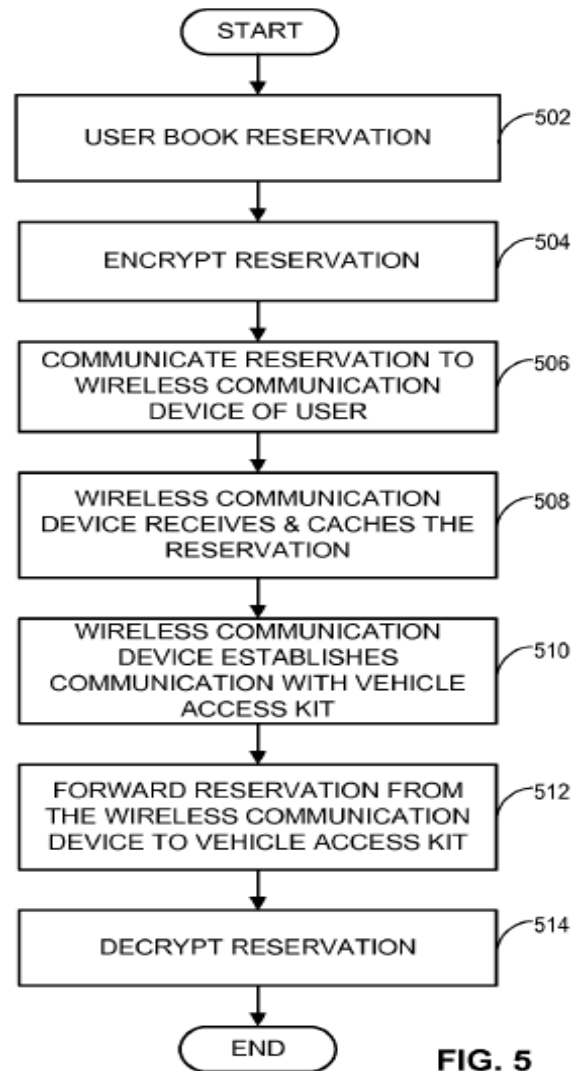


Figure 5 illustrates an example of receiving a vehicle reservation request from a wireless communication device. *Id.* ¶ 125. Zaid explains that at step 504, the vehicle reservation is encrypted. *Id.* According to Zaid, the central server encrypts the message containing the vehicle reservation, where the encryption includes multiple layers. *Id.* Zaid discloses that the vehicle reservation is encrypted in (1) a first layer of encryption using a public key of the wireless communication device the vehicle reservation will be sent to, and (2) a second layer of encryption using a public key of a vehicle access kit that provides access control to the vehicle. *Id.* Zaid then

discloses that the first layer of encryption can be decrypted using a private key of the wireless communication device, while the second layer of encryption can be decrypted using a private key of a vehicle access kit. *Id.*

Zaid discloses that at step 508, the wireless communication device receives and caches the reservation. *Id.* ¶ 126. In various embodiments, the wireless communication device decrypts the first layer of encryption encrypted using the public key of the wireless communication device using a locally stored private key of the wireless communication device. *Id.* In various embodiments, decryption is used to ensure and authenticate that the intended wireless communication device is receiving the vehicle reservation rather than one that intercepts the vehicle reservation. *Id.*

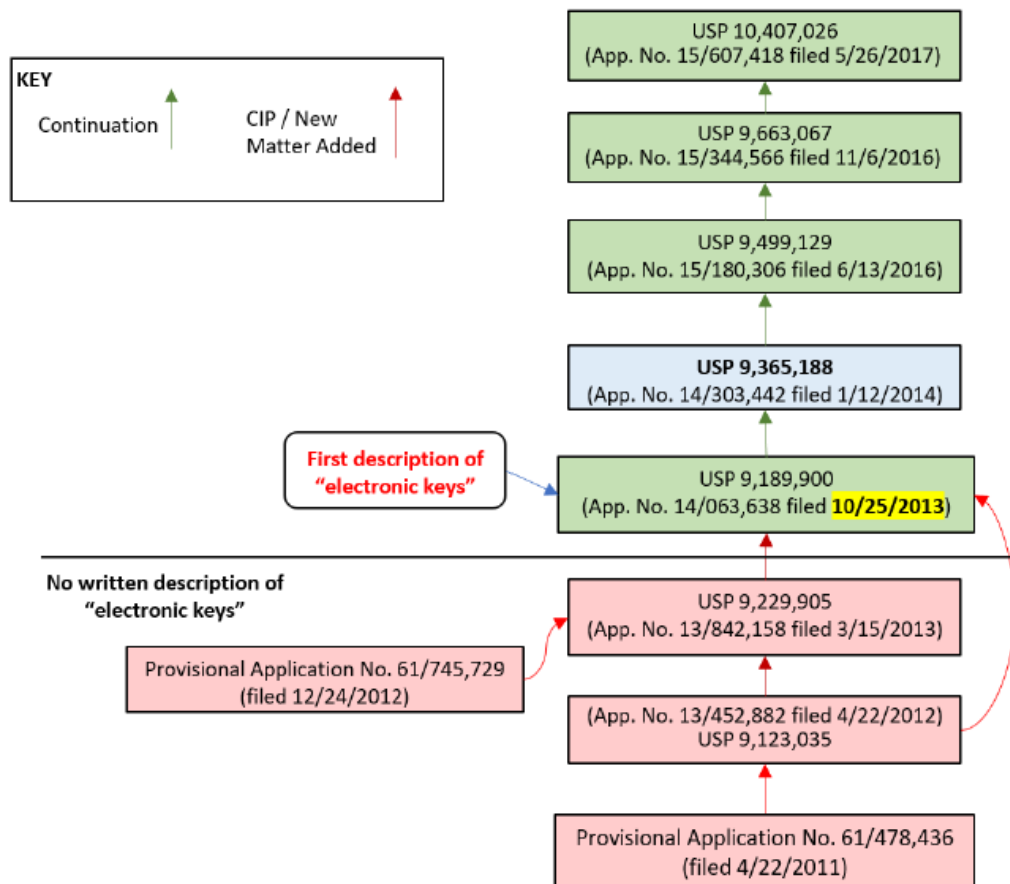
Zaid further discloses that vehicle access can be withdrawn when a vehicle reservation becomes invalid, such as when the time-out period elapses, when the reservation period ends, or when the vehicle is out of the communication range of the vehicle access control system. *Id.* ¶ 131.

6. *Patenaude (Ex. 1011)*

Patenaude is a U.S. patent application publication titled “Method of Determining and Predicting Entertainment Selections for Telematics Units.” Ex. 1011, code (54). Patenaude “relates to providing entertainment in a vehicle by determining an entertainment selection profile.” *Id.* ¶ 1. Patenaude’s method includes using telematics unit 120 to monitor entertainment selections in a mobile vehicle communication system (MVCS) 100. *Id.* ¶¶ 18, 42. To do this and as an example, an “algorithm searches the acquired data to determine if the FM radio is tuned to the same received FM frequency signal within a specified time frame each weekday for the specific user.” *Id.* ¶ 70.

B. Priority of the '188 Patent Claims and the Availability of Klevé as Prior Art

The '188 patent was filed on June 12, 2014 as a continuation-in-part of U.S. Patent Application No. 13/452,882 (“the '882 application”). The '882 application was filed on April 22, 2012, and later issued as U.S. Patent No. 9,123,035 B1. *See* Ex. 1001, code (63), 1:7–13. The '188 patent also claims priority to U.S. Provisional Patent Application No. 61/745,729 (“the '729 Provisional”) filed on December 24, 2012, and U.S. Provisional Patent Application No. 61/478,436 (“the '436 Provisional”) filed on Apr. 22, 2011. *Id.* Additionally, the '188 patent claims priority to several other U.S. continuation applications and continuation-in-part applications. *Id.* For convenience, Petitioner’s priority flow chart is provided below.



Pet. 4. Petitioner’s priority flow chart on page 4 of the Petition shows the priority applications listed on the face of the ’188 patent and marks, with a red arrow, applications that Petitioner alleges added new matter. *Id.*

Petitioner argues that the challenged claims are entitled only to an effective filing date of October 25, 2013, because that is the first time subject matter regarding “e-keys” was added to a related application, specifically CIP App. No. 14/063,638. Pet. 5 (citing Exs. 1018, 1003).

Patent Owner agrees that the ’188 patent is entitled to a priority date of at least Oct. 25, 2013. Prelim. Resp. 60–61. Patent Owner does not assert that any of petitioner’s references fail to qualify as prior art. Patent Owner, however, asserts that “Kleve is not ‘prior art consisting of patents or printed publications’ as required by § 311(b).” *Id.* at 61. Although Patent Owner concedes that Kleve is a patent publication, Patent Owner argues it is not prior art consisting of a patent, and Petitioner has not shown Kleve was publicly available before its publication date of May 8, 2014. *Id.* (citing Ex. 1004, 1). Furthermore, Patent Owner “recognizes and notes that this issue is currently on appeal before the Federal Circuit in *Lynk Labs, Inc. v. Samsung Electronics Co.*, No. 2023-2346 (Fed. Cir.).” Prelim. Resp. 62 n. 2; Prelim. Sur-reply 5.

Petitioner asserts that Patent Owner’s arguments are contrary to law and that we should allow Kleve according to current Board practice. Prelim. Reply 5 (citing *Patent Quality Assurance, LLC v. VLSI Tech. LLC*, IPR2021-01229 Paper 129, at 27–29 (PTAB June 13, 2023)).

At this juncture, the Federal Circuit has not issued a decision in *Lynk Labs*. Moreover, the Board has instituted trials and determined claims to be unpatentable based on patent application publications under § 102(e). *See, e.g., Patent Qual. Assurance, LLC v. VLSI Tech. LLC*, IPR2021-01229,

Paper 129 at 27–29 (PTAB June 13, 2023) (determining challenged claims unpatentable based, in part, on patent application publication available as prior art under § 102(e)); *Idle Free Sys., Inc. v. Bergstrom, Inc.*, IPR2012-00027, Paper 14 at 27 (PTAB Jan. 31, 2013) (instituting trial on § 102(e) challenge based on a patent application publication). Although not precedential, these decisions are persuasive. Indeed, in our view, § 311’s reference generally to § 102 indicates that applicable “printed publications” include published applications under § 102(e)(1). Furthermore, Petitioner relies on Kleve being a printed publication having an effective date determined by its filing date under § 102(e)(1) rather than its publication date.

Nevertheless, the parties are invited to further develop the record on this issue as needed after institution by, for example, notifying the panel when the Federal Circuit issues a decision in *Lynk Labs*.

C. Claims 1–9 and 11–20 Allegedly Rendered Obvious by Kleve Alone or in Combination with Sekiyama

Petitioner contends that Kleve alone or in combination with Sekiyama teaches every limitation of claims 1–9 and 11–20. Pet. 8–37. Patent Owner disagrees. Prelim. Resp. 24–47. Patent Owner specifically challenges whether Petitioner has shown that Kleve alone or with Sekiyama teach limitation (a) a “request from a user via a user account . . . to generate an electronic key . . . the request includes a condition of use of the vehicle as set by the user via the user account,” or (b) “generating, by the server, the e-key, the e-key being assigned/associated with the condition of use of the vehicle,” as required by the challenged independent claims. *Id.* at 24.

1. Analysis of Independent Claim 1

a) Limitation [1a]

Claim 1 recites the steps:

[1a] receiving, by a server, a request from a user via a user account that has a vehicle associated therewith to generate an electronic key (e-key) for an identified recipient to use the vehicle, the request includes identifying information for enabling sending of the e-key to the recipient via an electronic transmission, the request includes a condition of use of the vehicle as set by the user via the user account;

Ex. 1001, 49:30–37.

For this limitation, Petitioner contends that “Kleve discloses ‘a vehicle rental micro-business’ which comprises a *server*.” Pet. 9 (citing Ex. 1004 ¶ 35 (“[T]he exemplary processes may be executed by a . . . remote computing system (e.g., . . . a server).”); ¶ 36 (“The vehicle rental micro-business 200 may include a website.”); ¶ 69 (“server 634”)). According to Petitioner, a user in Kleve creates a user profile on the server that Petitioner contends is the required “user account,” and the user is required to include vehicle information in the user profile. *Id.* Petitioner asserts a person of ordinary skill of art at the critical time would have understood that the website and database were part of a server system, because websites were hosted on servers and interacted with database servers. *Id.* (citing Ex. 1003 ¶ 104).

Petitioner next contends that Kleve’s Temporary User is an “identified recipient” who identifies themselves by create a user profile for renting a car, and includes identification and payment in their user account. *Id.* at 10 (citing Ex. 1004 ¶¶ 36–37). Petitioner asserts that after the Temporary User selects a vehicle, “the Temporary User and vehicle Owner agree to

terms 316,” and then the agreement “can be signed and payment made through the website.” *Id.* (citing Ex. 1003 ¶¶ 105–106; Ex. 1004 ¶ 47).

Petitioner then contends that after coming to an agreement, “the Vehicle Owner (user) sends a request to the server via their user profile (user account) to generate a virtual key, an e-key.” *Id.* at 10. Petitioner specifically argues that “the vehicle Owner may enter in vehicle authorization credentials based on information received by the Temporary User to set up a virtual key.” *Id.* (citing Ex. 1004 ¶ 62). Petitioner notes Kleve’s statement that such a request is “entered into the server.” *Id.* (citing Ex. 1004 ¶ 63). According to Petitioner, the “entering of this information is a request sent by the user to generate an e-key.” *Id.* Petitioner asserts that Kleve’s virtual key is only generated after the Vehicle Owner has “already setup a user profile,” which is “a user account.” *Id.* at 11 (citing Ex. 1004 ¶ 62; Ex. 1003, Fig. 5). Petitioner concludes that the request is made via a user account because the Vehicle Owner “may enter in vehicle authorization credentials [i.e., make a request] . . . to set up a virtual key[.]” *Id.* (citing Ex. 1003 ¶¶ 107–108).

Petitioner further provides alternative argument why Kleve’s server would have generated the virtual e-key in response to a request made via a user account. *Id.* at 11–13 (citing Ex. 1004 ¶¶ 109–114). Petitioner also provides explanation of how and why the e-key would have been sent via an electronic transmission (*id.* at 14) to an identified recipient to use the vehicle (*id.* at 13–14).

Petitioner lastly contends that a Vehicle Owner’s request in Kleve may set conditions of use of the vehicle via the owner’s user profile because a rental agreement is negotiated through the user profiles (i.e., user accounts)

on the website and the agreement includes the rental period. Pet. 15 (citing Ex. 1003 ¶¶ 118–123; Ex. 1004 ¶ 38 (“The Owner and Temporary User may agree to terms and conditions for the rental period using the website.”), ¶ 47). According to Petitioner, Kleve discloses that the agreed conditions are sent with the request to generate a virtual key, which “enable[s] the keyless drive system for the appropriate Temporary User during a given rental period.” *Id.* (emphasis omitted) (citing Ex. 1003 ¶ 120; Ex. 1004 ¶¶ 39, 68 (“Once the rental period has expired the virtual key may be reset and cleared from the VCS.”)).

Patent Owner disagrees with Petitioner’s reading of Kleve and contends there is no teaching of a server that receives “a request from a user via a user account that has a vehicle associated therewith to generate an electronic key.” Prelim. Resp. 25. According to Patent Owner, Petitioner relies on its expert’s testimony in an attempt to show the limitation would have been obvious. *Id.* at 26 (citing Pet. 8, 11–12; Ex. 1003 ¶ 109). Patent Owner argues that even if the required

“request from a user via a user account . . .” would have been an obvious modification in order to “to know which vehicle and which Temporary User the virtual key is intended for,” as the Petition contends, neither the Petition nor Dr. Almeroth offer any similar suggestion or rationale that could render obvious the requirement that this same request “include[] a condition of use of the vehicle as set by the user via the user account.”

Id. (citing Ex. 1001, claims 1, 16, 19). Instead, according to Patent Owner, Kleve teaches that any alleged “restrictions,” which are what Petitioners uses at the required “condition of use,” are “requested only *after* the alleged e-key is generated and distributed.” *Id.* at 26.

Patent Owner relies on Kleve's Figures 2 and 5 to support its position that the vehicle owner does not even "have access to control usage of the vehicle being rented by the Temporary User" until step 214 (in Figure 2) and step 506 (in Figure 5), after a virtual key is distributed. Prelim. Resp. 28–29 (citing Ex. 1004, Figs. 2, 5, ¶¶ 40, ¶ 62). Patent Owner asserts that "Kleve repeatedly shows that it is only 'when the scheduled rental period of time begins [that] the vehicle Owner may send the credentials to the vehicle with the use of a server 506.'" *Id.* at 30 (emphasis omitted) (citing Ex. 1004 ¶ 66, Fig. 5; Ex. 2001 ¶¶ 51–52). According to Patent Owner, Kleve teaches away from any suggestion that an e-key includes a "condition of use" because it offers a solution where a vehicle owner does not include any "condition for use" in the request—such as the alleged rental time period—when the vehicle owner sends credentials to the renter "at rental time." *Id.* at 30 (citing Ex. 1004 ¶ 66, Fig. 5). So, Patent Owner argues that Kleve's virtual key is distributed before any restrictions can be set by the user and, therefore, cannot teach or suggest the recited limitation. *Id.* at 28–29 (citing Ex. 1001, claims 1, 16, 19; Ex. 1004; Ex. 2001 ¶¶ 45–50).

At this stage of the proceeding, we first are persuaded Petitioner demonstrates that Kleve's server receives a "request from a user via a user account that has a vehicle associated therewith to generate an electronic key" because we are persuaded that the Vehicle Owner (user) in Kleve sends a request to the server via their user profile (user account) to generate a virtual key, an e-key. Kleve states that the virtual key is only generated after the Vehicle Owner has "already setup a user profile," which we are persuaded qualifies as a user account. *See* Ex. 1004 ¶ 62. Then Kleve states that the Vehicle Owner "may enter in vehicle authorization credentials

based on information received by the Temporary User to set up a virtual key.” *Id.* For purposes of institution, we understand this statement to mean that a user request is made from the user account that then generates the e-key.

Second, we are persuaded that Petitioner adequately shows Kleve teaches, or at least suggests, that the user’s “request includes a condition of use of the vehicle as set by the user via the user account” because we are persuaded that the distribution of Kleve’s virtual e-key includes a rental period restriction. Specifically, we are persuaded by the Petition’s reliance on Kleve’s express disclosure that “terms and conditions for the rental period” are agreed to before the virtual key is generated. *See* Pet. 15 (quoting Ex. 1004 ¶ 38). We preliminarily agree with Petitioner that Kleve describes an e-key that is only operable during a rental period because Kleve discloses “[t]he virtual key may also be sent to the vehicle configuring the VCS to enable the keyless drive system for the appropriate Temporary User during a given rental period.” Ex. 1004 ¶ 39; *see* Pet. 16.

We note Patent Owner’s citations to Kleve’s Figures 2 and 5 that indicate control restrictions are added after the distribution of a virtual key. At this stage of the proceeding, however, based on the disclosure of Kleve we are persuaded the rental period would be included as a restriction when the virtual key is created at step 206 of Figure 2 prior to the distribution of the virtual key at 210. *See* Ex. 1004 ¶¶ 38–39.

At this stage, we credit the testimony of Dr. Almeroth, who opines that Kleve discloses that certain restrictions are sent with the request to generate a virtual key. Ex. 1003 ¶¶ 118–123. Specifically, Dr. Almeroth testifies that Kleve discloses that the virtual key “enable[s] the keyless drive system for the appropriate Temporary User during a given rental period. ”

Id. According to Dr. Almeroth, this “indicates that rental agreement restrictions were sent with the request so that the virtual key could be associated with said restrictions.” *Id.* (citing Ex. 1004 ¶¶ 39, 68 (“Once the rental period has expired the virtual key may be reset and cleared from the VCS.”)). Dr. Almeroth further testifies that the virtual key in Kleve is always generated after the rental agreement. *Id.* (citing Ex. 1004 ¶¶ 39, 68 (“[O]nce the Temporary User selects the vehicle, pays the appropriate amount and signs a consent agreement, then the system may generate a virtual key to distribute to the Temporary User and VCS.”)).

Thus, after review of the arguments and evidence, we find that Petitioner has provided adequate explanation and supporting evidence that Kleve teaches or suggests the challenged claim limitation.

b) Limitation [1b]

Claim 1 recites the step:

[1b] generating, by the server, the e-key, the e-key being assigned with the condition of use of the vehicle

Ex. 1001, 49:38–39.

For this limitation, Petitioner contends Kleve discloses or renders this limitation obvious because Kleve teaches that a “Temporary User identification is first ‘entered into the server and [then] used as a virtual key, or in addition to the virtual key,’ which means the server receives the identification to generate and accompany the virtual key.” Pet. 12 (citing Ex. 1004 ¶ 63). Petitioner argues that Kleve’s server sends the virtual key “to the VCS, Temporary User’s nomadic device, and/or vehicle Owner[’]s nomadic device,” which means “the server generates the virtual key and sends it to those various destinations.” *Id.* According to Petitioner, this

would only be the case if the server generated the e-key and not the Vehicle Owner's device. *Id.*

Petitioner further contends that Kleve's e-key is assigned with the condition of use of a vehicle associated with the rental period for the same reasons discussed previously for limitation 1[a]. Pet. 16. Specifically, Petitioner argues that a Vehicle Owner's request in Kleve may set conditions of use of the vehicle via the owner's user profile because a rental agreement is negotiated through the user profiles (i.e., user accounts) on the website and the agreement includes the rental period. *Id.* at 15 (citing Ex. 1003 ¶¶ 118–123; Ex. 1004 ¶ 38 (“The Owner and Temporary User may agree to terms and conditions for the rental period using the website.”), ¶ 47)). According to Petitioner, Kleve discloses that the agreed conditions are sent with the request to generate a virtual key, which “enable[s] the keyless drive system for the appropriate Temporary User during a given rental period.” *Id.* (citing Ex. 1003 ¶ 120; Ex. 1004 ¶¶ 39, 68 (“Once the rental period has expired the virtual key may be reset and cleared from the VCS.”)).

In the alternative, Petitioner also contends that Sekiyama discloses a server that generates an e-key. Pet. 37 (citing Ex. 1005 ¶ 25 (“an electronic key [is] output from the center server 20”)). According to Petitioner, “[t]his key performs ‘door lock locking/unlocking’ and ‘engine start permission.’” *Id.* (citing Ex. 1005 ¶ 18). Petitioner argues that it would have been obvious to modify Kleve such that the server generates the e-key, to the extent it does not already do so. *Id.* (citing Ex. 1003 ¶¶ 186–87); *see also id.* at 35–36 (addressing rationale to combine Kleve and Sekiyama).

Patent Owner disagrees with Petitioner, and referencing Kleve's Figure 2, contends that Kleve's “virtual key is sent to the vehicle—at step 212—*before* the user ‘may set restrictions’—at step 214.” Prelim.

Resp. 32 (citing Ex. 1004, Fig. 2, ¶ 40; Ex. 2001 ¶¶ 55–58). Patent Owner argues that the rental agreement is signed first (at step 206) and then later, at step 210, the virtual key is distributed. *Id.* at 33 (citing Ex. 1004, Fig. 2; E. 2001 ¶¶ 56–57). According to Patent Owner, the key is generated by Kleve before it is distributed to a vehicle renter. *Id.* (citing Ex. 1004, Fig. 2, ¶ 39). Patent Owner specifically argues that “at step 212,” that virtual key may be sent to a vehicle, website or nomadic device, and “only *subsequent to the virtual key’s generation and distribution* can the vehicle owner set ‘user restrictions,’ alleged ‘conditions of use’—at step 214.” *Id.* (citing Ex. 1004, Fig. 2, ¶ 40). Patent Owner further asserts that the addition of Sekiyama does not cure Kleve’s failure to teach a server that generates an e-key with an assigned or associated condition of vehicle use set by the user via the user account. *Id.* at 34.

As explained previously, at this stage of the proceeding, we are persuaded the rental period would be included as a restriction when the virtual key is created at step 206 of Figure 2 prior to the distribution of the virtual key at 210. *See* Ex. 1004 ¶¶ 38–39. We credit the testimony of Dr. Almeroth, who opines that Kleve discloses that certain restrictions are sent with the request to generate a virtual key. Ex. 1003 ¶¶ 118–123. Additionally, we preliminarily agree with Petitioner and specifically note the Kleve states that “the system may generate a virtual key to distribute to the Temporary User and VCS” (Ex. 1004 ¶ 39), with the system being identified as a centralized server system that includes processing capability (*id.* ¶ 57). *See id.* at Fig. 4 at 410, Fig. 5.

Thus, after review of the arguments and evidence, we find that Petitioner has provided adequate explanation and supporting evidence that

Kleve alone or in combination with Sekiyama teaches the challenged claim limitation.

c) Limitations [1c] – [1g]

Claim 1 recites additional steps at limitations [1c] through [1g].

Ex. 1001, 49:40–57.

Petitioner provides arguments and evidence regarding each of these claim limitations. Pet. 16–21, 37. Patent Owner has not provided separate arguments regarding Kleve alone or in combination with Sekiyama in regards to these challenged claims. *See generally* Prelim. Resp.

Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

We have reviewed the Petition’s analysis of the other claimed subject matter not discussed in the previous sections and determine that the analysis is sufficient at this stage. Based on our review of the arguments and evidence submitted for limitations [1c] through [1g] and the reasons presented previously, we are persuaded for purposes of institution only that Petitioner has sufficiently shown sufficiently that Kleve alone or in combination with Sekiyama teaches or suggests these limitations as recited in independent claim 1.

d) Rationale to Combine

Petitioner contends a person of ordinary skill in the art at the critical time would have been motivated to combine Kleve’s system with Sekiyama’s teaching of a server that generates an e-key to unlock and start a vehicle. Pet. 35 (citing Ex. 1005 ¶¶ 18, 26). According to Petitioner, “[t]here were well-known benefits of centralizing e-key generation, including better security and reliability.” *Id.* (citing Ex. 1003 ¶ 183).

Petitioner argues that generating the key in Kleve requires that the Vehicle Owner enter “authorization credentials” from the Temporary User, and the server stores the Temporary User’s user profile containing those credentials (e.g. “photo of forms of ID,” etc.) to confirm the Temporary User’s identity. *Id.* (citing Ex. 1004 ¶¶ 62, 37). Therefore, according to Petitioner, a person of ordinary skill in the art would have wanted the server to generate the key since it can confirm (1) Vehicle Owner’s account sent the request, (2) the identity of the Temporary User, and (3) a rental agreement between them. *Id.* (citing Ex. 1003 ¶ 183). Petitioner explains that “[h]aving the server centrally confirm all necessary information before issuing a key increases security and reliability.” *Id.* Petitioner then argues that a person of ordinary skill in the art would have had a reasonable expectation of success because having “Kleve’s server generate a key would have been well-within the capabilities of a POSITA” and “Kleve, Sekiyama and the ’188 patent are all directed to the same field of electronic key systems.” *Id.* (citing Ex. 1003 ¶¶ 184–185; Ex. 1001, Abstract; Ex. 1004 ¶ 48; Ex. 1005 ¶ 26).

Patent Owner has not provided separate arguments regarding Petitioner’s argument on the rational to combine Kleve with Sekiyama in regards to these challenged claims. *See generally* Prelim. Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

After review of the arguments and evidence, we are persuaded by Petitioner’s position and find for purposes of institution that a person of ordinary skill in the art at the critical time would have reason to combine the teachings of Kleve with that of Sekiyama.

2. *Analysis of Independent Claims 16, 19 and Dependent Claims 2–9, 11–15, 17, 18, 20*

Petitioner provides arguments and evidence regarding independent claims 16 and 19, as well as dependent claims 2–9, 11–15, 17, 18, and 20 in view of Kleve alone or in combination with Sekiyama. Pet. 21–37. Patent Owner has not provided separate arguments regarding Kleve alone or in combination with Sekiyama in regards to these challenged claims. *See generally* Prelim. Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

We have reviewed the Petition’s analysis of the other claimed subject matter not discussed in the previous sections and determine that the analysis is sufficient at this stage. Based on our review of the arguments and evidence submitted for independent claims 16 and 19, as well as dependent claims 2–9, 11–15, 17, 18, and 20 and the reasons presented previously, we are persuaded for purposes of institution only that Petitioner has shown sufficiently that Kleve alone or in combination with Sekiyama teaches or suggests the limitations as recited in independent claims 16 and 19, as well as dependent claims 2–9, 11–15, 17, 18, and 20.

3. *Summary regarding Challenged Based on Kleve alone or in combination with Sekiyama*

Based on the current record, Petitioner has established a reasonable likelihood that it will prevail in demonstrating that claims 1–9 and 11–20 would have been obvious over Kleve alone or in combination with Sekiyama.

D. Claim 10 Allegedly Rendered Obvious by Kleve and Mottla and optionally with Sekiyama

Claim 10 recites

The method of claim 1, wherein the e-key enables graphical icons on a screen of the device to be active for enabling use of the vehicle, at least one of the graphical icons on the screen enabling unlocking of the vehicle, or turning on of the vehicle, or locking the vehicle.

Ex. 1001, 50:34–38.

Petitioner provides arguments and evidence regarding dependent claim 10 in view of Kleve in combination with Mottla and optionally with Sekiyama. Pet. 37–39. Patent Owner has not provided separate arguments regarding Kleve in combination with Mottla and optionally with Sekiyama in regards to this challenged claim. *See generally* Prelim. Resp.

Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

We have reviewed the Petition’s analysis and determine that the analysis is sufficient at this stage. Based on our review of the arguments and evidence submitted for dependent claim 10, we are persuaded for purposes of institution only that Petitioner has shown sufficiently that Kleve in combination with Mottla and optionally with Sekiyama teaches or suggests the limitations as recited in dependent claim 10.

E. Claim 17 Allegedly Rendered Obvious by Kleve and Patenaude

Claim 17 recites

The method of claim 16, further comprising, receiving, by the server, data from the vehicle being indicative of interface inputs or settings made during use with thee-key, the inputs or settings being examined to identify patterns; and learning the patterns, by a process executed by the server, to provide recommendations to

the recipient or to an account of the recipient, for settings that should or may be made to the vehicle when using the e-key.

Ex. 1001, 51:39–48.

Petitioner provides arguments and evidence regarding dependent claim 17 in view of Kleve in combination with Patenaude. Pet. 67. Patent Owner has not provided separate arguments regarding Kleve in combination with Patenaude in regards to this challenged claim. *See generally* Prelim. Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

We have reviewed the Petition’s analysis and determine that the analysis is sufficient at this stage. Based on our review of the arguments and evidence submitted for dependent claim 17, we are persuaded for purposes of institution only that Petitioner has shown sufficiently that Kleve in combination with Patenaude teaches or suggests the limitations as recited in dependent claims 17.

F. Claims 1, 3, 5–7, 9, 11–16, and 18–20 Allegedly Rendered Obvious by Zaid and Harris

Petitioner contends that the combined teachings of Zaid and Harris render the subject matter of claims 1, 3, 5–7, 9, 11–16, and 18–20 obvious. Pet. 39–61. Patent Owner disagrees. Prelim. Resp. 35–48. Patent Owner specifically challenges whether Petitioner has shown that Zaid in combination with Harris teaches “receiving, by a server, a request from a user via a user account that has a vehicle associated therewith to generate an electronic key (e-key) for an identified recipient to use the vehicle, the request includes identifying information for enabling sending of the e-key to the recipient via an electronic transmission, the request includes a condition of use of the vehicle as set by the user via the user account” as recited in

limitation [a] of independent claims 1, 16, and 19. Accordingly, for purposes of institution, we will only provide analysis for limitation [a].

1. Analysis of Independent Claim 1

a) Limitations [1a]

Claim 1 recites the steps:

[1a] receiving, by a server, a request from a user via a user account that has a vehicle associated therewith to generate an electronic key (e-key) for an identified recipient to use the vehicle, the request includes identifying information for enabling sending of the e-key to the recipient via an electronic transmission, the request includes a condition of use of the vehicle as set by the user via the user account;

Ex. 1001, 49:30–37.

For this limitation, Petitioner contends that “Zaid discloses or renders obvious a vehicle owner (*user*) that can use a *user account* (such as through Facebook) to facilitate a vehicle rental reservation that causes the server to generate an encrypted reservation (*e-key*) to allow an identified user (*identified recipient*) to use the owner’s vehicle.” Pet. 41 (citing Ex. 1003, ¶¶ 203–14). Petitioner asserts that Zaid’s vehicle reservations are booked at a central server “via a user interface displayed on a computing device” and the e-key is sent to a renter’s device through this server. *Id.* at 41–42 (citing Ex. 1008 ¶¶ 72, 125).

Petitioner next contends that the vehicle owner (*user*) has the user account with a vehicle associated with it because the owner can list a vehicle for rental on a vehicle reservation application. *Id.* at 42 (citing Ex. 1008 ¶ 177). According to Petitioner, a person of ordinary skill in the art at the critical time would have understood that “the vehicle owner accesses the reservation application via [a user’s] account so the application can associate a vehicle with the correct person” and “to facilitate rental payments or

confirm insurance.” *Id.* (citing Ex. 1008 ¶ 79; Ex. 1003 ¶ 206). Petitioner then proffers an alternative theory, asserting that an ordinarily skilled artisan would have “considered it obvious for an owner to access the rental application through a user account to associate their vehicle with the account, providing the known benefit of increasing security and improving the vehicle owner experience.” *Id.* at 42–43 (citing Ex. 1003 ¶ 207).

Petitioner asserts that because “the owner advertises when the vehicle is available for reservation, and the owner has ‘control over the type of user the owner is lending/sharing/renting vehicle to,’” the owner decides whether a reservation will proceed. *Id.* at 44 (citing Ex. 1008 ¶¶ 72, 77, 79; Ex. 1003 ¶ 210). Thus, according to Petitioner, a person of ordinary skill in the art would have understood “that the reservation request to the server comes from the owner through the owner’s account.” *Id.* Again, Petitioner proffers an alternative theory, asserting that an ordinarily skilled artisan would have found it obvious that the reservation request is sent by the owner through the owner’s account. *Id.* at 44 (citing Ex. 1003 ¶¶ 211–12). Petitioner argues that because both the renter and the owner accounts are involved in making the reservation, whether the reservation request is sent by the renter or the owner is a mere design choice, with the system able to handle a request regardless of the source. *Id.*

Patent Owner disputes Petitioner’s position and contends that Zaid’s reservation, which is made by a renter and not a vehicle owner, does not suggest or teach a request to a server to generate an e-key. Prelim. Resp. 35–45. According Patent Owner, Zaid discloses that a user may book a reservation for a vehicle at a central server, and because “the central server does not have direct communication with the vehicle, the reservation

information is passed to a wireless communication device *through an encrypted message.*” *Id.* at 36 (citing Ex. 1008 ¶¶ 70, 125; Ex. 2001 ¶ 63).

Patent Owner argues that Petitioner conflates Zaid’s “reservation,” which authorizes a user to thereafter unlock a vehicle, with an actual request to generate an electronic key. *Id.* at 37. Patent Owner further argues that the Zaid confirms that instructions for car entry, such as unlocking doors, are received through direct commands, not merely passing through reservation requests, as the Petition misstates. *Id.* at 37 (citing Ex. 1008 ¶ 100; Pet. 8, 44–45; Ex. 2001 ¶ 65). As such, according to Patent Owner, the server of Zaid merely passes along a rental reservation as a “verified communication” to a user, but is not generating an e-key. *Id.* (citing Ex. 1008 ¶¶ 125–127; Ex. 2001 ¶ 65). Patent Owner explains that after the relayed reservation is received by the vehicle, and the message is “decrypted to verify the authenticity of the wireless communication device,” and then the device may send commands to unlock the car. *Id.* (citing Ex. 1008 ¶¶ 70, 100).

Patent Owner next contends that Petitioner’s citations to a vehicle owner’s Facebook or other social media account as the claimed “user account” is flawed and does not meet the recited claim limitation. According to Patent Owner, Zaid teaches that a vehicle reservation—the alleged “request”—is *not* sent via a vehicle owner’s Facebook account, as the Petition contends, but instead is that of the renter. Prelim. Resp. 40 (citing Ex. 1008 ¶ 72; Ex. 2001 ¶¶ 70–74). Patent Owner explains that Zaid’s vehicle owner can *advertise their vehicle* on social networking sites, like Facebook, but it is the renter that “must first *log into the social networking website* before he/she can view the advertisement and *make [sic, a] reservation.*” *Id.* at 41 (citing Ex. 1008 ¶ 72). As Patent Owner argues, Zaid makes it clear that “the user” is the renter (i.e., the *person who makes*

the reservation) not the vehicle owner. *Id.* (citing Ex. 2001 ¶¶ 70–74). Patent Owner further argues choosing to send a request from a renter’s Facebook account versus an owner’s account is not a “mere design choice” “because *Zaid* presents no ‘choice’ at all—*Zaid* never mentions or suggests any *owner account* from which such a request can be made.” *Id.* at 43–44 (citing Pet. 44; Ex. 1008 ¶ 72; Ex. 2001 ¶¶ 75–76).

At this stage of the proceeding, we do not agree with Patent Owner that Petitioner reads *Zaid*’s reservation for a vehicle as providing a “request . . . to generate an electronic (e-key)” to said vehicle too broadly. *Zaid* discloses that (i) when a reservation is received, (ii) the vehicle reservation is encrypted with multiple layers by the central server, and (iii) the “second layer of encryption using a public key of a vehicle access kit that provides access control to the vehicle.” Ex. 1008 ¶ 125. We understand this disclosure to mean that *Zaid* encrypts the reservation to generate an electronic key that allows an identified recipient to use the vehicle. *See id.* Thus, for purposes of institution, we are persuaded that the multi-layered encryption of the reservation sufficiently meets the limitations of claim 1[a]. *See* Pet. 44–46.

We do agree with Patent Owner, however, that Petitioner appears to use inappropriate hindsight in its analysis of the requirement for the “request from a user” required by claim 1. *See* Pet. 44–45. *Zaid* discloses that (i) a vehicle reservation is booked by a vehicle renter through one or more social networking websites (Ex. 1008 ¶ 72), (ii) a vehicle renter (i.e., the user) can access an online reservation system using a browser or other communication interface and then make a reservation online (*id.* ¶ 74), (iii) the vehicle reservation system allows a vehicle user and owner to dynamically send out a vehicle request and/or update the server (*id.* ¶ 79), (iv) the vehicle

reservation is booked at server 110 via user interface 116 displayed on computing device 118 (*id.* ¶ 80), and then (v) vehicle access control system receives a server update that includes a new private key to the vehicle access control system (*id.* ¶ 81).

We understand this disclosure to mean that the vehicle renter uses their own account to make a reservation and to send a request that generates an electronic key. At this stage of the proceeding, we are not persuaded Zaid provides a teaching or suggestion that such a user account would encompass the vehicle owner, nor do we discern any suggestion that request would emanate from the vehicle owner. *See id.* ¶¶ 72, 74, 79–80. To the extent Petitioner points to a different request (and one sent by the vehicle owner) (*see* Pet. 44), we question whether Petitioner has sufficiently shown that Zaid teaches or suggests such a request, much less one that meets the other requirements of claim 1. Thus, for purposes of institution, we are not persuaded Petitioner has identified sufficiently a teaching or suggestion from Zaid that meets this required limitation of claim 1[a].

2. *Analysis of Claims 3, 5–7, 9, 11–16, 18–20*

Petitioner asserts that dependent claims 3, 5–7, 9, 11–16, 18–20 depend of the '188 patent are rendered obvious by the combined teachings of Zaid and Harris. Pet. 53–61.

For this challenge, Patent Owner relies on the same arguments presented for claim 1. Prelim. Resp. 35–48. For the reason discussed above, Patent Owner's arguments are better supported. Petitioner does not provide any additional arguments and supporting evidence sufficient to establish a reasonable likelihood that Petitioner would prevail in showing that Zaid in view of Harris renders obvious claims 3, 5–7, 9, 11–16, 18–20.

G. Alleged Obviousness of Claims 2, 4, 8, 10, 17 in View of Zaid, Harris, and Mottla or Patenaude

Petitioner contends the combined teachings of Zaid, Harris, and Mottla would have rendered claims 2, 4, 8, and 10 obvious, while the teachings of Zaid with Patenaude would have rendered obvious claim 17. Pet. 2, 61–66. For this challenge, Patent Owner relies on the same arguments presented for claim 1 in view of Zaid alone. *See* Prelim. Resp. 48. For the reason discussed above, Patent Owner’s arguments are better supported. Petitioner does not provide any additional arguments and supporting evidence sufficient to establish a reasonable likelihood that Petitioner would prevail in showing that claims 2, 4, 8, 10, and 17 would have been obvious in view of the combined teachings of Zaid, Harris, and Mottla or Patenaude.

IV. CONCLUSION

Based on the arguments and evidence presented by the parties, we determine that there is a reasonable likelihood Petitioner would prevail with respect to at least one claim challenged in the Petition. Hence, we institute an *inter partes* review of all challenged claims on all challenges included in the Petition. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018) (noting that the language of 35 U.S.C. § 314(b) “indicates a binary choice—either institute review or don’t”); *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) (interpreting the statute as requiring “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”)).

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–20 in the ’188 patent is instituted on all challenges included in the Petition;

FURTHER ORDERED that, according to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial that commences on the entry date of this Decision.

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Patent 9,365,188 B1

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