

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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TOYOTA MOTOR CORP.  
and  
KIA CORPORATION,

Petitioners,

v.

EMERGING AUTOMOTIVE LLC,  
Patent Owner.

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Case PGR2026-00008  
U.S. Patent No. 12,337,715

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**EMERGING AUTOMOTIVE LLC'S  
PATENT OWNER PRELIMINARY RESPONSE**

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**PATENT OWNER'S UPDATED EXHIBIT LIST**

Exhibit No.	Description
2001	Declaration of Dr. Sam Malek
2002	Civil Docket Report for <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:23-cv-0437-JRG (lead case)
2003	U.S. Patent 8,737,913 to Xiao
2004	Final Written Decision, IPR2024-00981
2005	Claim Construction Order for <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:23-cv-0437-JRG (lead case)
2006	Discovery Order, <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:25-cv-0782-JRG (lead case)
2007	Defendants' Claim Construction Brief, <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:23-cv-0437-JRG (lead case)
2008	Order Denying Motion to Stay, <i>DigitalDoors, Inc. v. International Business Machines Corporation</i> , Case No. 2:22-cv-457-JRG-RSP (E.D. Tex. July 24, 2023)
2009	Civil Docket Report for <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:23-cv-0434-JRG (member case)
2010	Civil Docket Report for <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:25-cv-0782-JRG (lead case)
2011	Civil Docket Report for <i>Emerging Automotive LLC v. Toyota Motor Corp. et al.</i> , No. 2:25-cv-0799-JRG (member case)
2012	Curriculum Vitae of Dr. Sam Malek

## **I. Introduction**

Patent Owner Emerging Automotive LLC (“Patent Owner”) submits its Preliminary Response to the Petition for Post-Grant Review No. PGR2026-00008 (“Petition” or “Pet.”) filed on October 21, 2025, by Kia Corp. and Toyota Motor Corp. (collectively, “Petitioners”) challenging claims 1-24 of U.S. Patent No. 12,337,715 (“the ’715 Patent”). EX1001.

As detailed in its separately-filed Request for Discretionary Denial, Patent Owner respectfully submits that the Director should exercise discretion and deny institution under 35 U.S.C. § 324 for each of the reasons set forth in the Request for Discretionary Denial. To the extent the Petition is referred to reach the merits of Petitioners’ asserted Grounds, the Petition should be denied institution because:

(1) Petitioners’ inconsistent claim construction positions—involving the “e-key” and “privileges” / “conditions of use” claim terms already construed by the district court and directly relevant to the Petition’s failures of proof here—warrants denial of institution. “[P]etitioner [wa]s required to explain why those different positions are warranted,” *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00340, Paper 18, at 3 (Director Nov. 5, 2025) (informative), but failed to even acknowledge, let alone justify the alternative positions presented in the Petition. Despite the district court’s construction of the terms at issue in each of the challenged claims here, the Petition failed to identify “how the challenged claim is to be

construed,” as expressly required by 37 C.F.R. § 42.204(b)(3). Moreover, the Petition did not even advise the Board of the district court’s narrower constructions—narrower constructions that Petitioners had sought and obtained in district court—and did not include any alternative invalidity arguments based on any narrower claim construction of the “e-key” claim terms found in all claims of the ’715 Patent, or the narrower claim construction of the “privileges” / “conditions of use” claim terms found in eight claims of the ’715 Patent. Therefore, the Petition risks the possibility of decisions inconsistent with those of the district court, including irrelevant decisions based on incorrect claim constructions.

(2) The Petition’s § 112(a) attacks are meritless. The specification’s figures, description and examples easily refute the Petition’s baseless § 112(a) challenges. Indeed, Petitioners actually praise the figures, illustrations and “detail[ed]” description of the specification, but only when arguing that the filing date of the ’638 application is the priority date for the ’715 Patent—a point which is not in dispute here. However, this same praise, and the Petition’s citations to that ’638 application’s numerous figures and examples, are nowhere to be found in the Petition’s § 112 analysis, where Petitioners ignore the challenged claims’ written support in *that same specification*. Feigning ignorance of the ’715 Patent’s written support does nothing to carry Petitioners’ burden. *See, e.g., Syngenta Crop Protection AG v. Inflexion Point Techs., LLC*, PGR2025-00045, Paper 9, at 24

(PTAB Dec. 1, 2025) (“Petitioner, however, cannot meet its burden of proof by merely proclaiming a lack of knowledge on its part.”).

(3) The Petition does not even remotely satisfy 37 C.F.R. §42.204(b)(4), which requires that the Petition “specify where each element of the claim is found in the prior art patents or printed publications relied upon.” For example, for independent claim 17, and by dependency, claims 18-22, instead of identifying prior art disclosures for limitation 17[a]—which includes a “receiving confirmation ...” element—the Petition merely refers back to its discussion of claim limitation 1[a]—a claim that does not even recite a “receiving confirmation ...” element—leaving the Board to solve the mystery of where in the references any relevant disclosures might be found.

**(b) 17[a] – receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device, the sharing request originates responsive to a message transferred by an owner device to the recipient device;**

*See* limitation 1[a]; EX1003, ¶186.

Pet. 68; *but see* Pet. 39 (“1[a]”):

**(b) 1[a] – “processing a request to share an electronic key (e-key) of a vehicle with a recipient device, the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device;”**

As another example, the Petition fails to specify where each element of claim 12[b] is found in the prior art patents or printed publications relied upon. *See* 37 C.F.R.

§42.204(b)(4). Instead, Petitioners offer only generalized allegations of teachings from a “combined system,” which even if such allegations were true (they are not), still fails to specify where *the recited element* is found in the prior art.

(c) 12[b] – the request to share is configured to be initiated by a message originating from the recipient device, and responsive to the request, processing the request to securely generate the e-key;

*See* limitations 1[a] and 1[c]. As discussed above for limitation 1[a], in the combined system, Sekiyama in view of Kleve renders obvious an e-key request that is initiated by communications between the owner and recipient device involving agreement to rental terms. EX1003, ¶178.

Pet. 66. Accordingly, institution should be denied for this reason alone.

(4) For the Petition’s obviousness challenge, Petitioners failed to demonstrate that a POSITA would have been motivated to combine or modify Sekiyama in view of Kleve. Sekiyama’s “simple procedure” for “lending a dedicated vehicle key to another person,” as “in valet parking” (EX1005, ¶¶ 4, 50), explicitly teaches away from the “difficult” and “complex procedures” Petitioners seek to add from Kleve’s “credential check and authorization solution for personal vehicle *rental*”<sup>1</sup> (EX1004, Title).

(5)(a) Even if Sekiyama and Kleve were somehow properly combined, there is no plausible combination that results in recited claim limitations: “the request to share being received responsive to a message being sent to the recipient device from

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<sup>1</sup> Emphasis herein added unless otherwise noted.

a sharing device” (independent claim 1[a][ii]) or “the sharing request originates responsive to a message transferred by an owner device to the recipient device” (independent claim 17[a][ii]), or “the request to share is configured to be initiated using a message communicated to the recipient device” (independent claim 23[b]). The references’ lack of disclosure on these limitations is precisely why they are singled out by the Petition as allegedly failing to comply with 35 U.S.C. § 112(a). The Petition’s § 112 and § 103 grounds both fail.

(5)(b) Moreover, the Petition’s challenge to independent claim 12 also fails as the relied-upon references cannot satisfy claim 12[b]’s recited “the request to share is ... initiated by a message originating from the recipient device.” The Petition does not even identify a disclosure from Kleve purporting to teach or suggest the recited “the request to share the e-key,” let alone the specific means by which such a request is “initiated.”

(5)(c) Finally, putting aside Petitioners’ other difficulties with claim 17, the Petition’s relied-upon disclosures nonetheless fail to teach or suggest the element of “receiving confirmation of the sharing request from the recipient device,” as recited by independent claim 17[b].

Accordingly, for at least these reasons, Patent Owner Emerging Automotive respectfully submits that the Board should deny institution.

## **II. Background**

**A. Innovations of U.S. Patent No. 12,337,715**

The '715 Patent issued on June 24, 2025. EX1001, Face Page. The '715 patent, titled “Methods and Systems for Sharing e-Keys to Access Vehicles,” “relates to systems and methods for generating and sharing electronic keys (e-Keys) with users and cloud-based processing systems.” *Id.*, 1:1-2, 2:7-9.

The claims of the '715 Patent allow a vehicle owner to easily and securely share an e-key for their vehicle with a friend or guest user. *Id.*, 5:11-14, 21-26, 45:62-67, 7:57-62. The specification discloses examples in which the owner’s “request to share the e-key is initiated by sending a message to the recipient device.” EX1001, Abstract. The specification details examples in which a vehicle owner, John, wishes to share an e-key of his vehicle with a friend, Bob, so that Bob can use his smartphone as an e-key for John’s vehicle. *Id.*, 45:51-54, 37-41. For example, using his own smartphone, John can request that a message is sent to Bob’s smartphone, and that message—received on Bob’s smartphone—can be used to complete the activation process to use his phone as an e-key for John’s vehicle. *Id.*, 45:51-67.

For example, the message Bob received on his smartphone can have a link that allows an application to be launched from Bob’s smartphone and used to complete the activation and access the vehicle, or the message can include a link, which, when selected, links the smartphone to a webpage, which then provides Bob with instructions for activating the access for the e-keys. *Id.*, 5:21-26, 45:62-67.

**B. Priority**

The '715 patent properly claims priority to U.S. Appl. No. 14/063,638, filed on October 25, 2013, which includes the same specification because it is linked only by continuations. EX1001, Face Page item 63; MPEP 201.07. As such, there is no, and can be no, dispute that the '715 patent is entitled to a priority date of at least October 25, 2013. *Id.*; Pet. 16-17; EX1002, 27.

**C. Person of ordinary skill in the art**

Petitioners' expert opines that "a person of ordinary skill in the art pertinent to the '715 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 fields of access control systems, vehicle electronics, and/or cryptography. Additional education could substitute for professional experience and vice versa." EX1003, ¶ 84.

For purposes of this Preliminary Response, Patent Owner and its expert apply this definition. *See* EX2001, ¶ 40.

**D. Related district court and *inter partes* proceedings**

**1. The '715 Patent's "e-key" and "privileges" terms were already construed by the district court.**

In July 2025, Patent Owner asserted infringement of the '715 Patent against Petitioners in the Eastern District of Texas ("*Emerging Automotive v. Toyota/Kia, II*"). EX2010; EX2011. Patent Owner also asserted two other Emerging Automotive

patents, U.S. Patent Nos. 11,104,245 and 12,337,716 against Petitioner Toyota, and asserted the 11,104,245 Patent against Petitioner Kia. *Id.*

Previously, in September 2023, Patent Owner filed two patent infringement lawsuits against Petitioner Toyota and Petitioner Kia, asserting infringement of U.S. Patent No. 10,407,026 (“the ’026 Patent”), U.S. Patent No. 11,738,659 (“the ’659 Patent”), U.S. Patent No. 9,365,188 (“the ’188 Patent”) (collectively “related e-key patents”) and U.S. Patent No. 9,171,268 (against Petitioner Toyota only)<sup>2</sup>. EX2002; EX2009. These 2023 proceedings were consolidated (“*Emerging Automotive v. Toyota/Kia, I*”) and, on the eve of trial, *Emerging Automotive v. Toyota/Kia, I* was stayed, following the district court’s summary judgment order on a non-instituted asserted patent. EX2002. In *Emerging Automotive v. Toyota/Kia, I*, fact discovery, expert discovery, claim construction proceedings and the submission of a pretrial order had been completed and the parties participated in a Pretrial Conference.<sup>3</sup> *Id.*

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<sup>2</sup> Emerging Automotive had originally asserted U.S. Patent No. 11,296,244 (“the ’244 Patent”) in its 2023 patent infringement action against Toyota, but subsequently amended the complaint to withdraw the ’244 Patent from the lawsuit. EX2002.

<sup>3</sup> For the *Emerging Automotive v. Toyota/Kia, II* district court proceedings, the parties have agreed to utilize the discovery completed in *Emerging Automotive v. Toyota/Kia, I*. EX2006, at ¶¶ 5, 12(g)-(h).

The district court issued a Markman Order on May 14, 2025 for each of the '026 Patent, the '659 Patent, and the '188 Patent—identified by Petitioners as “related patents directed to e-keys” (hereinafter “related e-key patents”). EX2005; Pet. 19. Specifically, the district court construed the “e-key” terms of those related e-key patents as “electronic data that enables one or more functions of the vehicle”:

Term	Disputed Term	The Court's Construction
1	“electronic key”/ “eKey”/ “e-key” (’026 patent, Claims 1, 2, 6, 13, 15; ’659 Patent, Claims 1, 3, 4, 12, 13, 20; ’188 Patent, Claims 1, 11, 16, 17; ’268 Patent, Claims 10, 18)	“electronic data that enables one or more functions of the vehicle”

EX2005, at 32. Additionally, the district court ordered that the plain and ordinary meaning of “privileges” / “conditions of use,” as recited in the related e-key patents, specifically excludes “unfettered access”:

*Id.* (internal citations omitted). Plaintiff then emphasized its prosecution remarks that Zaid did not disclose “a unique access code that includes privilege settings set for additionally limiting types of use of the vehicle.” *Id.* at 17. In other words, Plaintiff equated “unfettered access” with the absence, not presence, of “privileges.” Given that, the Court agrees with Defendants that “privileges for use of the vehicle” cannot simply be “unfettered access” to the vehicle, which is the “plain and ordinary meaning” of these phrases on this record.

*Id.*, at 13.

Regarding the IPR/EPR proceedings on related e-keys patents, the Board did not institute IPR2024-00785, which challenged claims of the '026 Patent. EX1002, at 375. The Board instituted proceedings in IPR2024-00981 and issued a Final Written Decision finding that all challenged claims of the '188 Patent were shown

to be unpatentable. EX2004. A Request for Director Review of that Final Written Decision is currently pending. *See Kia Corp. and Toyota Motor Corp. v. Emerging Automotive LLC*, IPR2024-00981, Paper 37 (PTAB Jan. 8, 2026). Regarding the '659 Patent, the Board instituted proceedings in IPR2024-01167, and that matter is pending; additionally, the Office issued a final rejection in Reexamination No. 90/019,456, for which an appeal is pending. Pet. 11-12.

**III. Petitioners' unexplained, inconsistent claim construction positions warrant denial of institution.**

Petitioners have taken inconsistent positions in district court and in the PGR Petition concerning the “e-key” and “privileges” / “conditions of use” terms recited in the challenged claims of the '715 Patent, directly bearing on the Board's ability to weigh the merits of the Petition. The Petition should be denied because of Petitioners' (1) failure to construe the claims, in light of the district court order, as required by 37 C.F.R. § 42.204(b)(3); (2) failure to explain Petitioners' inconsistencies in the two forums, as required by *Revvo Technologies, Inc. v. Cerebrum Sensor Technologies, Inc.*, IPR2025-00632, Paper 20 (Director Nov. 3, 2025) (precedential) (“*Revvo*”), *Tesla*, Paper 18 at 3-4, and *TikTok, Inc. v. ShopSee, Inc.*, IPR2025-01485, Paper 13 (Director, Jan. 16, 2026) (denying institution where petitioner failed to explain inconsistent claim construction positions); and (3) failure to so much as alert the Board that these terms had already been construed by the district court—leaving it to Patent Owner to provide the evidence that enables the

Board to render decisions consistent with its mandate. *See, e.g.*, 83 FR 51340, Docket No. PTO-P-2018-0036, Document No. 2018-22006 (Final Rule directed to “Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board”).

As described above, the district court previously construed the “e-key” and “privileges” / “conditions of use” terms of the related e-keys patents. EX2005, at 32, 12-13. The district court specifically construed the term “e-key” / “electronic key” / “eKey” as “electronic data that enables one or more functions of the vehicle.” *Id.*, at 32.

Term	Disputed Term	The Court’s Construction
1	“electronic key”/ “eKey”/ “e-key” ('026 patent, Claims 1, 2, 6, 13, 15; '659 Patent, Claims 1, 3, 4, 12, 13, 20; '188 Patent, Claims 1, 11, 16, 17; '268 Patent, Claims 10, 18)	“electronic data that enables one or more functions of the vehicle”

*Id.* Indeed, it was Petitioners, and not Patent Owner, that had asked the court for a narrowing construction of the “e-key” terms, and those terms were ultimately narrowed by the district court. EX2005, at 32, 12-13.

Further, as noted above, the district court previously construed the related e-key patents’ “privileges” / “conditions of use” terms, noting that as part of its plain and ordinary meaning construction, these terms exclude “unfettered access.” EX2005, at 12-13. Here, again, it was Petitioners who had advanced a narrower construction of these “privileges” and “conditions of use” terms to exclude

“unfettered access”—and Petitioners’ narrower construction was in fact adopted by the district court. EX2005, at 12-13. Specifically, Petitioners’ proposed construction in district court was based on Patent Owner’s comments regarding the Zaid reference—e.g., that Zaid could not disclose the recited privileges limitations in light of Zaid’s “unfettered access” to the vehicle. *Id.*

*Id.* (internal citations omitted). Plaintiff then emphasized its prosecution remarks that Zaid did not disclose “a unique access code that includes privilege settings set for additionally limiting types of use of the vehicle.” *Id.* at 17. In other words, Plaintiff equated “unfettered access” with the absence, not presence, of “privileges.” Given that, the Court agrees with Defendants that “privileges for use of the vehicle” cannot simply be “unfettered access” to the vehicle, which is the “plain and ordinary meaning” of these phrases on this record.

*Id.*, at 13; *see also* Defendants’ Claim Construction Brief, EX2007, at 6:

limits, geographic restrictions, amount of time, etc.” Ex. G (“’026 POPR”), 3–4. EA argued that cited prior art did not disclose the claimed “privileges” because it provided “unfettered” vehicle access. *Id.*, 10. Therefore, the claimed “privileges for use” and “conditions of use” do not define whether “unfettered” access to the vehicle is permitted. Instead, they define permitted uses that restrict *how* the vehicle can be used with the e-key, such as speed restrictions, geographic limits, or the like, and not merely *whether* the vehicle can be accessed.

Defendants’ construction makes clear that “privileges for use” are permitted uses of the vehicle when using the e-key, such as what type of access, speed limits, geographic restrictions, or the amount of time the e-keys will be valid.” There can be no dispute that “privileges” modify

Here, Petitioners are not simply advancing inconsistent positions; Petitioners disregard altogether the district court’s construction of either the “e-key” term or the “privileges” / “conditions of use” terms, asking the Board to apply plain and ordinary meaning to all of them. Pet. 20:

**VI. CLAIM CONSTRUCTION**

The claim terms should be given their plain and ordinary meaning under *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005). EX1003, ¶¶88-89.

Petitioners did not even provide the Board with the district court’s Claim Construction Order, even though Petitioners had asked the court for narrowing constructions of the “e-key” and “privileges” / “conditions of use” terms, which were ultimately narrowed by the district court. *Id.*; EX2005, at 32, 12-13.

Because each of the independent claims of the ’715 Patent recites the “e-key” term and various operations involving that “e-key” term, and no fewer than eight of the dependent claims challenged by the Petition recite the “privilege” and/or “conditions of use” terms, Petitioners should have advised the Board that these terms had already been construed. EX1001, independent claims 1, 12, 17, and 23, and dependent claims 2, 3, 11, 13, 16, 18, 22, and 24. They did not. Also, to allow the Board to properly review the merits of the Petition’s challenge, the Petition should have provided a justification for the inconsistent positions and proposed invalidity arguments premised on both constructions. Petitioners did neither.

The Board’s ability to assess the Petition’s merits is compromised by the Petition’s lack of disclosure. Indeed, although the Petition relies on four different references for alleged obviousness of five or fewer claim limitations (e.g., claim 1: Pet. 38 (“the Sekiyama + Kleve + Hatton + Xiao combination (hereafter ‘the

combined system’) discloses a method for sharing e-keys (e-keys’’)), the Petition still fails to show any disclosure of the specific “e-key” limitations extensively recited by all claims.

For example, the ’715 Patent’s independent claim 1 recites the “e-key” term no fewer than eight times throughout. EX1001, claim 1. As detailed in Section IV.C.2. below, one of the many reasons the Petition fails as to independent claims 1, 17 and 23 is that the relied-upon reference, Kleve, does not teach or suggest the prerequisite “request to share the e-key,” let alone the sharing request’s initiating “message” that is “sent” / “transferred” / “communicated” “to the recipient device.” EX1001, claims 1[a][ii], 17[a][ii], 23[b]; *see* Sections IV.C.2.b.-c., *infra*.

In fact, the Petition failed to identify any disclosure in Kleve which allegedly teaches or suggests the “request to share the e-key being received responsive to a message ... .” *See* Sections IV.C.2.b.-c., *infra*; EX1001, claims 1[a][ii], 17[a][ii], 23[b]. For one, the Petition’s relied-upon disclosure refers to entry of information to “set up a virtual key” (Pet. 42, citing EX1004, ¶ 62), and even by Petitioners’ characterization, this disclosure is not any “request to *share an e-key*,” but is at most, “the request for an e-key.” *See* Sections IV.C.2.b.-c., *infra*. Either way, the argument fails, as “the request for an e-key” or Kleve’s “set up [of] a virtual key” is not a “request to *share*” an e-key that is yet to be “set up.”

Had the Petition actually informed the Board of, and applied, the district

court's claim construction of "e-key," this deficiency of the Petition would be even more glaring. Kleve's entry of credential information to "set up a virtual key" would therefore be, at most, entry of information to "*set up*" the "electronic data that enables one or more functions of the vehicle." *Id.*, EX2005, at 32. As is clearer with the proper construction, therefore, there is no "request to share electronic data that enables one or more functions of the vehicle," as required by all independent claims.

Accordingly, to weigh the merits of the Petition, the Board should have been informed of the district court's construction of the "e-key" term, and Petitioners should have explained the reason for their inconsistent positions across the two proceedings. Petitioners did neither.

Additionally, no fewer than eight dependent claims recite "privileges" and/or "conditions of use" terms, but again, Petitioners did not even advise the Board that these terms had already been construed. Likewise, Petitioners offered no alternative theory of invalidity based on the district court's construction of those terms, which is materially narrower than the construction presented in the Petition.<sup>4</sup> Again, the

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<sup>4</sup> This Preliminary Response focuses on select failures of the Petition's obviousness challenges with respect to the independent claims, which each recite the already-construed "e-key" term. *See* Sections IV.C.1.-5., *infra*; EX1001, claims 1, 12, 17, and 23. However, should the Board institute post-grant review, Patent Owner will

Board's ability to assess the Petition's merits is compromised by this lack of disclosure.

The Petition provided no reason for advancing different claim constructions before the district court, and these unexplained inconsistent claim construction positions alone warrant denial of institution. But here Petitioners took this error further, failing to inform the Board of their own narrowed district court constructions and then failed to apply either of the narrowed constructions in their challenges. The Petition's failure to comply with 37 C.F.R. § 42.204(b)(3), and failure to heed the Director's express requirements set forth in *Revvo* and *Tesla*, not only increases the risk of inconsistent decisions across the two forums, but also renders the Board's decision on the Petition's challenges as merely advisory.

For these reasons alone, Institution should be denied.

**IV. Institution should be denied because the petition fails to show it is more likely than not that at least one of the challenged claims is unpatentable.**

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detail the deficiencies of the Petition's obviousness challenges to the dependent claims as well, including those reciting the already-construed "privileges" / "conditions of use" terms. For all challenged claims, therefore, the Petition's failure to inform of, or apply the district court's constructions, risks inconsistent decisions across the two forums and further risks rendering the Board's decisions as merely advisory.

**A. Petitioners fail to demonstrate lack of written description support.**

Given the failures of the Petition's relied-upon references on each of the independent claims of the '715 Patent, it is unsurprising that the Petition attempts to attack the limitations from independent claim 1[a], independent claim 17[a]-[b] and independent claim 23[b] as allegedly failing to comply with 35 U.S.C. § 112(a). Pet. 75-79. But, as detailed below, the specification readily refutes those hollow attacks, providing written description to support and enable each of the challenged claim limitations. EX1001, claims 1, 17, 23.

And bearing out the weak challenges of the Petition, Petitioners' written description attacks of the '715 Patent's specification curiously omit the very examples, figures and "detail[ed]" descriptions thoroughly analyzed by Petitioners and Dr. Almeroth elsewhere in the Petition to describe *that same specification*. Pet. 16-17; EX1003, ¶ 69 (e.g., "their descriptions were introduced in the '638 Application and *discuss in detail* the requesting, generating, transmission and use of e-keys.").

**1. The Petition does not meet the legal standard.**

In order to meet the written description requirement, it is not necessary to spell out every detail of the invention in the specification. *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1365 (Fed. Cir. 2006) (citing *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005)). Elements that are conventional or well-

known to a POSITA do not need to be disclosed in detail to satisfy written description. *Id.* at 1368 (citing *Capon v. Eshhar*, 418 F.3d 1349, 1359 (Fed. Cir. 2005) (cited with approval in *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1352 (Fed. Cir. 2010)). “A patent need not teach, and preferably omits, what is well known in the art.” *Falko-Gunter Falkner*, 448 F.3d at 1365.

An adequate description does not require any particular form of disclosure or that the specification recite the claimed invention in *haec verba*. *Id.* at 1352. In fact, “drawings may suffice to satisfy the ‘written description’ requirement of § 112.” *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991); *see also Boston Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1366 (Fed. Cir. 2011) (holding that because assessment for written description is made from the perspective of person of ordinary skill in the art, in some instances, a patentee can rely on information that is “well-known in the art” to satisfy written description).

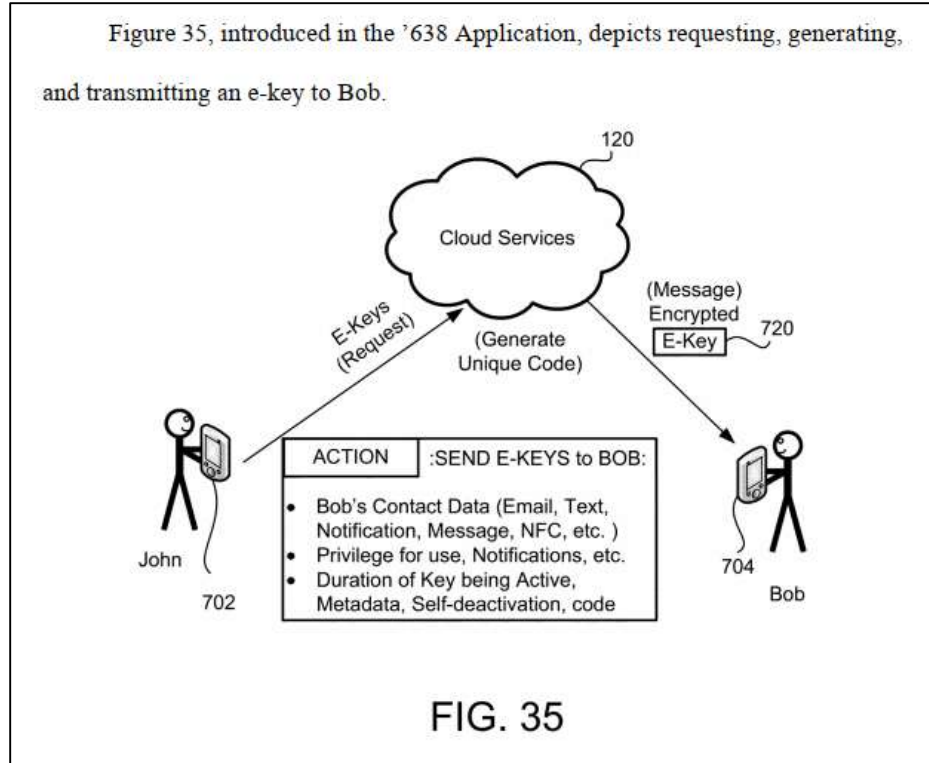
Petitioners’ written description argument rests on the assumption that “[t]he specification never describes a message to the recipient that causes the server to receive/process the share request or that initiates the request.” Pet. 78. This is demonstrably wrong.

A cursory review of even the first page of the Patent disproves Petitioners’ faulty premise. For example, the Abstract of the ’715 Patent describes “the request to share the e-key is *initiated* by sending a message to the recipient device using a

sharing device.” EX1001, Abstract.

And tellingly, the Petition offers up detailed descriptions of various figures and examples to, *on the one hand*, show the filing date of the ’638 application is the “earliest possible effective filing date” (Pet. 16-17), but, elsewhere in the Petition, when challenging written description and enablement, the Petition curiously ignores *that same specification’s figures, examples and “detail”* to argue that the specification fails to describe “(i) a message to the recipient that causes the server to receive or process a share request, or (ii) the system receiving acknowledgement that a sharing request was sent or receiving acknowledgement from the recipient device.” Pet. 77; *but see* EX1003, ¶ 69.

For example, Figure 35, highlighted by the Petition at pages 16-17, describes “in one example, the app on the user’s mobile device *can request that a message be sent to the recipient, so that* the recipient can receive the e-keys and be granted access to the vehicle.” EX1001, 45:51-54. Indeed, Figure 35, as featured in the Petition itself, shows an example of an e-key sharing “request” sent to “cloud services 120.” *See, e.g.*, Pet. 16-17:



See also, EX1003, ¶ 69:

69. For example, Figures 17 through 35 of the '638 Application (which are the same as Figures 17 through 35 of the '715 patent) and their descriptions were introduced in the '638 Application and discuss in detail the requesting, generating, transmission, and use of e-keys. See, e.g., *id.*, 105 (“FIGS. 17-30B ... describe the use of electronic keys (e-keys) in accordance with several embodiments.”); 122 (“Figure 29 illustrates an example where an owner of the vehicle Bob, is able to assign electronic keys (e-keys) 650 to any number of users.”); *id.* (“Each e-key, in one embodiment, will include a unique access code [which] can be generated by a server ...”); 126 (“FIG. 33 illustrates an example where Bob utilizes his device 704 to activate, open, lock, turn on, unlock, John’s vehicle ... facilitated by the activated e-keys 724, which are used via device 704 ...”); *id.* (“FIG. 31B illustrates ... when a request to send e-keys to a recipient is received [by c]loud services [which] can include identification of the recipient and the privileges defined by the requester for that issuance of e-keys ...”); 128 (“FIG. 35 illustrates an example where a request is sent by John via device 702 to cloud services 120 [which] can generate the unique access code which is then encrypted in a message and sent as encrypted e-keys 720 to the recipient, Bob, who receives it via device 704. ... The duration that the e-keys will remain active can also be set by the requester.”).

For ground 2, however, Petitioners ignore the same specification’s various figures which “describe the use of electronic keys (e-keys) in accordance with several embodiments,” ignore the specific examples offered throughout this specification, and further ignore what Dr. Almeroth characterizes as “discuss[ing] *in detail* the requesting, generating, transmission, and use of e-keys.” *Id.* Here, there is a stark contrast between how the Petition and its expert characterize the specification at pages 16-17 and at paragraph 69 of the expert’s declaration—

agreeing on the level of “detail” in the ’638 application and reciting various figures and examples—versus its § 112(a) arguments at pages 75-79 and paragraph 212 of the expert’s declaration, when criticizing the very same specification for an alleged lack of written description and examples. Pet. 75-79. But ignorance cannot supplant Petitioners’ burden. *See, e.g., Syngenta Crop Protection AG*, Paper 9 at 24 (“Petitioner[s], however, cannot meet its burden of proof by merely proclaiming a lack of knowledge on its part.”)

Petitioners’ § 112 challenges have failed to assess the specification’s actual *written description* which supports and enables the challenged claim limitations of claim 1[a], 17[a]-[b], and 23[b]. Therefore, for this reason, and for the reasons specified below, the Petition fails to meet its burden of proof.

**2. The specification provides specific examples and figures that satisfy the written description requirement of § 112.**

Despite the Abstract of the ’715 Patent describing “the request to share the e-key is *initiated by sending a message to the recipient device* using a sharing device[.]” (EX1001, Abstract), Petitioners challenge the written description of claim limitations 1[a] and 23[b], arguing “no support for ‘message-caused’ initiation of the sharing request.” Pet. 77:

Claim 1[a] requires “processing a request to share ... the request ... being received responsive to a message being sent to the recipient device from a sharing device.”

Claim 23[b] likewise requires that “the request to share is configured to be initiated using a message communicated to the recipient device.”

The specification discloses specific examples to further illustrate “the request to share the e-key is *initiated by sending a message to the recipient device.*” EX1001, Abstract. The specification illustrates examples in which an owner, John, wishes to share an e-key of his vehicle with Bob, the recipient, so that Bob can use his smartphone (recipient device) as an e-key for John’s vehicle. *Id.*, 45:51-54, 37-41.

As shown in Figure 35, which was highlighted by the Petition at 16-17, “Figure 35 illustrates an example where a request is sent by John via device 702 to cloud services 120.” EX1001, 45:37-38; Pet. 16-17; EX2001, ¶ 60. The request sent by John to cloud services can include an “action request.” EX1001, 45:41-42, Fig. 35. “That action can be to send e-keys to Bob.” *Id.*, 45:41-43. In another example, the specification discloses that “the user-owner of the vehicle can assign a valet with access to the vehicle by going on an application (App or website) on a computing device (e.g., mobile or non-mobile device), identifying the recipient, identifying a mode for communicating with the recipient (e.g., text, email, message, notification, etc.), selecting the advisor account privileges (e.g., what type of access, speed limits,

geographic restrictions, amount of time the keys will be valid (or else expire)), and requesting that e-keys be sent to the recipient.” *Id.*, 43:35-46.

The specification goes on to describe examples where the user-owner’s “action request” to cloud services 120 can request that a message is sent to the recipient device. *Id.*, 45:41-43, 51-54, 62-64; EX2001, ¶¶ 61-63. The specification further describes that recipient—e.g., valet or “Bob”—can use that message received on their recipient device to initiate the activation of an e-key sharing request. In one example, John can use an app on his smartphone (sharing device) to request that a message is sent to Bob’s smartphone (recipient device), so that, after Bob’s device completes the activation process, Bob can receive the e-keys and be granted access to John’s vehicle. *Id.*, 45:51-54, 62-64.

The specification goes on to describe examples of such a message. EX2001, ¶¶ 63-66. In one example, the message sent to Bob’s smartphone can have a link to an application that can be launched from Bob’s smartphone and used to complete the activation and access the vehicle. *Id.*, 45:62-64. In another example, the message to Bob’s smartphone can include a simple link, and when Bob selects that link, it will link his recipient device to a webpage, which then provides Bob with instructions for activating the access for the e-keys. *Id.*, 5:21-26, 45:62-67. Using his recipient device, Bob follows the webpage’s “instructions for activating the access for the e-keys.” *Id.*, 45:62-67. Accordingly, the request to share the e-key is initiated

by sending a message to the recipient device.

A POSITA would understand from at least these disclosures that the request to share the e-key may be initiated by or configured to be initiated by a user sending a message to the recipient device, and would understand that these disclosures adequately describe to a POSITA the challenged limitations in independent claims 1[a] and 23[b]. EX2001, ¶¶ 57-59. A POSITA would understand that the inventor had possession of the inventions claimed in claims 1 and 23 at the time of filing. EX2001, ¶ 67. Accordingly, the disclosures of the specification readily refute the Petition's baseless §112(a) attacks of claims 1-11 and claims 23-24. Pet. 76-78.

Equally unfounded is the Petition's 35 U.S.C. § 112(a) challenge to claim 17[a] and 17[b]. EX2001, ¶¶ 68-69, 73-74, 82-83.

<p>Claim 17[a] requires “receiving confirmation of a sharing request being sent” for an e-key.</p> <p>Claim 17[b] requires “receiving confirmation of the sharing request from the recipient device.”</p>
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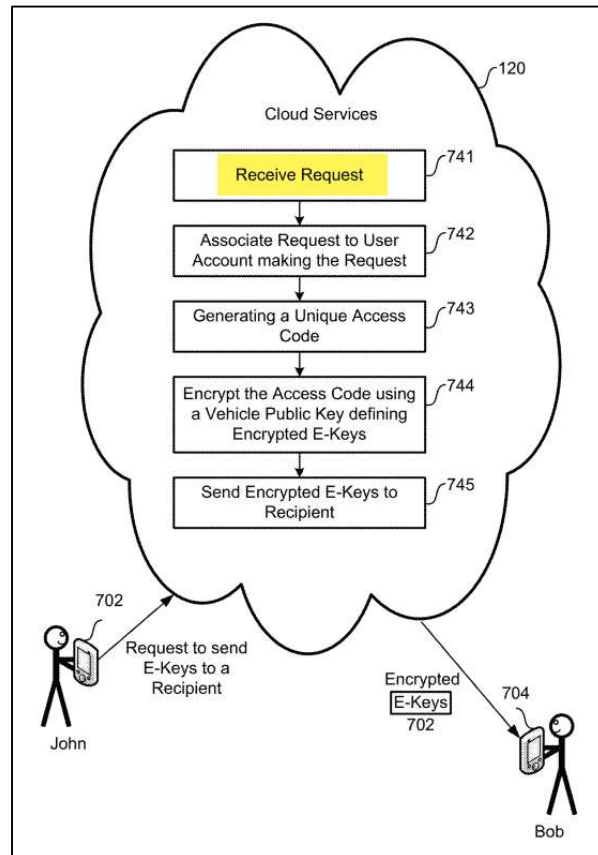
Pet. 78. Here, again, Petitioners and the expert managed to describe the “detail” discussed in the '638 application (e.g. Pet. 16-17; EX1003, ¶ 69), but when characterizing *that same specification* in ground 2 both somehow neglected to cite those same figures, examples and “detail” (Pet. 75-79). *See, e.g.*, EX1003, ¶ 69:

69. For example, Figures 17 through 35 of the '638 Application (which are the same as Figures 17 through 35 of the '715 patent) and their descriptions were introduced in the '638 Application and discuss in detail the requesting, generating, transmission, and use of e-keys. *See, e.g., id.*, 105 (“FIGS. 17-30B ... describe the use of electronic keys (e-keys) in accordance with several embodiments.”); 122 (“Figure 29 illustrates an example where an owner of the vehicle Bob, is able to assign electronic keys (e-keys) 650 to any number of users.”); *id.* (“Each e-key, in one embodiment, will include a unique access code [which] can be generated by a server ...”); 126 (“FIG. 33 illustrates an example where Bob utilizes his device 704 to activate, open, lock, turn on, unlock, John’s vehicle ... facilitated by the activated e-keys 724, which are used via device 704 ...”); *id.* (“FIG. 31B illustrates ... when a request to send e-keys to a recipient is received [by c]loud services [which] can include identification of the recipient and the privileges defined by the requester for that issuance of e-keys ...”); 128 (“FIG. 35 illustrates an example where a request is sent by John via device 702 to cloud services 120 [which] can generate the unique access code which is then encrypted in a message and sent as encrypted e-keys 720 to the recipient, Bob, who receives it via device 704. ... The duration that the e-keys will remain active can also be set by the requester.”).

For example, the expert’s declaration excerpts an example illustration from the specification: “**Fig. 31B illustrates ... when a request to send e-keys to a recipient is received by cloud services** which can include identification of the recipient and the privileges defined by the requester for that issuance of e-keys.” *Id.* Notwithstanding the Petition’s own description of Figure 31B, Petitioners contend “the written description contains no disclosure of (i) the system receiving confirmation that a sharing request was sent[.]” Pet. 78. One look at Figure 31B

shows Petitioners to be wrong.

The specification discloses an example where cloud services **120** receives confirmation of a user having sent a sharing request **741**, as shown in Figure 31B below. EX1001, Fig. 31B:



As the specification explains, John, using device **702** (e.g., sharing device), can send a request to a server, which may be operated by cloud services **120**, to send e-keys to Bob on Bob's smartphone **704** (e.g., recipient device). *Id.*, 44:34-40, 43:47-51. Cloud services confirms receipt of that request, for example, shown in Figure 31B above as **741**. *Id.*, Fig. 31B; EX2001, ¶¶ 70-73.

The specification also describes “receiving confirmation of the sharing

request from the recipient device,” as recited by claim limitation 17[b]. EX2001, ¶ 74. For example, as described above with respect to the “initiating” message limitations, a recipient, e.g., Bob, receives on his smartphone (recipient device) a message with a link. EX1001, 45:64-67. Bob can select that link that was sent to his smartphone, which, when selected, will link Bob’s device to a webpage. *Id.*; EX2001, ¶¶ 75-76. In response, a web server provides the recipient device with instructions for activating the access for the e-keys. EX1001, 45:64-67; EX2001, ¶¶ 76-78. Indeed, a POSITA would already be familiar with how a webpage is retrieved when a user selects a URL link, the parameters sent to the server, and how the server responds. *See id.*, ¶¶ 78-80. A POSITA would therefore understand from these disclosures that “the web server receives confirmation of the sharing request from the recipient device before the web server provides the recipient device with a webpage containing the instructions for activating the access for the e-keys.” EX2001, ¶ 77; *see id.*, ¶ 81.

A POSITA would understand from at least these disclosures that the inventor had possession of the invention claimed in claim 17 at the time of filing. *Id.*, ¶¶ 82-83, 73.

Accordingly, Petitioners fail to demonstrate that they will prevail in showing that it is more likely than not that at least one of the challenged claims is unpatentable with respect to their § 112(a) challenges. Pet. 75-79.

**B. Petitioners fail to demonstrate lack of enablement.**

At the outset, Petitioners' failure to adequately address the *Wands* factors is fatal to the Petition's enablement challenge. *Merck Sharp & Dohme Corp. v. Wyeth LLC*, PGR2017-00016, PGR2017-00017, Paper 9, at 8 (PTAB Oct. 20, 2017) (denying institution on other grounds, finding "Petitioner's failure to adequately address the *Wands* factors supports denial of the Petitions in both [PGR]016 and [PGR]017.>").

Presumably, the Petition's enablement challenge relies on its written description challenge, but (1) that challenge fails for at least the reasons cited above in Section IV.A.1.-2., and (2) the legal standard for enablement is distinct.

To demonstrate lack of enablement, Petitioners were required to show that "a person of ordinary skill in the art would not be able to practice the claimed invention without undue experimentation." *Enzo Life Sciences, Inc. v. Roche Molecular Sys., Inc.*, 928 F.3d 1340, 1345 (Fed. Cir. 2019). "[A] patent specification complies with the statute even if a 'reasonable' amount of routine experimentation is required in order to practice a claimed invention." *Enzo Biochem, Inc. v. Calgene, Inc.*, 188 F.3d 1362, 1371 (Fed. Cir. 1999). The Federal Circuit set forth factors to be considered in determining whether undue experimentation is required, including: (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the

invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988).

Nothing more than objective enablement is required, and therefore it is irrelevant whether this teaching is provided through broad terminology or illustrative examples. *In re Marzocchi*, 439 F.2d 220, 223 (CCPA 1971); *see In re Howarth*, 654 F.2d 103, 105 (CCPA 1981) (“An inventor need not, however, explain every detail since he is speaking to those skilled in the art.”).

The Petition never even bothers to analyze any of the *Wands* factors, but instead makes the hollow assertion that “the absence of any teaching on how to implement these causation/acknowledge flows would require a POSITA to devise and integrate unclaimed messaging and backend protocols without guidance (*id.*), amounting to undue experimentation under the *Wands* factors.” Pet. 77. This is the extent of the Petition’s enablement analysis.

And the Petition’s citation to Dr. Almeroth’s declaration (Pet. 77, citing EX1003, ¶ 213) is of no help, since that testimony merely repeats verbatim the Petition’s conclusory, unsupported assertion. EX1003, ¶ 213; *see Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 12, at 2, 5 (Feb. 10, 2023) (“Board was correct in giving little weight to Petitioner’s expert because the expert declaration

merely offered conclusory assertions...and repeated, *verbatim*, Petitioner’s conclusory arguments.”). Accordingly, the Petition’s conclusory statements (parroted by the expert) are necessarily deficient to sustain Petitioners’ burden of proof, as neither Petitioners nor Dr. Almeroth ever explains why any experimentation would be undue. *See Cephalon, Inc. v. Watson Pharms., Inc.*, 707 F.3d 1330, 1339 (Fed. Cir. 2013) (“Unsubstantiated statements indicating that experimentation would be ‘difficult’ and ‘complicated’ are not sufficient” to show that the “experimentation would be undue.”).

For example, a *Wands* analysis would have required, at a minimum, an explanation as to why ***the same specification*** which, as Petitioners’ expert testifies, “discuss[es] in detail the requesting, generating, transmission, and use of e-keys” is nonetheless insufficiently “detail[ed]” for a person skilled in the art to make and use the claimed inventions of claims 1, 17 and 23. EX1003, ¶ 69. Likewise, the requisite analysis of the *Wands* factors would have included at least an explanation as to why each of the examples cited by Dr. Almeroth (e.g., at EX1003, ¶ 69) somehow fail to teach a POSITA how to make and use the full scope of these claimed inventions. *See, e.g.*, EX1003, ¶ 69:

69. For example, Figures 17 through 35 of the '638 Application (which are the same as Figures 17 through 35 of the '715 patent) and their descriptions were introduced in the '638 Application and discuss in detail the requesting, generating, transmission, and use of e-keys. *See, e.g., id.*, 105 (“FIGS. 17-30B ... describe the use of electronic keys (e-keys) in accordance with several embodiments.”); 122 (“Figure 29 illustrates an example where an owner of the vehicle Bob, is able to assign electronic keys (e-keys) 650 to any number of users.”); *id.* (“Each e-key, in one embodiment, will include a unique access code [which] can be generated by a server ...”); 126 (“FIG. 33 illustrates an example where Bob utilizes his device 704 to activate, open, lock, turn on, unlock, John’s vehicle ... facilitated by the activated e-keys 724, which are used via device 704 ...”); *id.* (“FIG. 31B illustrates ... when a request to send e-keys to a recipient is received [by c]loud services [which] can include identification of the recipient and the privileges defined by the requester for that issuance of e-keys ...”); 128 (“FIG. 35 illustrates an example where a request is sent by John via device 702 to cloud services 120 [which] can generate the unique access code which is then encrypted in a message and sent as encrypted e-keys 720 to the recipient, Bob, who receives it via device 704. ... The duration that the e-keys will remain active can also be set by the requester.”).

At bottom, Petitioners offer no evidence, analysis or description of any alleged challenge a POSITA would face in practicing the claimed inventions. Pet. 77. Rather, the Petition’s enablement complaints appear to be premised on a failure to read or acknowledge the various examples, illustrations and explanations of the inventions claimed, for example, those refuting Petitioners’ written description challenges in Section IV.A.2. above. “Petitioner[s], however, cannot meet its burden of proof by merely proclaiming a lack of knowledge on its part.” *Syngenta Crop*

*Protection AG*, Paper 9 at 24 (denying institution, and finding “Petitioner’s lack of enablement argument fails”).

The Petition’s non-enablement theory cannot be sustained, given Petitioners’ failure to analyze the *Wands* factors, failure to explain what alleged experimentation would be required, failure to explain why that experimentation would allegedly be “undue,” failure to explain any alleged challenges a POSITA would face in practicing the inventions, and overall failure to provide any enablement analysis whatsoever. In any event, the specification of the ’715 Patent does in fact describe the invention in sufficient detail to enable a POSITA to make and use the full scope of the claimed inventions, as affirmed by Dr. Malek. EX2001, ¶¶ 84-85; *see id.*, ¶ 86 (claim 1 is enabled); *id.*, ¶ 87 (claim 23 is enabled); *id.*, ¶ 88 (claim 17 is enabled).

Accordingly, the Petition fails to demonstrate that it will prevail in showing that it is more likely than not that at least one of the challenged claims is unpatentable with respect to its enablement challenge.

**C. Ground 1 fails because the Petition fails to show the relied-upon art is properly combined, and even if it were, the Petition fails to identify prior art disclosures to support its obviousness challenges.**

The Petition’s obviousness ground is insufficient to meet even a *prima facie* showing under 35 U.S.C. § 103, and Petitioners’ failures to satisfy numerous distinct limitations of the independent claims are fatal to ground 1 of the Petition.

A strong petition does not rely on four different references when trying to

satisfy claims with only five or fewer limitations. A strong petition does not present excuses when a collection of references still fails to satisfy the claim limitations by offering unsupported § 112 attacks. Bearing this out, the Petition's challenges are, in fact, weak.

**1. The Petition fails to demonstrate why a POSITA would have been motivated to modify or combine Sekiyama in view of Kleve.**

Sekiyama discloses a deliberately simple method for “lending a dedicated vehicle key to another person” that expressly avoids any requirement for pre-registration. EX1005, ¶¶ 4, 50. Sekiyama explains that “with conventional electronic key systems, *there was the problem that a prerequisite for generating an electronic key was the pre-registration* of the electronic device (terminal) to be used as an electronic key, *which involved complex procedures, making it difficult to lend an electronic key temporarily.*” *Id.*, at ¶ 50. Sekiyama singles out the prerequisite of “pre-registration” as a “difficult” and overly “complex” problem, and places this problem in direct contrast “[w]ith the electronic key system of the present embodiment,” in which “*it is possible to issue a restricted duplicate electronic key through a simple procedure.*” *Id.*; EX2001, ¶¶ 50-51.

Sekiyama illustrates this simple approach using a valet-parking scenario, where a vehicle owner wishes to lend a key to a valet employee without requiring the pre-registration of devices or the creation of user accounts. EX1005, ¶¶ 4, 48,

50. To that end, Sekiyama teaches a simple system, in which an owner can request that a server issue a restricted duplicate key. *Id.*, at ¶ 35. And, in response, the server sends the duplicate restricted key to the owner’s phone (“portable telephone A”). *Id.*, ¶ 36. The owner stores that issued duplicate key on their own phone, and whenever the owner wishes to lend the key to others, such as a valet, the owner can simply send the electronic key directly from portable telephone A to the borrower’s portable telephone B using short-range or ad-hoc communication mechanisms such as Bluetooth, infrared, or email. *Id.*, ¶¶ 38, 31. As Sekiyama teaches, this system eliminates the need to lend a physical key, eliminates the need for the borrower to return the duplicate key, and allows the owner to simply and easily transmit the duplicate key to a borrower (e.g., valet) without making any other request from a server, and without any requirement to pre-register or create accounts on a server. *Id.*; *see id.*, ¶¶ 48, 50; EX2001, ¶¶ 50-51.

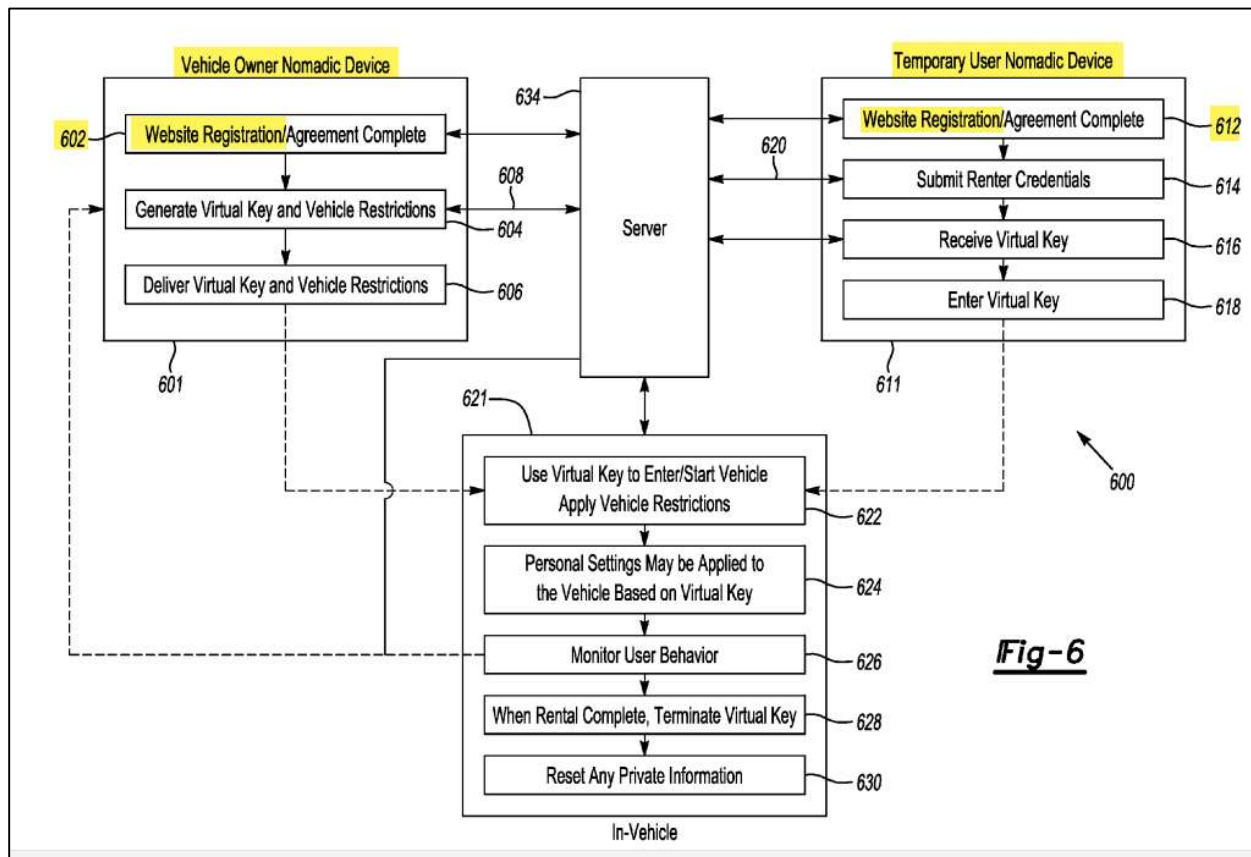
By Sekiyama’s own disclosure, this design choice is intentional. EX2001, ¶ 51. As described above, Sekiyama seeks to eliminate the complexity associated with conventional electronic key systems that require device pre-registration—i.e., the creation of accounts or profiles on a server—before a key can be shared. Indeed, Sekiyama explicitly teaches away from such solutions. *See id.*, quoting EX1005, ¶ 50 (“Additionally, with conventional electronic key systems, there was the problem that a prerequisite for generating an electronic key was the pre-registration of the

electronic device (terminal) to be used as an electronic key, which involved complex procedures, making it difficult to lend an electronic key temporarily.”).

Sekiyama is likewise intentional in addressing problems to be solved in “**lending** a dedicated vehicle to others,” such as a valet, without any of the complexities of any monetized system, such as a rental system. *See, e.g., id.*, ¶¶ 4 (“lending a dedicated vehicle key to another person,” such as “in valet parking”), 51 (“**allowing the owner A to lend the duplicate electronic key to others** with peace of mind”). For example, Sekiyama describes the restricted duplicate key solution as “eliminating the need to **lend** a master key,” instead “it becomes possible to **lend** a duplicate electronic key to another person while resolving the security problems involved,” which Sekiyama describes as “particularly effective in situations such as valet parking.” *Id.*, ¶ 48. Sekiyama also describes its system as protecting the privacy of the owner who **lends** a duplicate key, explaining: “when **lending a vehicle to other people**, the problem of the information in the on-board unit being seen by others and the problem of the content of the trunk being seen by others can thereby be resolved.” *Id.*, ¶ 49. Consistent with this overall system design, Sekiyama specifically identifies the person who is to receive a **lent** duplicate key as “the borrower.” *Id.*, ¶ 48.

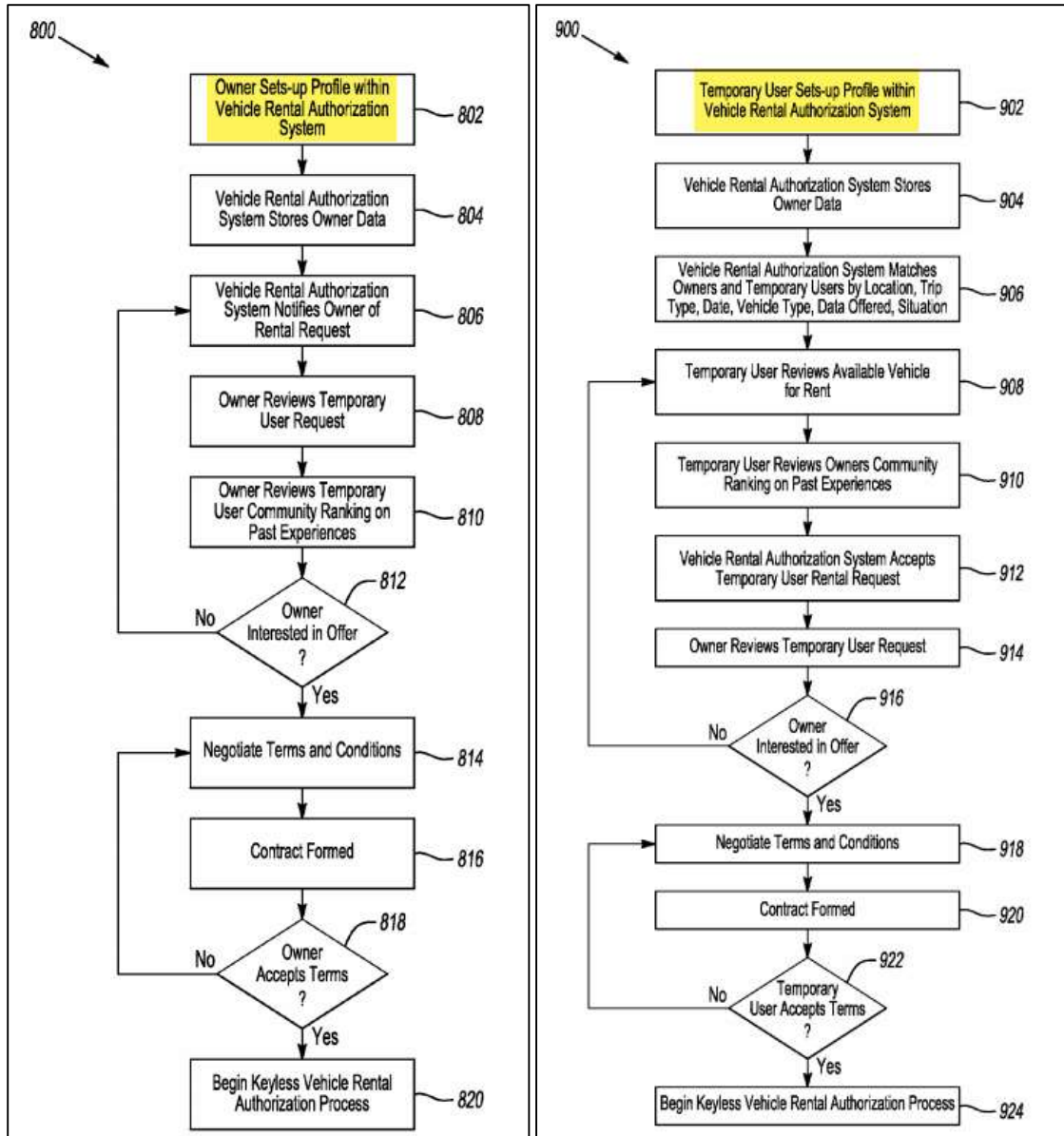
Kleve, by contrast, discloses precisely the type of conventional solution that Sekiyama criticizes. EX1004; EX2001, ¶ 52. Kleve is directed to a “credential check

and authorization solution for personal vehicle *rental*.” EX1004, Title. In Kleve, both the vehicle owner and the temporary user must first register on a website and create user profiles within Kleve’s “vehicle rental authorization system” before a virtual key can be issued. *See, e.g.*, EX1004, Figure 6, steps 602 and 612:



**Fig-6**

*See also id.*, Figure 8, step 802 and Figure 9, step 902:



Pre-registration may be a reasonable solution in the context of the vehicle-rental scenario discussed in Kleve, but it is, as Sekiyama explains, “complex” and “difficult” (EX1005, ¶ 50) in the context of the “lending” example highlighted by Sekiyama: “valet parking, where employees move vehicles to predetermined locations within a parking lot” (*id.*; *see id.*, ¶¶ 4, 48); *see also* EX2001, ¶¶ 52-53. And, while Sekiyama intentionally describes its simple system for “*lending*” a

duplicate key to a “*borrower*,” such as a valet, (*id.*, ¶¶ 4, 48-51), Kleve is directed to specific procedures for performing a “credential check” and “authorization” within a vehicle *rental* system.

Kleve and Sekiyama address problems arising in different operational settings. Accordingly, a POSITA would not have looked to Kleve to improve or modify Sekiyama. EX2001, ¶ 53. Because Sekiyama expressly teaches away from solutions requiring pre-registration prior to electronic key exchange, combining Sekiyama with Kleve would undermine Sekiyama’s core design objective and would not have been a natural or motivated modification for a POSITA. EX2001, ¶¶ 49, 53-55.

Dr. Almeroth provides the Board with six lengthy paragraphs listing modifications of Sekiyama in view of Kleve. EX1003, ¶¶ 104-109. In point of fact, the extremely convoluted and extensive modifications Dr. Almeroth proposes are precisely the kind of “difficult,” “complex procedures” Sekiyama’s intentionally “simple procedure” seeks to avoid. *E.g.*, EX1005, ¶ 50; EX2001, ¶¶ 49-51.

Moreover, Dr. Almeroth’s launching-off point—that “a POSITA would have understood that Sekiyama’s restricted e-key *could be* monetized in a rental or car share business”—is belied by the references and tainted by impermissible hindsight. EX1003, ¶ 105. First, there is no such suggestion in Sekiyama, and second, the reference itself discourages such an application, as its focus is on a “simple

procedure” for “lending” and “borrowing,” such as “in valet parking,” and which explicitly seeks to avoid the “difficult” and “complex procedures” attendant with “pre-registration.” *See* EX1005, ¶¶ 4, 48-51; EX2001, ¶¶ 49-51.

Under such circumstances, Petitioners’ purported reason to combine the references is only motivated by a hindsight-based approach, following the path of the inventors of the ’715 Patent. The issue is not whether a skilled artisan presented with Sekiyama and Kleve would have understood that they *could be* combined (i.e., “that Sekiyama’s restricted e-key *could be* monetized”). *See Personal Web Techs., LLC, v. Apple, Inc.*, 848 F.3d 987, 993 (Fed. Cir. 2017). “That is not enough: it does not imply a motivation to pick out those two references and combine them to arrive at the claimed invention.” *Id.* (citing *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.”)).

2. **The Petition fails to show that any reference, alone or in combination, teaches or suggests the prerequisite initiating “message” that is “sent” / “transferred” / “communicated” “to the recipient device”—as required by independent claim limitations 1[a][ii], 17[a][ii], and 23[b].**

There is a reason that, regardless of a lack of merit, the Petition still presented § 112(a) attacks on the “initiating” message recited by independent claims 1, 17 and 23: because *none of the four different references* relied-upon by Petitioners teaches

or discloses this element, when considered alone or even in Petitioners' purported combination. Indeed, the Petition goes so far as to feign ignorance of any "written description" of the "initiating" / "originating" message of the claimed inventions (Pet. 75-79), despite, at the outset, the Abstract itself describes method and systems to share e-keys, which include "receiving *a request to share an electronic key* (e-key) of a vehicle with a recipient device[,] *[t]he request to share the e-key is initiated by sending a message to the recipient device* using a sharing device." EX1001, Abstract.

Independent claims 1, 17 and 23 recite various operations centered on "a request to share an electronic key." *Id.*, claims 1, 17, 23. For example, independent claim 1 recites a method for sharing electronic keys, and limitation 1[a][i] recites "processing a request to share an electronic key (e-key) of a vehicle with a recipient device[.]" *Id.*, claim 1. The claim goes on to recite various requirements for the recited "request to share the e-key." *Id.* Claim limitation 1[a][ii] specifies: "the request to share the e-key being *received responsive to a message being sent to the recipient device* from a sharing device[.]" as shown below. *Id.*

1. A method for sharing electronic keys (e-keys), comprising:  
processing a request to share an electronic key (e-key) of a vehicle with a recipient device, **the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device;**  
determining that the request to share the e-key was associated with a registered owner e-key;  
processing instructions to enable the e-key to be securely generated for use by the recipient device; and  
saving information regarding the e-key with a server associated with a manufacturer of the vehicle;  
wherein the e-key is enabled for said use on the vehicle by the recipient device.

*Id.*, claim 1.

Independent claim 17 recites a “method for providing access to a vehicle,” and that method includes “receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device[.]” *Id.*, claim 17. Here, too, the claim specifies that “the sharing request *originates responsive to a message transferred by an owner device to the recipient device*[,] as illustrated below. *Id.*

17. A method for providing access to a vehicle, comprising:  
receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device, **the sharing request originates responsive to a message transferred by an owner device to the recipient device;**  
receiving confirmation of the sharing request from the recipient device;  
processing data related to the message by a server associated with a manufacturer of the vehicle, said processing data is performed to enable the e-key for use by the recipient device on the vehicle; and  
enabling the e-key for use by the recipient device on the vehicle.

*Id.*, claim 17.

Independent claim 23 recites “[a] system for enabling use and sharing of an electronic key (e-key) for a vehicle,” which also includes “a request to share the e-key for the vehicle with a recipient device[.]” *Id.*, claim 23. Claim 23[b] requires that “the request to share is configured to be *initiated using a message communicated to the recipient device*[.]” as highlighted below. *Id.*

23. A system for enabling use and sharing of an electronic key (e-key) for a vehicle, comprising:  
an on-board computer of the vehicle;  
a communications system of the vehicle interfaced with the on-board computer, the on-board computer of the vehicle having program instructions for communication with a server associated with a manufacturer of the vehicle, the server is configured to interface with an application provided by the manufacturer of the vehicle, the application provides a user interface for initiating a request to share the e-key for the vehicle with a recipient device, **the request to share is configured to be initiated using a message communicated to the recipient device**, and responsive to the request, processing the request to enable generation of the e-key for use on the vehicle by the recipient device.

*Id.*, claim 23.

The Petition relies on a convoluted mash-up of Sekiyama and Kleve for the first clause of limitation 1[a], relies on Kleve for the second clause, then returns to Sekiyama for the alleged “downstream mechanics” of the limitation. Pet. 38-43. This complicated interweaving of disparate references is not, in fact, supported by any motivation to combine the references, as detailed in Section IV.C.1., above. However, even if this strained combination were proper, the relied-upon references fail to satisfy the recited “the request to share the e-key being received responsive to

a message being sent to the recipient device from a sharing device” (claim 1[a][ii]) / “the sharing request originates responsive to a message transferred by an owner device to the recipient device” (claim 17[a][ii]) / “the request to share is configured to be initiated using a message communicated to the recipient device” (claim 23[b]). EX1001, claims 1, 17, 23. For each of the claim limitations recited in 17[a][ii] and 23[b], the Petition relies on the same faulty argument that it applies to claim limitation 1[a]:

**(b) 17[a] – receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device, the sharing request originates responsive to a message transferred by an owner device to the recipient device;**

*See limitation 1[a]; EX1003, ¶186.*

Pet. 68. The Petition likewise relies on “limitation 1[a]” for a similar limitation recited in claim 23[b]:

*“the request to share is configured to be initiated using a message communicated to the recipient device.” See limitation 1[a]; EX1003, ¶208.*

Pet. 75.

As demonstrated below, the requisite evidence is sorely lacking.

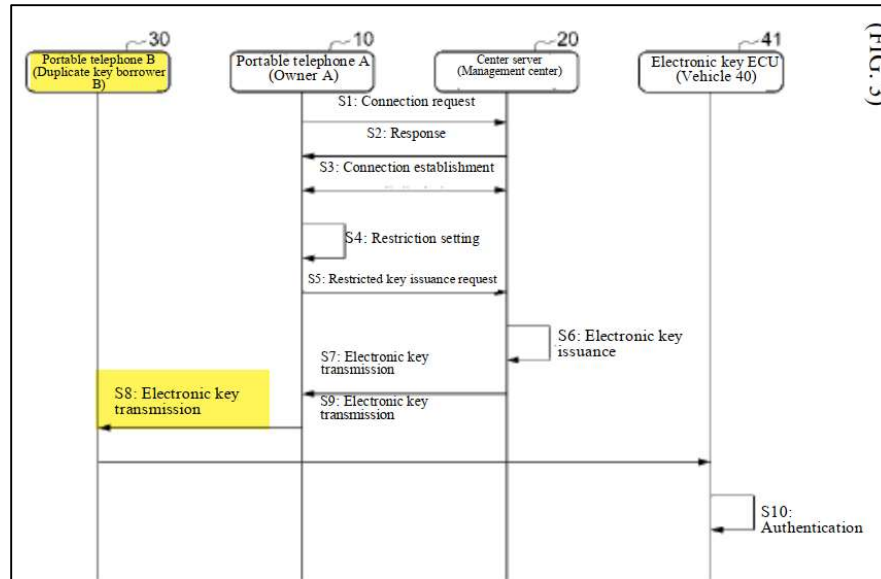
**a. The Petition failed to identify any disclosure in Sekiyama that could satisfy the initiating message recited by claims 1[a], 17[a] and 23[b].**

As detailed in Section IV.C.1. above, Sekiyama’s “simple procedure” does

not teach or suggest the prerequisite “the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device.” EX1005, ¶¶ 36-38, 50. Instead, in Sekiyama, the owner issues a request to a server “to issue a restricted duplicate key” (*id.*, ¶¶ 35, 4, 50), and in response, the server issues and “transmit[s] the generated key information to portable telephone A [owner’s telephone]” (*id.*, ¶¶ 36-37).

Indeed, in Sekiyama, there is no communication with any “recipient device” until such time as the owner wishes to “lend” the duplicate key to the borrower, e.g. in the “valet parking” scenario highlighted by the reference. In other words, it is only *after* (1) the owner issues a request to a server to “issue a restricted duplicate key” (*id.*, ¶ 35), *after* (2) the server “issues an electronic key” in response to the request from the owner (*id.*, ¶ 36), and *after* the server transmits that key information to the owner’s portable telephone A (*id.*, ¶ 37), that “portable telephone A 10 sends the key information for the restricted duplicate electronic key to [the borrower’s phone] portable telephone B 30” (*id.*, ¶ 38).

As confirmed in Sekiyama’s Figure 3, below, there is no communication with the borrower’s phone until step 8 (“S8”), when the owner wishes to transmit an electronic key to the borrower. *Id.*, Figure 3, ¶ 38.



*Id.*, Fig. 3.

Accordingly, Sekiyama’s “simple procedure” makes clear that there is no “request to share the e-key *being received responsive to a message being sent to the recipient device from a sharing device.*” *Id.*; see also *id.*, ¶¶ 35-38, Fig. 3; see also EX1001, claim 1[a][ii].

More fundamentally, there is no “processing a request to share an electronic key (e-key) with a recipient device,” as recited by claim 1[a][i], at least because the request in Sekiyama is simply a “restricted duplicate electronic key issuance request,” i.e., a request that is transmitted to the server to issue a restricted duplicate key. *Id.*, ¶ 35. There is no “request to share ... with a recipient device,” and in fact, Sekiyama teaches that the owner can send the same duplicated key to any number of borrowers. See, e.g., EX1005, ¶ 51 (“allowing the owner A to *lend the duplicate electronic key to others*”). Regardless, Sekiyama does not teach or disclose at least

claim 1[a][ii], as shown above.

**b. The Petition’s failure to identify any disclosure from Kleve that could satisfy the *initiating message* for “the request to share the [an] e-key,” as required by claims 1[a][ii], 17[a][ii], and 23[b].**

Amidst the Petition’s convoluted analysis on this limitation, it is difficult to parse what reference’s disclosure is relied upon for which element, but, the Petition appears to concede Sekiyama’s procedure does not teach or suggest the prerequisite “message” recited by independent claims 1, 17 and 23, and therefore tries to fill the evidentiary gap by alleging that Kleve’s “owner can deliver to the recipient a [form].” Pet. 43, citing 1004, ¶ 38.

But at paragraph 38, Kleve never discloses the recited message that initiates “the request to share the e-key”—indeed as shown in Section IV.C.2.c., *infra*, Kleve does not disclose any “request to share the e-key” at all, and Petitioners do not allege that it does—nor does Kleve teach or suggest any “sharing device” that “deliver[s]” any form to the recipient’s device, as the Petition alleges—and certainly not any alleged “deliver[y]” of this form by the recited “*message being sent to the recipient device from a sharing device.*” EX1004, ¶ 38; EX1001, claim 1[a][ii].

[0038] At step 206, the Owner may collect the monetary compensation in exchange for the use of his vehicle. The Owner and Temporary User may agree to terms and conditions for the rental period using the website or nomadic device. The Owner may create a standard rental agreement form, or may develop a custom form based on the type of use the Temporary User is requesting to use the vehicle for. For example, if the Temporary User wants to use the Owner's vehicle to move furniture, the Owner can tailor the rental agreement to include what can and cannot be transported. The Temporary User and Owner can sign the consent and agreement using the website or the nomadic device at step 208.

EX1004, ¶ 38.

**c. The Petition's failure to identify any disclosure in Kleve that could satisfy the recited "request to share the e-key" initiated by a message sent to the recipient device.**

More problematic for Petitioners, Kleve never teaches or suggests any "request to share an electronic key (e-key) ... with a recipient device"—and it is this "request to share the e-key" that is "*being received responsive to a message being sent to the recipient device from a sharing device.*" EX1001, claim 1[a].

In the place of such analysis, Petitioners merely state: "Kleve describes that, prior to *the request for an e-key*, the owner and recipient 'have already ... both agreed to the rental agreement.'" Pet. 42, citing EX1004, ¶ 62. To be clear, at paragraph 62, there is no disclosure of any "request to *share* an electronic key ... *with* a recipient device" (EX1004, ¶ 62) and Petitioners do not allege otherwise. Pet. 42; *see id.*, 39-43. At paragraph 62, Kleve discloses that "[a]t step 502, the vehicle

Owner may enter in vehicle authorization credentials based on information received by the Temporary User *to set up a virtual key.*” EX1004, ¶ 62.

Accordingly, as Petitioners affirm, Kleve does not teach or suggest any pre-existing e-key to “*to share,*” nor any “*request to share an e-key,*” but instead, only the relied-upon disclosure is the entry of information to “set up a virtual key.” Pet. 42; EX1004, ¶ 62.

As Kleve does not teach or suggest any “request to share an [] e-key,” let alone “a request to share an [] e-key ... with a recipient device,” and Petitioners do not allege otherwise, the Petition’s so-called “recipient-facing message” is both irrelevant and inherently insufficient. Because Kleve does not teach the recited “the request to share the e-key,” the Petition’s alleged “recipient-facing message” cannot satisfy the limitation recited by claim 1[a][ii]: “the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device.” EX1001, claim 1[a][ii]; *see also id.*, claims 17[a][ii] and 23[b].

The deficiencies of Kleve are even more glaring when the district court’s order is applied to Petitioners’ reliance on Kleve: an owner’s entry of credential information to “set up” the actual “electronic data that enables one or more functions of the vehicle.” *Id.*; EX2005, at 32. The Petition fails to explain how this disclosure of Kleve somehow teaches a *request to share* “electronic data that enables [] functions of the vehicle” that is apparently yet to be “set up.”

And, in any event, Kleve does not disclose the recited “sharing device” sending the alleged “recipient-facing message” to “*the* recipient device.” Pet. 43, citing EX1004, ¶¶ 38, 62; EX1001, claim 1[a]. Neither paragraph 38 nor 62 of Kleve describes any “sharing device”—as shown above, even Petitioners characterize the teachings therein as “a request for an e-key,” not any request to “share an e-key.” Pet. 42. Likewise absent from these disclosures is any teaching or suggestion of “a message being sent to *the* recipient device” where claim 1[a]’s “the recipient device” finds its antecedent basis in “a request to share an [] e-key ... *with a recipient device.*” EX1001, claim 1[a]. Again, Kleve does not teach or suggest this “request to share an [] e-key,” and Petitioners do not allege otherwise.

Accordingly, the Petition fails to demonstrate that either of the relied-upon references—neither Sekiyama nor Kleve—teaches or suggests “*the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device[.]*” EX1001, claim 1[a][ii]; *see also id.*, claims 17[a][ii] and 23[b]; Pet. 38-43.

As the Petition fails to offer any additional analysis or evidence to support its challenges to claim limitations 17[a][ii] or 23[b] (see Pet. 68, 72), the Petition has failed to show that it is more likely than not that any of independent claims 1, 17, or 23 (and therefore, by dependency, claims 2-11, 18-22, and 24), is unpatentable.

**3. The Petition’s obviousness challenge to independent claim 17, and by dependency, claims 18-22, cannot succeed because the Petition fails to comply with 37 C.F.R. § 42.204(b)(4).**

The Petition flouts 37 C.F.R. § 42.204(b)(4)’s requirement to specify exactly where each element of the challenged patent claim is found in the prior art and instead hopes the Board will backfill the Petition’s procedural holes and ignore glaring evidentiary gaps. 37 C.F.R. § 42.204(b)(4) (requiring petition to precisely identify prior art for each claim element). For example, for claim limitation 17[a], the Petition merely points to “limitation 1[a],”—though, at a minimum, claim 1[a] does not recite the “receiving confirmation” element that claim 17[a] recites. EX1001, claim 1; *but see id.*, claim 17. Accordingly, by its cursory reference to claim 1[a], the Petition does not “specify where each element of the claim is found in the prior art patents or printed publications relied upon” (37 C.F.R. § 42.204(b)(4)), but instead demands that the Board somehow figure it out from Petitioners’ obscure clues:

**(b) 17[a] – receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device, the sharing request originates responsive to a message transferred by an owner device to the recipient device;**  
*See limitation 1[a]; EX1003, ¶186.*

Pet. 68; *but see* Pet. 39 (“1[a]”):

**(b) 1[a] – “processing a request to share an electronic key (e-key) of a vehicle with a recipient device, the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device;”**

Were the Board to hunt for clues in the Petition’s citation to “EX1003, ¶ 186,” that, too, would be equally unhelpful:

**(b) 17[a] – receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device, the sharing request originates responsive to a message transferred by an owner device to the recipient device;**

186. See limitation 1[a].

EX1003, ¶ 186.

This is not remotely compliant with 37 C.F.R. § 42.204(b)(4), nor does it afford Patent Owner an opportunity to demonstrate the flaws in this wholly unsupported challenge to the claims’ patentability. The Petition does not bother to identify any disclosure from any reference that allegedly satisfies claim 17[a]’s step of “receiving confirmation of a sharing request being sent for an electronic key (e-key) for use of the vehicle by a recipient device[.]” EX1001, claim 17[a]; Pet. 38-43.

This failure to heed 37 C.F.R. § 42.204(b)(4) is fatal to the Petition’s challenges to claims 17-22.

4. **The Petition’s obviousness challenge to claim 12, and by dependency, claims 13-16, fails because the Petition does not comply with 37 C.F.R. § 42.204(b)(4), and the challenge fails regardless, because the references cannot satisfy claim 12[b]’s recited “the request to share is ... initiated by a message originating from the recipient device.”**

The Petition fails to show that independent claim 12, or by dependency, any of claims 13-16, is unpatentable, as the Petition does not even “specify where each element is to be found in the prior art patents or printed publications relied upon,” as required by 37 C.F.R. § 42.104(b)(4), and regardless, neither reference of the “combined system” of Sekiyama or Kleve is shown to teach or suggest the recited “*the request to share is configured to be initiated by a message originating from the recipient device*” of claim 12[b][i].

As with claim 17[a], here, too, the Petition fails to comply with 37 C.F.R. § 42.204(b)(4), leaving it to the Board to find whether in the morass of Petitioners’ “combined system” of Sekiyama and Kleve there is any teaching or suggestion of: “the request to share is ... initiated by a message originating from the recipient device.” Pet. 66; EX1001, claim 12[b]. Rather than offer analysis of limitation 12[b][i], Petitioners offer only generalized allegations from a “combined system,” which even if true, do not even track the recited element set forth in 12[b][i]:

(c) 12[b] – the request to share is configured to be initiated by a message originating from the recipient device, and responsive to the request, processing the request to securely generate the e-key;

*See* limitations 1[a] and 1[c]. As discussed above for limitation 1[a], in the combined system, Sekiyama in view of Kleve renders obvious an e-key request that is initiated by communications between the owner and recipient device involving agreement to rental terms. EX1003, ¶178.

Pet. 66. This denies Patent Owner the opportunity to demonstrate the flaws in this unsupported challenge to the claims’ patentability. The Petition’s failure to comply with 37 C.F.R. § 42.104(b)(4) is fatal to its obviousness challenge to independent claim 12, and by dependency, claims 13-16.

And even if the Board were to go hunting in the Petition’s failed analysis of claim 1[a], this, too, would fail to provide any insight as to how the combined system allegedly renders obvious “the request to share is configured to be *initiated by a message originating from the recipient device.*” EX1001, claim 12[b]; Pet. 39-43.

First, as was shown in Sections IV.C.1.-2. above—demonstrating why the Petition’s references do not teach or suggest independent claims 1[a], 17[a] or 23[b]—Sekiyama does not teach or suggest the recited “request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device. *See* Section IV.C.1.-2., *supra*. Instead, Sekiyama teaches a procedure in which there is only a transmission *from* the owner’s phone (portable telephone A) *to* the borrower’s phone (portable telephone B) (EX1005, ¶ 38), and that

“transmission” does not occur until *after* (1) the owner issues a request to a server to “issue a restricted duplicate key” (*id.*, ¶ 35), *after* (2) the server “issues an electronic key” in response to the request from the owner (*id.*, ¶ 36), and *after* the server transmits that key information to the owner’s portable telephone A (*id.*, ¶ 37). *See also id.*, Figure 3 (showing transmission of duplicated key from owner’s phone to borrower’s phone does not occur until step 8). Sekiyama’s simple procedure does not teach or suggest, and the Petition does not otherwise identify, any alleged disclosure from Sekiyama as showing, any “*message originating from the recipient device*,” let alone one that would somehow “initiate” a “request to share.” *Id.*; Pet. 66; EX1001, claim 12[b].

Nor does the Petition’s reliance on Kleve fare any better. As detailed in Section IV.C.2. above, the identified disclosures from Kleve do not teach or suggest claim 1[a]’s recited “*message being sent to the recipient device from a sharing device*.” Section IV.C.2., *supra*; EX1001, claim 1[a]; EX1004, ¶ 38. Further, Kleve does not even teach or suggest any “request to share an electronic key (e-key) ... with a recipient device”—and therefore cannot satisfy the recited “*the request to share the e-key*” that is “*being received responsive to a message being sent to the recipient device from a sharing device*” in claim 1[a]. *See* Section IV.C.2, *supra*.

As Petitioners concede, Kleve is not directed to e-key sharing, or any request thereof, but instead, a rental system that allows the owner to “set up a virtual key,”

*anew*, for a “Temporary User.” EX1004, ¶ 62 (“[a]t step 502, the vehicle Owner may enter in vehicle authorization credentials based on information received by the Temporary User *to set up a virtual key*”). Also, in the Petition’s analysis of claim limitation 1[a], Petitioners characterize Kleve as teaching a “request for an e-key” (Pet. 42), and again here for claim limitation 12[b], as “an e-key request” (Pet. 66). Neither is alleged to be a “request to share the e-key.” Simply put, the Petition never demonstrated any teaching or suggestion from Kleve of the recited “request to share the [an] e-key.” See Section IV.C.2., *supra*. Moreover, applying the district court’s construction, the Petition likewise failed to demonstrate any disclosure from Kleve that teaches claim 12’s recited “the request to share electronic data that enables one or more functions of the vehicle.” EX1001, claim 12; EX2005, 32.

Additionally, as shown in Section IV.C.2. above, the Petition’s so-called “recipient-facing message” does nothing to cure the Petition’s other deficiencies of proof. Because Kleve does not even teach the recited “*the request to share the e-key*,” nor any “*sharing device*” which sends this alleged “recipient-facing message” to “*the recipient device*,” such a “recipient-facing message” (assuming one exists) could not possibly satisfy the limitation recited by claim 1[a][ii]: “the request to share the e-key being received responsive to a message being sent to the recipient device from a sharing device.” See Section IV.C.2., *supra*.

Therefore, Kleve does not teach or suggest “the request to share” which finds

its antecedent basis in 12[a][ii]'s "a request to share the e-key," and likewise fails to teach the requisite specificity of "the request to share" recited by 12[b][i]: "the request to share is configured to be initiated by a message originating from the recipient device." *See id.*; EX1001, claim 12. Indeed, Petitioners failed to identify any "message" in Kleve that is (1) "originating from the recipient device" and which (2) "initiate[s]" "the request to share." Pet. 66, 38-43; EX1001, claim 12; *see* Section IV.C.2., *supra*.

**5. The Petition's obviousness challenge to independent claim 17, and by dependency, claims 18-22, fails because Petitioners failed to show any reference which teaches or suggests claim 17[b]'s recited element of "receiving confirmation of the sharing request from the recipient device."**

The Petition concedes there is no reference which teaches or suggests claim 17[b]'s recited step of "receiving confirmation of the sharing request from the recipient device." Pet.68-69; EX1001, claim 17[b]. Instead, Petitioners propose that "adding a recipient-side 'accept/received' confirmation back to the backend/server is a routine client-server pattern that fits Sekiyama and Kleve's architecture without changing it." Pet. 68. But of course, *many* fundamental and unexplained "changes" would need to be made to both references, since the Petition failed to identify any disclosure from Sekiyama or Kleve that teaches or suggests the prerequisite and specific "the sharing request" identified in limitation 17[a]. *See* Sections IV.C.2., 4., *supra*. "[T]he sharing request" and "the recipient device" of claim 17[b] both find

their antecedent basis in claim 17[a]. And, as shown in Section IV.C.2. above, neither Sekiyama nor Kleve teaches or suggests “*the* sharing request originates responsive to a message transferred by an owner device to *the* recipient device,” as recited by claim 17[a]. *See id.*; EX1001, claim 17[a].

In any event, the Petition does not somehow contend that “adding a recipient-side ‘accept/received’ confirmation” could possibly cure any of the deficiencies in the Petition’s failures of proof for 17[a]. *See* Section IV.C.2.-4., *supra*. It cannot.

## V. Conclusion

For the reasons presented above, institution should be denied.

Dated: January 23, 2026

/Brenda Entzminger/

Brenda Entzminger, Reg. No. 76,896

**CERTIFICATE OF WORD COUNT**

The undersigned certifies that the foregoing PATENT OWNER'S  
PRELIMINARY RESPONSE complies with the type-volume limitation in 37  
C.F.R. § 42.24(b)(1). According to the word-processing system's word count, the  
brief contains 11,049 words, excluding the parts of the brief exempted by 37  
C.F.R. § 42.24(a).

Dated: January 23, 2026

/Brenda Entzminger/  
Brenda Entzminger  
Reg. No. 76,896 (Lead counsel)  
Aaron R. Hand  
Reg. No. 80,694 (Back-up  
counsel)  
**BUNSOW DE MORY LLP**  
701 El Camino Real  
Redwood City, CA 94063  
Telephone: 650-318-6774  
Facsimile: 415-426-4744  
bentzminger@bdiplaw.com  
ahand@bdiplaw.com

*Counsel for Patent Owner*

**CERTIFICATE OF SERVICE**

Petitioners have consented to e-mail service in this proceeding. Pursuant to 37 C.F.R. §42.6, the undersigned certifies that, on the date indicated below, a copy of the foregoing document was served by email upon the following counsel at the below email addresses:

Finnegan, Henderson, Farabow, Garrett & Dunner LLP  
Joshua L. Goldberg – [joshua.goldberg@finnegan.com](mailto:joshua.goldberg@finnegan.com)  
James R. Barney - [james.barney@finnegan.com](mailto:james.barney@finnegan.com)  
Aidan Skoyles - [aidan.skoyles@finnegan.com](mailto:aidan.skoyles@finnegan.com)  
Nicholas Eitsert - [nicholas.eitsert@finnegan.com](mailto:nicholas.eitsert@finnegan.com)

Munck Wilson Mandala, LLP  
Robert McCutcheon – [rmccutcheon@munckwilson.com](mailto:rmccutcheon@munckwilson.com)  
Michael Wilson – [mwilson@munckwilson.com](mailto:mwilson@munckwilson.com)  
Jared Hoggan – [jhoggan@munckwilson.com](mailto:jhoggan@munckwilson.com)

QUINN EMANUEL URQUHART & SULLIVAN, LLP  
James M. Glass – [jimglass@quinnemanuel.com](mailto:jimglass@quinnemanuel.com)  
Quincy Lu - [quincylu@quinnemanuel.com](mailto:quincylu@quinnemanuel.com)  
Joseph Milowic - [josephmilowic@quinnemanuel.com](mailto:josephmilowic@quinnemanuel.com)

Dated: January 23, 2026

/Brenda Entzminger/  
Brenda Entzminger  
Reg. No. 76,896 (Lead counsel)  
Aaron R. Hand  
Reg. No. 80,694 (Back-up counsel)  
**BUNSOW DE MORY LLP**  
701 El Camino Real  
Redwood City, CA 94063  
Telephone: 650-318-6774  
Facsimile: 415-426-4744  
[bentzminger@bdiplaw.com](mailto:bentzminger@bdiplaw.com)  
[ahand@bdiplaw.com](mailto:ahand@bdiplaw.com)

*Counsel for Patent Owner*