

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KIOSOFT TECHNOLOGIES, LLC AND TECHTREX, INC.,
Petitioners,

v.

PAYRANGE INC.,
Patent Owner.

Case No. PGR2023-00050
Patent No. 11,501,296

**PATENT OWNER'S PRELIMINARY RESPONSE
PURSUANT TO 37 C.F.R. § 42.207**

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I. Introduction

The Board should deny institution of post grant review of U.S. Patent No. 11,501,296 (“the ’296 patent”) because Petitioners Kiosoft Technologies, LLC and TechTrex, Inc. fail to demonstrate a reasonable likelihood of prevailing. The petition presents three grounds of challenge, each of which fall short.

Ground 1 attempts to relitigate Petitioners’ failed patent eligibility challenges to claims Petitioner characterizes as “very similar” to those challenged in a previous PGR. In arguing that the claims are patent ineligible under 35 U.S.C. §101, Petitioners invoke the Board’s previous decision in PGR2021-00093—Petitioners’ challenge to claims of related U.S. Patent No. 10,891,614 (“the ’614 patent”)—where the Board found “very similar claims” to be patent ineligible. Pet., 38 (emphasis original) (citing PGR2021- 00093, Paper 38). Petitioners elected not to appeal that decision. Petitioners are thus correct that the Board has already resolved §101 challenges against the challenged subject matter, and Patent Owner has now disclaimed claims 1-6, 8-10, 14-17, and 19-28 of the ’296 patent, leaving only claims 7, 11-13, and 18. *See* EX2006 (statutory disclaimer under 37 C.F.R. §1.321(a) filed on December 20, 2023). Petitioners overlook, however, that this prior decision found that Petitioners failed to prove patent ineligibility for claims 7, 11-13, and 17 of the ’614 patent, which are virtually identical to claims 7, 11-13, and 18 of the ’296 patent. For at least this reason, the Board should

exercise its discretion under §325(d) to deny institution. Moreover, Petitioners are collaterally estopped from relitigating the patent ineligibility of these claims, and in any event the petition fails to prove that the Board should reach a different outcome here.

As with Ground 1, Petitioners' §103 arguments in Ground 2 have a multitude of flaws, including reliance on art explicitly considered during examination—facts which Petitioners conveniently omit from their tailored exhibits—making the ground ripe for denial under §325(d). Should the Board reach the merits of Ground 2 it fares no better than Ground 1. Ground 2 argues that the claims are obvious over a combination of Low, Arora, and Casey (incorporating Lin), but Petitioners fail to show that the proposed combination satisfies multiple elements of claim 1, which claims 7, 11-13, and 18¹ inherit via dependency. Petitioners also fail to show that the proposed combination satisfies additional limitations recited in the claims.

¹ Claim 18 depends from independent claim 15, but as noted herein claim 15 incorporates features Petitioners fail to show with regard to independent claim 1.

Ground 3 has been rendered moot. Ground 3 argues that claim 17 is indefinite under §112, but PayRange has disclaimed claim 17. EX2006.

Petitioners do not allege that any of the remaining claims are indefinite.

Petitioners thus fail to meet their burden of proving that claims 7, 11-13, or 18 are patent ineligible under §101, obvious under §103, or indefinite under §112. Accordingly, institution of post grant review should be *denied*.

II. Factual Background

Founded in 2013, PayRange Inc. invented its own mobile payment technology for non-networked, unattended retail machines, such as legacy vending machines. PayRange's innovations allow vending machine operators to insert a pocket-sized device into legacy machines so that these non-networked machines can communicate with customers' smartphones. Customers can then buy goods or services from the machines in seconds through a specially coded application on their phone. The Office awarded PayRange the '296 patent in November 2022 for this breakthrough.

On March 3, 2020, PayRange sued Petitioners in United States District Court for infringing claims of U.S. Patent Nos. 9,659,296 (the "'296 grandparent") and 9,134,994. EX2001. PayRange did not assert claims from the challenged '296 patent against Petitioners. While Petitioners mention the district court's grant of summary judgment (Pet., 3), Petitioners omit the fact that the district court found

in favor of PayRange concerning the patentability of the '296 grandparent in view of Petitioners' failed §101 challenge. EX2005, 15-16 ("The Court finds that the '296 [grandparent] patent is not directed to an abstract idea.").

On October 21, 2020, PayRange sued Petitioners in United States District Court for infringing claims of U.S. Patent No. 10,719,833. PayRange filed an amended complaint for infringement of claims of the '833 patent and U.S. Patent Nos. 10,891,608 ("the '608 patent), and 10,891,614 ("the '614 patent") on January 15, 2021, and filed a second amended complaint for infringement of claims of the '833, '608, and '614 patents on January 31, 2023. EX2002; EX2003; EX2004. Again, PayRange has not asserted any claims from the challenged '296 patent against Petitioners.

III. The Board Should Exercise Its Discretion to Deny the Petition under §325(d)

The petition does little more than repeat art and arguments already explicitly considered by the Office, and Petitioners fail to show that the Office erred in a material manner in its prior evaluations. Therefore, under §325(d), the Board should exercise its discretion to not institute this challenge because (1) the same or substantially the same art or arguments were previously presented to the Office; and (2) Petitioners failed to demonstrate that the Office erred in a material manner. *Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte GMBH*, IPR2019-01469, Paper 6 at 8-9 (precedential).

A. Ground 1 is substantially similar to what was previously considered by the Board

Petitioners' arguments against discretionary denial fail even to mention the Board's prior decision regarding substantially similar subject matter that was decided in PayRange's favor. Pet., 87-93. Ground 1 of the instant challenge repeats §101 arguments substantially similar to those already considered and decided by the Board in favor of PayRange in PGR2021-00093, which challenged claims of the '614 patent, parent of the '296 patent. *See* Pet., 2 (Petitioners acknowledging relationship between '614 patent and '296 patent). In that proceeding, the Board found that all claims corresponding with '296 claims 7, 11-13, and 18 were not shown to be patent ineligible. Since the challenged claims incorporate features already addressed by the Board in rejecting Petitioners' previous §101 challenge, the instant petition should be denied.

Presently, challenged claims 7, 11-13, and 18 are materially the same as those that Petitioners already tried—and failed—to invalidate under §101. Pet., 14-15, 38. Petitioners admit as much, relying on the prosecution history of the '296 patent to demonstrate that the challenged claims are substantially the same as those in the '614 patent. Pet., 14-15 ("The Examiner remarked that '[t]he only difference between the instant application and the '296 [Parent] patent is merely a labeling difference' The same remark was made with respect to the '614 Patent.").

Despite recognizing the similarity between the '614 claims and those of its child, Petitioners fail to explain why the Board should evaluate patentability under §101 of claims having substantially similar subject matter as those that the Petitioners already tried, but failed, to show are ineligible. Petitioners were of course aware of the Board's decision in PGR2021-00093, which found that Petitioners failed to show the '614 patent's claims 7, 11-13, and 16-17 are invalid under §101. Pet., 2; PGR2021-00093, Paper 38 at 45-49. But Petitioners chose not to address this when arguing against discretionary denial. Pet., 87-93.

Presently challenged claims 7, 11-13, and 18 are materially similar subject matter to those claims that the Board found are not ineligible under §101. In its previous final written decision, the Board found that Petitioners failed to show that claims 7, 11-13, and 16-17 of the '614 patent are ineligible under §101. PGR2021-00093, Paper 38 at 45-49. As shown in the tables below, currently challenged claims 7, 11-13, (each dependent from claim 1) and 18 (dependent from claim 15) are substantially similar to those previously considered by the Board:

US 10,891,614	US 11,501,296
1. A method of presenting representations of payment accepting unit events, comprising: at a mobile device with one or more processors, memory, one or more output devices including a display, and one or more radio transceivers:	1. A method of executing payment accepting unit events, comprising: at a mobile device with one or more processors, memory, one or more output devices including a display, and one or more radio transceivers:

identifying one or more payment accepting units in proximity to the mobile device that are available to accept payment from a mobile payment application executing on the mobile device, the identifying including detecting predefined radio messages broadcast by the one or more payment accepting units, wherein the one or more payment accepting units are vending machines that accept payment for dispensing of products and/or services; displaying a user interface of the mobile payment application on the display of the mobile device, the user interface being configured to display a visual indication of the one or more payment accepting units and accept user input to (i) receive selection by a user of the mobile device of an available payment accepting unit of the one or more payment accepting units and (ii) trigger payment by the mobile payment application for a vending transaction initiated by the user of the mobile device with the available payment accepting unit of the one or more payment accepting units; establishing via the one or more radio transceivers a wireless connection between the mobile device and the available payment accepting unit of the one or more payment accepting units; after establishing the wireless connection, presenting the user interface of the mobile payment	detecting one or more payment accepting units in proximity to the mobile device, including detecting predefined radio transmissions broadcast by the one or more payment accepting units, wherein the one or more payment accepting units are payment operated machines that accept payment for dispensing of products and/or services; displaying a user interface of a mobile payment application on the display of the mobile device, the user interface being configured to display a visual indication of the one or more payment accepting units and accept user input to (i) receive selection by a user of the mobile device of an available payment accepting unit of the one or more payment accepting units and (ii) trigger payment by the mobile payment application for a transaction initiated by the user of the mobile device with the available payment accepting unit of the one or more payment accepting units; establishing via the one or more radio transceivers a wireless connection between the mobile device and the available payment accepting unit of the one or more payment accepting units; after establishing the wireless connection, enabling user interaction with the user interface of the mobile
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application and enabling user interaction with the user interface of the mobile payment application to complete the vending transaction; exchanging information with the available payment accepting unit via the one or more radio transceivers, in conjunction with the vending transaction; and in response to receiving the information, displaying, on the display, an updated user interface of the mobile payment application to the user of the mobile device.	payment application to complete the transaction; exchanging information with the available payment accepting unit via the one or more radio transceivers, in conjunction with the transaction; and in response to receiving the information, displaying, on the display, an updated user interface of the mobile payment application to the user of the mobile device.
7. The method of claim 1, wherein the mobile device includes an accelerometer and the method further comprises: based on data from the accelerometer, determining whether the user is walking away from the available payment accepting unit; and in accordance with a determination that the user is walking away from the available payment accepting unit, canceling the wireless connection.	7. The method of claim 1, wherein the mobile device includes an accelerometer and the method further comprises: based on data from the accelerometer, determining whether the user is walking away from the available payment accepting unit; and in accordance with a determination that the user is walking away from the available payment accepting unit, canceling the wireless connection.
11. The method of claim 1, wherein the user interface of the mobile payment application presented after establishing via the wireless connection includes: a visual representation of available payment accepting unit; an indication of a prepared balance; and an affordance that when slid, indicates the initiation of the vending transaction.	11. The method of claim 1, wherein the user interface of the mobile payment application presented after establishing via the wireless connection includes: a visual representation of available payment accepting unit; an indication of a prepared balance; and an affordance that when slid, indicates the initiation of the transaction.

12. The method of claim 11, wherein the affordance is slid in response to receiving a user input of swipe on the affordance displayed on the display of the mobile device.	12. The method of claim 11, wherein the affordance is slid in response to receiving a user input of swipe on the affordance displayed on the display of the mobile device.
13. The method of claim 1, wherein the predefined radio messages are broadcasted by the one or more payment accepting units indicating status of the one or more payment accepting units.	13. The method of claim 1, wherein the predefined radio transmissions are broadcasted by the one or more payment accepting units indicating status of the one or more payment accepting units.

US 10,891,614	US 11,501,296
14. A mobile device, comprising: one or more radio transceivers; one or more output devices including a display; one or more processors; and memory storing one or more programs to be executed by the one or more processors, the one or more programs comprising instructions for: identifying one or more payment accepting units in proximity to the mobile device that are available to accept payment from a mobile payment application executing on the mobile device, the identifying including detecting predefined radio messages broadcast by the one or more payment accepting units, wherein the one or more payment accepting units are vending machines that accept payment for dispensing of products and/or services;	15. A mobile device, comprising: one or more radio transceivers; one or more output devices including a display; one or more processors; and memory storing one or more programs to be executed by the one or more processors, the one or more programs comprising instructions for: detecting one or more payment accepting units in proximity to the mobile device, including detecting predefined radio transmissions broadcast by the one or more payment accepting units, wherein the one or more payment accepting units are payment operated machines that accept payment for dispensing of products and/or services;

displaying a user interface of the mobile payment application on the display of the mobile device, the user interface being configured to display a visual indication of the one or more payment accepting units and accept user input to (i) receive selection by a user of the mobile device of an available payment accepting unit of the one or more payment accepting units and (ii) trigger payment by the mobile payment application for a vending transaction initiated by the user of the mobile device with the available payment accepting unit of the one or more payment accepting units; establishing via the one or more radio transceivers a wireless connection between the mobile device and the available payment accepting unit of the one or more payment accepting units; after establishing the wireless connection, presenting the user interface of the mobile payment application and enabling user interaction with the user interface of the mobile payment application to complete the vending transaction; exchanging information with the available payment accepting unit via the one or more radio transceivers, in conjunction with the vending transaction; and in response to receiving the information, displaying, on the display, an updated user interface of the mobile	displaying a user interface of a mobile payment application on the display of the mobile device, the user interface being configured to display a visual indication of the one or more payment accepting units and accept user input to (i) receive selection by a user of the mobile device of an available payment accepting unit of the one or more payment accepting units and (ii) trigger payment by the mobile payment application for a transaction initiated by the user of the mobile device with the available payment accepting unit of the one or more payment accepting units; establishing via the one or more radio transceivers a wireless connection between the mobile device and the available payment accepting unit of the one or more payment accepting units; after establishing the wireless connection, enabling user interaction with the user interface of the mobile payment application to complete the transaction; exchanging information with the available payment accepting unit via the one or more radio transceivers, in conjunction with the transaction; and in response to receiving the information, displaying, on the display, an updated user interface of the mobile
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payment application to the user of the mobile device.	payment application to the user of the mobile device.
17. The mobile device of claim 14, wherein: the wireless connection is established via a first transceiver of the one or more transceivers; the information is exchanged via a second transceiver of the one or more transceivers; and the first transceiver is different from the second transceiver.	18. The mobile device of claim 15, wherein: the wireless connection is established via a first transceiver of the one or more transceivers; the information is exchanged via a second transceiver of the one or more transceivers; and the first transceiver is different from the second transceiver.

The Board should exercise its discretion to deny the petition because Petitioners are repeating substantially the same arguments that the Board previously rejected. Reintroducing the same ground of challenge against materially the same subject matter, Petitioners seek a second opportunity to argue that which the Board has already decided. Petitioners do not address, let alone show error in, the Board's determination that these claims were not shown to be ineligible under §101.

Because (1) substantially the same arguments were previously presented to the Office; and (2) Petitioners failed to demonstrate that the Board erred in a material manner, the Board should deny the petition under §325(d). *Advanced Bionics*, IPR2019-01469, Paper 6 at 8-9 (precedential); *Supercell Oy v. Gree, Inc.*, PGR2020-00063, Paper 10 at 7-12 (exercising discretion under §325(d) to deny institution of a §101 challenge).

B. Ground 2 is substantially similar to what was previously considered by the Office

Contrary to Petitioners' misrepresentations, the Office explicitly considered the petition's primary and secondary grounds references; thus the foundation of the Ground 2 §103 argument is substantially similar to art and arguments previously considered by the Examiner during prosecution of the '296 patent.

1. The Office already considered Low

The Board has already considered the very same art and arguments proffered by Petitioners with regard to the primary ground reference, Low. Petitioners again rely on Low as allegedly disclosing, *inter alia*, the same feature that the Board already determined Petitioners had failed to show was present in Low in the '614 challenge. Now grasping for another opportunity to explain how Low supposedly teaches the claimed subject matter, Petitioners merely repeat their same flawed argument that the Board previously rejected.

As discussed above, Petitioners contend that the challenged '296 claims are "very similar" to those challenged by the same Petitioners in PGR2021-00093 against the '614 patent. *Supra*, §I; Pet., 38. Invoking the Board's previous decision in Petitioners' challenge to claims of the '614 patent, Petitioners characterize the currently challenged claims as "very similar claims." Pet., 38 (emphasis original) (citing PGR2021- 00093, Paper 38). Petitioners also note the Examiner's statement that certain differences between the '614 patent and the '296

patent are merely “labeling difference[s].” Pet., 15. Both the ’614 patent and ’296 patent recite, *inter alia*, identifying (or detecting) payment accepting units in proximity to a mobile device, including detecting predefined radio messages (or transmissions) broadcast by the payment accepting units. *Supra*, §II.A. While Petitioners have not shown any difference between the ’614 identifying step including detecting predefined radio messages and the ’296 detecting step including detecting predefined radio transmissions, Petitioners nonetheless advance the same argument that the Board previously decided in PayRange’s favor.

In its previous final written decision, the Board faulted Petitioners for not identifying “what it contends to be the recited ‘predefined radio messages broadcast [by a vending machine].” PGR2021-00093, Paper 38 at 62. There, “[t]he Petition contains a claim chart that does not use the phrase ‘predefined radio messages’ or the term ‘broadcast’ beyond quotations of the claim limitation itself.” *Id.* Likewise, here, the petition contains a claim chart that does not use the phrase “predefined radio transmission” or “broadcast” in the context of radio transmissions beyond quotations of the claim limitation itself. Pet., 56-57, 78. Thus the result is the same: “we are unable to discern Petitioner[s]’ theory of its case and, thus, cannot assess that theory under the preponderance of evidence standard.” PGR2021-00093, Paper 38 at 62.

Petitioners with this challenge seek a new opportunity to explain why Low allegedly discloses predefined radio transmissions, yet they still fail to do so. In the '614 challenge, the Board “specifically put Petitioner on notice of our determination that it had failed to meet its threshold burden with regard to both limitations 1.2 and 1.3” including the limitation requiring identification to include a predefined message broadcast by the vending machine. PGR2021-00093, Paper 38 at 63. There, the “Petitioners’ reply...conspicuously omits a discussion of limitation 1.3—requiring the broadcast of a predefined message.” *Id.*, 63-64. Thus, “Petitioner declined to take advantage of the opportunity to explain to us and Patent Owner how the *Petition* set forth a viable theory” of obviousness of this claim element. *Id.* Now Petitioners yet again baldly allege Low teaches detecting predefined radio transmissions broadcast by the one or more payment accepting units without setting forth a viable theory to support it. Pet., 56-57.

Petitioners thus raise the same art and arguments previously rejected by the Board. Because Petitioners have not even alleged that the Board erred in its determination “that Petitioner has failed to show by a preponderance of evidence that Low discloses or teaches ‘the identifying including detecting predefined radio messages broadcast by the one or more payment accepting units,’ as recited in the independent claims,” the same outcome should apply here. PGR2021-00093,

Paper 38 at 64. Petitioners' §103 challenge does nothing more than repeat art and arguments previously rejected by the Office.

The Examiner was also familiar with Low as the primary ground reference in Petitioners' challenge to the claims of the parent '614 patent since the art and arguments Petitioners presented in that challenge were before the Examiner during prosecution. As Petitioners recognize, PayRange filed a terminal disclaimer that disclaimed any statutory term that would extend beyond expiration of the '296 grandparent and '614 patents. Pet., 15; EX1002, 333-338. By virtue of PayRange filing the terminal disclaimer, the Examiner was both aware of Petitioners' previous challenges to the grandparent '296 and '614 patents as well as Petitioners' reliance on references therein. *See* MPEP §904.04 (the Examiner is required to review, *inter alia*, the Petition, Patent Owner's Preliminary Response, PTAB's decision on institution, and Parties' supporting evidence where pending claims have similar scope or claim elements to a parent challenged at the PTAB, and "[t]he presence of a recorded terminal disclaimer...is evidence that the claims have similar scope or similar claim elements"). The Examiner therefore would have been closely familiar with Low because Petitioners alleged it anticipated or by itself rendered obvious all claims of the '614 patent. PGR2021-00093, Paper 2 (Petition).

Thus, contrary to Petitioners' mischaracterization of the Office's previous consideration of Low, both the Board and the Examiner were familiar with the primary ground reference as well as Petitioners' characterization of that reference. Petitioners' §103 challenge therefore does nothing more than repeat art and arguments previously rejected by the Office.

2. The Office already considered Arora

Petitioners mislead the Board by implying that the Examiner was unfamiliar with the secondary grounds reference, Arora, and by omitting facts from their tailored exhibits that show otherwise. Pet., 89-90. Petitioners' shrouding of the evidence only serves to confuse facts and waste the Board's time.

Petitioners suggest that Arora was only introduced to the Examiner in an IDS shortly before the mailing of the notice of allowance, and since it was included with other references in that IDS, it was not considered by the Examiner. *Id.* But the Examiner was intimately familiar with Arora—having discussed it during prosecution of the parent '614 patent—and also would have been aware of Petitioners' reliance on it for alleging obviousness of the claimed subject matter at least by virtue of the filed terminal disclaimer. While the petition falsely indicates that “the Examiner merely signed the IDS” without evaluation (Pet., 90), there is no evidence to support this bald allegation and the prosecution history shows that the Examiner was, in fact, closely familiar with Arora.

Petitioners carefully tailored their submitted exhibits and, in doing so, chose to omit the Examiner's previous explicit consideration of Arora. Petitioners submitted EX1008 as excerpts from the prosecution history of the '614 patent, but Petitioners selectively excluded portions demonstrating the Examiner's familiarity with Arora. *Compare* EX1008 *with* EX2007. Notably, Petitioners' exhibit omits that the very same Examiner discussed Arora during prosecution of the parent '614 patent, and that the Examiner explicitly agreed that Arora did not teach or suggest claimed features that are substantially similar to those in the challenged '296 patent. EX2007, 153. One example omission is reproduced below:

Examiner-Initiated Interview Summary	Application No. 15/603,400	Applicant(s) Patel, Paresh K.		
	Examiner FRANTZY POINVIL	Art Unit 3691	AIA (First Inventor to File) Status Yes	Page 1 of 1
All participants (applicant, applicants representative, PTO personnel): 1. FRANTZY POINVIL (Primary Examiner); 2. Douglas J. Crisman (Attorney); Telephonic Telephonic Date of Interview: <u>13 November 2020</u> Claims Discussed: 1-25 Prior Art Discussed: Arora et al. Brief Description of the main topic(s) of discussion: 35 USC 103 rejection was discussed. Issues Discussed: Item(s) under 35 U.S.C. 103: The identifying functions of claims 1, 8 and 9 were discussed and it was agreed that the Arora et al reference does not teach or suggest this claimed feature.				
/FRANTZY POINVIL/ Primary Examiner, Art Unit 3691				
Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04 Please further see: MPEP 713.04 Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b) 37 CFR § 1.2 Business to be transacted in writing				

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Id. (highlight added).

Petitioners' omissions of the Examiner's previous consideration of Arora mislead the Board. While Petitioners contend that the Examiner was unfamiliar with Arora because it was, in part, included among other references submitted in an IDS, this omits another key fact from the '614 patent prosecution: PayRange submitted an IDS notifying the Office of a single reference—Arora. *Id.*, 166. As PayRange's representative indicated, Arora in particular was discussed with the Examiner from the various references that had previously been cited in information disclosure statements. *Id.*, 167. Petitioners' misdirection achieves nothing except to waste the Board's valuable resources by requesting it to consider art and arguments that have already been considered by the Office.

The Board has also already considered the very same art and arguments proffered by Petitioners with regard to Arora. Petitioners again rely on Arora for features substantially similar to those Petitioners relied on in their challenges to the claims of the grandparent '296 patent. Neither of the previous challenges led to institution, so institution should be denied here as well. As discussed above, Petitioner subsumes the Examiner's contention that the challenged '296 claims are substantially similar to those of the grandparent '296 patent. *Supra*, §III.B.1; Pet., 15, 17. The grandparent '296 patent was twice challenged by the same Petitioners in CBM2020-00026 and IPR2021-00086. Both challenges alleged obviousness of

claims based on Arora, and the Board denied institution in both cases. CBM2020-00026, Paper 11; IPR2021-00086, Paper 12.

3. Petitioners' reliance on the grounds references is cumulative

The Board already held that Petitioners failed to show that Low teaches or renders obvious the claimed detecting step including detecting predefined radio transmissions broadcast by the one or more payment accepting units. *Supra*, §III.B.1. Petitioners' arguments are cumulative to what was already rejected by the Office.

While Petitioners allege the combination of Low, Arora, and Casey is not cumulative (Pet., 92), Petitioners' claim chart shows otherwise. Seeking a new opportunity to show that Low teaches the predefined radio transmissions broadcast by one or more payment accepting units, Petitioners again fail to do so. Pet., 56-57. Petitioners' reliance on Arora does not even allege that it cures this deficiency: Petitioners merely point to Arora to disclose communication by a vending machine and "various wireless communication methods." *Id.* Likewise, petitioners' reliance on Casey does not allege that it cures this deficiency as Petitioners merely point to Casey to disclose "communication protocols in which each device broadcasts its identification information using Internet protocol or other device identification protocol." *Id.* Neither of these show that Arora or Casey disclose predefined radio transmissions broadcast by one or more payment accepting

units—thus Petitioners’ arguments relying on Low are cumulative to that which the Board previously considered and rejected.

Because neither Arora nor Casey is relied on in a manner to cure the deficiencies of Low that the Board already identified, Petitioners’ combination of the references does not resolve that deficiency and merely presents the same argument to the Board yet again.

Petitioners’ obviousness argument relies on references and arguments previously rejected by the Office, therefore the Board should exercise its discretion to deny consideration of Ground 2 under §325(d). Even if, *arguendo*, the Board does not exercise its discretion under §325(d) to deny consideration of Ground 2, Ground 2 still fails for any of a multitude of fatal flaws as described below. *Infra*, §V.

IV. Ground 1 Fails Because Petitioners Fail to Show that the Claims are Patent Ineligible

Even if the Board decides that Ground 1 should not be discretionarily denied under §325(d) (*supra*, §III.A), Petitioners’ §101 arguments should nonetheless be collaterally estopped or otherwise denied on the merits for the reasons previously recognized by the Office. The Board found in PGR2021-00093 that Petitioners failed to show §101 ineligibility of claims reciting similar features to those recited in ’296 claims 7, 11-13, and 18. PGR2021-00093, Paper 38, 45-49. Now, contrary to the Board’s findings, Petitioners argue that claims 7, 11-13, and 18 of the ’296

patent are unpatentable under §101. In view of the Board’s prior decision addressing patent eligibility issues of claims Petitioners consider to be “very similar” to those challenged here, Petitioners are collaterally estopped from challenging the patent eligibility of claims 7, 11-13, and 18. Even if collateral estoppel does not apply, Petitioners’ repetition of the same facially deficient arguments from the previous PGR only confirms that Petitioners have failed to meet their burden of proving that any claim is patent ineligible.

A. Petitioners are collaterally estopped

Petitioners are collaterally estopped from arguing that claims 7, 11-13, and 18 are patent ineligible under §101. Collateral estoppel applies to AIA proceedings when:

(1) the issue is identical to one decided in the first action; (2) the issue was actually litigated in the first action; (3) resolution of the issue was essential to a final judgment in the first action; and (4) [the party against whom collateral estoppel is being asserted] had a full and fair opportunity to litigate the issue in the first action.

Google LLC v. Hammond Dev. Int’l, Inc., 54 F.4th 1377, 1381 (Fed. Cir. 2022).

All four elements are satisfied here.

First, the issues here—the patent eligibility of claims 7, 11-13, and 18 under §101—are identical to issues decided in PGR2021-00093 because these claims are

substantially similar to the claims challenged under §101 in that proceeding. *See* Pet., 38 (considering the challenged claims to be “very similar” to those in the ’614 patent). “It is well-understood that patent claims need not be identical for collateral estoppel to apply.” *Google*, 54 F. 4th at 1381. “Rather, collateral estoppel requires that the *issues of patentability* be identical,” meaning collateral estoppel may apply even when the claims “use slightly different language to describe substantially the same invention, so long as the differences between the unadjudicated patent claims and adjudicated patent claims do not materially alter the question of invalidity.” *Id.* (internal quotations omitted). Such is the case here.

Each of claims 7, 11-13, and 18 of the ’296 patent describes substantially the same invention as corresponding claims 7, 11-13, and 17 of the ’614 patent, and any differences do not materially alter the question of invalidity. *Supra*, §III.A (showing the claims to be substantially similar, identifying differences with bold emphasis). The slight differences do not meaningfully alter the patentability analysis, and Petitioners even expressly invoke the previous Board decision, representing that “the Board in the parent ’614 PGR...found very similar claims to be ineligible for patent protection.” Pet., 38 (emphasis original). Additionally, Petitioners emphasize that the Office found the only differences to be “merely a labeling difference.” *Id.*, 15. Accordingly, the differences between ’296 claims 7,

11-13, and 18 compared to '614 claims 7, 11-13, and 17 do not materially alter the question of patent eligibility.

Second, these issues were “actually litigated in the first action.” *Google*, 54 F.4th at 1381. The same patent-eligibility issues were addressed in the previous petition (PGR2021-00093, Paper 2 at 25-27) and litigated during the trial phase (*e.g.*, PGR2021-00093, Paper 19 at 14).

Third, resolution of these issues was “essential to a final judgment in the first action.” *Google*, 54 F.4th at 1381. The Board’s final written decision in the previous PGR expressly addressed Petitioners’ failure to prove that '614 claims 7, 11-13, and 17 are patent ineligible. PGR2021-00093, Paper 38 at 45-49. Those findings were essential to the Board’s ultimate determination to uphold claims 7, 11-13, and 17. *See id.*, 68-69.

Fourth, Petitioners had a “full and fair opportunity to litigate the issue in the first action.” *Google*, 54 F.4th at 1381. As noted above, the parties fully litigated these patent eligibility issues during the trial phase of the previous PGR. The Board even expressly considered Petitioners’ belated arguments regarding claim 11. PGR2021-00093, Paper 38 at 46-47 (“Even if we were to consider this belatedly-developed articulation of its theory, we agree with Patent Owner that Petitioner still has failed to adequately address the claim as a whole.”). Petitioners chose not to file a request for rehearing or appeal the Board’s decision to the

Federal Circuit. Petitioners thus had a full and fair opportunity to litigate the same patent eligibility issues.

All four requirements of collateral estoppel are therefore satisfied.

Petitioners are thus estopped from challenging the patent eligibility of claims 7, 11-13, and 18 of the '296 patent, and the Board should deny institution accordingly.

B. Petitioners fail to prove claims 7, 11-13, and 18 are patent ineligible

Even if collateral estoppel did not apply, Petitioners' repetition of the same flawed arguments from PGR2021-00093 confirms that Petitioners fail to meet their burden of proving that claims 7, 11-13, and 18 are not patent eligible under §101. As explained below, the petition essentially repeats the same conclusory arguments that the Board already found to be insufficient.

First, Petitioners fail to prove that the specific requirements of claim 7 were well-known, routine, and conventional under *Alice* step 2B. In the previous PGR, the Board found Petitioners' conclusory arguments insufficient, noting that they had "not explained, for example, how the recited *use* of an accelerometer (as opposed to merely the accelerometer itself) was conventional and is not indicative of an innovative concept." PGR2021-00093, Paper 38 at 45-46. Equally unable to provide such an explanation here, Petitioners simply repeat their previous failed assertion that accelerometers in general were well-known while adding a wholly

conclusory assertion (copying and pasting language from the Board’s decision) that the recited use of the accelerometer was routine and conventional:

Claim 7, which recites the use of the mobile device’s accelerometer to detect when a user has departed and then to cancel the transaction, fares no better, as **accelerometers were well-known**, Casey (EX1005), and **the recited *use* of an accelerometer (as opposed to merely the accelerometer itself) was routine and conventional and is not indicative of an innovative concept.** EX1005, 8:4-13, FIGs. 5, 6; EX1012 ¶¶130-135. This is particularly true as of December 18, 2013, when accelerometers were already being used in payment transactions, including to confirm payments. EX1012, ¶¶134-135; EX1005, 7:59-8:13.

Pet., 39-40 (bold, underline emphasis added; italics original from Petition and the Board’s previous decision (IPR2021-00093, Paper 38 at 46)).

Still missing is any substantive evidence or analysis actually showing that the recited *use* of an accelerometer was routine and conventional. The cited portions of Casey are of no help since they do not mention the specific requirements of claim 7. EX1005, 8:7:59-8:13, Figs. 5-6. Petitioners’ subsequent assertion that “accelerometers were already being used in payment transactions” similarly fails to address the actual requirements of claim 7, which recites “based

on data from the accelerometer, determining whether the user is walking away from the available payment accepting unit” and “in accordance with a determination that the user is walking away from the available payment accepting unit, canceling the wireless connection.” Accordingly, Petitioners still fail to grapple with the actual claim language, leaving only a conclusory, incomplete argument that, as before, “fails to articulate adequately and with particularity why dependent claim 7 is patent ineligible under §101.” PGR2021-00093, Paper 38 at 45-46.

Petitioners similarly fail to prove that the specific requirements of claims 11-12 were well-known, routine, and conventional under *Alice* step 2B. With regard to both of these claims, Petitioners argue that “the iPhone already had a ‘Swipe’ feature” (Pet., 39), but this is the exact same assertion from Petitioners’ reply in the previous PGR that the Board found insufficient. PGR2021-00093, Paper 19 at 14; PGR2021-00093, Paper 38 at 46-47 (“Even if we were to consider this belatedly-developed articulation of its theory, we agree with Patent Owner that Petitioner still has failed to adequately address the claim as a whole.”). As the Board explained:

Simply asserting that swiping as a general concept was known does not explain adequately, for example, whether the use as recited in the claim and in conjunction with the other displayed information is indicative that an inventive concept may be present or simply appends well-

understood, routine, conventional activities previously known to the industry.

PGR2021-00093, Paper 38 at 46-47. Petitioners’ conclusory analysis here is therefore just as deficient as the conclusory analysis in the previous PGR.

Likewise, Petitioners fail to prove that the specific requirements of claim 13 were well-known, routine, and conventional under *Alice* step 2B. With regard to this claim, Petitioners argue “[c]laim 13 simply describes that the predefined radio transmissions are broadcasted by the conventional and generic one or more payment accepting units indicating status...” Pet., 30. This is again the same assertion that Petitioners made in the previous PGR that the Board found to be insufficient. PGR2021-00093, Paper 2 at 24; PGR2021-00093, Paper 38 at 47-48 (“Petitioner replies, citing as support only its own arguments, that the recited status information is ‘simply a type of data, the transmission of which via conventional means was well-understood, routine, and conventional.’ We determine that Petitioner fails to present adequate evidence and to articulate adequately and with particularity why dependent claim 13 is patent ineligible under §101”) (citations omitted).

Petitioners also fail to prove that the specific requirements of claim 18 were well-known, routine, and conventional under *Alice* step 2B. With regard to this claim, Petitioners argue “[c]laim 18 simply recites conventional technology of a conventional and well-understood mobile device being used according to a

conventional and well-understood methodology, *i.e.*, establishing a wireless connection via a first transceiver, exchanging information via the second transceiver, and the first transceiver being different from the second transceiver.” Pet., 31. This assertion is similar to that which Petitioners argued in the previous PGR that the Board found to be insufficient. PGR2021-00093, Paper 19 at 14; PGR2021-00093, Paper 38 at 48-49. Even with the Board’s clear instruction of the manner in which Petitioners failed, Petitioners still fail to “explain *how* the recited use of two transceivers in the recited manner (with one transceiver establishing a wireless connection between the vending machine and the mobile device and the second transceiver exchanging information between the vending machine and mobile device) is a ‘conventional manner.’” PGR2021-00093, Paper 38 at 49 (emphasis added).

Accordingly, even if collateral estoppel does not apply, the petition’s conclusory analysis still fails to prove that claims 7, 11-13, or 18 are patent ineligible under §101.

V. Ground 2 Fails Because Not All Claim Elements are Shown to be in the Cited References

A showing of obviousness requires: (1) that the prior art teach or suggest each claim limitation; (2) that there is a motivation to combine or modify the prior art in the way Petitioners propose; and (3) that a POSITA would have a reasonable expectation of success in the proposed combination or modification. *KSR Int’l Co.*

v. Teleflex Inc., 550 U.S. 398, 418-19 (2007); *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007); *Regents of Univ. of California v. Broad Institute, Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018).

Petitioners have failed to meet their burden of showing a reasonable likelihood that they would prevail on Ground 2 because the petition’s analysis of the claims falls short in multiple ways. First, Petitioners fail to provide an obviousness evaluation under *Graham* in assessing differences between the cited references and the claim elements for numerous claim elements. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Second, the petition fails to show that the combined references of Low, Arora, and Casey teach numerous of the independent claim elements. The discussion of the dependent claims does not remedy any of these deficiencies. Petitioners thus fail to meet their burden of proving that any challenged claim was obvious.

A. Petitioners fail to meet their burden of showing obviousness of any claim

Petitioners appear to acknowledge that none of the grounds references disclose certain claim elements, but rather than providing the requisite obviousness evaluation under *Graham*, Petitioners attempt to rewrite the references. *Graham* mandates the identification of what cited references *actually* disclose and an assessment of the differences between the cited references and the claim elements in view of the understanding of a POSITA. *Graham*, 383 U.S. at 17 (“Under §103,

the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.”). In contrast, Petitioners provide *no evaluation* of the differences between the references and the claims, and instead propose to rewrite the references to support their conclusory statements.

As an initial matter, Petitioners’ bare citations to the grounds references in their claim chart amount to an improper incorporation by reference. Petitioners provide conclusory statements that the cited references teach elements of the claims, but their assertions lack analysis and evaluation. Pet., 53-86. Petitioners attempt to place the burden on the Board and PayRange to figure out the arguments on their behalf, but this attempted incorporation by reference should be rejected as a violation of the rules governing this proceeding. 37 C.F.R. §42.6(a)(3).

Harmonic Inc. v. Avid Tech., Inc., 815 F.3d 1356, 1363 (Fed. Cir. 2016) (“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.... Thus, it was Harmonic’s burden to explain to the Board how Haskell combined with Rossmere rendered the challenged claims unpatentable.”).

Beyond that, Petitioners’ obviousness analysis of every claim is facially deficient because the petition fails to provide an analysis of what the cited references *did* disclose as well as the difference between such disclosure and the

claim elements. Instead, Petitioners repeatedly allege what the references “would have disclosed” if modified in the way that they envision. Pet., 53-86. Petitioners similarly propose what the modified references “would have included.” *Id.* But Petitioners’ contentions lack the substantive evaluation and analysis that is required under *Graham*: there is, e.g., no assessment of what the cited references *actually* disclose along with an identification of the differences between the *actual* cited reference disclosure and the challenged claims.

Petitioners’ rewriting of the references to estimate what the modified references “would have” taught lacks any legal foundation. This flaw is present in Petitioners’ challenge to each of claims 7, 11-13, and 18; thus the petition is facially deficient with respect to each of these claims.

B. The petition fails to show that the proposed combination satisfies all requirements of the independent claims

The petition’s conclusory, piecemeal analysis of claim 1 fails to show that the references, even if combined as proposed, meet all of the requirements of claim 1, including at least elements 1.3, 1.7.2, 1.9, and 1.11. Independent claim 15 recites substantially the same requirements; thus Petitioner’s analysis of claim 15 fails for the same reasons. Each of claims 7 and 11-13 depend from claim 1 while claim 18 depends from claim 15. Accordingly, the petition’s flaws are fatal to its allegation of obviousness with regard to each of claims 7, 11-13, and 18.

1. The Petition Fails to Show that the Proposed Combination Teaches Element 1.3

Claim 1 recites detecting one or more payment accepting units (“PAUs”) in proximity to the mobile device (element 1.2), “including detecting predefined radio transmissions broadcast by the one or more payment accepting units” (element 1.3). Petitioners argue that “Low alone or in combination with Arora and/or Casey would have disclosed or rendered obvious this element.” Pet., 56. Both arguments fail.

Petitioners’ reliance on Low for this claim feature was already found by the Board to be deficient. *Supra*, §III.B.1. The Board “specifically put Petitioner on notice of our determination that it had failed to meet its threshold burden with regard to” claim limitation 1.3, but even Petitioners’ Reply “conspicuously omit[ted] a discussion of limitation 1.3—requiring the broadcast of a predefined message.... Thus, Petitioner declined to take advantage of the opportunity to explain to us and Patent Owner how the *Petition* set forth a viable theory.” PGR2021-00093, Paper 38 at 63-64. Petitioners’ reintroduction of Low in this instance fares no better.

Petitioners rely solely on Low to allegedly teach detecting predefined radio transmissions even though the Board already found Petitioners’ reliance on Low for this feature was misplaced. With regard to claim element 1.3, Petitioners introduce Arora merely to argue that it discloses wireless communication by a

vending machine and “various wireless communication methods,” but Petitioners do not allege, much less prove, that Arora discloses predefined radio transmissions that are broadcast by the PAU. Pet., 56-57. Similarly, Petitioners rely on Casey merely to allege that it “discloses various communication protocols in which each device broadcasts its identification information using Internet protocol or other device identification protocol,” but Petitioners do not allege, much less prove, that Casey discloses predefined radio transmissions that are broadcast by the PAU. *Id.* Therefore here, the combination of Low, Arora, and Casey fails for the same reason that Low itself failed in the ’614 challenge: “Petitioner has failed to show by a preponderance of evidence that Low discloses or teaches ‘the identifying [detecting] including *detecting predefined radio messages [transmissions] broadcast by the one or more payment accepting units,*’ as recited in the independent claims.” PGR2021-00093, Paper 38 at 64.

Petitioners still have not corrected their flawed reliance on Low. Petitioners’ conclusory analysis is legally and factually insufficient to prove their assertion that Low discloses element 1.3. The petition offers merely a conclusory assertion that Low discloses various elements, but its argument is devoid of analysis. Pet., 56-57 (citing EX1003, 2:25-28, 4:57-5:3, 6:17-31, claim 12). And Petitioners cannot prove obviousness without articulated reasoning supporting their assertion. *In re*

Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) (proving obviousness requires “articulated reasoning with some rational underpinning”).

Petitioners err here in the same manner that the Board found to be deficient to show obviousness in Petitioners’ ’614 challenge. In Petitioners’ challenge to the claims of the ’296 patent—just as with the challenge to the ’614 patent—the petition “contains a *claim chart that does not use the phrase ‘predefined radio messages’*...beyond quotations of the claim limitation itself.” PGR2021-00093, Paper 38 at 62 (emphasis added); *see also* Pet., 56-57 (claim chart that does not use the phrase “predefined radio” or “transmission” beyond quotations of the claim limitation itself). The Board already found that, due to this deficiency, “we are unable to discern Petitioner’s theory of its case and, thus, cannot assess that theory under the preponderance of evidence standard.” PGR2021-00093, Paper 38 at 62. Thus, Petitioners’ challenge here fails for at least the same reason. Insofar as Petitioners now use the term “broadcast” beyond quotations from the claim limitation itself, this is still devoid of analysis and does not provide Petitioners’ theory of the case. Pet., 57 (stating that Casey discloses communication protocols where devices broadcast identification information but not alleging, much less proving, that these are predefined radio transmissions broadcast by a PAU).

Regardless, no showing that Low discloses element 1.3 can be gleaned from the petition’s analysis-free citations. While one of the quoted passages mentions

sending unique identifiers and the user's selection of machines, it says nothing about *detecting* a PAU *based* at least in part on detecting a predefined radio transmission. Pet., 56 (quoting EX1003, 2:25-28). The petition's unexplained string cite to column 6, lines 17-31 and its assertion that Low describes communication interfaces "to communicate a machine identifier and other transaction information" similarly fail to show that "the detecting" of element 1.2 includes "detecting *predefined radio transmissions* broadcast by the one or more payment accepting units." Pet., 56 (citing EX1003, 4:45-56, 4:57-5:3, 6:17-31).

Lastly, if anything, the petition's quotation of Low's claim 12 *contradicts* Petitioners' assertion that Low discloses element 1.3. Petitioners quote Low's recitation of a "payment provider" receiving a request that includes the location of the user device, determining the identification of non-Internet connected machines within a certain distance "based at least in part on the location," and communicating that determination to the user's device. Pet., 56-57 (quoting Low, claim 12). But Petitioners offer no explanation of how Low's description of steps performed by the *payment provider* implicitly disclose the detecting step recited in the '296 claims, which is performed "at a mobile device." Nor do Petitioners explain how Low's determination based on the user device's *location* discloses the recited detecting based at least in part on "detecting predefined radio transmissions broadcast by the one or more payment accepting units."

Petitioners’ reliance on Low’s claim 12 repeats—yet again—an argument the Board already found was insufficient to show obviousness of claim limitations 1.2 and 1.3. The Board recognized that, in Low, “the user device and vending machine may communicate wirelessly with each other, and that the *server* provides to the user device the identification of vending machines.” PGR2021-00093, Paper 38 at 62 (emphasis original). As before, “the claim requires there to be a predefined [transmission] broadcast by the payment accepting unit (the vending machine), not some general identifying action by the server.” *Id.* Rather than address the deficiencies that the Board previously identified in rejecting Petitioners’ previous challenge, Petitioners simply repeat the same arguments hoping for a different outcome.

Accordingly, Petitioners fail to prove their conclusory assertion that Low discloses element 1.3. If anything, Petitioners prove that it does not.

Petitioners’ alternative theory is equally flawed. Petitioners argue that Low “in combination with Arora and/or Casey would have disclosed or rendered obvious” element 1.3, but again provide no supporting analysis. Pet., 56-57. Instead, the petition offers a single, conclusory sentence addressing Arora and another addressing Casey. *Id.* Petitioners allege that “Arora discloses in FIG. 5 ‘wireless communication by the vending machine (65), and discloses various wireless communication methods.” Pet., 57 (citing EX1004, 16:37-38 and 27:52-

28:3) (citations omitted). But even accepting this assertion as true, it does not explain how “various wireless communication methods” discloses the recited detecting of a predefined radio transmissions broadcast by the one or more payment accepting units. Petitioners then allege that “Casey discloses various communication protocols in which each device broadcasts its identification information using internet protocol or other device identification protocol.” *Id.*, 57 (citing EX1005, 3:65-4:3; 5:57-6:7; 6:51-7:25). Again, however, Petitioners do not even allege, let alone prove, that such identification information is used as a basis for the “detecting” step recited in the claims. In fact, this assertion is doubly inapposite since the petition does not even propose applying these teachings of Casey in the combination. Pet., 52 (motivation section exclusively discussing use of Casey’s swipe/motion inputs to trigger payment). The petition thus facially fails to address all aspects of element 1.3, let alone prove that the proposed combination satisfies this element as a whole.

Nor does the petition show that a POSA would have arrived at element 1.3 by modifying Low in view of Arora and Casey. Petitioners’ claim chart provides no analysis of the combination beyond piecemeal assertions regarding individual references’ purported disclosures. Pet., 56-57; *supra* §V.A. While a previous section of the petition discusses a proposed combination of Low with Arora and

Casey, the petition’s discussion of element 1.3 does not cite that section. *Id.* The petition thus fails to show that the proposed combination satisfies element 1.3.

Accordingly, both of the petition’s arguments against element 1.3 fall short, which is fatal to Petitioners’ challenges to claims 7, 11-13, and 18 in Ground 2.

2. The Petition Fails to Show that the Proposed Combination Teaches Element 1.7.2

As recited in element 1.7.2, the user interface is configured to accept user input to “trigger payment by the mobile payment application for a transaction initiated by the user of the mobile device with the available payment accepting unit of the one or more payment accepting units.” Petitioners argue that this element is disclosed by Low “alone or in combination with Arora and/or Casey.”² Pet., 62. As explained below, however, both arguments fail.

The petition’s conclusory argument based on Low alone is facially incomplete and lacks the required articulated reasoning. *In re Kahn*, 441 F. 3d at 988 (proving obviousness requires “articulated reasoning with some rational

² The precise basis of Petitioners’ alternative argument is unclear—it is initially characterized as Low in combination with Arora “and/or” Casey, while the subsequent analysis only mentions Low in view of Arora “and” Casey (Pet., 62)—but the argument fails under either formulation.

underpinning”). The petition merely quotes Low’s description of the user’s device displaying a purchase request and transmitting a payment request to the server when the user selects a payment button, then similarly argues that in step 306 of Figure 3 “the user device 110 transmits the purchase request to a server.” Pet., 62 (citing EX1003, 2:46-51, 10:41-57, Fig. 3). But the petition never explains, let alone proves, why Low’s transmission of a payment/purchase request to the server would satisfy the recited triggering of “payment by the mobile payment application.” Nor do Petitioners allege, let alone prove, that the cited disclosures in Low involve payment for “a transaction initiated by the user of the mobile device.” The petition’s cursory, incomplete analysis is thus facially insufficient to prove obviousness.

Petitioners also fail to prove their assertion that element 1.7.2 is disclosed or rendered obvious by the proposed combination. In support of this argument, the petition offers a single conclusory sentence: “Low in view of Arora and Casey discloses that Low’s app would include Casey’s swipe-to-pay and other triggering features implementable via the GUI features.” Pet., 62 (citing EX1004, 6:7-12, 2:16-30, 25:28-33; EX1005, 9:37-52). This assertion fares no better than the cursory, incomplete discussion of Low alone, as Petitioners do not even attempt to explain how the proposed inclusion of “Casey’s swipe-to-pay and other triggering features” would satisfy element 1.7.2 as a whole. For example, Petitioners still do

not explain how the proposed combination teaches triggering payment by the mobile payment application for “a transaction initiated by the user of the mobile device.” Petitioners cannot meet their burden of proving obviousness with piecemeal assertions that contain no substantive analysis and fail to address all of the claim limitations.

Accordingly, both of the petition’s arguments against element 1.7.2 fall short, which is fatal to Petitioners’ challenges to claims 7, 11-13, and 18 in Ground 2.

3. The Petition Fails to Show that the Proposed Combination Teaches Element 1.9

Element 1.9 recites “after establishing the wireless connection, enabling user interaction with the user interface of the mobile payment application to complete the transaction.” Petitioners argue that “Low in view of Arora and/or Casey would have disclosed or rendered obvious this element”³ but offers only a piecemeal, conclusory analysis. *Id.*, 63-64. The petition makes a few isolated statements

³ As with element 1.7.2, the precise basis of Petitioners’ alternative argument is unclear—it is initially characterized as Low in combination with Arora “and/or” Casey, while the subsequent analysis only mentions Low in view of Arora “and” Casey (Pet., 63-64)—but the argument fails under either formulation.

about Low’s purported disclosure without explaining how this relates to the claim language. *Id.* Petitioners then argue that the proposed combination disclosed or rendered obvious facilitating interaction with the user interface (“UI”) after establishing the wireless communication path “to provide more options to the user for the goal of enabling the purchase” and that this step “necessarily” comes after establishing the wireless communication path to ensure transaction security. *Id.* As explained below, this argument fails in multiple ways, each of which is fatal to all challenges in Ground 2.

First, the petition fails to address all aspects of element 1.9, including enabling user interaction with the UI after establishing the wireless communication path “to complete the transaction.” Petitioners argue that in Low, (1) the user device may provide a graphical user interface, (2) the user may view and select products on the user device while it is in communication with electronic payment module 130, (3) the user device may receive a purchase request after the user selects products for purchase, and (4) the user device may receive approval and use a payment authorization in the approval to dispense products from the vending machine. *Id.* (citing EX1003, 4:24-28, 10:26-27, 10:55-61). But none of these piecemeal assertions address the recited requirement that the user interaction with the UI “complete the transaction.” The petition’s subsequent argument regarding Low in view of Arora and Casey similarly fails to address this requirement. The

petition thus facially fails to show that the proposed combination satisfies element 1.9 as a whole.

Second, the petition relies on a flawed inherency theory. *Therasense, Inc. v. Becton, Dickinson and Co.*, 593 F. 3d 1325, 1332 (Fed. Cir. 2010) (inherency “may not be established by probabilities or possibilities” (internal quotation marks omitted)). Petitioners argue “that the step in this element would necessarily come after the establishment of the wireless communication path in Low, as modified in view of Arora and Casey, in order to ensure that the transaction was secure.” Pet., 64 (emphasis added) (citing EX1005, 7:13-22, 16:22-35, 17:35-37; EX1012, ¶280). But Petitioners offer no explanation for why transaction security “necessarily” requires enabling interaction with the UI to complete the transaction after establishing a wireless communication path, nor do Petitioners explain why such transactions must “necessarily” be secure in the first place.

Petitioners’ conclusory inherency theory is also unsubstantiated. As an initial matter, Petitioners never explain the relevance of their string cites to Casey. *See* Pet., 64. Regardless, the cited passages say nothing about transaction security or UI interaction necessarily coming after the establishment of a wireless communication path including the mobile device and the available PAU. *See* EX1005, 7:13-22 (describing networking protocols generally), 16:22-35 (describing optional connections that “may” be used to transfer information and

“may” be established when a user device is brought into close proximity with another user’s device), 17:35-37 (payment information “may” be transferred to electronic device 234 over longer-range connection). Moreover, the petition does not even apply those aspects of Casey in the proposed combination. *See* Pet., 52 (exclusively applying Casey’s purported swipe/motion inputs to trigger payment). The cited testimony is equally unhelpful since it does not even address Petitioners’ inherency theory. EX1012, ¶281 (conclusory assertion that it was obvious to enable UI interaction after establishing wireless communication path).

While the conclusory, unsupported nature of Petitioners’ assertions is already fatal to this inherency argument, the argument is further undermined by Petitioners’ own statements and evidence. For example, Petitioners acknowledge that “Low does not specify a particular methodology for what happens when the user approaches multiple NICMs” (Pet., 49) and Arora describes transaction processing that would not necessarily require enabling UI interaction after establishing the recited wireless communication path including the mobile device and the available PAU, including “advance purchases with deferred dispensing” and “automatic” payments. EX1004, Abstract; *see also id.*, 3:40-41 (technique allows “customer to make a purchase in advance of being adjacent to a vending machine”), 5:13-21 (describing GPS-based location determination and lookup operations that “could be performed either in the app, by the vending machine

company, or by a third party”), 12:9-30 (user may select/purchase products selection/purchase when user is not close to vending machine, while subsequent dispensing commands “may come from a remote server”). While Casey is not used in the proposed combination beyond its swipe/motion inputs (Pet., 52), it also notes that its close-range connection could be used to “initiate and/or complete” the transaction, which further indicates that a communication path including the mobile device and the available PAU need not be established beforehand. EX1005, 16:21-22. Petitioners’ inherency theory thus fails at every level.

This leaves Petitioners with nothing more than their initial conclusory assertion of obviousness, which is facially insufficient to carry Petitioners’ burden. Before setting forth their inherency reasoning, Petitioners argue that facilitating UI interaction after establishing the wireless communication path was obvious “in order to provide more options to the user for the goal of enabling the purchase.” Pet., 64. But the petition offers no explanation of how such functionality would “provide more options to the user.” For example, Petitioners do not even attempt to explain why the mobile device could not be provided with the same options *before* a wireless communication path is established including the mobile device and the available PAU (e.g., if the user device obtains a set of available options from a remote server via cellular communications). Indeed, as noted above, Arora

teaches that its techniques allow the user to select and purchase items before even arriving at the vending machine. EX1004, Abstract, 3:40-41, 12:9-30.

The cited testimony cannot salvage the petition’s conclusory argument. Pet., 64 (citing EX1003, ¶277). First, the cited testimony essentially just repeats the petition’s conclusory assertion without offering any supporting analysis or corroboration, and it is therefore entitled to little or no weight. *Compare* EX1012, ¶277, *with* Pet., 64; *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (precedential) (declarant’s conclusory repetition of petition’s argument entitled to little weight). Beyond this parroting of the petition, Petitioners’ declarant argues that establishing the connection prior to enabling user interaction would keep the user from conducting a transaction with a different machine, but this assertion is irrelevant since the petition never makes this argument. EX1012, ¶278.

Petitioners’ declarant also argues that a POSA would have been “aware of the capabilities of mobile device technology” and “would have found it obvious and known to look to solutions such as those taught in Arora and/or Casey, to arrive at the claimed element” (*id.*), but this vague, uncorroborated assertion provides no technical analysis supporting the petition’s argument that facilitating UI interaction after establishing the wireless communication path was obvious “in order to provide more options to the user for the goal of enabling the purchase.” Pet., 64.

Petitioners’ conclusory assertion of obviousness is therefore legally and factually deficient.

Accordingly, the petition’s analysis of element 1.9 is facially incomplete, relies on a flawed inherency theory, and boils down to nothing more than a conclusory, unsubstantiated assertion of obviousness. Petitioners therefore fail to prove that the proposed combination satisfies element 1.9, which is fatal to Petitioners’ challenges to claims 7, 11-13, and 18 in Ground 2.

4. The Petition Fails to Show that the Proposed Combination Teaches Element 1.11

The petition’s cursory discussion of element 1.11 is facially deficient in multiple ways. Element 1.11 recites “in response to receiving the information”—i.e., the “information” recited in element 1.10—“displaying, on the display, an updated user interface of the mobile payment application to the user of the mobile device.” Petitioners argue that “Low in view of Arora and/or Casey would have disclosed or rendered obvious this element,”⁴ but offers only three conclusory

⁴ As with the previously discussed elements, the precise basis of Petitioners’ alternative argument is unclear—it is initially characterized as Low in combination with Arora “and/or” Casey, while the subsequent analysis mentions only Low in

sentences to support that assertion. Pet., 65-66. As explained below, this piecemeal discussion fails to show that the proposed combination satisfies the claims as a whole and relies on a flawed inherency theory.

First, the petition’s conclusory analysis is facially insufficient to prove obviousness. Petitioners argue that Low’s user device receives an approval, which is supposedly “conveyed to the user device 110 via purchase application 112 and/or other application 114 (GUI).” Pet., 65-66. Petitioners then argue without explanation that “Low, as modified in view of Arora and Casey, discloses this element.” *Id.*, 66. Missing from this cursory discussion is any explanation of how the proposed combination supposedly satisfies element 1.11. Petitioners cannot meet their burden of proving obviousness with conclusory analysis that does not even address the claim language. *In re Kahn*, 441 F. 3d at 988 (proving obviousness requires “articulated reasoning with some rational underpinning”).

The petition’s string cites to Arora and Casey cannot salvage this facially deficient analysis. *See* Pet., 66 (citing EX1004, FIG.3, 13:47-14:51; EX1005, 14:25-32). Petitioners do not even attempt to explain the relevance of these citations to Arora. Pet., 66. And while a parenthetical following the last string

view of Arora “and” Casey (Pet., 65-66)—but the argument fails under either formulation.

citation mentions Casey's purported disclosure of updating a display after exchanging information, the petition contains no analysis of how this relates to the proposed combination with Low and Arora. *Id.* In fact, as previously shown, the petition exclusively proposes applying Casey's swipe/motion inputs in the combination (*id.*, 52), so the petition never even proposes using the cited portion of Casey in the combination with Low and Arora (let alone proves sufficient motivation to do so with a reasonable expectation of success).

Accordingly, the petition's conclusory analysis of element 1.11 fails to provide any articulated reasoning with some rationale underpinning showing that the proposed combination satisfies this element as a whole.

Petitioners' argument against element 1.11 also relies on a flawed inherency argument. *See Therasense*, 593 F. 3d at 1332 ("Inherency...may not be established by probabilities or possibilities."). After asserting that Low's user device receives approval (Pet., 65-66 (citing EX1003, 10:55-61)), Petitioners argue that the information "would **necessarily** have been conveyed to the user device 110 via purchase application 112 and/or other application 114 (GUI)." Pet., 65-66 (emphasis added) (citing EX1012, ¶¶288-289). But the cited passage of Low says nothing about approval being conveyed via purchase application 112 or a GUI, and the petition fails to offer *any* explanation of why the approval would necessarily be conveyed to the user device via those applications (as opposed to being conveyed

to the user device via, for example, a different process executing on the user device that simply forwards the approval to the vending machine). *See* EX1003, 10:55-61 (“User device 110 may receive the approval and use a payment authorization included in the approval with electronic payment module 130 to dispense a purchase item of product 124 from vending machine 120.”). The petition thus once again relies on wholly conclusory analysis. *See In re Kahn*, 441 F. 3d at 988 (proving obviousness requires “articulated reasoning with some rational underpinning”).

Petitioners’ inherency argument also lacks meaningful evidentiary support. Pet., 68 (citing EX1012, ¶¶288-289). As the Board explained in *Xerox*:

Petitioner’s only evidence in support of its assertion that blocking the purchaser would require recording the blocking in a record in the user’s account is the opinion of its Declarant, Dr. Jones. Pet. 28 (citing Ex. 1003 ¶54). We have reviewed this excerpt from Dr. Jones’ declaration and note that it merely repeats, *verbatim*, the conclusory assertion for which it is offered to support. *See* Ex. 1003 ¶54 (Dr. Jones declaring that “[a] POSITA would understand that such a blocking would require recording the blocking in a data record associated with that user’s account.”). Dr. Jones does not cite to any additional supporting evidence or provide any technical reasoning to support his statement. Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.

Xerox, Paper 9 at 16 (citing, *inter alia*, 37 C.F.R. §42.65(a)). As in *Xerox*, the only cited support is testimony that essentially just repeats Petitioners’ attorney argument without providing corroboration or supporting technical analysis. EX1012, ¶290 (“In my opinion, a POSITA would have understood that the information would be conveyed to the user device 110 via purchase application 112 and/or other application 114 (GUI).”); *compare id.*, with Pet., 65-66. The cited testimony is therefore entitled to little or no weight, leaving the petition’s conclusory inherency argument factually unsupported.

Moreover, Petitioners’ declarant testimony is directly at odds with Petitioners’ inherency argument. While Petitioners assert that Low’s “information would necessarily have been conveyed to the user device 110 via purchase application 112 and/or other application 114 (GUI)” the cited testimony contradicts such necessity. Pet., 65-66 (emphasis added) (citing EX1012, ¶¶288-289). Instead, Petitioners’ declarant clearly states “[a] POSITA would have understood that this approval may be conveyed to the user device 110 via the purchase application 112.” EX1012, ¶289 (emphasis added). Thus, Petitioners’ own declarant emphasizes the flaws of Petitioners’ inherency argument.

Accordingly, the petition’s argument against element 1.11 fails for multiple reasons. Each of these deficiencies is fatal to Petitioners’ challenges to claims 7,

11-13, and 18 in Ground 2, which do not remedy the deficiencies with respect of claim 1.

VI. Ground 3 Fails Because it is Moot

Petitioners allege claim 17 of the '296 patent is indefinite under §112(b). Pet., 86-87. As discussed above, PayRange has disclaimed claim 17 without conceding to the merits of Petitioners' argument. EX2006 (statutory disclaimer under 37 C.F.R. §1.321(a) filed on December 20, 2023, disclaiming claims 1-6, 8-10, 14-17, and 19-28 of the '296 patent, leaving only claims 7, 11-13, and 18). Therefore, Petitioners' Ground 3 challenge to claim 17 has been rendered moot and the Board need not consider it to deny institution in this proceeding.

VII. Conclusion

Accordingly, for at least the reasons set forth above, institution of post grant review should be *denied*.

Respectfully submitted,

Dated: December 28, 2023

/Matthew A. Argenti/
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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this paper contains no more than 18,700 words, not including the portions of the paper exempted by § 42.24(b). According to the word-processing system used to prepare this paper, the paper contains 11,501 words.

Respectfully submitted,

Dated: December 28, 2023

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VIII. Appendix

EXHIBIT NO.	DESCRIPTION
2001	KioSoft Complaint, <i>PayRange Inc. v. KioSoft Techs., LLC</i> , No. 1:20-cv-20970 (S.D. Fla. Mar. 3, 2020), Doc. No. 1.
2002	KioSoft Complaint, <i>PayRange Inc. v. KioSoft Techs., LLC</i> , No. 1:20-cv-24342 (S.D. Fla. Oct. 21, 2020), Doc. No. 1.
2003	Amended KioSoft Complaint, <i>PayRange Inc. v. KioSoft Techs., LLC</i> , No. 1:20-cv-24342 (S.D. Fla. Jan. 15, 2021), Doc. No. 17.
2004	Second Amended KioSoft Complaint, <i>PayRange Inc. v. KioSoft Techs., LLC</i> , No. 1:20-cv-24342 (S.D. Fla. Jan. 31, 2021), Doc. No. 142.
2005	Order Granting in Part and Denying in Part Partial Summary Judgment, <i>PayRange Inc. v. KioSoft Techs., LLC</i> , No. 1:20-cv-20970 (S.D. Fla. June 8, 2023), Doc. No. 335.
2006	Statutory Disclaimer filed in U.S. Patent 11,501,296, on December 20, 2023.
2007	Prosecution History of U.S. Patent No. 10,891,614.

CERTIFICATE OF SERVICE

I certify that the foregoing Patent Owner's Preliminary Response Pursuant to 37 C.F.R. § 42.207 and accompanying Exhibits 2001-2007 was served this 28th day of December 2023, on the Petitioners at the following electronic service addresses:

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