

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. PGR2023-00045
Patent No. 11,488,174

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

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I. Introduction

The petition wastes the Board's resources and fails on the merits. The Board should deny institution for multiple reasons.

First, Petitioners reintroduce arguments already rejected by the Office. The Board previously found in PayRange's favor when these exact same Petitioners challenged claims under 35 U.S.C. §101 that Petitioners admit are substantially similar to those challenged here. *Infra*, §III.A. Petitioners elected not to appeal that decision, but now seek to collaterally attack the Board's prior judgment through this continuation patent. Petitioners then seek to ignore the import of the Patent Office's prosecution of the current patent, wherein the scope of the present claim was narrowed to ensure patent eligibility, consistent with the Board's prior holding. *Id.* Additionally, Petitioners' §103 arguments have a multitude of flaws, including reliance on art explicitly considered during examination. *Infra*, §III.B. For at least these reasons, the Board should exercise its discretion under §325(d) and dismiss this challenge.

Second, even if the Board does not discretionarily deny institution, the petition fails on the merits. With regard to Petitioners' first ground, Petitioners fail to show that the claims are patent ineligible under §101. *Infra*, §IV. With regard to Petitioners' second ground, Petitioners fail to show the claims to be obvious under §103. *Infra*, §V. They fail to apply the correct standard of obviousness and

instead present a hodgepodge of allegations that are nigh undecipherable. *Infra*, §V.A. Petitioners fail to show that numerous claim elements are taught by the applied references, relying instead on uncorroborated testimony that essentially repeats the petition’s flawed arguments verbatim. *Infra*, §V.B-C. The petition also presents illogical arguments as well as contentions that are unsupported by their relied-upon testimony. *Infra*, §V.B-D.

The petition therefore fails on every level: Petitioners fail to show reason why the Board should not exercise its discretion to deny the petition under §325(d) and fails on the merits to prove that any claim is unpatentable under §101 or §103. 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 ’174 patent in November 2022 for this breakthrough.

On March 3, 2020, PayRange sued Petitioners in United States District Court for infringing U.S. Patent Nos. 9,659,296 and 9,134,994. EX2001.

PayRange did not assert the challenged '174 patent against Petitioners.

On October 21, 2020, PayRange sued Petitioners in United States District Court for infringing U.S. Patent No. 10,719,833. PayRange filed an amended complaint for infringement of the '833 patent and U.S. Patent Nos. 10,891,608, and 10,891,614 on January 15, 2021, and filed a second amended complaint for infringement of the '833, '608, and '614 patents on January 31, 2023. EX2002; EX2003; EX2004. Again, PayRange has not asserted the challenged '174 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 and the Examiner

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., 82-89. 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 PGR2021-00077, which challenged U.S. Patent No. 10,719,833 ("the '833 patent"), the parent of the '174 patent. *See* Pet., 2 (Petitioners acknowledging relationship between '833 patent and '174 patent). In that proceeding, the Board found that almost all claims in that case were not shown to be patent ineligible. In addition, the Examiner expressly considered this eligibility issue during prosecution of the '174 patent, including consideration of the PGR proceeding involving the '833 patent. Yet Petitioners are taking a second swing at their §101 arguments. Since the challenged claims incorporate features already addressed by the Board in rejecting Petitioners' previous §101 challenge, the instant petition should be denied.

1. Claims 2-20

Presently challenged claims 2-20 are materially the same as those that Petitioners already tried—and failed—to invalidate under §101. Petitioners admit as much, relying on the prosecution history of the '174 patent as demonstrating that the challenged claims are "substantially the same" as those in the '833 patent.

Pet., 23 (“the Examiner’s obviousness-type double patenting finding indicates they are directed to substantially the same subject matter as the ’833 patent claims”); *see also, id.*, 48 (citing PGR2021-00077, Paper 32); *id.*, 22 (“the same or similar scope as the claims of the ’833 patent”).

Despite highlighting the similarity between the ’174 claims and those of its parent, 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 PGR2021-00077, which found that Petitioners failed to show the ’833 patent’s claims 2-27 are invalid under §101. Pet., 48, 22-23. But Petitioners chose not to address this when arguing against discretionary denial. Pet., 82-89.

The presently challenged claims are materially similar to those 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 2-27 of the ’833 patent are ineligible under §101 in part because the claims recite a first transceiver corresponding to a short-range communication mode and a second transceiver corresponding to a long-range communication mode. PGR2021-00077, Paper 32 at 30-31. As shown in the tables below, currently challenged claims 2-20 are substantially similar. For example, ’174 independent claim 12 and claims

dependent therefrom are substantially similar to '833 claim 14 and claims

dependent therefrom:

US 10,719,833	US 11,488,174
14. A mobile device, comprising: a first transceiver corresponding to a short-range communication mode, and a second transceiver, distinct from the first transceiver, corresponding to a long-range communication mode distinct from the short-range communication mode; 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, prior to user selection of any items or services provided by an automatic retail machine: identifying the automatic retail machine based at least in part on a transmission received from an electronic payment device of the automatic retail machine; in response to identifying the automatic retail machine, obtaining, from the electronic payment device, a request, via a communications unit of the mobile device, to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine;	12. A mobile device, comprising: a first transceiver corresponding to a short-range communication mode, and a second transceiver, distinct from the first transceiver, corresponding to a long-range communication mode distinct from the short-range communication mode; 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, prior to user selection of any items or services provided by an automatic retail machine: receiving via the communications unit a transmission from an electronic payment device of the automatic retail machine, the transmission including a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine;

sending, to a server, the request via the communications unit of the mobile device; in response to sending the request to the server, obtaining from the server an authorization grant of an amount of funds for use in conjunction with the cashless transaction with the automatic retail machine; detecting, by an application executing on the mobile device, a trigger condition to perform the cashless transaction with the automatic retail machine; and in response to detecting the trigger condition, sending to the electronic payment device the authorization grant to enable completion of the cashless transaction at the automatic retail machine.	sending, to a server, the request via the communications unit of the mobile device; in response to sending the request to the server, obtaining from the server an authorization grant of an amount of funds for use in conjunction with the cashless transaction with the automatic retail machine; detecting, by an application executing on the mobile device, a trigger condition to perform the cashless transaction with the automatic retail machine; and in response to detecting the trigger condition, sending to the electronic payment device the authorization grant to enable completion of the cashless transaction at the automatic retail machine.
15. The mobile device of claim 14, wherein the transmission at least includes authorization zone threshold criterion; and after receiving the transmission, initiating a handshake process with the electronic payment device, wherein the handshake process includes: sending, to the electronic payment device, mobile device information at least including user identification information corresponding to the user of the mobile device via the first transceiver; and	13. The mobile device of claim 12, wherein the transmission at least includes authorization zone threshold criterion; and after receiving the transmission, initiating a handshake process with the electronic payment device, wherein the handshake process includes: sending, to the electronic payment device, mobile device information at least including user identification information corresponding to the user of the mobile device via the first transceiver; and

receiving, from the electronic payment device, electronic payment device information, wherein the electronic payment device information at least includes an identifier corresponding to the electronic payment device.	receiving, from the electronic payment device, electronic payment device information, wherein the electronic payment device information at least includes an identifier corresponding to the electronic payment device.
16. The mobile device of claim 15, wherein the sending the mobile device information comprises: in accordance with a determination that the authorization zone threshold criterion is satisfied, sending the mobile device information to the electronic payment device via the first transceiver, wherein the mobile device information indicates that the authorization zone threshold criterion is satisfied; and wherein the mobile device obtains the request in response to sending the mobile device information.	14. The mobile device of claim 13, wherein sending the mobile device information comprises: in accordance with a determination that the authorization zone threshold criterion is satisfied, sending the mobile device information to the electronic payment device via the first transceiver, wherein the mobile device information indicates that the authorization zone threshold criterion is satisfied; and wherein the mobile device obtains the request in response to sending the mobile device information.
17. The mobile device of claim 15, wherein the electronic payment device information further includes an indication that hands-free mode is available and payment zone threshold criterion.	15. The mobile device of claim 13, wherein the electronic payment device information further includes an indication that hands-free mode is available and payment zone threshold criterion.
18. The mobile device of claim 17, wherein the mobile device information further includes device identification information corresponding to a model type of the mobile device; and wherein the payment zone threshold criterion is based at least in part on the device identification information.	16. The mobile device of claim 15, wherein the mobile device information further includes device identification information corresponding to a model type of the mobile device; and wherein the payment zone threshold criterion is based at least in part on the device identification information.

19. The mobile device of claim 17, wherein detecting the trigger condition comprises: determining whether the payment zone threshold criterion is satisfied; and in accordance with a determination that the payment zone threshold criterion is satisfied, detecting the trigger condition without user input from a user at the mobile device.	17. The mobile device of claim 15, wherein detecting the trigger condition comprises: determining whether the payment zone threshold criterion is satisfied; and in accordance with a determination that the payment zone threshold criterion is satisfied, detecting the trigger condition without user input from a user at the mobile device.
20. The mobile device of claim 14, wherein detecting the trigger condition comprises: detecting a user input from a user of the mobile device; and in response to detecting the user input, detecting the trigger condition to perform the cashless transaction with the automatic retail machine.	18. The mobile device of claim 12, wherein detecting the trigger condition comprises: detecting a user input from a user of the mobile device; and in response to detecting the user input, detecting the trigger condition to perform the cashless transaction with the automatic retail machine.

Similarly, '174 independent claim 19 and claims dependent therefrom are substantially similar to '833 claim 21 and claims dependent therefrom:

US 10,719,833	US 11,488,174
21. A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions, which, when executed by a mobile device with one or more processors and a first transceiver corresponding to a short-range communication mode, and a second transceiver, distinct from the first transceiver, corresponding to a long-range communication mode	19. A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions, which, when executed by a mobile device with one or more processors and a first transceiver corresponding to a short-range communication mode, and a second transceiver, distinct from the first transceiver, corresponding to a long-range communication mode

distinct from the short-range communication mode, cause the mobile device to perform operations comprising: prior to user selection of any items or services provided by an automatic retail machine: identifying the automatic retail machine based at least in part on a transmission received from an electronic payment device of the automatic retail machine; in response to identifying the automatic retail machine, obtaining, from the electronic payment device, a request, via a communications unit of the mobile device, to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine; sending, to a server, the request via the communications unit of the mobile device; in response to sending the request to the server, obtaining from the server an authorization grant of an amount of funds for use in conjunction with the cashless transaction with the automatic retail machine; detecting, by an application executing on the mobile device, a trigger condition to perform the cashless transaction with the automatic retail machine; and	distinct from the short-range communication mode, cause the mobile device to perform operations comprising: prior to user selection of any items or services provided by an automatic retail machine: receiving via the first transceiver a transmission from an electronic payment device of the automatic retail machine, the transmission including a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine; sending, to a server, the request via the second transceiver of the mobile device; in response to sending the request to the server, obtaining from the server an authorization grant of an amount of funds for use in conjunction with the cashless transaction with the automatic retail machine; detecting, by an application executing on the mobile device, a trigger condition to perform the cashless transaction with the automatic retail machine; and
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in response to detecting the trigger condition, sending to the electronic payment device the authorization grant to enable completion of the cashless transaction at the automatic retail machine.	in response to detecting the trigger condition, sending to the electronic payment device the authorization grant to enable completion of the cashless transaction at the automatic retail machine.
22. The non-transitory computer readable storage medium of claim 21, wherein the transmission at least includes authorization zone threshold criterion; and after receiving the transmission, initiating a handshake process with the electronic payment device, wherein the handshake process includes: sending, to the electronic payment device, mobile device information at least including user identification information corresponding to the user of the mobile device via the first transceiver; and receiving, from the electronic payment device, electronic payment device information, wherein the electronic payment device information at least includes an identifier corresponding to the electronic payment device.	20. The non-transitory computer readable storage medium of claim 19, wherein the transmission at least includes authorization zone threshold criterion; and after receiving the transmission, initiating a handshake process with the electronic payment device, wherein the handshake process includes: sending, to the electronic payment device, mobile device information at least including user identification information corresponding to the user of the mobile device via the first transceiver; and receiving, from the electronic payment device, electronic payment device information, wherein the electronic payment device information at least includes an identifier corresponding to the electronic payment device.

Finally, '174 claims 2-10 are substantially similar to '833 claims 2-11:

US 10,719,833	US 11,488,174
1. A method of payment processing, the method comprising:	1. A method of payment processing, the method comprising:

at a mobile device with one or more processors, memory, and a communications unit, and prior to user selection of any items or services provided by an automatic retail machine: identifying the automatic retail machine based at least in part on a transmission received from an electronic payment device of the automatic retail machine; in response to identifying the automatic retail machine, obtaining, from the electronic payment device, a request, via the communications unit of the mobile device, to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine; sending, to a server, the request via the communications unit of the mobile device; in response to sending the request to the server, obtaining from the server an authorization grant of an amount of funds for use in conjunction with the cashless transaction with the automatic retail machine; detecting, by an application executing on the mobile device, a trigger condition to perform the cashless transaction with the automatic retail machine; and	at a mobile device with one or more processors, memory, and a communications unit, and prior to user selection of any items or services provided by an automatic retail machine: receiving via the communications unit a transmission from an electronic payment device of the automatic retail machine, the transmission including a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine; sending, to a server, the request via the communications unit of the mobile device; in response to sending the request to the server, obtaining from the server an authorization grant of an amount of funds for use in conjunction with the cashless transaction with the automatic retail machine; detecting, by an application executing on the mobile device, a trigger condition to perform the cashless transaction with the automatic retail machine; and
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in response to detecting the trigger condition, sending to the electronic payment device the authorization grant to enable completion of the cashless transaction at the automatic retail machine.	in response to detecting the trigger condition, sending to the electronic payment device the authorization grant to enable completion of the cashless transaction at the automatic retail machine.
2. The method of claim 1, wherein: the transmission at least includes authorization zone threshold criterion; and after receiving the transmission, initiating a handshake process with the electronic payment device, wherein the handshake process includes: sending, to the electronic payment device, mobile device information corresponding to the mobile device via a first transceiver of the mobile device; and receiving, from the electronic payment device, electronic payment device information, wherein the electronic payment device information at least includes an identifier corresponding to the electronic payment device.	2. The method of claim 1, wherein: the transmission at least includes authorization zone threshold criterion; and after receiving the transmission, initiating a handshake process with the electronic payment device, wherein the handshake process includes: sending, to the electronic payment device, mobile device information corresponding to the mobile device via a first transceiver of the mobile device; and receiving, from the electronic payment device, electronic payment device information, wherein the electronic payment device information at least includes an identifier corresponding to the electronic payment device.
3. The method of claim 2, wherein sending the mobile device information comprises: in accordance with a determination that the authorization zone threshold criterion is satisfied, sending the mobile device information to the electronic payment device via the first transceiver, wherein the mobile device information indicates that the authorization zone threshold criterion is satisfied; and	3. The method of claim 2, wherein sending the mobile device information comprises: in accordance with a determination that the authorization zone threshold criterion is satisfied, sending the mobile device information to the electronic payment device via the first transceiver, wherein the mobile device information indicates that the authorization zone threshold criterion is satisfied; and

wherein the mobile device obtains the request in response to sending the mobile device information.	wherein the mobile device obtains the request in response to sending the mobile device information.
4. The method of claim 2, wherein the electronic payment device information further includes an indication that hands-free mode is available and payment zone threshold criterion.	4. The method of claim 2, wherein the electronic payment device information further includes an indication that hands-free mode is available and payment zone threshold criterion.
5. The method of claim 4, wherein the mobile device information further includes device identification information corresponding to a model type of the mobile device; and wherein the payment zone threshold criterion is based at least in part on the device identification information.	5. The method of claim 4, wherein the mobile device information further includes device identification information corresponding to a model type of the mobile device; and wherein the payment zone threshold criterion is based at least in part on the device identification information.
6. The method of claim 4, wherein detecting the trigger condition comprises: determining whether the payment zone threshold criterion is satisfied; and in accordance with a determination that the payment zone threshold criterion is satisfied, detecting the trigger condition without user input from a user at the mobile device.	6. The method of claim 4, wherein detecting the trigger condition comprises: determining whether the payment zone threshold criterion is satisfied; and in accordance with a determination that the payment zone threshold criterion is satisfied, detecting the trigger condition without user input from a user at the mobile device.
7. The method of claim 1, wherein detecting the trigger condition comprises: detecting a user input from a user of the mobile device; and in response to detecting the user input, detecting the trigger condition to	7. The method of claim 1, wherein detecting the trigger condition comprises: detecting a user input from a user of the mobile device; and in response to detecting the user input, detecting the trigger condition to

perform the cashless transaction with the automatic retail machine.	perform the cashless transaction with the automatic retail machine.
8. The method of claim 1, further comprising: in response to obtaining the authorization grant, presenting a notification to a user of the mobile device that a connection has been established with the electronic payment device.	8. The method of claim 1, further comprising: in response to obtaining the authorization grant, presenting a notification to a user of the mobile device indicating (i) a connection has been established with the electronic payment device, and
9. The method of claim 8, wherein the notification further indicates the amount of funds for the transaction.	(ii) the amount of funds for the transaction.
10. The method of claim 1, wherein the authorization grant includes an identifier corresponding to the electronic payment device, an identifier corresponding to the mobile device, an amount of funds, an authorization grant token, and an expiration period for the authorization grant token.	9. The method of claim 1, wherein the authorization grant includes an identifier corresponding to the electronic payment device, an identifier corresponding to the mobile device, an amount of funds, an authorization grant token, and an expiration period for the authorization grant token.
11. The method of claim 10, wherein at least a portion of the request and the authorization grant token are encrypted with a unique encryption key corresponding to the electronic payment device.	10. The method of claim 9, wherein at least a portion of the request and the authorization grant token are encrypted with a unique encryption key corresponding to the electronic payment device.

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.

In addition to the previous PGR considered by the Board, the Office has also already considered the eligibility of the challenged '174 claims themselves. As Petitioners admit, the Examiner provided a detailed discussion considering patent eligibility under §101 during prosecution of the application for the '174 patent. Pet., 23; *see also* EX1002, 18-26 (noting application of 2019 Revised Patent Subject Matter Eligibility Guidance). Consistent with the Board's conclusion in PGR2021-00077, the Examiner determined that independent claims 2, 13, and 20 of the application for the '174 patent (and therefore claims 2-20 of the issued patent) "are eligible under 35 U.S.C. §101." EX1002, 26.¹

Petitioners argue that the grant of the challenged claims was based on "a misunderstanding of patent law, including reading limitations in from the challenged claims," but the only such alleged importation Petitioners identify is the adapter module depicted in Figure 5. Pet., 24. Petitioners do not address, let alone show error in, the Examiner's finding that the claimed invention's use of "short range communication capability in combination with long range communication capability" constituted "a solution to a technical problem of being able to

¹ The relevance of the prosecution history to claim 1 of the '174 patent is discussed separately in Section III.A.2, below.

communicate with a remote server in an area where a signal is unavailable.”

EX1002, 25. This is directly tied to the first and second transceivers having a short-range communication mode and a long-range communication mode, respectively, found in independent claims 12 and 19, and the first transceiver recited in dependent claim 2, and is consistent with the Board’s conclusions in PGR2021-00077. Nor do Petitioners address the Examiner’s citation to corroborating prior art demonstrating the existence of such problems in the relevant field. *Id.*, 25-26 (citing, *e.g.*, Mumford).

Because (1) substantially the same arguments were previously presented to the Office; and (2) Petitioners failed to demonstrate that the Board and the Examiner 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).

2. Claim 1

Consistent with the Board’s findings in Petitioners’ prior challenge, claim 1 of the ’174 patent is also patent eligible under §101. While the Board decided in PGR2021-00077 that claim 1 of the ’833 patent was ineligible under §101, it was in relevant part because that claim did not explicitly recite short- and long-range communications. PGR2021-00077, Paper 32, 23-24, 30-31. In that case, there

was no prosecution history preceding that PGR establishing these communication modes as elements of that claim. In contrast, here, claim 1 contains the feature of a short-range communication mode and a long-range communication mode in view of the prosecution history.

As described further below, PayRange's argument in the '833 PGR—that all claims included the short-range communication mode and the long-range communication mode—became part of the prosecution history of the '833 patent and were folded into the prosecution history of its continuation application, which matured into the '174 patent. These arguments were in front of the Examiner during prosecution of the '174 patent. The Examiner arrived at the same understanding that all claims of the '174 patent included a short-range communication mode and a long-range communication mode and incorporated that understanding. Thus, claim 1 includes the short-range communication mode and the long-range communication mode by virtue of prosecution history estoppel, and for at least that reason is §101 patent eligible.

During the PGR of the '833 patent, PayRange argued repeatedly and consistently that all the claims—including claim 1—had the features of a short-range communication mode and a long-range communication mode. PGR2021-00077, Paper 11 (POR) at 23 (“[T]he patent improves conventional payment networking systems...by offering a solution that leverages the mobile phone's

short- and long-range communication capabilities.”), 19-20 (“[A]ll challenged claims operate by...the mobile device obtaining a request for preemptive authorization of funds...[and] the mobile device sending the authorization to the automatic retail machine...permitt[ing] asynchronous, or non-persistent, communication between the payment server and the automatic retail machine via the mobile device, thus avoiding the need for a persistent network.”); *see also* PGR2021-00077, Paper 7 (POPR), 19 (describing the relevance of the same subject matter deemed patent eligible in U.S. Pat. No. 9,547,859 (the “’859 patent”) (grandparent of the ’174 patent). Although the Board found that ’833 patent claim 1 did not include the short- and long-range communications (PGR2021-00077, Paper 32, 23-24), the outcome differs with the ’174 patent at least because the features were explicitly incorporated into the presently challenged claims via prosecution history estoppel.

Statements made by PayRange during the PGR challenging the ’833 patent became part of that patent’s prosecution history, and the prosecution history of the ’833 patent is relevant to understanding the scope of the ’174 patent claims. Where a patent owner makes statements to the Board during a post-grant proceeding, the public is put on notice of how the patent owner views its patent and such statements are incorporated into the patent’s prosecution history. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1359 (Fed. Cir. 2017). Additionally,

the prosecution history of a parent patent informs the understanding of the scope of the claims of a child patent. *Augustine Med., Inc. v. Gaymar Indus.*, 181 F.3d 1291, 1300 (Fed. Cir. 1999); *see also Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990) (prosecution history of a parent application is relevant to understanding the scope of claims in a continuation application). Thus, the above-discussed statements PayRange made with regard to its understanding of the claims in PGR2021-00077 narrow the scope of the claims of the '174 patent.

The arguments PayRange made to the Board in the challenge against the '833 patent were before the Examiner during prosecution of the application that matured into the '174 patent. As Petitioners recognize, PayRange filed a terminal disclaimer that disclaimed any statutory term that would extend beyond expiration of the '859 and '833 patents.² Pet., 22-23, 83; EX1002, 98-99. The Office accepted this terminal disclaimer (EX1002, 26, 93) and by virtue of PayRange filing the terminal disclaimer, the Examiner was required to consider the arguments PayRange made in the Patent Owner Preliminary Response and Patent Owner Response for PGR2021-00077. *See* MPEP §904.04 (the Examiner is required to review, *inter alia*, Patent Owner's Preliminary Response and Patent

² The terminal disclaimer also disclaimed statutory term beyond expiration of U.S. 8,856,045. EX1002, 26, 93, 98-99.

Owner's Response 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 prosecution history shows that the Examiner did in fact fulfil his duty and considered the PTAB documents. EX1002, 18-29 (discussing the '833 post grant review and institution decision).

The Examiner arrived at the same understanding of the claims that PayRange had advocated—that all claims included a short-range communication mode and a long-range communication mode. Like PayRange, the Examiner explained that he understood claim 1 of the '174 patent to require both short range communication and long range communication. EX1002, 22-23 ("[T]hose of ordinary skill would view the communication between the machine/adaptor module as being clearly directed towards short range communication...and the communication between the mobile device and the server as being a long range communication."). Therefore, the Examiner incorporated the same understanding of the claims that PayRange had argued, and this understanding was thereby incorporated into the claim terms via prosecution history estoppel. These facts are similar to *Elkay*, where the Federal Circuit held that prosecution history estoppel applied where—as here—the patent owner made statements regarding its understanding of the scope of the claims, the Examiner's Reasons for Allowance

stated he understood the claims to have that same scope, and the patent owner did not object to the Examiner's understanding. *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 978-79 (Fed. Cir. 1999).

The understanding that all claims included a short-range communication mode and a long-range communication mode—as advocated by PayRange and as adopted by the Examiner—definitively narrows claim 1 via prosecution history estoppel. Prosecution history estoppel applies both where there have been express amendments to the claims and where arguments as to the scope of the claims have been made and accepted. *Elkay*, 192 F.3d at 978-79; *see also ACCO Brands, Inc. v. Micro Sec. Devices, Inc.*, 346 F.3d 1075, 1078-79 (Fed. Cir. 2003) (prosecution history estoppel is found where an Examiner and applicant have a shared understanding of the interpretation of the claims); *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1096 (Fed. Cir. 2013) (arguments establish prosecution history estoppel and the applicant's statements need not repeat the Examiner's language *verbatim et literatim*). Indeed, “[a]rguments made during the prosecution of a patent application are given *the same weight* as claim amendments.” *Elkay*, 192 F.3d at 978-79 (emphasis added).

Additionally, the Examiner explicitly recognized that this claim element had overcome §101 rejections in a previous member of the same patent family and—consistent with the Board's decision in PGR2021-00077—that the Board had not

found claims reciting the element to be claim ineligible under §101. EX1002, 19 (“the presence of the short-range communication mode and the long-range communication mode in the claims of the [grandparent] ’859 patent were sufficient to overcome the section 101 rejection both in the Examiner’s issuance of the ’859 patent and were the basis for the Patent Trial and Appeal Board concluding that any arguments relative to the long-range communication mode and short-range communication mode have already been considered by the office”).

Additional references cited by the Examiner support his conclusion that claim 1 of the ’174 patent includes the short-range communication mode and the long-range communication mode. EX1002, 25-26. These references explain the issues of offline vending machines or online-connected vending machines in dead zones—something PayRange resolved with the presently claimed invention. *Id.* The Examiner recognized that the technological problems of older machines are solved by the claimed invention incorporating the short-range communication mode and the long-range communication mode. *Id.* Having obtained allowance of claim 1 because the Examiner adopted PayRange’s argument regarding the narrowed scope of the claim, PayRange paid the issue fee and perfected their meeting of the minds, which had established the narrower scope of claim 1. Thus, claim 1 incorporates the short- and long-range communication features that the Office has repeatedly determined render the claims patent eligible under §101.

Petitioners' attempts to evade the consequences of their previous §101 challenge and take a second swing at the claimed subject matter should be rejected. The petition's challenge thus should be denied.

Petitioners' repeated attack on the subject matter in the challenged claims is sufficient to deny consideration of at least Ground 1 under §325(d). As discussed below (*infra*, §III.B), Petitioners' obviousness argument in Ground 2 should also be discretionarily denied under §325(d). Nonetheless, if the Board believes that §325(d) merits denial of only the substance of Ground 1, the Board should still exercise its discretion to deny institution because Petitioners have failed to show the claims to be obvious under §103 in Ground 2. *Supercell Oy*, PGR2020-00063, Paper 10 at 7-12 (exercising §325(d) discretion to deny institution of §101 challenge while denying prior art challenges on the merits).

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

Contrary to Petitioners' misrepresentations, the Examiner explicitly considered the petition's primary grounds reference; 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 '174 patent.

Petitioners mislead the Board by implying that the Examiner was unfamiliar with the primary grounds reference, *Kamat*. Pet., 84-85. Petitioners suggest that *Kamat* 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 it was not considered by the Examiner. *Id.* But the very same Examiner was already familiar with Kamat, having relied upon it as the basis of a prior art rejection during prosecution of '174 patent's grandparent, U.S. 9,547,859. EX2005, 1017-1025, 1028. While the petition falsely states that “the Examiner merely signed the Information Disclosure statement” without evaluation of the reference (Pet., 85), the prosecution history shows that the Examiner was demonstrably familiar with Kamat long before that IDS, including going so far as to apply it in a rejection.

The Examiner was also familiar with Kamat as a ground reference challenging the parent '833 patent which—as discussed above—has substantially similar subject matter to the '174 claims. Prior to issuing a notice of allowance, the Examiner evaluated the Board's institution decision in PGR2021-00077. EX1002, 18-19 (“Patent 10,719,833...is the subject of post-grant review PGR2021-00077. Examiner has reviewed the entire document for the matters being reviewed under sections 101, 112(a), 112(b), 102 and 103.”). The institution decision, in turn, described Kamat and Petitioners' obviousness arguments, applying it as a ground reference. PGR2021-00077, Paper 8, at 7-8, 45-48.

Yet Petitioners again rely on Kamat in this challenge for the same reasons that the Board and Examiner already determined are unavailing. For example, in the prior institution decision the Board recognized that Kamat's “generic

disclosure describ[ing] changing the order of Kamat’s operations” is insufficient for a basis to argue that Kamat teaches claimed steps occurring prior to user selection of items or services. PGR2021-00077, Paper 8, at 47; *see also* PGR2021-00077, Paper 32, 47-49 (similar conclusion in the final written decision). Yet Petitioners rely on this same argument again, albeit via an improper incorporation by reference. Pet., 64-65 (claim element [1.2]) (arguing Kamat as modified by Arora and Dixon would have disclosed steps occurring prior to user selection of any items or services and relying on expert testimony, EX1009, ¶239); EX1009 ¶239 (Petitioners’ expert repeating—**and relying solely on**—the argument that Kamat’s generic disclosure of changing the order meets this claim limitation). As discussed above, the Examiner had reviewed the entirety of the Board’s institution decision; thus he was also familiar with Kamat’s generic disclosure and still issued the notice of allowance, likely also recognizing Kamat’s generic disclosure to be insufficient. Petitioners’ reliance on the same art for the same arguments in this case is sufficient reason for the Board to deny institution under §325(d).

Petitioners also misstate facts in presenting their argument against discretionary denial. Arguing that the challenged claims were allowed with no merits-based rejections, Petitioners state that “[n]o amendments were made to the original claims of the ’174 patent.” Pet., 83. But the only original claim of the ’174 patent was canceled during prosecution; the remaining claims were added

via amendment. EX1002, 248-255. Petitioners' framing of the claims serves only to confuse the facts.

Because Petitioners' obviousness argument relies on a reference previously applied by the Examiner, 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, that ground 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 denied on the merits for the reasons previously recognized by the Office. The Board already found in PGR2021-00077 that Petitioners failed to show §101 ineligibility of the claims reciting a first transceiver corresponding to a short-range communication mode and a second transceiver, distinct from the first transceiver, corresponding to a long-range communication mode distinct from the long-range communication mode. PGR2021-00077, Paper 32, 30-31. Now, contrary to the Office's findings, Petitioners argue that claims 1-20 of the '174 patent are unpatentable under §101.

Consistent with the Board's holding in PGR2021-00077, the '174 patent claims are patent eligible under §101. As described above, all claims, including all three independent claims, require a short-range communication mode and a long-range communication mode. *Supra*, §III.A.2. The Board was not convinced in the previous challenge that Petitioners showed that the claims containing this element are ineligible under §101. PGR2021-00077, Paper 32, 30-31. Put differently, a finding that claims 1-20 are patent eligible under §101 would be consistent with the Board's decision in PGR2021-00077, Paper 32.

Petitioners err in their §101 analysis of the first transceiver and the second transceiver of independent claims 12 and 19. Petitioners argue against the Office's findings, contending that the first transceiver and second transceiver are generic elements under Prong Two of Step 2A. Pet., 42-44. But the Office has already found that, even if the claims were directed to an abstract idea, such an abstract idea is integrated into a judicial exception under Prong Two of Step 2A at least because of the recited first transceiver corresponding to a short-range communication mode and second transceiver corresponding to a long-range communication mode. EX1002, 21-26. Such a finding of a practical application under Prong Two of Step 2A is consistent with the Board's holding in PGR2021-00077.

The Office has already found each of the claims to be patent eligible under §101 due at least in part to the fact that each of the claims includes a short-range communication mode and a long-range communication mode. EX1002, 21-26; *supra*, §III.A.2. The transceivers recited in independent claims 12 and 19 provide a solution to a technical problem of communicating with a remote server from a machine without long-range communication capabilities. Adapting machines that are not equipped for both long-range and short-range communication, the claims accomplish such communication by performing operations of a mobile device receiving a transmission from an electronic payment device of an automatic retail machine and sending that transmission to the server via the mobile device's long-range communication. Thus, as the Office already found and as is consistent with the Board's previous decision, the challenged claims provide a solution for a technological problem. EX1002, 24-26.

Petitioners fail to provide good reason for the Board to revisit this already-decided issue and arrive at the opposite conclusion. Grasping at straws,³ Petitioners ask the Board to reconsider its position but fail to identify any flaws

³ Petitioners' disparaging statements against the Office, such as allegations that the Examiner had "a clear case of sour grapes" (Pet., 23) do not change the fact of the Examiner's conclusions, or the Board's in PGR2021-00077.

with either the Board's decision in PGR2021-00077 or the Examiner's allowance of these claims after considering this eligibility issue. Thus, Petitioners fail to articulate sufficient reason to reverse course and fail to show that the challenged claims are patent ineligible under §101.

Therefore, consistent with the Office's previous decisions on this matter, the Board should recognize that Petitioners yet again failed to show the claimed subject matter to be patent ineligible under §101. Accordingly, Petitioners' challenge to the '174 patent in Ground 1 should be denied.

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 independent 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 Kamat, Arora, and Dixon teach that the recited claim elements occur “prior to user selection of any items or services provided by an automatic retail machine” as recited in elements [1.2], [12.2], and [19.2]. Third, the petition fails to show that the references teach a transmission “including a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine” as recited in elements [1.4], [12.4], and [19.4]. Fourth, the petition fails to provide a supported reason to combine the references to arrive at the claimed inventions. 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 conclusory statements.

As an initial matter, Petitioners’ bare citations to the grounds references in its 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 woefully lack analysis and evaluation. Pet., 63-82. 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).

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., 64-82 (each of independent claim elements 1.1-1.8, 12.2-12.8, and 19.2, 19.4, 19.6-19.8; each of dependent claim elements 2.0, 2.3, 2.4, 3.0-3.1, 4.0-4.1, 5.0, 6.0-6.2, 7.0-7.2, 8, 9, 10, 11, 13.0, 13.3-13.4, 14.0-14.1, 15.0-15.1, 16.0, 17.0-17.2, 18.0-18.2, 20.0, and

20.3-20.4). Petitioners similarly propose what the modified references “would have included.” *Id.* (each of elements 4.1, 5.1, 6.2, 15.1, 16.1, and 17.2). 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 1-20; thus the petition is facially deficient with respect to each and every claim.

B. Claims 1, 12, and 19: “prior to user selection of any items or services” [element 1.2/12.2/19.2]⁴

Each of independent claims 1, 12, and 19 recite steps (that occur “prior to user selection of any items or services provided by an automatic retail machine.” Petitioners fail to establish that the prior art taught this feature of each of the ’174 patent claims because the petition fails to show even that the cited references,

⁴ This section refers to element 1.2 throughout but the issues raised apply equally to elements 12.2 and 19.2, which are addressed collectively in the petition. Pet., 64-65.

whether alone or in combination, disclose performing each of the subsequently claimed steps *prior to user selection* of items or services. Petitioners' analysis for element 1.2, 12.2, and 19.2 is facially deficient, lacking any explanation as to how the cited portions of the references disclose this element. A cursory examination of the references shows that they do not meet the limitation. Petitioners' bare citations to expert testimony and the motivation to combine discussion do not support the contention, but rather undermine it, highlighting inconsistencies in Petitioners' arguments. Further inconsistency is found when comparing the petition's element 1.2 assertions to the 1.7 discussion just a few pages later. Any one of these issues is enough on its own to reject Petitioners' challenge.

To the extent that the petition's claim-mapping for element 1.2 can be deemed an "argument," it is superficial and conclusory. Alleging that the cited references teach steps that occur prior to user selection of any items or services, Petitioners contend in threadbare fashion that Kamat, as modified by Arora and Dixon, "would have disclosed, or at minimum rendered obvious, this limitation, including performing steps 1.3-8 prior to user selection of any item or service." Pet., 64-65. As discussed above in Section V.A, arguing what the prior art "would have disclosed" if modified is insufficient to demonstrate obviousness under the proper legal framework. In any event, Petitioners cite *no* prior art in support of

this assertion. *Id.*, 64 (citing only expert testimony (EX1009)). In fact, the element 1.2 discussion contains no citation to Kamat whatsoever.

Petitioners then go on to assert that “all information necessary to complete a purchase in Kamat...would have been exchanged between the mobile device and vending machine *before the customer enters the ‘dispensing distance’* of the vending machine.” *Id.*, 65 (emphasis added). But Petitioners’ argument is facially deficient for altogether missing the mark: the instant claims recite steps that occur *prior to user selection of any items or services*; Petitioners have not shown this to be the same as performing steps before a customer enters a “dispensing distance.” Lacking any real evaluation of how the POSITA would allegedly arrive at this claim element in view of the cited references, the petition addresses this claim element as a mere afterthought.

Petitioners attempt to incorporate their motivation to combine section into their claim mapping analysis, but that cannot remedy the deficiencies regarding element 1.2. Pet., 61 (“As discussed in §IV.G.2...”). As in the element 1.2 analysis itself, the motivation section relies on Arora’s teachings regarding a user’s physical proximity to a vending machine, i.e., within a “dispensing distance.” *Id.*, 61 (“Arora’s ‘transaction distance’-based zones that speed up purchase transactions by handling identification, authorization, and other exchanges of information necessary for cashless payment *before a customer reaches the machine.*”)

(emphasis added); 62 (alleging obviousness of exchanging “all information necessary for the purchase transaction before the customer is within the ‘dispensing distance’”). These disclosures say nothing about the timing of a user’s selection of goods or services relative to the exchange of other information. Petitioners’ reliance on Arora thus fails to describe the claimed steps occur “*prior to user selection* of any items or services provided by an automatic retail machine.”

Petitioners’ citations to Arora likewise fail to show that it teaches the cited “exchanges of information,” let alone the claimed steps, prior to selection of goods or services. Pet., 61-62 (citing EX1007, 12:45-49, 13:40-43, 18:13-28, FIG. 6). **First**, EX1007, 12:45-49 merely recites that there are distances wherein a customer may recognize a machine or vice versa. **Second**, EX1007, 13:40-43 merely states that some transactions include a customer’s identification. **Third**, EX1007, 18:13-28 recites the use of near field communications to identify a customer and determine if that customer is within a dispensing distance; insofar as it describes the confirmation of a pending transaction, this is with regard to a product purchase—in other words, after user selection of items or services. **Finally**, EX1007, FIG. 6 illustrates a flowchart of steps for a customer to purchase a product. EX1007, 18:37-19:19. But Arora’s FIG. 6 does not describe the transfer of information prior to a user’s *selection* of any items or services; rather, it describes steps that occur within a user’s various *distances from* the machine. *Id.*

Contrary to Petitioners' assertions, Arora is explicit that its disclosure "permits a customer to 'pre-order' a product prior to standing directly in front of the particular vending machine." *Id.*, 19:19-23; *see also id.*, 12:9-15 (describing that the customer pre-selects or even pre-purchases a product prior to Arora's other steps occurring). In other words, Arora describes a customer who has *previously selected* an item or service prior to the transfer of information based on distance; this cannot be understood to teach steps that occur "prior to user selection of any items or services" as claimed.

In its element 1.2 discussion, Petitioners repeat their citations to Arora, without any additional analysis or argument beyond what is found in the motivation section. Pet., 65 (citing EX1007, 12:45-49, 13:40-43, 18:13-28, FIG. 6). Petitioners additionally cite to 25:28-35 of Arora, but this citation merely teaches that a product may be dispensed prior to seller approval of a purchase. Quickly dispensing a product because a "vending company 'trust[s]' this customer, who has already been electronically identified to the vending company" does not teach or suggest that any of the claimed steps occur prior to user selection of any items or services. EX1007, 25:22-40.

Petitioners' citation to Dixon, whether with respect to element 1.2 itself or in the motivation to combine section, likewise fails to support the conclusory assertion that the prior art discloses or renders obvious this element. As with its

discussion of Arora, the petition does not allege that Dixon discloses performing the claimed steps prior to user selection of items or services—instead, the petition merely contends that “Dixon teaches that all steps necessary for the completion of a purchase transaction can be done “*before the customer reaches the point of sale.*” Pet., 63 (emphasis added). But the claims do not recite steps occurring prior to a customer reaching a “point of sale,” and Petitioners provide no explanation how this would result in performance of the claimed steps prior to selection of goods or services (which is itself presumably a necessary step to complete a transaction).

Petitioners’ relied-upon excerpts of Dixon similarly fail to teach that steps occur “prior to user selection of any items or services.” Petitioners allege that Dixon describes delaying *completing* a transaction when a customer authorizes cashless payment, such as walking away from a point of sale. Pet., 63 (citing EX1008, FIG. 9B, step 950). But this citation illustrates that Dixon does not describe steps occurring *prior to* user selection of any items or services; instead, Dixon explicitly describes steps occur *following* user selection of services. Dixon describes the use of a mobile device to transfer information including a user identification and accessing account information while a user is in transit in a vehicle. EX1008, ¶0120 (describing FIG. 9B). Dixon teaches that block 915 of FIG. 9B shows a transmission “to detect entry of the mobile device 250 onto the

transit vehicle 310.” *Id.*, ¶0114. Thus, all of the steps occurring thereafter are occurring *after user selection* of services (e.g., after user has already selected the route or vehicle that will be used). *See id.*, FIG. 9B (reproduced below, showing step 915 at the beginning corresponding with a user’s entry to the transit vehicle).

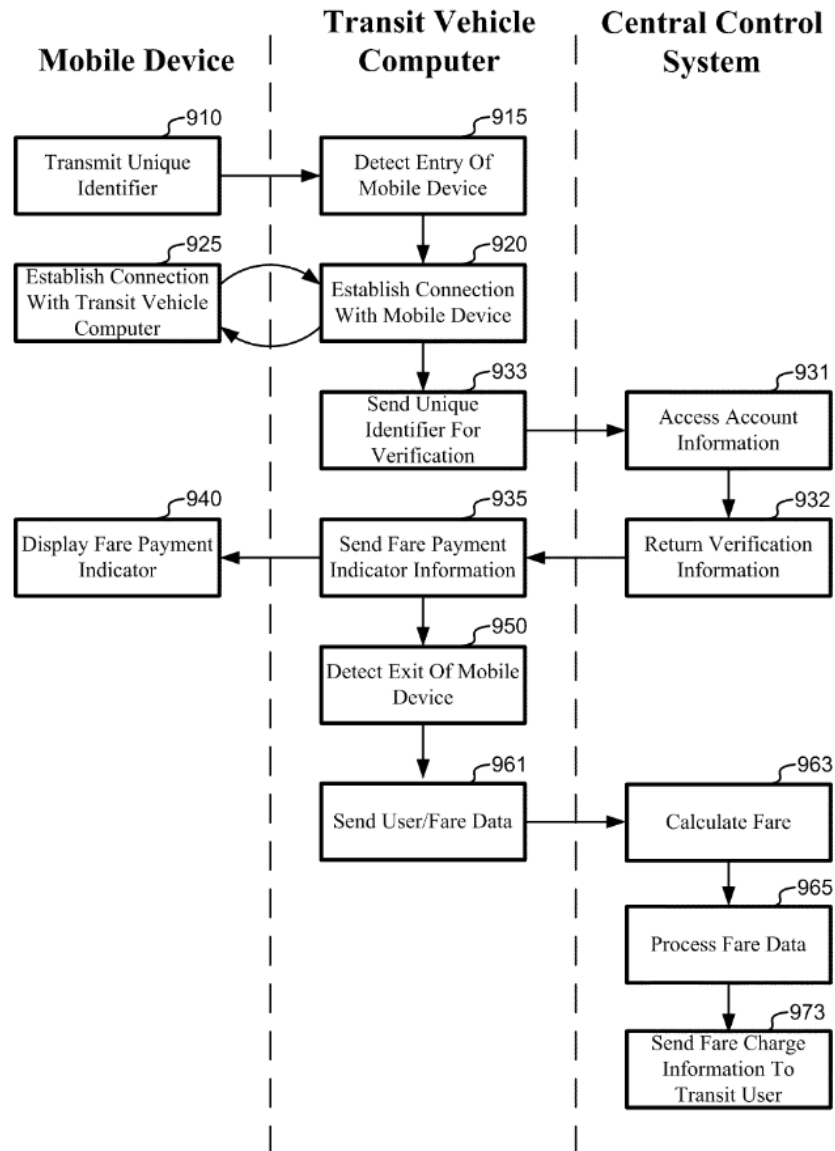


FIG. 9B

The petition relies upon Dixon’s step 950—without explanation—to allege that this describes completing steps necessary *prior to a customer reaching a point of sale*. Pet., 63. But this still fails to show that the recited steps occur *prior to user selection of a service* or item, at least because the customer is described as having already selected a service (e.g., selection of transportation) by entering the vehicle at step 915. EX1008, ¶¶0114, 0120.

Petitioners do not rely on any other excerpts of Dixon to allegedly support their claim element analysis regarding steps that occur “prior to user selection of any items or services provided by an automatic retail machine.” Pet., 64-65.

Therefore, its conclusions to the contrary remain deficient.

Petitioners’ citation to its expert declaration fares no better than its reference to its motivation section. The cited paragraphs of the declaration provide no substantive analysis that might inform the basis of the conclusory assertions in petition’s element 1.2 claim mapping. See EX1009, ¶¶238-39. In fact, the expert declaration says something entirely different than the petition. Petitioners allege that Kamat, Arora, and Dixon render obvious steps that occur “prior to user selection of any items or services,” but rely on modification of Kamat with Arora and Dixon to allegedly describe this feature (i.e., Petitioners do not allege that Kamat describes this feature, and as noted above do not cite Kamat in their element 1.2 discussion). Pet., 64-65. In contrast, Petitioners’ expert *relies solely on Kamat*

as allegedly describing steps “prior to user selection of any items or services.” EX1009, ¶239 (citing only EX1006, ¶42). Due to the divergence between the petition and the cited expert witness testimony, the petition is entirely without support for its contentions regarding obviousness of this claim element in view of the combination of Kamat, Arora, and Dixon.

While the Board should not consider citations to prior art not raised in the petition itself, Petitioners’ expert is nevertheless incorrect in his assertion that Kamat discloses this claim element. The sole alleged basis for support is a boilerplate statement in Kamat that, with regard to its flowchart, “the functions noted in the block may occur out of the order noted in the Figures.” EX1009, ¶239 (citing EX1006, ¶0042). But Kamat does not disclose each of the claim elements of the recited independent claims, much less that each of the subsequent claimed steps occur “prior to user selection of any items or services.” Therefore, any reliance on Kamat as allegedly describing this claim feature is facially deficient, and mere reliance on generic language without further evaluation is insufficient.

Moreover, Petitioners’ contentions with respect to claim element 1.2 are illogical and inconsistent with those they put forth for element 1.7. Combined claim elements 1.2 and 1.7 provide that, [1.2] “prior to user selection of any items or services provided by an automatic retail machine,” [1.7] “a trigger condition to perform the cashless transaction with the automatic retail machine” is “detect[ed],

by an application executing on the mobile phone.” With regard to claim element 1.2, Petitioners argue that each of the subsequent steps must occur before the user hits a *dispensing distance*, but Petitioners explicitly argue that the combined references describe cashless transactions that “would occur after a determination is made that the mobile device 10 is within the ‘dispensing distance’ taught by Arora.” Pet., 67 (emphasis original). For element 1.7, Petitioners explicitly rely on “the ‘dispensing distance’ [as] being understood by the POSITA to be the claimed ‘trigger condition.’” *Id.* Petitioners’ argument is facially deficient for being illogical: Arora’s “dispensing distance” cannot both be the trigger to perform the cashless transaction *and* be a stand-in for showing that the trigger must occur before the user has entered the dispensing distance.

Accordingly, Petitioners have not shown the combination of Kamat, Arora, and Dixon to teach each and every element of the claims at least because the combination fails to disclose that the subsequent claimed steps occur “prior to user selection of any items or services provided by an automatic retail machine.”

C. Claims 1, 12, and 19: “a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine” [element 1.4/12.4/19.4]⁵

Each of independent claims 1, 12, and 19 recite “a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine.” Petitioners fail to establish that the cited references show this feature of each of the ’174 patent claims because the petition fails to identify evidence that the references disclose such a request to preemptively obtain authorization to make funds available. In doing so, the petition fails to show that the cited references disclose this claim element.

Petitioners admit that this claim element was noted during prosecution as a distinguishing feature over the prior art. The petition acknowledges that “[t]he Examiner stated that he did ‘not see where any of the cited prior art fairly teaches or suggests the operation of receiving a request to preemptively obtain authorization to make funds available for a cashless transaction with an automatic retail machine.’” Pet., 24. Yet neither Petitioners’ discussion regarding the motivation to combine references (Pet., 61-63), nor Petitioners’ claim element

⁵ This section refers to element 1.4 throughout but the issues raised apply equally to elements 12.4 and 19.4, which are addressed collectively in the petition. Pet., 65-66.

analysis (Pet., 65-66), describe this element as being found in the cited references. Lacking such disclosure, Petitioners also fail to articulate a reason to incorporate a request to preemptively obtain authorization to make funds available for a cashless transaction into the cited references, much less to explain how a POSITA would have arrived at the claimed invention incorporating this feature with a reasonable expectation of success.

Petitioners' claim element analysis is conclusory and does not describe how a POSITA would arrive at the present claim element. Discussing the claim element that includes the "request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine," Petitioners merely allege that Kamat includes a "request," assert without explanation that Arora teaches the claim limitation in full, and then argue that Dixon can include a variety of types of information. Pet., 65-66 (elements 1.4, 12.4, and 19.4). Petitioners fail to provide any evaluation of the cited references, and therefore fail to show that this claim element is present in Kamat, Arora, and Dixon.

Petitioners' assertion that Kamat discloses the claimed request relies on that reference's point-of-sale code. Pet., 65 (citing EX1007 [*sic*], ¶¶51, 61-62). But Petitioners cite nothing in Kamat disclosing that the point-of-sale code is a request to obtain authorization to make funds available, let alone to do so preemptively.

To the contrary, Kamat explicitly describes that its point-of-sale code (205) includes: a merchant code that identifies the merchant managing the POS (840), the address where the POS device is located (845), a unit code to identify a store, kiosk, etc. (850), a register code to identify a register within a store (855), and a time stamp to indicate when the point-of-sale code was generated (860). EX1006, ¶¶0058-0059, FIG. 3A (reproduced below).

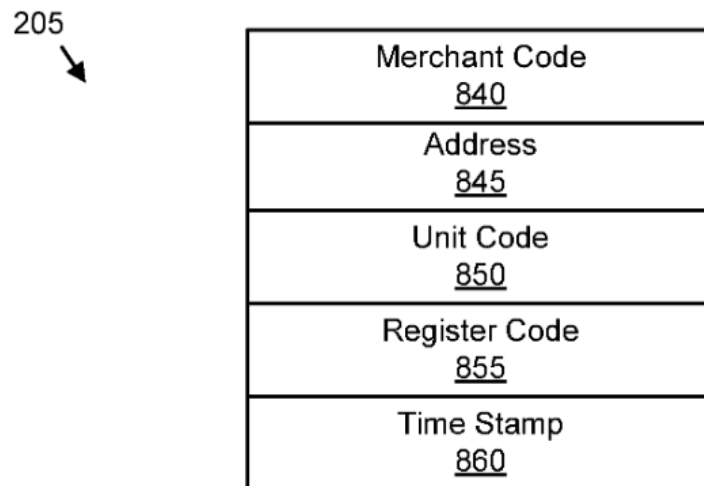


FIG. 3A

Thus, Petitioners' assertion that Kamat teaches a request to obtain authorization to make funds available for a cashless transaction (*see, e.g.,* Pet., 54) is unsubstantiated.

Petitioners then assert that Arora implicitly teaches the request to preemptively obtain authorization to make funds available, but the cited portions of Arora do not support this contention. Pet., 65-66. Petitioners cite to three excerpts of Arora as allegedly implicitly teaching this feature: (1) EX1007, 11:27-30, which

describes that “[i]f a customer *has paid for* or is *about to pay for* a product via an app on a personal mobile electronic device, the only function required from the physical vending machine is the ‘vend’ function”—but this does not teach or suggest a mobile device receiving a transmission including a request to preemptively obtain authorization to make funds available; (2) *id.*, 25:3-15, which describes the customer convenience of paying without additional explicit action before, during, or after a purchase transaction and is accomplished by the customer pre-selecting a method of payment—but this does not teach or suggest a mobile device receiving a transmission including a request to preemptively obtain authorization to make funds available; and (3) *id.*, 9:25-29, which describes excess payment that may be “banked” to a payment method—but this does not teach or suggest a mobile device receiving a transmission including a request to preemptively obtain authorization to make funds available. Accordingly, Petitioners have failed to show that Arora implicitly or explicitly teaches the request to preemptively obtain authorization to make funds available.

While Petitioners vaguely assert that Dixon contains teachings relevant to this claim element, their claim element analysis altogether fails to explain this stance. Pet., 66. Petitioners merely assert that transmissions between a mobile device and a transit vehicle computer “can include a variety of types of information.” *Id.* No explanation is offered as to how this might be relevant to the

claim element in question or how it might serve to overcome the shortcomings of Kamat and Arora for this limitation.

Insofar as Petitioners cite to Dixon when discussing claim element [1.4], these cites also fail to teach or suggest a request to preemptively obtain authorization to make funds available. Arguing that Dixon vaguely teaches that transmissions include a variety of types of information, the petition cites to EX1008, FIG. 9B, steps 920 and 925. Pet., 66. But stripped of any context or explanation, Petitioners' reliance on FIG. 9B is trivial and without merit. Indeed, Dixon itself only provides that steps 920 and 925 illustrate a transit vehicle computer and mobile device establishing a connection. EX1008, ¶0115. This does not teach or suggest any authorization to make funds available. Petitioners have thus failed to show that Dixon teaches or suggests a request to preemptively obtain authorization to make funds available.

Petitioners' expert witness does not cure the deficiencies of the petition's reliance on Kamat, Arora, and Dixon. The expert witness testimony repeats—nearly verbatim—the same allegations put forth in the petition; thus this testimony does not resolve any of the issues identified above. *Compare* Pet., 65-66 with EX1009, ¶¶246-249. Therefore, the expert witness testimony fails to show that the combined references of Kamat, Arora, and Dixon teaches a transmission including a request to preemptively obtain authorization to make funds available for a

cashless transaction with an automatic retail machine. Furthermore, this expert witness testimony is entitled to no weight because it merely copies Petitioners' arguments. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (precedential).

Accordingly, Petitioners have not shown the combination of Kamat, Arora, and Dixon to teach each and every element of the claims at least because it fails to disclose "the transmission including a request to preemptively obtain authorization to make funds available for a cashless transaction with the automatic retail machine" as described in the '174 patent.

D. Petitioners' motivation to combine Kamat, Arora, and Dixon is deficient

The petition fails to show that a POSITA had reason combine the references as proposed. This deficiency is fatal to Petitioners' obviousness case.

Petitioners' motivation argument with respect to Dixon is conclusory and unsubstantiated. The petition argues that a POSITA would have relied on Dixon to "eliminat[e] any delay in completing a transaction when the customer authorizes cashless payment, such as, for example, walking away from the point of sale." Pet., 63. But Petitioners fail to explain how Dixon's teachings would achieve such an elimination in delay, and Petitioners fail to show that Dixon itself teaches such elimination.

The petition’s only support for its alleged motivation to combine Dixon into the teachings of Kamat and Arora are (1) a single figure from Dixon that Petitioners mischaracterize and (2) expert witness testimony that merely repeats Petitioners’ arguments. Both are entitled to little or no weight. Petitioners argue that Dixon teaches steps necessary for completion of a purchase transaction which can be done before a customer reaches the point of sale, pointing to step 950 of Dixon’s FIG. 9B. Pet., 63. But Dixon teaches exactly the opposite: the system can “send fare charge information to the transit user” by “among other things, via email, phone call, mail, etc.” long after the customer already departed the point of sale. EX1008, ¶0123; *see also id.*, ¶0117 (Petitioners’ relied-upon step 950 merely shows a transit vehicle computer can detect the exit of the mobile device). Thus, contrary to Petitioners’ alleged reason to combine the teachings of Dixon into Kamat (i.e., to complete purchase transaction before a customer reaches a point of sale), Dixon’s FIG. 9B describes completing a purchase transaction *much later* than when a customer reaches a point of sale. *Id.* Petitioners’ expert witness does not provide any additional support because it merely copies—nearly verbatim—the same statements put forth by Petitioners, and thus is entitled to no weight.

Compare Pet., 63 *with* EX1009, ¶¶200-202; *Xerox*, Paper 9 at 15.

The petition thus fails to demonstrate a reason to combine Kamat, Arora, and Dixon.

VI. Conclusion

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

Respectfully submitted,

Dated: November 24, 2024

/Matthew A. Argenti/
Matthew A. Argenti, Lead Counsel
Reg. No. 61,836

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 11,539 words.

Respectfully submitted,

Dated: November 24, 2024

/Matthew A. Argenti/
Matthew A. Argenti, Lead Counsel
Reg. No. 61,836

VII. 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	File History, U.S. Pat. No. 9,547,859.

CERTIFICATE OF SERVICE

I certify that the foregoing Patent Owner's Preliminary Response Pursuant to 37 C.F.R. § 42.207 and accompanying Exhibits 2001-2005 was served this 24th day of November 2023, on the Petitioners at the following electronic service addresses:

Holiday Banta
Safet Metjahic
Thomas Rammer
ICE MILLER LLP
H.Banta@icemiller.com
Safet.Metjahic@icemiller.com
Tom.Rammer@icemiller.com

Respectfully submitted,

Dated: November 24, 2024

/Matthew A. Argenti/
Matthew A. Argenti, Lead Counsel
Reg. No. 61,836