

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CSC SERVICEWORKS, INC.,
Petitioner,

v.

PAYRANGE INC.,
Patent Owner.

Case No. IPR2023-01449
Patent 11,481,772

**PATENT OWNER'S PRELIMINARY RESPONSE
PURSUANT TO 37 C.F.R. §42.107**

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I. Introduction

The Board should deny institution of *inter partes* review (IPR) of U.S. Patent No. 11,481,772 (“the ’772 patent”) because Petitioner CSC ServiceWorks, Inc. (“CSC” or “Petitioner”) fails to demonstrate a reasonable likelihood of prevailing.

As an initial matter, most grounds are moot. Patent Owner PayRange disclaimed claims 1-6, 8-10, and 12-20 of the ’772 patent, leaving only claims 7 and 11. EX2017. The petition does not challenge claim 7, and claim 11 is addressed in only Ground 4. Accordingly, the only challenge relevant to institution is the challenge to claim 11 in Ground 4. *See* 37 C.F.R. §42.107 (“No *inter partes* review will be instituted based on disclaimed claims.”). Even for this single challenge, denial is warranted for numerous reasons.

First, the Board need not even reach the merits because discretionary denial is warranted under *General Plastic* and as a sanction for Petitioner’s misrepresentation of material facts. Petitioner has engaged in a pattern of misrepresentation in this petition and in three previous IPR petitions challenging other PayRange patents. One of the previous IPRs (IPR2023-01188) is time-barred because unnamed real parties in interest (“RPIs”)—i.e., KioSoft Technologies, LLC and TechTrex, Inc. (collectively, “KioSoft”)—were served with a complaint more than one year before that petition was filed. IPR2023-

01186, Paper 6 at 6-12. Seeking to avoid the time-bar in IPR2023-01188, and to avoid proper application of the *General Plastic* factors here (since KioSoft previously filed a petition against the '772 patent), Petitioner once again fails to identify KioSoft as an RPI, fails to disclose relevant facts about its relationship with KioSoft, and falsely states that it has “no significant relationship” with KioSoft. Pet., 15. But recently disclosed evidence has exposed this deception, showing, for example, that KioSoft supplied Petitioner with an accused product, that KioSoft is obligated to fund this proceeding (an obligation Petitioner has repeatedly invoked), and that KioSoft has the ability to control this proceeding.

Regardless, Petitioner’s challenge to claim 11 fails on the merits for numerous reasons. For elements 1(c), 1(e), and 1(g)—which are required by claim 11 via dependency—and multiple limitations recited in claim 11, Petitioner’s conclusory arguments fail to explain how the references teach all of the recited requirements. Petitioner’s flawed mapping is also disconnected from the alleged reasons to combine the references, as Petitioner repeatedly relies on purported teachings of certain references without presenting any alleged reason to apply those teachings in the combination.

Petitioner thus cannot meet its burden of proving that claim 11 is unpatentable. Accordingly, institution of *inter partes* review should be *denied*.

II. Claim Construction

In an IPR, a claim is given its ordinary and customary meaning in light of the specification. 37 C.F.R. §42.200(b). No constructions are necessary to deny institution because denial is warranted for numerous reasons that do not depend on claim construction. *Infra*, §§III-VI.

III. Petitioner Has Attempted to Conceal Its Relationship with Unnamed RPIs

This petition is the latest in a series of challenges to PayRange patents in which CSC has misled the Board by failing to identify KioSoft as an RPI and falsely stating that it has no significant relationship with KioSoft. *See* Pet., 15, 93. When confronted with similar misrepresentations in three recent IPRs—IPR2023-01186 (against U.S. Patent No. 8,856,045), IPR2023-01187 (against U.S. Patent No. 10,438,208), and IPR2023-01188 (against U.S. Patent No. 10,891,608)—CSC requested additional briefing to address the RPI issue. But rather than come clean, CSC doubled down, continuing to deny that KioSoft was an RPI and attempting to hide the full extent of its relationship with KioSoft. *See* IPR2023-01186, Paper 7 (CSC’s reply), Paper 8 (PayRange’s sur-reply); IPR2023-01187, Papers 7-8; IPR2023-01188, Papers 7-8.

After CSC filed its replies in the previous IPRs—

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

A. KioSoft Is an RPI

CSC has not, and cannot, satisfy its burden of proving that it has identified all RPIs. *Worlds Inc. v. Bungie, Inc.*, 903 F.3d 1237, 1242 (Fed. Cir. 2018) (petitioners bear burden). The Federal Circuit has explained that the RPI inquiry “demands a flexible approach” considering both equitable and practical considerations to determine whether the party “is a clear beneficiary that has a preexisting, established relationship with the petitioner.” *Applications in Internet Time, LLC v. RPX Corp.*, 897 F.3d 1336, 1350-51 (Fed. Cir. 2018) (“*AIT*”) (RPI must be given its “expansive common-law meaning”). KioSoft meets this standard.

CSC has a significant relationship with KioSoft, which benefits directly from this IPR. In response to the copying of PayRange’s electronic payment devices—which allow smartphone users to make mobile purchases from unnetworked, legacy vending machines—PayRange brought one infringement action against KioSoft and a second against its customer, CSC. In the action

against CSC, the court’s case schedule calls for opening claim construction briefs to be submitted on March 21, 2024 and fact discovery to be completed by July 25, 2024. EX2002, 14-15. The customer-supplier relationship was noted in PayRange’s infringement complaints, and counsel for KioSoft represented to the district court that CSC is in fact a customer. *See, e.g.*, EX2003, ¶¶31 (CSCPay Mobile powered by KioSoft), 34 (same); EX2001, ¶¶5, 20, 73-76 (accused systems include CSCPay Mobile); *see also* EX2001, ¶21 (KioSoft was CSC’s technology supplier); EX2004, 83:21-84:4. KioSoft’s president confirmed that CSC—one of the largest laundry route operators in the U.S., with a 55% market share—is a customer and that a CSC system was developed by KioSoft.¹ *E.g.*, EX2004, 39:14-20 (testifying that CSC is a customer), 43:22-44:12 (same), 45:6-16 (“[T]he whole solution that [CSC was] carrying was fully developed by us.”); EX2005 (listing of “KioSoft CSC” payment terminal). The existence of CSC’s KioSoft-based products can also be seen in online marketplaces. *E.g.*, EX2005 (showing

¹ Charles Lee is the president of both the US company (KioSoft) and the Canadian company (TechTrex), and during his testimony he agreed that the use of “KioSoft” would refer to both companies. EX2004, 21:19-22:9. PayRange similarly uses “KioSoft” to refer to both companies unless otherwise noted.

CSC/KioSoft product). CSC was also deposed in PayRange's lawsuit against KioSoft. EX2001, ¶21. The public record is thus replete with evidence that CSC products use technology supplied by KioSoft.

In addition to this undisclosed customer-supplier relationship, CSC also fails to disclose that KioSoft agreed to indemnify CSC. The president of KioSoft confirmed the existence of this indemnification agreement:

Q. Now, I believe in your direct examination you mentioned that both CS[C] and Wash had requested indemnification from KioSoft; is that correct?

A. Yes.

Q. **Did KioSoft provide indemnification to CS[C]** and Wash?

A. We did provide -- my understanding -- again, this is a lot of legalese here, but **I believe we provided indemnification to CS[C]**, but [not] for Wash -- because they developed their own app. So, **CS[C] was -- the whole solution that they were carrying was fully developed by us.**

EX2004, 45:6-16 (emphasis added); *see also id.*, 39:21-40:6 (CSC contacted Mr. Lee requesting indemnification against PayRange's infringement claims). Given the direct customer-supplier relationship and the indemnification agreement, KioSoft directly benefits from this proceeding.

After being confronted with this evidence in the three previous IPRs, CSC requested additional briefing supposedly to create a "fulsome" record.

IPR2023-01186, EX3001. However, CSC chose to limit the evidence it provided

the Board with its replies to short, carefully curated declarations from Chris Maxie, CSC's General Counsel and Corporate Secretary. IPR2023-01186, EX1013; IPR2023-01187, EX1009; IPR2023-01188, EX1014. But even these documents show that KioSoft is an RPI. For example, Mr. Maxie admits that CSC "has used Kiosoft and/or TechTrex as a vendor to develop one of the two accused products," effectively conceding KioSoft's significant interest in invalidating this patent. *E.g.*, IPR2023-01186, EX1013, ¶9. KioSoft's interest in this proceeding is also confirmed by the fact that it separately filed a challenge to the '772 patent in PGR2023-00042.

CSC's declarations also attempt to obscure the relationship between CSC and KioSoft. *E.g.*, *id.*, ¶¶4, 8 (stating KioSoft has not indemnified CSC against infringement claims or funded, directed, or controlled this IPR "[t]o date"). Despite Mr. Maxie's assertion that KioSoft has not "agreed to fund, direct, or control, any aspect of CSC's filing of" this petition, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] CSC indisputably should have identified KioSoft in the petition [REDACTED]

[REDACTED]

[REDACTED] *See Ventex Co., Ltd. V. Columbia Sportswear N. Am., Inc.*, IPR2017-00651, Paper 152 at 10 (precedential).

The evidence also shows that [REDACTED]

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[REDACTED] It does not matter that KioSoft has delayed its response to subsequent requests; [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *See Bungie*, 8-9 (noting indemnification provisions “allow each party, under certain conditions, the right to assume full control over the defense and/or settlement” (internal quotes omitted)). In view of this evidence, KioSoft is indisputably “a clear beneficiary that has a preexisting, established relationship with the petitioner” and is therefore an RPI. *AIT*, 897 F.3d at 1351.

B. Petitioner’s Misrepresentations Are Sanctionable

In its previous replies, CSC does not contest that a time-bar is at issue in IPR2023-01188, but CSC mistakenly claims it is automatically excused from RPI failures if there is no time-bar in the other two IPRs. IPR2023-01186 and -01187, Paper 7, 2-3 (citing *SharkNinja Operating LLC v. iRobot Corp.*, IPR2020-00734, Paper 11 (precedential)). This ignores CSC’s *statutory obligation* to identify all

RPIs and privies (35 U.S.C. §312(a)(2)), which serves important purposes beyond the time-bar, including facilitating subsequent application of estoppel under §315(e) and allowing the Board to identify conflicts of interests. *AIT*, 897 F.3d at 1350; *SharkNinja*, 17. “Accordingly, petitioners ***must*** comply with these requirements in good faith.” *Id.* (emphasis added) (citing 37 C.F.R. §42.11(a)). Here, CSC falsely represents that it has no substantial relationship with KioSoft, and it failed to come clean in its previous replies. The Board’s power to excuse good-faith omissions does not entitle CSC to willfully abuse the Board’s processes.

Even without a time-bar in this proceeding, CSC’s failure to satisfy its statutory obligations and CSC’s misrepresentations of material facts warrant denial of institution. 35 U.S.C. §312 (petition may be considered “only if” all RPIs identified). Violating the duty of candor and misrepresenting facts—as CSC has done here by falsely stating that it has no significant relationship with KioSoft (Pet., 15) and failing to submit the extensive evidence in its possession contradicting that assertion (*supra*, §III.A)—are sanctionable by, *inter alia*, dismissal of the petition. 37 C.F.R. §42.12. This evidence also supports discretionary denial under *General Plastic*, as explained in the following section.

IV. The *General Plastic* Factors Favor Denying Institution

Denial is also warranted because of the inefficiencies and unfairness of subjecting PayRange to serial challenges from related parties. The Board has

discretion to deny institution under §314(a), and the exercise of that discretion is guided by factors set forth in *General Plastic*. *General Plastic Indus. Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, at 15-16 (precedential §II.B.4.i) (“*General Plastic*”). Those factors include:

1. whether the same petitioner previously filed a petition directed to the same claims of the same patent;
2. whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;
3. whether at the time of filing of the second petition the petitioner already received the patent owner’s preliminary response to the first petition or received the Board’s decision on whether to institute review in the first petition;
4. the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
5. whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
6. the finite resources of the Board; and
7. the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

Id. As explained below, the petition’s cursory discussion of *General Plastic* does not meaningfully apply the *General Plastic* factors, and it omits and misstates

material facts. Applying *General Plastic* to the actual facts overwhelmingly supports denial of this follow-on petition.

Factor 1 favors denial because of Petitioner’s significant relationship with the prior petitioners. Though *General Plastic* describes this factor as considering whether the same petitioner previously filed a petition, the Board has clarified that “when different petitioners challenge the same patent, we consider any relationship between those petitioners.” *Valve Corp. v. Elec. Scripting Products, Inc.*, IPR2019-00062, Paper 11 at 9 (precedential) (“*Valve*”). Similar to *Valve*, where the Board found that factor 1 weighed against institution, all challenged claims—including claim 11 (i.e., the sole challenged claim that has not been disclaimed)—were previously challenged in PGR2023-00042, Petitioner is a customer of the prior petitioners, and Petitioner is accused of infringement in part based on technology supplied by the prior petitioners. *See id.*, 9-10 (successive petitions challenge same claims, and current/prior petitioner accused of infringement based on same product); PGR2023-00042, Paper 1 at 1 (challenging ’772 claims 1-20); *supra*, §III.A (explaining relationship between parties). Indeed, the parties’ relationship here is even more significant than in *Valve* given KioSoft’s indemnification obligations (which Petitioner has repeatedly invoked) and ability to exercise control over defense and settlement. *Supra*, §III.A.

Petitioner’s cursory discussion of *General Plastic* does not address the relevant considerations and misrepresents the facts. Petitioner falsely states that it “has no significant relationship with the prior petitioner” (Pet., 15), but as previously explained the evidence shows otherwise. *Supra*, §III.A. Petitioner argues that it “is a different petitioner than the petitioner in” the prior proceeding, which ignores the Board’s precedential decision explaining that factor 1 also considers the relationship between different petitioners. *Valve*, 9. Petitioner argues that it “was not involved in any prior suit” involving KioSoft (Pet., 15), which is both irrelevant in view of *Valve* and untrue because Petitioner was deposed in March 2021 as part of the litigation between PayRange and the prior petitioners. EX2001, ¶21. Petitioner argues that it and KioSoft were “sued on largely different products,” but Petitioner has since admitted that KioSoft developed one of the two products for which it is accused of infringement. *E.g.*, IPR2023-01186, EX1013, ¶9.

Accordingly, Factor 1 weighs against institution, particularly in view of Petitioner’s misrepresentations.

Factor 2 favors denial because Petitioner knew or should have known about each asserted reference when the first petition was filed. Petitioner’s challenge to claim 11—the only challenged claim that has not been disclaimed—applies six U.S. patent documents: Zhou, Athwal, Low, Arora, Casey, and Freeny.

Three of these references—Low, Arora, and Casey—were applied in KioSoft’s challenge to claim 11 in PGR2023-00042. PGR2023-00042, Paper 1 at 5 (applying Low-Casey-Freeny combination). Moreover, all of these U.S. patent documents were readily obtainable using standard searching tools. As in *General Plastic*, Petitioner does not allege that it was unaware of these references when the previous petition was filed or that they would not have been identified by a reasonably diligent search. *See* Pet., 15; *General Plastic*, 20 (“Here, the record is devoid of any explanation why Petitioner could not have found the newly asserted prior art in any earlier search(es) through the exercise of reasonable diligence.”). Indeed, Petitioner admits that Zhou, Athwal, Low, and Arora were submitted in an IDS and considered by the Examiner. Pet., 17 (citing EX1002, 31-42, 165-75). Accordingly, factor 2 weighs against institution.

Factor 3 is neutral, since this petition was filed just before PayRange filed its preliminary response in PGR2023-00042.

Factors 4 (delay in filing petition) and 5 (justification for delay) favor denial. Petitioner filed this petition just under three months after KioSoft filed its petition. The distinction between the parties does not excuse this delay, particularly given their significant relationship. *Valve*, 14. (“As a licensor of technology incorporated in the accused products, [the current petitioner’s] interests are aligned closely with [the prior petitioner’s] interests, and [the current

petitioner] could have filed its Petition at or around the same time as [the prior petitioner].”); *supra*, §III.A (accused product developed by KioSoft). Petitioner does not discuss factors 4 or 5, nor does it attempt to justify its delay.

Accordingly, factors 4 and 5 both weigh against institution.

Factors 6 and 7 favor denial. These factors address efficiency concerns, including the Board’s finite resources and the requirement of reaching a final determination within one year. *Valve*, 15. As the Board recognized in *Valve*, having multiple petitions challenging the same patent “is inefficient and tends to waste resources.” *Id.* Here again, Petitioner does not discuss these factors.

Accordingly, factors 6 and 7 both weigh against institution.

Six of the seven *General Plastic* factors thus weigh against institution. Accordingly, the Board should exercise its discretion under §314(a) to deny institution.

V. Grounds 1-3 Are Moot

All claims challenged in Grounds 1-3 have been disclaimed. EX2017. Accordingly, while the challenge to claim 1 suffers from multiple flaws (*infra*, §VI), trial cannot be instituted based on Grounds 1-3. 37 C.F.R. §42.107 (“No *inter partes* review will be instituted based on disclaimed claims.”).

VI. Ground 4 Fails

Ground 4 challenges claim 11 as allegedly obvious over a combination of six references: Zhou, Athwal, Low, Arora, Casey, and Freeny. Pet., 82. Petitioner thus adds three references to the Low-Casey-Freeny combination that KioSoft applied against claim 11 in the previous PGR. PGR2023-00042, Paper 1 at 5.

Despite adding multiple references to KioSoft's ground, Ground 4 suffers from numerous fatal flaws. Petitioner fails to prove that the proposed combination satisfies multiple limitations of claim 1—including elements 1(c), 1(e), and 1(g)—and each of these deficiencies is independently fatal to Ground 4, since claim 11 depends from claim 1. The petition also fails to show that the proposed combination satisfies additional limitations of claim 11. Petitioner thus fails to meet its burden of proving that claim 11 was obvious.

A. Petitioner Fails to Show that the Proposed Combination Teaches Element 1(c)

As recited in element 1(c), the user interface (“UI”) 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.” Petitioner argues that this element is disclosed by Zhou alone or in combination with Athwal. Pet., 47. As explained below, both arguments fail.

Petitioner’s conclusory argument addressing Zhou alone is legally and factually insufficient to prove obviousness. *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) (proving obviousness requires “articulated reasoning with some rational underpinning”). According to Petitioner, Zhou’s IC card provides a prompt to a vending machine application indicating that the vending machine is approved and “that completion of the transaction and transfer of sensitive payment information” may proceed. EX1004, 6:12-20; Pet., 47. Petitioner then concludes that “[b]y completing a transaction, the vending machine application (*i.e., mobile payment application*) of Zhou receives user input that *trigger[s] payment...for a transaction initiated by the user of the mobile device with the available payment accepting unit.*” *Id.*, 47-48 (citing EX1003, ¶89). Missing from this cursory discussion is any explanation of how Zhou’s notification that the transaction can proceed involves receiving *user input* triggering payment, let alone a UI configured to receive user input to trigger payment for a transaction initiated by the user, as recited. Petitioner neither cites any disclosure of such user input in Zhou nor provides any substantive explanation of how the cited disclosures would render this limitation obvious.

The cited testimony does not help, since this *ipse dixit* testimony is essentially just a *verbatim* copy of the petition’s flawed assertion. 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 Corp. v. Bytemark, Inc., 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 Petitioner's attorney argument without providing corroboration or supporting technical analysis. EX1003, ¶89 ("A POSITA would have understood that by completing a transaction, including transferring 'sensitive payment information,' the vending machine application (*i.e., mobile payment application*) of Zhou receives user input that 'trigger[s] payment by the mobile payment application for a transaction initiated by the user of the mobile device with the available payment accepting unit.'"); compare *id.*, with Pet., 47-48. The cited

testimony is therefore entitled to little or no weight, leaving the petition's conclusory argument factually unsupported.

Petitioner's alternative argument based on Zhou in view of Athwal fares even worse. Petitioner cites Athwal's disclosure that, after a consumer selects product, an electronic retail system sends an electronic bill to a mobile device. Pet., 48 (citing EX1005, ¶17). The consumer is then prompted to verify the purchase and select an account, at which point the mobile device transmits payment account info and an authorization key to the electronic retail system. Pet., 48 (citing EX1005, ¶17). Petitioner then concludes, again with no explanation, that "[a] POSITA would have understood transmitting payment account information and authorization following user input to constitute *trigger[ing] payment by the mobile payment application for a transaction initiated by the user of the mobile device with the available payment accepting unit.*" Pet., 48 (citing EX1003, ¶90). This cursory argument suffers from multiple fatal flaws.

First, Petitioner never explains why these disclosures supposedly teach a UI configured to accept user input to trigger the recited payment. At best, Petitioner argues that Athwal merely describes transmitting account information "after" the customer is prompted to select an account. Pet., 48. But Petitioner never explains how this selection involves user input via the recited UI, let alone such user input to "trigger" the recited payment (as opposed to merely occurring afterward). *See*

id. Petitioner also identifies no support for its assertion regarding a POSA's supposed understanding beyond *ipse dixit* testimony that essentially just copies the petition *verbatim* and is therefore entitled to little or no weight. Compare EX1003, ¶90, with Pet., 48; Xerox, Paper 9 at 15. Petitioner cannot meet its burden of proving obviousness with conclusory, factually unsupported analysis. *In re Kahn*, 441 F.3d at 988 (proving obviousness requires “articulated reasoning with some rational underpinning”).

Even if Petitioner had shown that Athwal's disclosures satisfy this limitation, Petitioner never argues that a POSA would have applied this aspect of Athwal in the proposed combination. Motivation analysis must be commensurate in scope with the relied-upon teachings of the references. See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 at 418-19 (2007) (obviousness not shown “merely by demonstrating that each of [a claim's] elements was, independently, known in the prior art”); *Axonics, Inc. v. Medtronic, Inc.*, 73 F.4th 950 at 957 (Fed. Cir. 2023) (patent challenger must demonstrate reason to “combine the teachings of the prior art references to achieve the claimed invention”). No rationale is presented in the discussion of this limitation itself (Pet., 47-48), and the earlier section discussing the purported reasons to combine Zhou and Athwal never mentions the aspects of Athwal cited here. *Id.*, 28-31 (alleging cost/efficiency benefits from “including a request for funds alongside the request for authorization” and “incorporate[ing]

Athwal’s disclosure of identifying all nearby vending machines”). Petitioner thus fails to allege, let alone prove, that a POSA had reason to combine the cited teachings of the references to arrive at this limitation with a reasonable expectation of success.

Accordingly, both of the petition’s arguments against element 1(c) fall short, which is fatal to Petitioner’s challenge to claim 11.

B. Petitioner Fails to Show that the Proposed Combination Teaches Element 1(e)

Petitioner offers a brief, conclusory discussion of element 1(e), which recites “after establishing the wireless communication path, enabling user interaction with the user interface of the mobile payment application to complete the transaction.” Petitioner argues that this limitation is disclosed or rendered obvious by Zhou “because it teaches allowing user interaction to complete a transaction after wireless communication has been established and after authentication has occurred.” *See* Pet., 51-52. But the discussion that follows merely points to disparate disclosures in Zhou—disclosures that supposedly teach certain aspects of element 1(e) in isolation—without even attempting to explain how the cited portions of Zhou relate to one another. As explained below, this piecemeal analysis fails to prove that Zhou teaches element (e) as a whole.

Petitioner offers a vague, two-sentence discussion of Zhou’s display that does not address all requirements of element 1(e). Petitioner first quotes Zhou’s

statement that the consumer’s device presents “various screen displays and prompts to facilitate a transaction” when the consumer “comes within a certain proximity of a vending machine.” EX1004, 5:32-34; Pet., 51. But Petitioner does not explain why presenting displays and prompts “[w]hen a consumer comes within a certain proximity of a vending machine” (Pet., 51) teaches enabling user interaction with the UI “after establishing the wireless communication path,” as recited. Nor does Petitioner explain why presenting displays and prompts to “facilitate” a transaction teaches enabling user interaction with the UI to “complete” the transaction, as recited. Petitioner then argues that, after wireless communication is established, the vending machine application obtains product information from the vending machine and presents it on the device’s display. Pet., 51 (citing EX1004, 5:35-41). However, Petitioner does not allege that this presentation of product information has anything to do with “enabling user interaction with the user interface,” let alone enabling such interaction “to complete the transaction,” as recited. *See* Pet., 51.

Petitioner then turns to separate disclosures that supposedly involve completing the transaction, but Petitioner offers no explanation of how this relates to the previous disclosures involving Zhou’s display. Petitioner argues that “[o]nce the vending machine is authenticated, ‘[t]he method further continues with a step b) of completing the transaction[.]’” Pet., 51 (quoting E1004, 7:37-39).

Petitioner then concludes that “because Zhou performs authentication after wireless communication is established and because Zhou requires authentication before a user is allowed to complete the transaction, Zhou discloses or renders obvious this limitation as claimed.” Pet., 51-52. But Petitioner does not allege, let alone prove, that this completion of the transaction involves “enabling user interaction with the user interface” to complete the transaction, as recited.

In sum, Petitioner’s argument fails even if Petitioner’s piecemeal assertions are accepted as being true. Petitioner argues that Zhou’s device (1) generally presents displays and prompts to facilitate transactions, (2) displays product information after wireless communication is established, and (3) completes transactions after wireless communication is established. Missing from Petitioner’s argument is any explanation of how these disclosures relate to one another or how, when read together, they teach element 1(e) as a whole. Petitioner’s piecemeal, conclusory analysis of element 1(e) is thus facially insufficient to meet its burden of proving obviousness.

C. Petitioner Fails to Show that the Proposed Combination Teaches Element 1(g)

Petitioner presents a facially deficient discussion of element 1(g), which recites “after exchanging the information, displaying, on the display, an updated user interface of the mobile payment application to the user of the mobile device.”

Petitioner argues that this limitation is disclosed or rendered obvious by Zhou alone or by Zhou in combination with Athwal. Both arguments fall short.

Petitioner's discussion of Zhou alone is facially incomplete. Petitioner first notes Zhou's general statement that the consumer's device presents "various screen displays and prompts to facilitate a transaction with the vending machine." EX1004, 5:32-34; Pet., 54 (quoting same). Petitioner then pivots to Zhou's authentication process, arguing that, after authentication succeeds or fails, the device displays messages such as "VENDING MACHINE NOT APPROVED" or "VENDING MACHINE APPROVED." *Id.* (internal quotations omitted) (citing EX1004, 7:1-14). But Petitioner never alleges, let alone proves, that Zhou's disclosure of displaying text messages satisfies the recited requirement of displaying an updated "user interface." The cited testimony merely repeats the same deficient argument and, in any event, is entitled to little or no weight because it is essentially a *verbatim* copy of Petitioner's attorney argument without supporting analysis. *Compare*, EX1003, ¶102, with Pet., 54; *Xerox*, Paper 9 at 15. Petitioner cannot meet its burden of proving obviousness with conclusory assertions that fail to address the claim language as a whole. *In re Kahn*, 441 F. 3d at 988 (proving obviousness requires "articulated reasoning with some rational underpinning").

Petitioner's alternative argument based on Zhou and Athwal fares no better. First, this argument exhibits the same flaws as the argument based on Zhou alone. Petitioner points to Athwal's disclosure of the electronic retail system sending the customer's device a wireless signal "informing the customer that the transaction has been completed successfully" and providing an electronic receipt. Pet., 54-55 (citing EX1005, ¶¶29-32) (internal quotations omitted). Petitioner then argues that a "POSITA would have understood sending a notification to the mobile device informing the customer that the transaction has successfully completed as well as an electronic receipt constitutes or renders obvious" element 1(g). Pet., 55 (citing EX1003, ¶103). But Petitioner never even alleges that these notifications and receipts are presented on a display, let alone explains why sending such notifications and receipts would satisfy the recited requirement of displaying an updated "user interface."

Regardless, similar to its flawed discussion of Athwal for element 1(c), Petitioner never argues that a POSA would have applied this aspect of Athwal in the proposed combination. Motivation analysis must be commensurate in scope with the relied-upon teachings of the references. *See KSR*, 550 U.S. at 418-19 (obviousness not shown "merely by demonstrating that each of [a claim's] elements was, independently, known in the prior art"); *Axonics*, 73 F.4th at 957 (patent challenger must demonstrate reason to "combine the teachings of the prior

art references to achieve the claimed invention”). As with element 1(c), no rationale is presented in the discussion of this limitation itself (Pet., 54-55), and the earlier section discussing the purported reasons to combine Zhou and Athwal never mentions the aspects of Athwal cited here. *Id.*, 28-31 (alleging cost/efficiency benefits from “including a request for funds alongside the request for authorization” and “incorporate[ing] Athwal’s disclosure of identifying all nearby vending machines”). Petitioner thus fails to allege, let alone prove, that a POSA had reason to combine the cited teachings of the references to arrive at this limitation with a reasonable expectation of success.

Accordingly, both of the petition’s arguments against element 1(g) fall short, which is fatal to Petitioner’s challenge to claim 11.

D. Petitioner Fails to Show that the Proposed Combination Satisfies the Additional Limitations of Claim 11

In Ground 4, Petitioner argues that claim 11 was obvious in view of Zhou, Athwal, Low, Arora, Casey, and Freeny. Claim 11 depends from claim 1 and further recites that the UI, after establishing the wireless communication path, includes:

- a visual representation of the available payment accepting unit;
- an indication of a prepared balance; and
- an affordance that when slid, indicates the initiation of the transaction;

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. As explained below, Petitioner fails to show that the proposed combination teaches multiple limitations of this claim.

First, Petitioner’s brief, conclusory discussion of “the user interface of the mobile payment application, after establishing the wireless communication path, includes: a visual representation of the available payment accepting unit” is facially deficient. Petitioner first makes the wholly conclusory argument that this limitation is satisfied by Zhou alone. Pet., 86. Petitioner’s only explanation for this argument is that Zhou discloses or renders this limitation obvious “for the same reasons discussed above at [1(c)], [1(g)], and [2].” *Id.* (citing EX1003, ¶155; EX1004, 7:1-14). But the cross-referenced limitations do not recite the same claim language, and Petitioner offers no explanation whatsoever as to how the previous analysis might apply here. Petitioner’s conclusory assertion is thus facially insufficient to prove obviousness. *In re Kahn*, 441 F. 3d at 988 (proving obviousness requires “articulated reasoning with some rational underpinning”).

Petitioner’s alternative argument based on Zhou in combination with Arora also falls flat for multiple reasons. First, this argument is facially incomplete because it does not address all recited requirements. Petitioner points to Arora’s disclosure of displaying images of machines on a personal electronic device,

arguing that a “POSITA would have understood displaying icons or photographs representing different vending machines on a consumer’s mobile device to constitute a *user interface of [a] mobile payment application includ[ing]: a visual representation of the available payment accepting unit.*” Pet., 86-88. But even accepting this assertion as true, Petitioner does not allege, let alone prove, that the combined teachings satisfy the full limitation, which requires that the user interface include the visual representation “after establishing the wireless communication path.”

Moreover, Petitioner again fails to identify a reason to combine the relied upon disclosures with Zhou. *See KSR*, 550 U.S. at 418-19 (obviousness not shown “merely by demonstrating that each of [a claim’s] elements was, independently, known in the prior art”); *Axonics*, 73 F.4th at 957 (patent challenger must demonstrate reason to “combine the teachings of the prior art references to achieve the claimed invention”). The only alleged motivation to combine Zhou with Arora appears in Ground 2, where Petitioner exclusively argues motivation to incorporate Arora’s disclosure of *offering coupons* to vending machine customers. Pet., 73-74 (alleging motivation “to provide a consumer with coupons for products to incentivize consumers to purchase additional products” and to “incorporate Arora’s disclosure of coupons tailored to a user’s transaction history into the combination”), 75 (alleging reasonable expectation of success in expanding UI “to

offer tailored coupons to consumers”). Thus, at no point does Petitioner even allege that a POSA would have been motivated to combine Zhou with the teachings of Arora relied upon for claim 11. Accordingly, Petitioner has not and cannot prove a reason to combine the cited teachings of the references to arrive at this limitation with a reasonable expectation of success.

Petitioner also fails to prove that the combination satisfies the requirement that the UI, after establishing the wireless communication path, include “an indication of a prepared balance” for similar reasons. Petitioner argues that “Freeny in combination with Zhou discloses or renders obvious this limitation,” citing Freeny’s purported disclosure of (1) a proximity authorization method that allows customers to request their balance from their bank and (2) a proximity authorization unit that stores an approved credit amount that can be checked at any time. *Id.*, 88-89 (citing EX1009, 9:32-35, 37:60-63, 38:3-5). This argument fails for multiple reasons.

First, Petitioner again fails to address all recited requirements. As with the previous limitation, Petitioner ignores that claim 11 does not merely require “an indication of a prepared balance,” but rather that the UI “after establishing the wireless communication path” includes this indication. Petitioner argues that a “POSITA would have understood displaying a customer’s bank balance or approved credit amount(s) to be *indication[s] of a prepared balance*” but never

even alleges, let alone proves, that the references teach a UI that includes such an indication “after establishing the wireless communication path.” Pet., 88-89.

Having failed to address claim 11 as a whole, Petitioner has not and cannot prove that claim 11 was obvious.

Second, Petitioner once again fails to identify a reason to combine the relied upon disclosures with Zhou. *See KSR*, 550 U.S. at 418-19 (obviousness not shown “merely by demonstrating that each of [a claim’s] elements was, independently, known in the prior art”); *Axonics*, 73 F.4th at 957 (patent challenger must demonstrate reason to “combine the teachings of the prior art references to achieve the claimed invention”). In discussing the purported reasons to combine the previous references with Freeny, Petitioner vaguely references Freeny’s “proximity-based transactions,” but never mentions the aspects of Freeny relied upon for the above limitation (i.e., requesting bank balances and storing an approved credit amount). Pet., 84 (alleging that “a POSITA would have been motivated to implement Freeny’s proximity-based transactions in Zhou’s system”), 85 (alleging reasonable expectation of success to “expand the proximity authentication method of Zhou to include a method for effecting a post-authentication transaction”). Petitioner therefore has not and cannot prove a reason to apply the relied upon teachings of Freeny to arrive at the above limitation with a reasonable expectation of success.

Petitioner therefore fails to meet its burden of proving that claim 11 was obvious for numerous reasons.

VII. Conclusion

Accordingly, for at least the reasons set forth above, institution of inter partes review should be denied.

Respectfully submitted,

Dated: January 18, 2024

/Matthew A. Argenti/
Matthew A. Argenti, Lead Counsel
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VIII. Appendix

EXHIBIT NO.	DESCRIPTION
2001	Amended CSC Complaint, <i>PayRange Inc. v. CSC Serviceworks, Inc.</i> , No. 1:23-cv-00278-MN (D. Del. May 19, 2023), Doc. No. 12.
2002	Scheduling Order, <i>PayRange Inc. v. CSC Serviceworks, Inc.</i> , No. 1:23-cv-00278 (D. Del. Jul. 27, 2023), Doc. No. 24.
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	Transcript of Rule 11 Hearing, <i>PayRange, Inc. v. Kiosoft Techs., LLC</i> , No. 1:20-cv-20970 (S.D. Fla. July 27, 2021), Doc. No. 250.
2005	eBay Listing of KioSoft CSC Ultra One V2 POS Payment Terminal, EBAY, https://www.ebay.com/itm/185234504103 [https://we.archive.org/web/20231010224416/https://www.ebay.com/itm/185234504103].
2006	December 7, 2023, email from Jason R. Mudd to Matthew Argenti
2007	CONFIDENTIAL – CSC Production Document No. 1
2008	CONFIDENTIAL – CSC Production Document No. 2
2009	CONFIDENTIAL – CSC Production Document No. 3
2010	CONFIDENTIAL – CSC Production Document No. 4
2011	CONFIDENTIAL – CSC Production Document No. 5
2012	CONFIDENTIAL – CSC Production Document No. 6
2013	CONFIDENTIAL – CSC Production Document No. 7

2014	CONFIDENTIAL – CSC Production Document No. 8
2015	CONFIDENTIAL – CSC Production Document No. 9
2016	CONFIDENTIAL – CSC Production Document No. 10
2017	Statutory Disclaimer filed in U.S. Patent 11,481,772 B2, on November 22, 2023

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. §42.24(d), the undersigned certifies that this paper contains no more than 14,000 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 6,751 words.

Respectfully submitted,

Dated: January 18, 2024

/Mathew A. Argenti/
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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Patent Owner's Preliminary Response and EX2001-EX2017 were served on January 18, 2024, on Petitioner at the electronic correspondence addresses of Petitioner as follows:

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