

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Askeladden L.L.C.,
Petitioner

v.

Calabrese Stemer LLC,
Patent Owner

Case: IPR2024-00367
U.S. Patent No. 7,357,310

PETITIONER'S REPLY

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LIST OF EXHIBITS

PETITIONER EXHIBIT	DESCRIPTION
1001	U.S. Patent No. 7,357,310 (“the ’310 patent”)
1002	Prosecution History of the ’310 patent
1003	Declaration and <i>curriculum vitae</i> of Dr. Robert Akl, D.Sc.
1004	Declaration of Glenn J. Perry
1005	Supporting Exhibit to Declaration of Glenn J. Perry
1006	Certified English Translation of Japanese Patent Application No. 2002-133100 (“Horie”) and Certification
1007	<i>Not used</i>
1008	U.S. Patent No. 5,915,222 (“the ’222 patent”)
1009	Japanese Patent Application No. 2002-133100 (“Horie”)
1010	<i>Not used</i>
1011	<i>Not used</i>
1012	<i>Not used</i>
1013	<i>Not used</i>
1014	U.S. Patent No. 7,024,396 (“Woodward”)

CLAIM LISTING

Claim 1
[1pre] 1. A payment authorization method, which comprises:
[1a] gathering, at a merchant's, account information for payment of a customer's purchase;
[1b] transmitting an authorization request to a financial authorization system requesting payment authorization for the customer's purchase via a first transmission channel;
[1c] notifying the customer that the authorization request has been received by transmitting, via a second transmission channel independent of and separate from the first transmission channel between the merchant's and the financial institution, a notification to a communications device associated with the customer; and
[1d] processing the transaction for payment authorization substantially without requiring a direct communications link between the communications device associated with the customer and the merchant's and substantially without requiring a response to the notification from the communications device associated with the customer.
Claim 2
2. The method according to claim 1, wherein the authorization request includes the account information and a monetary amount, and the notification to the communications device associated with the customer includes the monetary amount.
Claim 3
[3pre] 3. In a charge card payment authorization method, wherein a charge is requested at a merchant's, account information for payment of a customer's purchase is acquired at the merchant's, an authorization request is transmitted from a terminal associated with the merchant's to a remote charge processing facility, and the charge request is processed, the improvement which comprises:
[3a] processing the charge request substantially exclusively through communication between the merchant's and the remote processing facility and

substantially without requiring activity on the part of the customer,
[3b] and transmitting a notification of the charge request to a wireless device associated with the customer no later than immediately after authorizing the charge request.
Claim 4
4. The method according to claim 3, which comprises transmitting the notification immediately upon receiving the charge request and prior to authorizing the charge request.

I. Introduction.

The challenged claims of the '310 patent are invalid. Patent Owner's Response (Paper 10) fails to present any coherent argument or evidence to the contrary. Instead, the Response—which consists entirely of attorney argument bereft of citations to the evidence of record—proposes a construction for “independent of and separate from” as recited in claim 1 that is unsupported by the intrinsic record and excludes the preferred embodiment described in the '310 patent. For the remaining challenged claims, Patent Owner either fails to argue their patentability at all (claim 2) or makes a conclusory assertion that the claims are valid (claims 3 and 4) devoid of any analysis or evidence.

The Board should cancel all of challenged claims 1-4 of the '310 patent.

II. The Petition's Level Of Ordinary Skill Is Undisputed.

As explained in the Petition (Paper 1), a POSITA in the context of the '310 patent would have had a bachelor's degree in computer science, computer engineering, electrical engineering, or a related study, and would have had one or two years of experience with wired and wireless networks used to securely process requests for authorization of activity such as financial transactions at the time of the alleged invention. Paper 1, at 9 (citing Ex. 1003 ¶ 22). The Board preliminarily adopted this level of ordinary skill in its Institution Decision. Paper 6, at 8-9.

Patent Owner agrees with this definition of a POSITA. Response, at 3. However, Patent Owner also speculates—without any supporting evidence—that “instead of a degree in computer science, computer engineering, or electrical engineering, the person of ordinary skill in the art may also be educated in general physics.” Response, at 3. It is unclear what Patent Owner means to be “educated in general physics,” however, or how such a background is relevant to the ’310 patent or the prior art at issue in this proceeding. Patent Owner also suggests a POSITA may “have experience in wireless and wired network technology” and “experienced in data transmission over secure transmission channels and open, non-secured transmission channels.” Response, at 3. Although these hypothetical qualifications appear to be relevant to the ’310 patent, Patent Owner offers no evidence or explanation as to why they should be included in the definition of a POSITA or how these qualifications affect the ultimate issues of anticipation and obviousness in this proceeding. At least for these reasons, Petitioner respectfully submits that the Board should adopt the level of ordinary skill as set forth in the Institution Decision. Paper 6, at 8-9.

III. There is No Dispute “Merchant’s” is Disclosed by Horie.

As explained in the Petition, independent claims 1 and 3 of the ’310 patent recite a or the “merchant’s,” *i.e.* a possessive noun without recitation of an object. *See, e.g.*, claim 1[a] (“gathering, at a merchant’s, account information...”).

Petitioner proposed that instances of “[a/the] merchant’s” in the challenged claims of the ’310 patent refer to a merchant’s *terminal*, based on the applicant’s statements during prosecution. Paper 1, at 9-10 (citing Ex. 1002, at 45). The Board in its Institution Decision described this as “a potential typographical error in the claims.” Paper 6, at 10 n.5. However, Petitioner respectfully submits that the Petition did not refer to this claim language as a typographical error nor provide any analysis to that effect. Rather, the Petition proposed the clarification of a merchant’s terminal to answer the operative question—what is the “merchant’s”, *i.e.* what is possessed by the merchant recited in the claims?

According to Patent Owner, the claim language at issue “makes use of a (slightly antiquated) grammatical form.” Response, at 4. Patent Owner asserts that “[i]n the context, the expression may refer to anything in possession of, or under the control of the merchant, as the use of the possessive form implies.” Response, at 4. For the purposes of this proceeding and the asserted prior art, Petitioner agrees with Patent Owner that “merchant’s” refers to anything in the possession or control of the recited merchant, including the merchant’s terminal. Response, at 4.

Petitioner therefore submits that there is no typographical error in claims 1 or 3 with respect to “merchant’s” that requires construction or correction by the Board. There is no dispute between the parties as to the usage and scope of the term in the claims, and therefore it need not be expressly construed by the Board as

explained in the Petition. Paper 1, at 9-10. As demonstrated in the Petition, “gathering, at a merchant’s, account information for payment of a customer’s purchase” as recited in claim 1 and “account information for payment of a customer’s purchase is acquired at the merchant’s” as recited in claim 3 are expressly disclosed by the asserted prior art. For example, Horie discloses a “transaction terminal device” in a merchant’s possession that reads “card information, transaction details information, and other necessary information” and sends the information to a “card authentication host.” Ex. 1006, at [0046]-[0048]. Patent Owner does not dispute that Horie discloses “a merchant’s” as recited in claims 1 and 3 in the Response.

IV. The Petition Properly Analyzed the Disclosure of Horie for Anticipation.

In its Institution Decision, the Board observed that “Petitioner and Dr. Akl refer to both the Figure 1 and Figure 9.” Paper 6, at 14 n.8. The Board further ordered that “[t]he parties should brief whether it is appropriate in an anticipation analysis to consider features of both Figures 1 and 9.” *Id.* Petitioner respectfully submits that the Petition’s analysis of anticipation of claims 1-4 in view of Horie is consistent with the law of anticipation.

Horie describes Figure 1 as a “schematic configuration of a card payment

transaction system of the present invention.” Ex. 1006, at 9¹. Horie’s Figure 9 shows “a schematic configuration of another aspect (second embodiment of the present invention.” Ex. 1006, at 10. Although described as a second embodiment, Horie expressly states that “[i]t should be noted that for the second embodiment, the description of the detailed processing will now be limited to a schematic description, as it would readily be performed by a person skilled in the art by reference to the various processing described in the first embodiment.” Ex. 1006, at [0075].

As Patent Owner admits, “it appears that Petitioner’s use of Fig. 1 and Fig. 9 of Horie in their argumentation is of little impact.” Response, at 14. Petitioner agrees. There are no substantive differences between Figures 1 and 9 for purposes of anticipation, the arguments set forth in the Petition, or the ultimate issue of invalidity of the challenged claims. And Patent Owner correctly states that “Fig. 9, which includes everything from Fig. 1, is simplified relative to Fig. 1. See, for example, the use of ‘5’ and ‘6,’ as opposed to ‘5a – 5n.’ The network in Fig. 9 uses the same pathways as Fig. 1. Only the description and the illustration are simplified and abbreviated for space.” Response, at 14. Nowhere in its Response does Patent Owner identify any disclosures in Figures 1 and 9 of Horie that are inconsistent or

¹ Because of the formatting of the certified translation of Horie, page citations to Exhibit 1006 refer to the pagination of the exhibit footer added by Petitioner, unlike citations to specific paragraphs.

otherwise impact the analysis of whether Horie anticipates the challenged claims.

The Board further stated that “[f]or purposes of this [Institution] Decision, we focus exclusively on Figure 1.” Paper 6, at 14 n.8. Petitioner submits that Horie anticipates the challenged claims, even if Horie’s Figure 9 is excluded from the analysis. However, in the context of that analysis for anticipation, it is not error to consider the disclosures of both Figures 1 and 9 because Horie expressly states that “for the second embodiment, the description of the detailed processing will now be limited to a schematic description, as it would readily be performed by a person skilled in the art by reference to the various processing described in the first embodiment.” Ex. 1006, at [0075]. “[P]rior art references should be considered for all that they teach, rather than being limited to a particular embodiment or the claimed invention of the prior art.” *Hayward Indus., Inc. v. Pentair Water Pool & Spa, Inc.*, 814 F. App’x 592, 596 (Fed. Cir. 2020) (citing *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1076 (Fed. Cir. 2015)). “A reference may still anticipate if that reference teaches that the disclosed components or functionalities may be combined and one of skill in the art would be able to implement the combination.” *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1344 (Fed. Cir. 2016).

Because Horie expressly explains that a POSITA could implement either of Horie’s Figures 1 or 9 through the same “processing described,” the figures may

both be considered with respect to the analysis for anticipation. Patent Owner does not argue or present any evidence or authority to the contrary in its Response. At least for these reasons, the Petition's analysis of anticipation of the challenged claims of the '310 patent in view of Horie was appropriate.

V. The Petition Properly Demonstrated the Obviousness of the Challenged Claims in View of Horie.

As explained in the Petition, the challenged claims of the '310 patent are obvious in view of Horie. *See* Paper 1, at 31-38. In its Institution Decision, the Board stated that "it is unclear that the Petition, unlike Dr. Akl's testimony, argues how a person having ordinary skill in the art would have modified Horie." Paper 6, at 21 n.10. The Board further ordered that "[t]he parties should address in the Response and Reply (1) whether the Petition argues how and why a person having ordinary skill in the art would have modified Horie and (2), if not, whether we can rely on the argument in Dr. Akl's testimony that is not made in the Petition." Paper 6, at 21 n.10.

Petitioner respectfully submits that the Petition demonstrates the obviousness of the challenged claims of the '310 patent in view of Horie *as is, without modification*. The Petition and supporting testimony of Dr. Akl do not include a motivation to modify Horie as a single reference. Nor is any such motivation to modify or modification of Horie required in this case to conclude that the challenged claims are obvious.

A claim may be rendered unpatentable under 35 U.S.C. § 103 based on a single prior art reference that discloses every claim limitation. *Unification Techs. LLC v. Micron Tech. Inc.*, Nos. 2023-1348, 2023-1351, 2023-1352, 2024 WL 3738401, at *6 (Fed. Cir. Aug. 9, 2024) (citing *Realtime Data, LLC v. Iancu*, 912 F.3d 1368 (Fed. Cir. 2019)). Where no modification is necessary to arrive at the claimed invention, the Petition and the Board need not set forth a motivation to modify the prior art. *Id.* (“Because no modification to Suda was necessary to arrive at the claimed invention, the Board was ‘not required to make any finding regarding a motivation to’ modify Suda.” (citation omitted)). The Petition presents Horie in a single-reference obviousness ground and no modification of Horie is necessary for a POSITA to arrive at the elements of the challenged claims, just like the situation addressed by the Federal Circuit in the *Unification Technologies* case. Because Horie renders obvious each and every element of the challenged claims of the ’310 patent for the reasons explained in the Petition, the Petition does not analyze “how and why a person having ordinary skill in the art would have modified Horie.” Paper 6, at 21 n.10.

Relatedly, Dr. Akl did not testify how a POSITA would have modified Horie. Rather, as the Board noted, Dr. Akl’s testimony explained that the differences between the first and second transmission channels in Horie “would have suggested to a person of ordinary skill in the art that separate and independent

lines of communication could be employed in Horie's system for the sending/receiving of requests and notifications." Paper 6, at 21 n.10 (citing Ex. 1003 ¶ 98). Dr. Akl did not testify as to any motivation to modify or modification of Horie, but rather what the "differences between the channels described in Horie would have suggested to a person of ordinary skill in the art." Ex. 1003 ¶ 98.

Petitioner respectfully submits that the Board incorrectly found that this is "argument in Dr. Akl's testimony that is not made in the Petition." Paper 6, at 21 n.10. As the Petition explained, "[t]o the extent that Horie does not disclose that the second transmission channel is independent of and separate from the first transmission channel, a POSITA would have understood that the transmission channels were independent and separate." Paper 1, at 32-33 (citing Ex. 1003 ¶¶ 97-99). Rather than presenting new argument, Dr. Akl's testimony provides the underlying facts and analysis to support his opinion, which he was obligated to do in his role as an expert witness. *See* 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."); *cf. Kinetic Techs., Inc. v. Skyworks Sols., Inc.*, Case IPR2014-00529, Paper 8, at 15 (P.T.A.B. Sept. 23, 2014) ("Merely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value."). As part of the underlying facts and analysis in Dr. Akl's testimony, he provides an explanation of what "would have

been understood by a person of ordinary skill in the art” based on the disclosure of Horie. Ex. 1003 ¶ 98. This is a permissible use of expert testimony in an *inter partes* review, rather than a new or improper argument outside the Petition. See *Unification Techs.*, 2024 WL 3738401, at *6 (“The Board relied on Dr. Baker not to supply limitations missing from Suda, but to inform the Board’s analysis as to how a skilled artisan would have understood Suda’s disclosure.”).

VI. Patent Owner’s Construction for “Independent Of and Separate From” Is Unsupported By The Intrinsic Evidence.

Attempting to distinguish the asserted prior art, Patent Owner argues that the phrase “independent of and separate from” recited in claim 1[c] should be construed as “notifying the customer that the authorization request has been received by transmitting, via a second transmission channel that is independent of and separate from the first transmission channel between the merchant’s and the financial institution and that does not overlap with the first transmission channel, a notification to a communications device associated with the customer.” Response, at 16-17 (added language underlined). Patent Owner’s construction should be rejected for several reasons.² First, Patent Owner does not argue that either

² Patent Owner’s addition of the phrase “that is” to the claim language appears to be nothing more than a grammatical modification with no substantive effect on claim scope. Patent Owner does not provide any explanation or justification for the addition of “that is,” and does not argue “that is” alters the scope of the claim or the ultimate question of invalidity. Patent Owner has waived any arguments

lexicography or disclaimer limit the plain and ordinary language of the claim as would have been understood by a POSITA. *Second*, Patent Owner’s proposed construction is contradicted by the intrinsic evidence and would exclude the preferred embodiment depicted in Figure 1 of the ’310 patent.

A. “Independent of and separate from” should be given its plain and ordinary meaning.

As the Board found in its Institution Decision, Horie discloses first and second transmission channels “independent of and separate from” each other under the plain and ordinary meaning of the term. Paper 6, at 19. Patent Owner concedes this point and does not argue to the contrary in its Response. Instead, “Patent Owner is presenting a claim construction in this paper which will clearly and unambiguously disqualify Horie as a patent-defeating reference.” Response, at 5. But Patent Owner’s proposed construction that the second transmission channel “does not overlap with the first transmission channel” is unsupported by any evidence and contrary to the canons of claim construction.

There is a “heavy presumption” that a claim term or phrase has its ordinary and customary meaning. *See, e.g., Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). “There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee

otherwise. Paper 7, at 9 (“Patent Owner is cautioned that any arguments not raised in the response may be deemed forfeited.”).

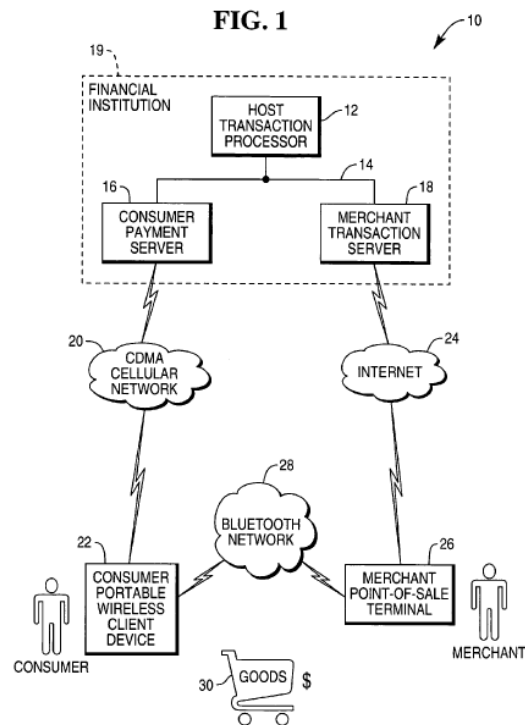
disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). “Absent a ***clear disavowal*** or contrary definition in the specification or the prosecution history, the patentee is entitled to the ***full scope of its claim language***.” *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) (emphasis added). Neither of these exacting conditions is present here such that “independent of and separate from” should be further limited to exclude transmission channels with some overlapping elements.

Patent Owner does not argue lexicography or disclaimer apply here, nor could it. With respect to lexicography, the phrase “independent of and separate from” does not appear anywhere in the specification of the ’310 patent. As Patent Owner admits, “[t]he specification of the ’310 Patent does not express any intent to impart a novel meaning to the terms.” Response, at 20.

The first time the phrase appeared in the intrinsic record of the ’310 patent is when the applicant amended pending claim 1 of the ’310 patent during prosecution. Ex. 1002, at 42. In so doing, the applicant stated that “[t]he communication between the financial transaction system and the customer is separate (in terms of the physical channel and in terms of the content) from the communication between the financial transaction system and the merchant.” Ex. 1002, at 48. This amendment and accompanying remarks were made to overcome

a § 102 rejection in view of U.S. Patent No. 6,442,532 (“Kawan”). Ex. 1002, at 47. With respect to Kawan, the applicant stated that “[i]n no case is the cellular telephone [in Kawan] integrated into the system in parallel with another transaction terminal (and with separate communications channels that may be operative simultaneously).” Ex. 1002, at 49. Nowhere in this office action response did the applicant provide any express definition for “independent of and separate from,” or specifically disavow transmission channels with any amount of overlap between them.

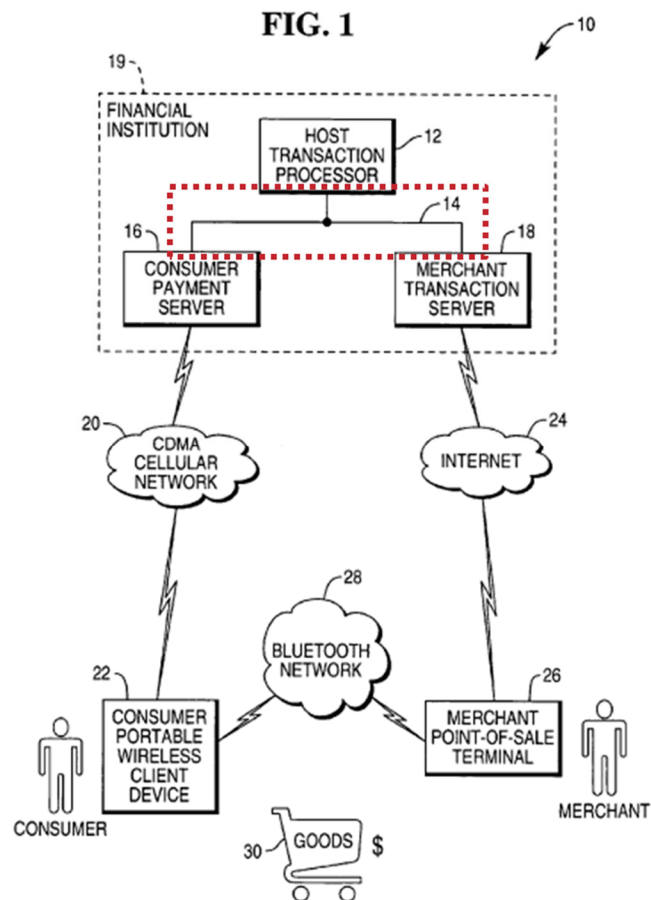
Instead, the prosecution history contradicts Patent Owner’s proposed construction. After pending claim 1 was amended by the applicant to include the “independent of and separate from” limitation, the examiner issued a rejection under § 102 in view of U.S. Patent No. 7,024,396 (“Woodward”). Ex. 1002, at 54; *see* Ex. 1014. Woodward disclosed a “schematic block diagram of a transaction system.” Ex. 1014, at 3:16-17 & Fig. 1.



The applicant stated that according to Woodward “the merchant transmits an authorization request to a host. The host then provides a merchant authorization key and a consumer authorization key. ... The two keys are split up by the host and sent *separately* to the two parties of the POS transaction.” Ex. 1002, at 72 (emphasis added). To overcome the examiner’s rejection based on Woodward, the applicant amended pending claim 1 to recite processing the transaction for payment authorization “substantially without requiring a direct communications link between the communications device associated with the customer and the merchant’s.” Ex. 1002, at 68. The applicant then asserted that the amendment excluded a “horizontal communications component” between the customer and the

merchant as shown in a Woodward's Figure 1. Ex. 1002, at 72. The applicant never argued that Woodward did not disclose transmission channels “independent of and separate from” each other.

But the transmission channels in Woodward still overlap. An annotated Figure 1 of Woodward appears below highlighting “network 14.”



According to Woodward, “the present invention includes a host transaction processor 12 which *communicates on a network 14* with a consumer payment server 16 and a merchant transaction server 18.” Ex. 1014, at 3:28-31 (emphasis

added). As described in Woodward and depicted in Figure 1 above, the host transaction processor uses “network 14” for transmissions between *both* the consumer and the merchant—in other words, those transmission channels overlap at network 14. Yet Patent Owner told the examiner that Woodward’s host transmissions are “sent separately to the two parties of the POS transaction.” Ex. 1002, at 72. Rather than a “clear disavowal” of overlapping transmission channels from the scope of the term “independent of and separate from,” the applicant’s failure to distinguish Woodward’s overlapping “network 14” contradicts Patent Owner’s proposed construction.

Furthermore, the plain and ordinary meaning of “independent of and separate from” does not exclude any overlap in transmission channels. As Patent Owner admits, “[t]he ordinary and customary meaning of the terms is that the objects of the juxtaposition (i.e., the first and second transmission channels) are not identical, they are not the same, they are distinguishable, they are not indistinguishable, they are discrete and individual, etc.” Response, at 20. Ignoring the facts that Patent Owner presents (1) no citation or evidence to support these definitions and (2) no testimony or evidence as to how a POSITA would have understood the ordinary meaning of the term at issue, none of Patent Owner’s characterizations of the ordinary meaning require no overlap between transmission channels.

Patent Owner also suggests that “[t]he specification nevertheless ‘narrows’ the terms by their use in the context.” Response, at 20. However, Patent Owner does not cite to any portions of the specification beyond Figures 1 and 2. Patent Owner also offers no evidence as to how a POSITA would have understood the “context” of the ’310 patent. “[P]atent coverage is not necessarily limited to inventions that look like the ones in the figures.” *MBO Lab ’ys, Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007). Patent Owner’s attempt to rely on Figures 1 and 2 of the ’310 patent to limit the scope of “independent of and separate from” should be rejected. And, as explained below, the embodiment depicted in the figures of the ’310 patent confirms that the plain and ordinary meaning of “independent of and separate from” permits overlap so long as the transmission channels are not the same.

B. Patent Owner’s proposed construction would exclude the preferred embodiment.

A construction that excludes a preferred embodiment is “rarely, if ever, correct.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). But Patent Owner’s proposed construction of “independent of and separate from” that requires transmission channels which do not overlap at all would exclude the preferred embodiment depicted in the ’310 patent. An annotated Figure 1 of the ’310 patent is shown below.

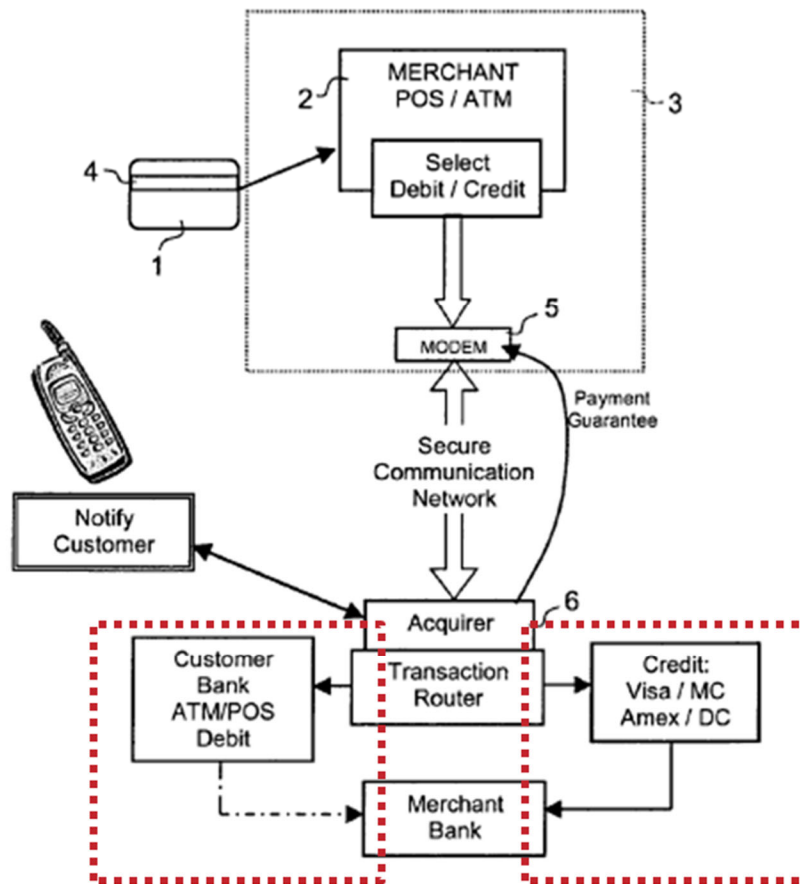


FIG. 1

As shown in Figure 1, the '310 patent states that a “cardholder, or the person swiping the card, may now be prompted to select a debit transaction or a credit transaction on the merchant terminal 3.” Ex. 1001, at 2:50-52. The '310 patent explains that “the merchant terminal 3 connects, through a modem 5, to an acquirer 6. The latter obtains the information from the modem 5 and *checks against its data sources whether or not the transaction should be authorized.*” Ex. 1001, at 2:57-60 (emphasis added). Those “data sources” appear in Figure 1, which are shown

as either the customer's bank (where the transaction is ATM/debit) or the credit card company. The customer bank and credit card company each connect to the merchant bank. Ex. 1001, Fig. 1. As the annotated Figure 1 above shows, the acquirer's check and resulting authorization overlap in either instance of debit or credit transactions.

Patent Owner's proposed construction and arguments in support thereof ignore the depiction of overlapping transmission channels in Figure 1 for debit or credit transactions, and would exclude this embodiment from the scope of "independent of and separate from." Patent Owner's construction should therefore be rejected by the Board.

VII. Horie Anticipates and Renders Obvious The Challenged Claims.

As explained in the Petition, Horie anticipates and renders obvious the challenged claims. Paper 1, at 14-38. Patent Owner only appears to raise arguments regarding whether Horie discloses claims 1[c], 3[a], 3[b], and 4. Response, at 24-27. Patent Owner has thus waived any other arguments regarding whether Horie anticipates or renders obvious the remaining elements of the challenged claims. Paper 7, at 9.

A. Horie anticipates and renders obvious claim 1.

Horie anticipates and renders obvious claim 1 of the '310 patent. Paper 1, at 14-25, 32-35. As noted above, Patent Owner does not dispute that Horie discloses

and renders obvious all of the elements of claim 1 except for element 1[c]. And as explained above, Patent Owner's arguments with respect to claim 1[c] all rely on the Board adopting Patent Owner's proposed construction for "independent of and separate from." Because that construction is wrong for the reasons explained in Section VI, *supra*, Petitioner respectfully submits that claim 1 of the '310 patent is anticipated and rendered obvious by Horie for the reasons explained in the Petition.

B. Patent Owner fails to argue patentability of claim 2.

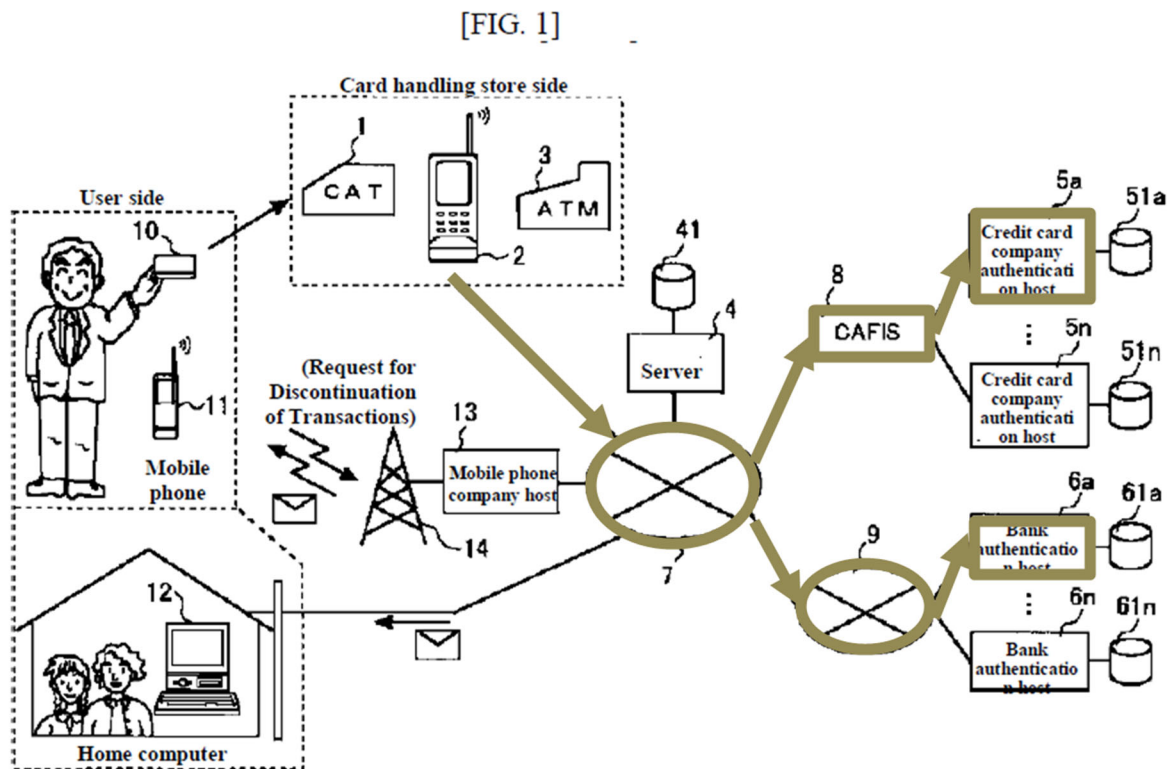
The Response contains a paragraph containing Patent Owner's characterizations of claim 2. Paper 10, at 6. However, Patent Owner does not argue patentability of claim 2 anywhere in the Response. As such, any arguments regarding claim 2 by Patent Owner have been waived. Petitioner respectfully submits that claim 2 of the '310 patent is anticipated and rendered obvious by Horie for the reasons explained in the Petition.

C. Horie anticipates and renders obvious claim 3.

Patent Owner appears to include a section arguing patentability of claims 3 and 4 of the '310 patent. Response, at 26-27. With respect to claim 3, Patent Owner states that claim 3 recites "the charge request is processed substantially exclusively through communication between the merchant's and the remote processing facility and substantially without requiring activity on the part of the customer," which according to Patent Owner "disqualifies Horie's primary

embodiment, in which a response from the customer is required.” Patent Owner is wrong for several reasons.

First, as explained in the Petition, Horie discloses that “when [a] card 10 owned by a card user is used for payment transactions via card transaction terminal devices 1 to 3, card authentication processing is performed between card transaction terminal devices 1 to 3 and each authentication host via CAFIS 8.” Ex. 1006, [0044]. None of that activity is depicted in Figure 1 as involving the customer. Ex. 1003 ¶ 113.



Ex. 1006, Fig. 1 (annotated). Horie further discloses that this processing is performed substantially without requiring activity on the part of the customer. As

shown above in Figure 1, the communications devices associated with the customer (*i.e.* mobile phone 11 and home computer 12) are depicted without any direct link between either of those devices and the merchant's terminals (*i.e.* CAT 1, wireless CAT 2, or ATM 3). *See* Ex. 1006, Fig. 1; *see also* Ex. 1003 ¶ 101.

Horie explains that “when a payment transaction is made using a card owned by the card user or a family member, the card user can be informed of the fact via e-mail, and can also receive notification of the transaction.” Ex. 1006, [0071]. Horie further discloses that either “an e-mail is sent to notify the user after the card authentication process in the card payment transaction, [or] the e-mail can also be sent, for example, during the card authentication process.” Ex. 1006, [0073].

In either of these two possibilities, Horie does not disclose requiring any response from the customer's communications device to the notification prior to processing the transaction for payment authorization—in other words, the card authentication process will proceed absent any input from the customer. Ex. 1003 ¶¶ 102-103.

Second, Patent Owner does not cite to any disclosure from Horie to show that Horie requires activity on the part of the customer to process a charge request with respect to claim 3[a]. Although Patent Owner asserts that this “limitation in claim 3 disqualifies Horie's primary embodiment,” Patent Owner does not cite any evidence from Horie to support this claim.

Third, Patent Owner appears to allege that Horie fails to disclose “transmitting a notification . . . to a wireless device associated with the customer no later than immediately after authorizing the charge request.” Response, at 27. However, Patent Owner does not present any evidence or substantive argument to support this assertion regarding claim 3[b]. And Patent Owner is nevertheless wrong. As noted in the Petition, Horie explains that “in the embodiment described above, although an e-mail is sent to notify the user after the card authentication process in the card payment transaction, the e-mail can also be sent, for example, during the card authentication process.” Ex. 1006, [0073]. A POSITA would have understood this notification occurs immediately, according to Horie. Ex. 1003 ¶ 120. “[W]hen a payment transaction is made using a card that the card user owns, the card user can immediately know through the mobile phone 11 that the card payment transaction has been made.” Ex. 1006, [0072].

D. Horie anticipates and renders obvious claim 4.

Patent Owner alleges that “[a]ccording to claim 4, the notification to the customer’s wireless device is transmitted before the charge request is authorized. Horie does not disclose, nor fairly suggest, this feature, as outlined above.” Response, at 27. It is unclear where Patent Owner is referring to “as outlined above.” Regardless, Patent Owner is wrong. Horie “does not limit the timing of sending the email. The e-mail could be sent after the card payment transaction, or

the e-mail notification could be sent while the card payment transaction is in progress.” Ex. 1006, [0010]. A POSITA would have understood that a notification email sent “while the card payment transaction is in progress” is “prior to authorizing the charge request.” Ex. 1003 ¶¶ 121-122. Patent Owner otherwise fails to present any substantive argument, analysis, or evidence regarding claim 4.

VIII. The Board Is Not Required To Sift Through Patent Owner’s Response Or The Record.

Patent Owner’s Response is devoid of citations to the evidentiary record in this proceeding and fails to clearly identify arguments with respect to specific claims and/or claim elements. “One cannot reasonably expect the Board to sift through hundreds of documents, thousands of pages, to find the relevant facts.” *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1371 (Fed. Cir. 2023). And “the Board should not be forced to ‘play arch[a]eologist with the record.’” *Id.* at 1372 (alteration in original) (quoting *Gen. Access Sols., Ltd. v. Sprint Spectrum L.P.*, 811 F. App’x 654, 657 (Fed. Cir. 2020)). Petitioner respectfully submits that it has attempted to respond to the ascertainable arguments Patent Owner has presented in its Response with respect to the invalidity of the challenged claims, but the Board is not obligated to discern Patent Owner’s arguments on its behalf or attempt to identify the portions of the record upon which Patent Owner may or may not be relying in support of those apparent arguments.

For example, Patent Owner asserts that “[t]he first transmission channel,

therefore, must be a secure channel. The authorization request logically includes an identification of the customer's account. The transmission must be secure."

Response, at 7. However, Patent Owner cites to no evidence, disclosure in the specification, or claim language to support this assertion. The word "secure" does not appear in any claim of the '310 patent.

As another example, Patent Owner asserts that "a simple and short message with limited information can be sent instantaneously via a second separate and independent transmission channel with either no security or limited security. This is impossible in Horie because the notification must pass through the same robust and secure line that is used to protect the customer's credit card information and identity." Response, at 13 (emphasis in original). Again, Patent Owner cites to no evidence in the record and no disclosure from either the '310 patent or Horie to support the assertion.

Petitioner submits that the Board should disregard and give no weight to Patent Owner's unsupported assertions that lack citation to the record. It is not the role of the Board to "formulate arguments on [Patent Owner's] behalf, search the record for pertinent facts, and inject our own reasoning." *3M Co. v. Evergreen Adhesives, Inc.*, 860 F. App'x 724, 726 (Fed. Cir. 2021) (quoting *3M Co. v. Westech Aerosol Corp.*, Case IPR2018-00576, Paper 39, at 8 (P.T.A.B. Feb. 4, 2020)). Nor should Patent Owner be permitted to remedy these deficiencies in its

Sur-Reply, as any evidence or argument not in the Response has been forfeited. Paper 7, at 9.

IX. The Testimony Of Dr. Akl Is Unchallenged And Unrebutted.

In support of the Petition, Petitioner submitted the declaration testimony of its expert, Dr. Robert Akl. Ex. 1003. Patent Owner did not depose Dr. Akl or submit any expert testimony on its behalf. As such, on this record Dr. Akl's testimony as to how a POSITA would have understood the disclosure of the prior art stands unchallenged and unrebutted. To the extent Patent Owner attempts to critique Dr. Akl's testimony and conclusions in its Response, the entirety of that Response is nothing more than unsupported attorney argument which cannot create any dispute regarding Dr. Akl's testimony or the invalidity of the challenged claims. *See, e.g., Elbit Sys. of Am., LLC v. Thales Visionix, Inc.*, 881 F.3d 1354, 1359 (Fed. Cir. 2018) (“[The party] fails to present any evidence supporting this contention beyond attorney argument,...and ‘[a]ttorney argument is not evidence’ and cannot rebut other admitted evidence.” (third alteration in original) (internal citation and citation omitted)).

X. Conclusion.

Petitioner respectfully requests that the Board find all challenged claims unpatentable.

Dated: December 20, 2024

Respectfully submitted,

By: Andrew W. Rinehart
Andrew W. Rinehart
Counsel for Petitioner

CERTIFICATE OF WORD COUNT

The undersigned certifies pursuant to 37 C.F.R. § 42.24(d) that the foregoing **Petitioner's Reply** excluding any mandatory notices, table of contents, table of authorities, certificates of service or word count, or appendix of exhibits or claim listing, contains fewer than 5,600 words according to the word-processing program used to prepare this paper (Microsoft Word).

Dated: December 20, 2024

Andrew W. Rinehart
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