

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: IPR2024-00368
Patent No. US 8,783,564 B2

PATENT OWNER RESPONSE
37 CFR § 42.120

TIMING OF PATENT OWNER RESPONSE

A Decision Granting Institution of *Inter Partes* Review, Paper 8, issued on June 27, 2024. The due date for Patent Owner Response, which was originally set to September 20, 2024 in the Scheduling Order, has been extended to September 27, 2024.

PATENT CLAIMS SUBJECT TO REVIEW

A Disclaimer under 37 CFR 1.321(a), Form PTO/SB/43, disclaiming claims 10-19 of the subject patent was filed together with Patent Owner's Preliminary Response. Claims 1-9 are subject to the *Inter Partes* Review.

EXPERT TESTIMONY

In this response, Patent Owner does not rely on expert testimony or any extrinsic evidence. It is believed that the issues before the Board may be resolved with proper claim construction. Once the claims are properly construed, the alleged anticipation and alleged obviousness will be overcome. Patent Owner nevertheless reserves the right to introduce additional testimony and evidence should developments in this IPR require such submissions.

Ordinary Skill in the Art and Burden of Proof

Patent Owner agrees with the analysis of the applicable legal standards as outlined on pages 7-9 of the Institution Decision. Patent Owner does not disagree, for the purposes of this submission, with the level of ordinary skill in the art as proffered by Petitioner, Pet. 7-8, and as adopted in the Decision, Dec. 9. Patent Owner, however, suggests that additional or different qualifications may be applicable in the case at hand. For instance, 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 and/or have experience in wireless and wired network technology. Further, the person of ordinary skill in the art will be experienced in data transmission over secure transmission channels and open, non-secured transmission channels.

Patent Owner also agrees that the burden of proof remains with the Petitioner throughout this *Inter Partes* Review. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). As will be pointed out in the following, Petitioner has not carried its burden of proof and Petitioner has not shown that the claims are either anticipated by, or obvious over, the prior art of record. Petitioner has not identified with particularity any evidence that properly challenges the validity of claims 1-9 of the '564 Patent.

ARGUMENTS IN SUPPORT OF THE CLAIMS

Petitioner asserts that claims 1-9 are anticipated by Japanese patent application 2002-133100 (hereinafter "Horie") and that claims 1-9 are obvious over Horie as modified by "knowledge of a POSITA."

The Board, after reviewing the Petition and Patent Owner's Preliminary Response, determined that Petitioner has shown a reasonable likelihood of success and, accordingly, instituted the *Inter Partes* Review. Dec. 26.

Patent Owner submits that the claims, if properly interpreted, are neither anticipated by, nor obvious over, Horie. Patent Owner is presenting a claim construction in this paper which will clearly and unambiguously disqualify Horie as a patent-defeating reference.

The Office should enter a decision in this *Inter Partes* Review affirming claims 1-9 of the subject patent, US 8,783,564.

Introduction - Claims 1-9

Claim 1 of the '564 Patent describes a notification process that is triggered upon receiving an authorization request for a transaction. The request is received via a first transmission channel. The "notification" is

immediately separated from the “authorization.” The notification progresses entirely independently of the authorization, and *vice versa*. Subject to a brief query as to whether the customer should be notified of any transactions (i.e., including the authorization request), the customer is notified via a second and distinct transmission channel. The notification is near instantaneous upon the receipt of an authorization request. The notification trigger does not depend on completing authorization, nor waiting for a customer response.

Petitioner misses the inventive concept and the point of novelty.

Petitioner alleges:

The ‘564 patent is invalid. The only alleged point of novelty in the ‘564 patent – simultaneously authorizing a card transaction and notifying a card holder of the transaction via a text . . . was already known in the art.

Petition, p. 4 (*Introduction*).

The gist of the claimed invention of the ‘564 Patent is not that the authorization and the notification are simultaneous. Instead, the authorization and the notification are independent from one another. It is a core inventive concept underlying claims 1-9 of the ‘564 Patent that the notification to the customer should not delay the authorization process. Again, the invention is not simultaneously authorizing and notifying, as alleged by Petitioner. An important feature of the invention is that the notification is separated from the authorization, so as not to delay and encumber the authorization process. Or, *vice versa*, to not encumber the notification process. The two processes are “separated” immediately upon the receipt of an authorization request.

Analysis of Claim 1

In the following, Patent Owner shall use the same numbering within the claims as presented by Petitioner and as adopted by the Board. Claim 1 of the ‘564 Patent recites the following steps:

[1a] *receiving a request for authorizing a transaction for an account, said request received via a first transmission channel, said request including at least an identification of the customer’s account;*

Because the claim deals with a financial transaction, the *first transmission channel* must necessarily be a secure channel. The authorization request expressly includes an identification of the customer’s account. The transmission must be secure.

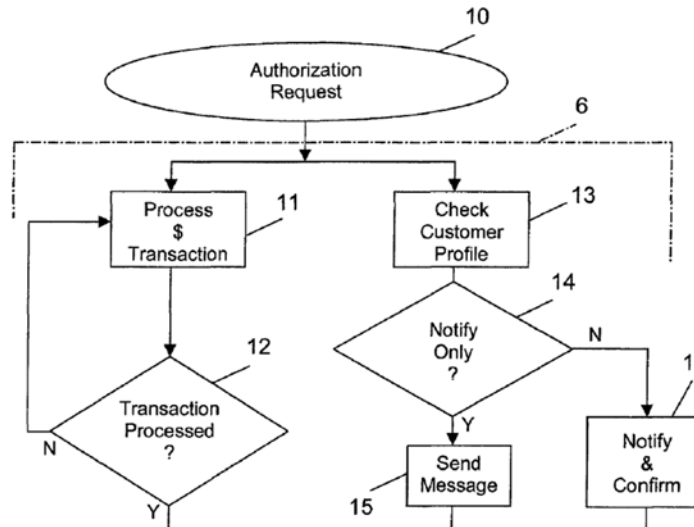
[1b] *determining whether or not the account includes a request for notification to the customer of any transactions;*

[1c] *notifying the customer via a second transmission channel only if the account includes a request for notification of any transactions;*

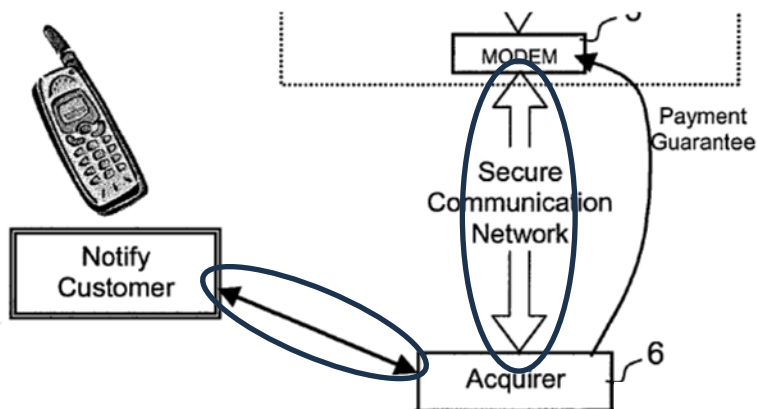
The claim specifically calls for a *second transmission channel* through which the customer is notified of the transaction (i.e., the request for authorizing a transaction for an account).

[1d] *the second transmission channel being **distinct** from the first transmission channel.*

The immediate separation of the two processes (authorization vs. notification) is illustrated in Fig. 2. See, e.g., the first steps in the flowchart of Fig. 2:



As shown in Fig. 2, one process does not encumber the other. The charge authorization and the notification are processed separately, and the communications between the parties (i.e., merchant, authorizing authority, customer) are handled via different and distinct transmission channels.



As shown in Fig. 1, the transmission channels are distinct, in that they are completely separate and independent of one another. There is no overlap between the two transmissions (process and structure).

The separation between the two processes and the feature that the first and second transmission channels are “distinct” requires a proper

interpretation of the claimed steps. Patent Owner suggests the following claim construction:

Distinct Transmission Channels

As noted above, the first transmission channel carries account information. It must be a secure transmission channel. The second transmission channel is used for a notification, an alert that an authorization request has been received. There is no necessity for the notification to be secure.

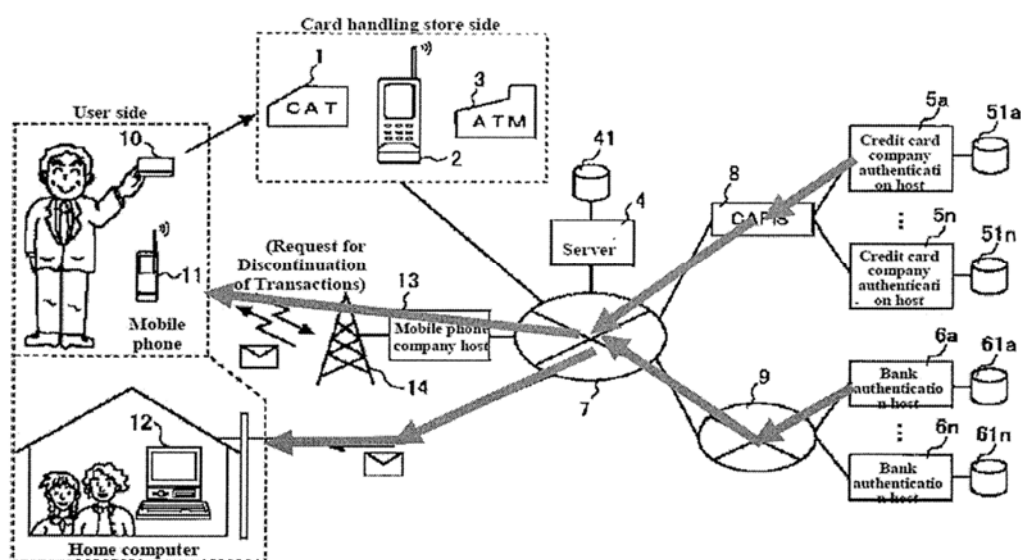
Claim 1 explicitly recites that the “first transmission channel” includes “identification of the customer’s account” and that the second channel is “distinct” from the “first channel.” There is no overlap, not even a partial overlap between the two channels. According to the claimed concept, the second channel cannot overlap with the channel carrying “identification of the customer’s account.” If there were an overlap, even a partial overlap, then the data packets must be secure as well. In that case, the same protocol would have to be used for the notification as the packets that came in, since they pass through the same secure network again. The result would be a slowing down of the process. We shall return to this issue below. We shall also detail the prior art teachings below. The following summary of issues will flow from the prior art discussion below:

1. First, Horie does not discuss the concept of sending one message over a line that is secure and another message over a different line that may or may not be secure. The concept is not discussed in Horie; on the other hand, the concept is central to the speed of the ‘564 invention.

2. In Fig 1 of Horie, CAFIS (8) and “dedicated bank line” (9) are both secure. They carry the user’s password/pin (see Horie [0047]). All communications coming in and out of Horie 5 and 6 must be secure because they travel through secure networks CAFIS (8) and “dedicated bank line” (9).
3. Fig. 9 of Horie also includes the CAFIS (8) network and the “dedicated bank line” (9). 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.
4. This brings us back to the essence of the invention, where speed and efficiency of the process are essential. The network channels CAFIS (8) and dedicated bank line (9) will be relatively slow (since they are heavily congested, given they deal with all card transactions in Japan).

In the Expert Declaration of Dr. Robert Akl (“Dr. Akl”), he argues that the transmission channels of Horie through which the request is received and through which the notification is sent are “distinct” from each other. Dr. Akl provides an annotated copy of Fig. 1 of Horie. To wit:

[FIG. 1]



The annotation shows that the “response” to an authorization request is sent from the box 5a (*Credit card company authentication host*) through CAFIS 8 to the network 7 and from the box 6a (*Bank authentication host*) through the dedicated bank line 9. From the network 7 (Fig. 1) or from the server 4 (Fig. 9), the notification is sent by email to the home computer 12 and/or to the mobile phone 11.

There exists a considerable overlap between the first and second transmission channels. As shown by Dr. Akl’s annotation, the notification from the network 7 or the server 4 to the user (11, 12) progresses through a different channel than the channel that connects the “Card handling store side” to the server 7. As such, the transmission of the authorization request from the “merchant” (1, 2, 3) to the server 7 uses a different communication channel than the notification from the server 4/network 7 to the user (11, 12). The communication between the server 7 and the credit card company 5, as well as the communication between the server 7 and the bank 6, proceed on the same channels, whether it be the authorization request or the

notification/authorization. Again, as shown in Dr. Akl's annotation, there exists a considerable overlap between the first and second transmission channels. They are not "distinct" in the sense of the claimed invention.

The claimed invention relies heavily on the speed and efficiency of the process. The claimed feature that the first and second transmission channels are "distinct" lies at the very heart of the invention. The term "distinct" excludes any overlap between parts of the transmission channels and any use of a common channel for the transmission.

Claim Construction

Patent Owner submits that the term "distinct" in claim 1 should be understood to convey the feature that the channels are "separate" and "independent." The corresponding feature of claim 1 should be read as follows:

*the second transmission channel being **distinct from, separate, and independent of** the first transmission channel.*

When two transmission channels are distinct, separate, and independent from one another, they do not overlap. The two transmission channels are not (partially) overlapping channels.

The claimed feature that the transmission channels are "distinct" also means that there is not overlap between them. As an alternative, therefore, or in addition, the claimed feature should be read as follows:

*the second transmission channel being **distinct from, separate, and independent of** the first transmission channel **and the first and second transmission channels do not overlap.***

We once more return to Dr. Akl's opinion that the second transmission channel in Horie is "distinct" from the first transmission channel if the different channels "use different hardware and network connections." This misses the point of the claim limitation. The second channel is distinct if it does not have to carry any "identification of the customer's account," as referenced by the first element of claim 1. This is so that one channel can be secure while the other is not. It will be understood that any channel that carries an "identification of the customer's account" must be secure (in the Japanese context of Horie, the secure channel would also carry a password/pin). Again, the "first transmission channel" must be secure.

Also, any (partial) overlap between the channels would be detrimental to the speed and efficiency of the process because the overlap would force the second transmission channel to be secure as well. The channel going in and out of the *Credit card company authentication host* (box 5a) in Horie must be secure, which would defeat the purpose of the claim limitation entirely and which also is in contradistinction to Fig. 1. Horie teaches sending the notification over a secure channel because it is the same channel coming in and out of the credit card authentication host 5a which, again, we know must be secure since it carries "an identification of the customer's account."

Horie does not disclose a second transmission channel that is *distinct*, *separate*, and *independent* of a first transmission channel.

The two transmission channels of Horie *overlap* one another.

Support for *distinct*, *separate*, and *independent*

Claims in *inter partes* review proceedings are construed "using the same claim construction standard" that is applicable in a proceeding under 35

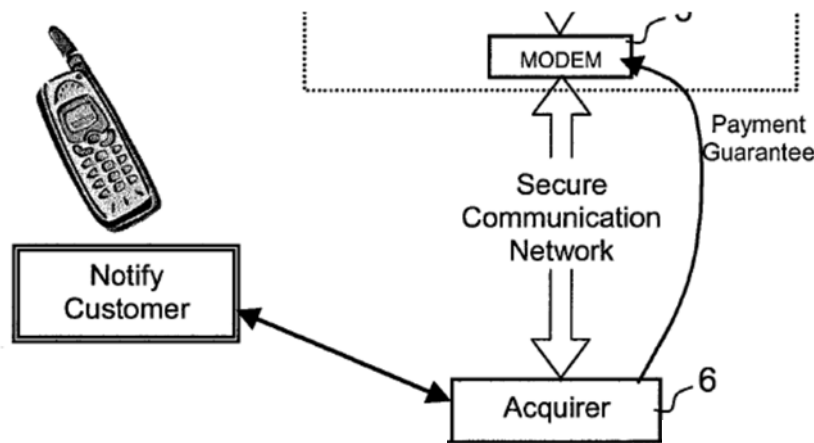
U.S.C. § 282(b). 37 CFR § 42.100(b). Claim construction is subject to a certain hierarchy with regard to its acceptable evidence. *Phillips v. AWH Corp.*, 415 F.3d 1310, 75 USPQ2d 1322 (Fed. Cir. 2005) (en banc). *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir.1996); *Pitney Bowes Inc. v. Hewlett-Packard Company*, 182 F.3d 1298 (Fed. Cir. 1999); and *Wang Laboratories, Inc. v. America Online, Inc.*, 197 F.3d 1377 (Fed. Cir. 1999). First, the claim itself must be reviewed and read as if it stood alone. The words of the claim must be interpreted in accordance with the use of the words in the specification. Furthermore, any file wrapper statements presented by applicants may be introduced into the record. These form the intrinsic record. Words and phrases may be further interpreted with the aid of dictionaries and lexica.

The words of the claims must be given their plain meaning, unless the plain meaning is inconsistent with the specification. *In re Zletz*, 893 F.2d 319, 13 USPQ2d 1320 (Fed. Cir. 1989); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 69 USPQ2d 1857 (Fed. Cir. 2004) (“the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313, 75 USPQ2d at 1326. See, also, *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294 67 USPQ2d 1136 (Fed. Cir. 2003) (“In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art”).

The “disputed term” in this context is the term “distinct,” which relates to the recitation in element [1d] of claim 1 that the second transmission channel is distinct from the first transmission channel. The term must be

understood with a view to the contextual use thereof. The ordinary and customary meaning of the term 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.

The specification of the '564 Patent does not express any intent to impart a novel meaning to the term distinct. The specification nevertheless "narrows" the term by its use in the context. The two transmission channels are illustrated as entirely separate channels. Fig. 1 shows a "Secure Communication Network" between the merchant's modem 5 and the acquirer 6 and also an entirely separate, non-overlapping connection between the acquirer 6 and the customer's mobile phone.



The two channels are different from one another. There is no overlap. They are not even partially congruent. The separation is also suggested in Fig. 2 (primarily in terms of the process), where the authorization request is immediately separated into the transaction processing branch at 11 and the notification branch which starts by checking the customer profile at 13.

In addition to consulting the specification, the fact finder should also consider the prosecution history. *Markman* at 980. The prosecution history may reveal how the inventor understood the invention and whether the inventor limited the invention during prosecution, making the claim scope narrower than it would otherwise be. *Phillips* at 1317. The prosecution history of the parent application No. 11/077,783 (Patent No. US 7,357,310, the “’310 Patent”) contains the following statement with reference to a claim amendment that was filed in response to a prior art rejection over the prior art reference US 6,442,532 B1 (“Kawan”):

Claim 1 has been clarified with regard to the communication between the merchant terminal and the authorization system, on the one hand, and between the customer and the authorization system, on the other hand. Support for the added language is found in Fig. 1, for example, where the secure network and the “payment guarantee” channel are illustrated between the acquirer 8 and the modem 5 of the merchant’s terminal. The communications channel between the acquirer 6 and the customer’s mobile device is illustrated to the left. The two communications channels are independent of one another, they are separate and distinct.

[T]he independent claims of the application have been clarified with regard to the separate communications channels. The 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. The prior art reference Kawan does not utilize such separate communications.

File History of ‘310 Patent, amendment filed July 12, 2006 (emphasis added) in response to a non-final rejection.

In the context of the claimed invention, where the term “distinct” should be afforded its ordinary meaning as defined by the specification and as further defined during the prosecution of the parent application, the second transmission channel is **distinct, separate, and independent** from the first transmission channel.

In summary, Patent Owner, having thus shown that the narrower interpretation of “distinct” is fully supported, herewith proffers the following claim construction to be accorded to limitation [1d] of claim 1:

*the second transmission channel being **distinct from, separate, and independent of** the first transmission channel.*

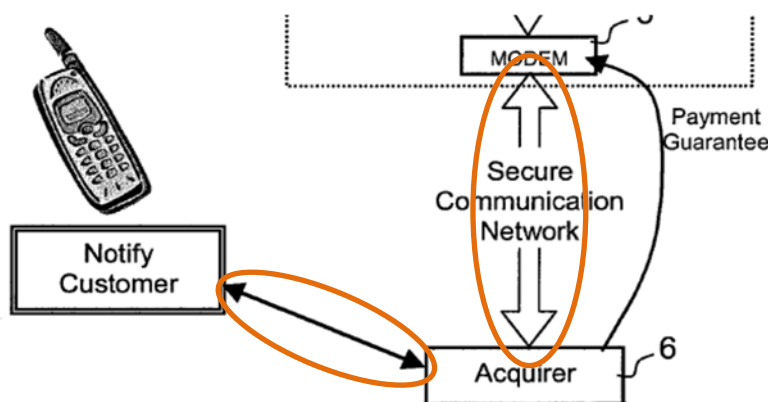
The limitation excludes Horie’s partially overlapping channels, which are not separate and independent from one another. The limitation, as suggested, does not allow for a partial overlap between the first and second transmission channels.

Support for “no overlap”

As an alternative, or in addition, the claimed feature might be read as follows:

*the second transmission channel being **distinct, separate, and independent** from the first transmission channel **and the first and second transmission channels do not overlap.***

The construction is primarily supported in Fig. 1 and in its description in the specification. To wit:



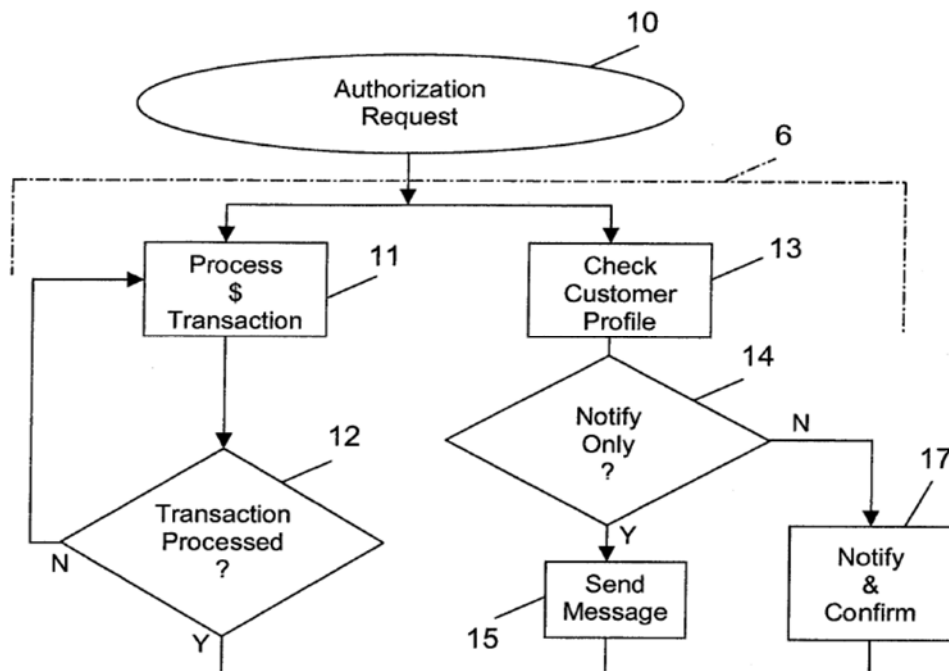
There is no overlap between the two transmission channels. The first transmission channel extends between the acquirer 6 and the modem 5. The first transmission channel (“secure communication network”) is shown with a double arrow. The authorization request travels from the merchant towards the acquirer 6 and the authorization travels from the acquirer to the merchant. Similarly, the second transmission channel (i.e., the notification channel) is also shown with a double arrow. The notification travels from the acquirer 6 to the user’s mobile phone. The reverse arrow direction pertains to an unclaimed variation of the invention, namely, where the user is requested to respond so as to authorize or decline the transaction. In either case, the two transmission channels are completely independent from one another, they do not overlap.

Patent Owner, having thus shown that the further interpretation of the “distinct transmission channels” is fully supported, herewith proffers the above alternative claim construction to be accorded to claim 1.

*the second transmission channel being **distinct from, separate, and independent of** the first transmission channel **and the first and second transmission channels do not overlap.***

Claim 9

Dependent claim 9 further requires that the authorization and the notification be performed “substantially concurrently.” The use of the term “concurrent” further shows that the processes have a temporal identity, while it also amplifies the fact that the communications through the transmission channels are independent and separate from one another. The authorization and the notification do not depend from each other, nor do they impact each other. Again, we refer to the flowchart of Fig. 2:



This distinction over the prior art achieves a stated object of the invention, namely, not to delay (i.e., encumber) the authorization process with the notification. The specification states:

Extraneous authorization security, on the other hand, may be too intrusive in many cases and may even have a negative impact on the transaction.

‘564 Patent, col. 1, lines 44-46.

It is accordingly an object of the invention to provide a credit card transaction notification and authorization method . . . which provides for a non-intrusive, user-selectable notification and authorization system for credit card transactions.

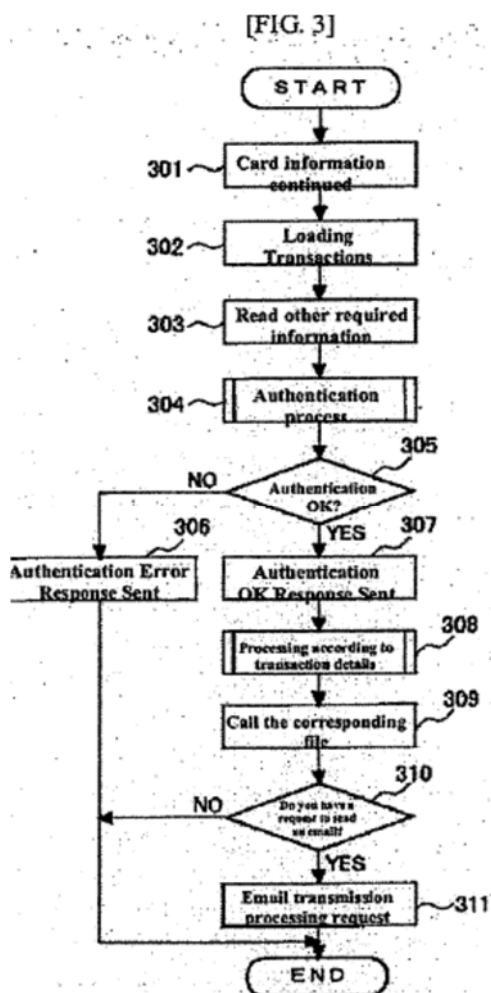
Id., lines 50-55.

Prior Art - Horie (JP 2002-133100)

Horie's primary object is broadly similar to that of the '564 Patent, namely, to notify the charge account holder after making a purchase. Early card usage notification, as explained by Horie, enables the "legitimate card user and his/her family [to be] notified of this via e-mail," and the quick notification makes it "possible to quickly respond to fraudulent card usage." Horie, [0013].

As such, there exists an overlap between the objects of the '564 Patent and Horie. Both recognize that early and quick notification is advantageous.

Horie's implementation, however, is different from that of the '564 Patent and, more importantly, from the claimed invention.



Horie's primary implementation is illustrated in Fig. 3 (*Flowchart showing card authentication host side processing in Horie*).

In Horie, upon receiving a charge request, the card processing system proceeds with the authentication. If the authentication fails, the merchant (*card transaction terminal device*) is so notified at 306 and the process is ended. The customer is not notified. The customer is not informed that a charge request was received.

If the authentication is successful in Horie, the system proceeds with the authorization process according to the "transaction details" at 308. After the transaction is authorized, the system queries the database at 310 whether the customer has a request on file to be sent an e-mail. When the answer to the query is "yes," an email is prepared and sent as requested at 311. The email is processed after the charge has been authorized. The "notification" appears as the last step in the charge authorization scheme and in-line with the remaining steps. As shown in Fig. 3, Horie's notification trigger is the completion of the authorization process, not the receipt of an authorization request.

Claimed Step: *without requiring a response from the customer*

In a broad reading of the claims, Horie discloses this limitation. Horie explains:

Whether or not notification is to be provided by email is recorded in advance . . . [if] the email notification service is not requested . . . a normal card payment transaction is performed as usual and the process ends.

Petition, p. 29. Here, Horie describes nothing more than a regular prior art transaction – without notification and without a confirmation request.

Petitioner continues:

[A]lthough 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. In such a case, for example, it would be possible to prevent fraudulent card use by making it possible to issue a transaction cancellation request to the authentication hosts 5 to 6 via the mobile phone 11.

Id. (emphasis in original).

It must be noted that Horie’s notification is by “e-mail.” Contrary to Dr. Akl’s declaration it is not by SMS or another “immediate” service. Even where the notification is sent to the mobile phone in Horie, the notification is by “e-mail.” Patent Owner disagrees with Dr. Akl’s statement in ¶ 232 et seq. that the notification in Horie was by way of SMS. See, Akl Declaration, pp. 112-114. If SMS was the “standard,” as argued by Dr. Akl, why then does Horie only explicitly refer to e-mail and why does Horie send an “e-mail” to the customer’s mobile phone. The mobile phone in Horie is expressly

configured for receiving “e-mails” and it also is enabled to notify the user by “Ringtone Manner Mode, Light Display.” Fig. 9. The notification by ringtone or by light display in Horie, very likely, is but provided for the purpose of alerting the user that an e-mail has arrived. Horie does not mention the receipt of a text message or SMS.

The differences between the designs of Horie and the ‘564 Patent claims 1-9 has implications for the speed in which the customer receives the notification. In the ‘564 Patent design, a simple and short message with limited information can be sent instantaneously via a second and distinct (separate, 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 transmission channel that is used to protect the customer’s credit card information and identity. Accordingly, Horie’s relevant transmission channels are not separate and distinct, as claimed in the ‘564 Patent.

Summary

The ‘564 Patent and Horie have similar goals, namely, to inform a customer that their credit card has been used. The implementation of the respective processes is quite different. Specifically, the ‘564 Patent describes and claims an implementation of the invention that is different from Horie. The claimed invention is neither anticipated by, nor obvious over, the disclosure of Horie.

Horie describes a concept in which the authorization authority sends a notification to a customer at his or her request through the same secure channels (CAFIS 8, dedicated bank line 9) through which the authorization

request has been received. The inventors of the '564 Patent sought to speed up the prior art implementation by moving the notification trigger forward in the process as far as possible and to split, and completely separate, the steps of authorizing and notifying. In the claims, the authorization request and the notification are transmitted through entirely distinct, separate, and independent channels.

The prior art reference Horie does not disclose each element of claims 1-9. Accordingly, the invention defined in claims 1-9 of the '564 Patent is not anticipated by Horie under 35 U.S.C. §102.

Obviousness

The Petition does not explain, with particularity, how the claimed invention of the '564 Patent is allegedly obvious over Horie. We agree with the comment in the Institution Decision that Petitioner has not presented particular arguments to support a finding of obviousness. In fact, it appears that Petitioner's obviousness argument is supported in its entirety by a conclusory statement in Dr. Akl's declaration. The conclusory statement in the expert declaration is but an expression of an opinion that is not supported by any factual detail and/or proper argumentation.

As noted by the Board, Dec. 25, the obviousness argument in the Petition deals only with element [1d] of claim 1. The Petition apparently alleges that it would have been obvious to one of ordinary skill in the art to replace the secure and overlapping channels (CAFIS 8, dedicated bank line 9) of Horie with distinct (separate, independent) transmission channels that do not overlap. Petitioner has not shown any suggestion or motivation that such a modification of the prior art teaching would be obvious. Petitioner has not

pointed to any teaching in the prior art (either in Horie or in the prior art as a whole) that would render the modification obvious. The conclusory statement rendered in the Akl Declaration and adopted into the Petition cannot carry Petitioner's burden. Also, a mere statement that the modification – which statement Petitioner never presented with particularity – would be “well within the ordinary skill of the art” is not sufficient to establish a *prima facie* case of obviousness. MPEP 2143.01(IV); see also, *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993), and *KSR*, 550 U.S. at 418. The allegation is further impeached with reference to MPEP 2143, which explains that if “the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified,” then the modification cannot be obvious, 2143.01(VI). While this section in the MPEP pertains to a secondary prior reference that is alleged to suggest the modification, it may be pertinent here as well. In the instant case, Petitioner has not even pointed to any prior art reference that would suggest the modification. The conclusory statement by Dr. Akl that is not supported by any evidence cannot take the place of a secondary reference teaching. The conclusions are not argued with any particularity that would enable Patent Owner to even apply any of the tests outlined in MPEP 2143.01, and especially MPEP.01(VI) to the case at hand.

Further, Patent Owner is unable to respond with regard to an obviousness query, as outline in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), because the conclusions of obviousness in the Petition are not supported accordingly. Patent Owner is not able to respond with any particularity to the allegations regarding obviousness. Patent Owner reserves the right to address any details concerning a cogently argued allegation of

obviousness. Furthermore, Patent Owner also reserves the right to “address objective evidence of non-obviousness” under *Graham*.

The teachings of Horie, whether by itself or in combination with the knowledge of a person of ordinary skill in the art (POSITA), do not render claims 1-9 obvious under 35 U.S.C. § 103.

Claim Construction

Patent Owner suggests the following claim construction for element [1d] of claim 1:

*the second transmission channel being **distinct, separate, and independent** from the first transmission channel*

In the alternative, Patent Owner proffers the following claim construction for element 1[d] of claim 1:

*the second transmission channel being **distinct, separate, and independent** from the first transmission channel **and the first and second transmission channels do not overlap**.*

Conclusion

The Board should hold that Petitioner has not carried its burden and that claims 1-9 of the subject patent, US 8,783,564 B2 are patentable over the prior art.

Respectfully submitted,

/Werner H. Stemer/

Werner H. Stemer
Calabrese Stemer LLC

September 26, 2024

CERTIFICATE OF WORD COUNT

The undersigned herewith certifies that the foregoing Patent Owner Answer contains fewer than 6,000 words according to the word processing program used to prepare this paper.

/Werner H. Stemer/
Werner H. Stemer
Calabrese Stemer LLC

September 26, 2024

CERTIFICATE OF SERVICE

The undersigned herewith certifies that a copy of the foregoing paper was served on September 26, 2024 by email upon Petitioner. The parties have agreed that electronic filing with the Board satisfies the service requirements.

/Werner H. Stemer/

September 26, 2024

Werner H. Stemer
Calabrese Stemer LLC