

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

FINTIV, INC.,
Patent Owner.

Case No. IPR2023-00399
U.S. Patent No 9,208,488

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Ex. 2001	Declaration of Dr. Michael I. Shamos, Ph.D., dated April 11, 2023
Ex. 2002	Resume of Michael Ian Shamos

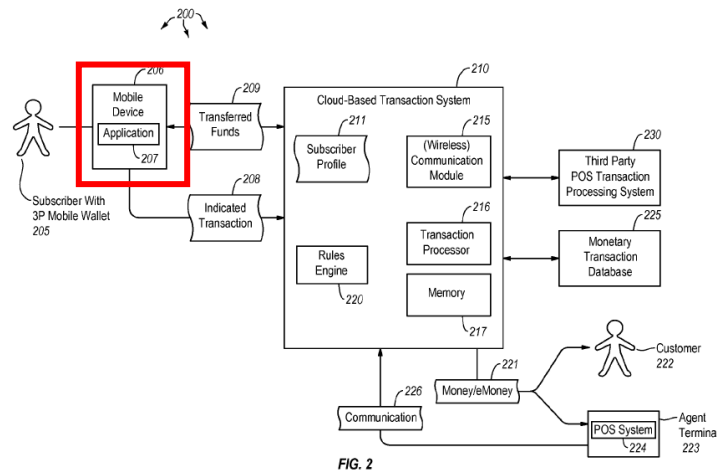
I. INTRODUCTION

The Petition challenges claims 1-22 (“Challenged Claims”) of U.S. Patent No. 9,208,488 (“‘488 Patent,” Ex. 1001) under a single ground of unpatentability. The Board should find that Petitioner has failed to demonstrate a reasonable likelihood of success on the merits, and deny institution. As discussed below, the mappings in the Petition fail to meet the Petitioner's own claim constructions, and multiple aspects of each of the Challenged Claims are not met by the cited references. Patent Owner’s explanations herein are supported by the Declaration of Dr. Michael I. Shamos, an expert in the field. Ex. 2001.

II. THE '488 PATENT SPECIFICATION AND CLAIMS

A. Description of Cloud-Based Transaction Platform

The '488 Patent discloses a cloud-based transaction platform, where a subscriber interacts with the platform using a "mobile device" such as phone or tablet. Ex. 1001, 11:14-15 ("The subscriber has (or has access to) a mobile device 206 such as a phone or tablet."). The "mobile device" runs a "mobile wallet application" installed on the mobile device. *Id.*, 7:1-3 ("[a]s used herein, a mobile wallet application is a mobile wallet application installed on a SIM card or elsewhere on a mobile device.") Figure 2 (shown below with Patent Owner's annotations) of the specification illustrates the mobile device 206 running mobile wallet application 207 (red box):



The '488 Patent describes two types of mobile wallet applications that may be installed a user's mobile device, namely, a native mobile wallet application or a third party mobile wallet application. The cloud-based transaction platform can transact with either type of mobile wallet application. As described in the '488 Patent:

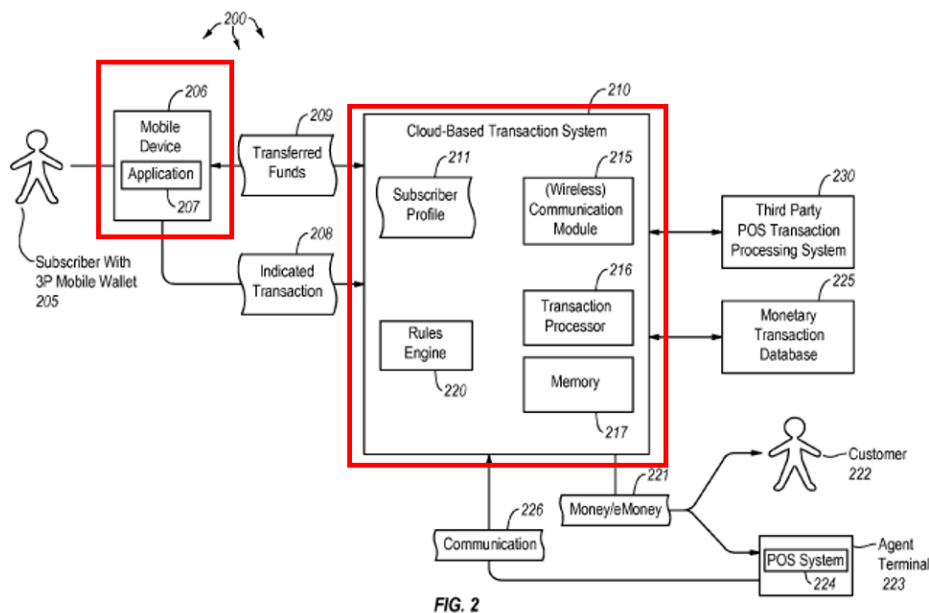
... Users with native or third party mobile wallets can use the cloud-based transaction platform to enroll a customer for a third party mobile wallet, add a stored value account (either hosted by the cloud-based transaction platform or a third party), add a bank/credit union account to a third party mobile wallet, add a debit/credit card account to a third party mobile wallet, deposit funds in a third party mobile wallet, withdraw funds from a third party mobile wallet, pay bills from a third party mobile wallet, top up a prepaid mobile account through a third party mobile wallet, transfer funds through a third party mobile wallet, and make in store purchases from a third party mobile wallet. Ex. 1001, 1:34-45 (emphasis added).

As explained in the '488 Patent, a "native" mobile wallet application is one that is provided by the provider of the cloud-based transaction platform, while the

'third party' mobile wallet is one provided by a provider other than the provider of the cloud-based transaction platform. In this regard, the '488 Patent states:

As used herein, a mobile wallet application is a mobile wallet application installed on a SIM card or elsewhere on a mobile device. The mobile wallet application may either be native (i.e. provided by the provider of the cloud-based transaction platform) or third party (i.e. provided by a provider other than the provider of the cloud-based transaction platform). Ex. 1001, 7:1-7 (emphasis added).

Fig. 2 (annotations in red) discloses an example of the transaction system:



Subscriber 205 has "a mobile device 206 such as a phone or tablet. The mobile wallet device runs the native or third party mobile wallet application 207." Id., 11:15-16 (emphasis added). In either case, the transaction is carried out by cloud-based transaction platform 210. Id., 11:19-20.

In addition to each type being able to transact with cloud-based transaction platform 210, the system allows native and third-party mobile wallet applications to transact with each other. As explained in the '488 Patent:

The cloud-based transaction platform includes an infrastructure that allows native mobile wallet application and third party mobile wallet applications to interact both with the transaction system and with each other. This allows the user of a native or a third party mobile wallet to make purchases, transfer money or perform any of the other transactions described herein. Id., 6: 48-54 (emphasis added).

Figure 6 of the specification illustrates how the cloud-based system processes transactions involving third party wallets. In connection with Figure 6, the Patent explains that “Mobile wallet platform 601 may also communicate with a third party mobile wallet platform 603 [red box] to process transactions using a mobile wallet owned or managed by a third party mobile wallet provider.” Id., 17:26-28.

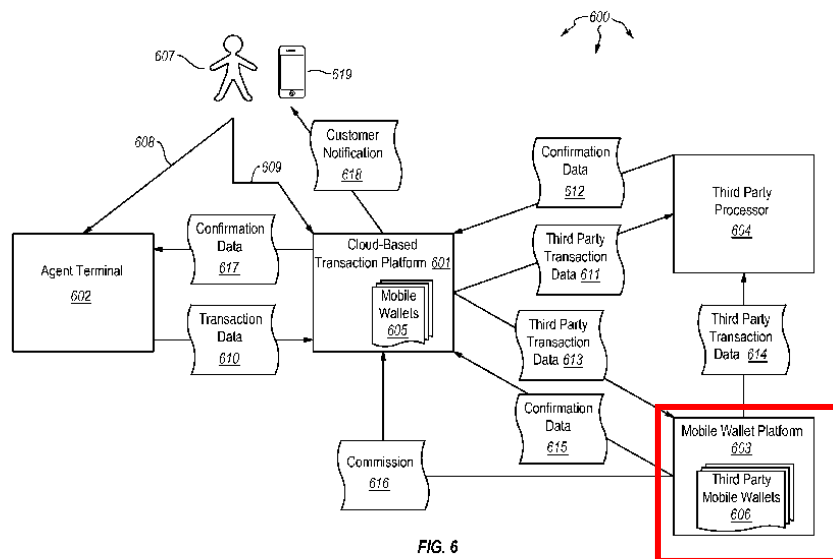


FIG. 6

In connection with Figure 6, the specification explains the distinction between the term "mobile wallet" in general and "third-party mobile wallet":

With respect to the entire description of FIG. 6, and as explained above, the term "mobile wallet" encompasses not only mobile wallets owned or managed by the mobile wallet platform, but also third party mobile wallets owned by third party mobile wallet providers or managed by third party mobile wallet platforms. In contrast, the term "third party mobile wallet" refers only to third party mobile wallets owned by third party mobile wallet providers or managed by third party mobile wallet platforms. Accordingly, cloud-based transaction platform 601 may manage and process transactions using mobile wallets 605, which may be mobile wallets owned by cloud-based transaction platform 601 or mobile wallets owned by a third party mobile wallet provider. Id., 17:51-63 (emphasis added).

The '488 Patent explains that various types of applications may be suitable for use as either a native and third-party mobile wallet application including, e.g., "a subscriber identity module (SIM) application, an Unstructured Supplementary Service Data (USSD) application, a smartphone application, a web application, a mobile web application, a Wireless Application Protocol (WAP) application, a Java 2 Platform, Micro Edition (J2ME) application, [or] a tablet application." Id., 6:59-64.

The functional architecture of cloud-based transaction platform 210 includes specific infrastructure for managing sessions with these various types of mobile wallet applications. In the '488 Patent, session management is performed by the infrastructure's integration tier 101, which is illustrated in Figure 1 within the

functional architecture of the platform as a whole (Patent Owner's annotations in red).

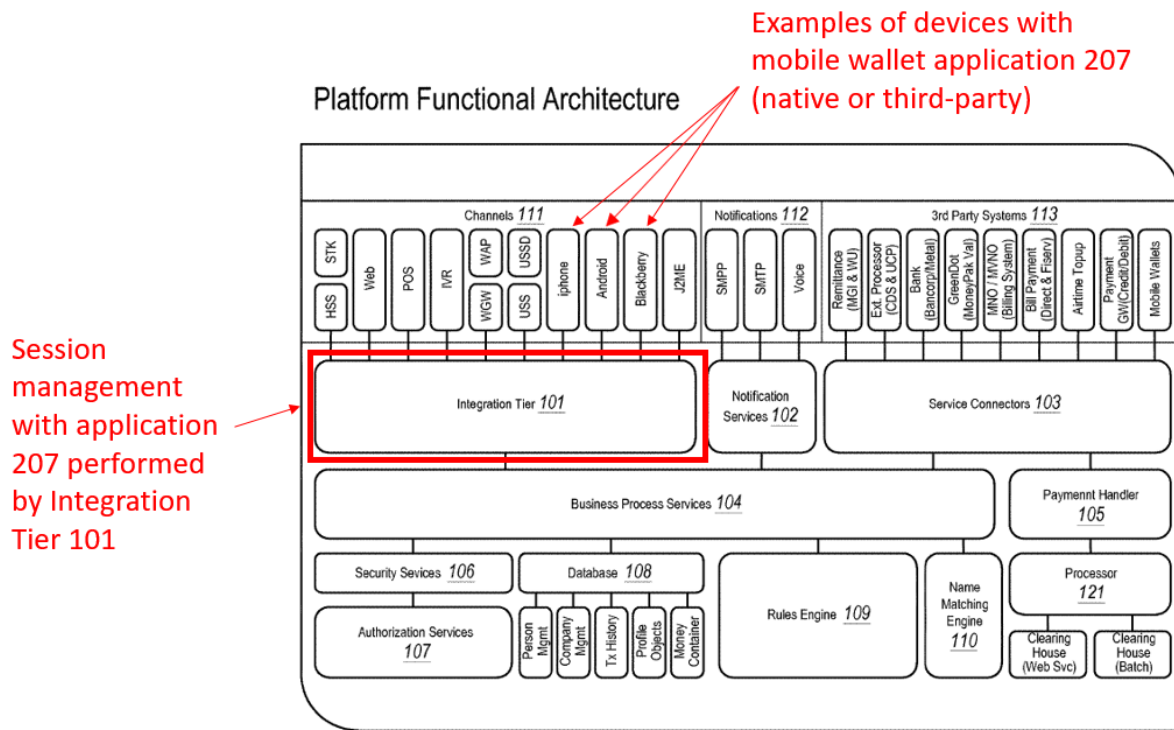


FIG. 1

The Claims of the '488 Patent

The '488 Patent has three independent claims, namely, Claims 1, 11, and 22.

Claim 1 of the '488 Patent recites a computer system for facilitating the management of a mobile wallet. In pertinent part, Claim 1 recites:

1. A computing system for facilitating management of a mobile wallet, including: ...

an integration tier configured to manage mobile wallet sessions with a mobile device and including web services communication mechanisms for interfacing with a mobile wallet application

installed on a hardware SIM card as well as with a plurality of different device types over a plurality of different communication channels, the integration tier being configured to receive binary and text messages from the mobile device;

the computing system receiving communication from an agent terminal over one of a plurality of communication channels connected to the cloud-based transaction platform, the agent communication indicating that a customer desires to perform a transaction comprising a mobile wallet transaction using a third party mobile wallet, ...

Several aspects of Claim 1 are worthy of mention. First, the terms "mobile device" and "mobile wallet application" are recited in the claim. As explained above, the "mobile device" is a device that is mobile (such as a phone or tablet). In Claim 1, the "mobile wallet application" is installed on a hardware SIM card. Second, the claim recites an integration tier configured to manage mobile wallet sessions with a mobile device. Third, the claim requires the use of a "third-party mobile wallet" (as opposed to a "native mobile wallet") as part of the transaction system. In connection with both the "mobile wallet application" and the "third-party mobile wallet," the claim recites a mobile wallet which the Petition asserts is one where the "mobile device holds value (such as on a secure chip)." Pet., at 4-5. The other independent claims (i.e., Claims 11 and 22) include these same aspects.

III. CLAIM CONSTRUCTION

In IPR proceedings, claims must be construed under *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). "The construction that stays true to the claim

language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societe' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

A. **"Mobile Device"**

<u>Claim Term</u>	<u>Patent Owner's Proposed Construction</u>
"mobile device"	"physical device that is mobile, such as a phone or tablet"

The '488 Patent specification makes clear that a "mobile device" is a "physical device that is mobile, such as a phone or tablet." Consistent with this construction, the specification uses "mobile device" as follows:

... The subscriber has (or has access to) a mobile device 206 such as a phone or tablet. The mobile device runs the native or third party mobile wallet application 207. Ex. 1001, 11:14-16 (emphasis added).

* * *

It should also be noted that the mobile device 206 may be any type of plan-based phone or tablet, or prepaid phone or tablet. Many subscribers, such as unbanked subscribers, may primarily use prepaid phones. The mobile wallet application 207 may be installed on both plan-based phones and prepaid phones. The mobile wallet application may be installed on the device's SIM card, or on the device's main memory. Accordingly, the monetary transaction system 200 may be accessed and used via substantially any type of plan-based or prepaid mobile device. Ex. 1001, 12:7-12 (emphasis added).

While the term "mobile device" may seem so basic that it need not be construed, the Petition (through its mappings) has implicitly raised the possibility that a "mobile device" need not be a physical device, and need not even be mobile.

For example, in connection with limitation [1.4C], the Petition suggests that Dill's M-Wallets 125 and 130 (shown below) are mobile devices, even though they reside inside Dill's Mobile Network Operator 120, and are clearly not mobile. Pet., at 32 ("A POSITA would have also understood that Dill's mobile wallet application may be installed on mobile device 125, 130 ...") (emphasis added):

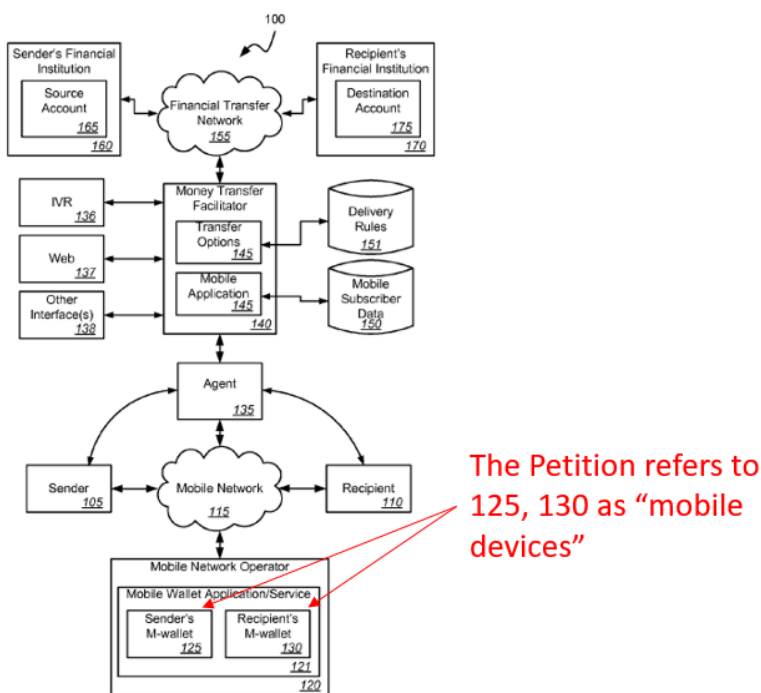


FIG. 9

See also, Pet., at 21 (mapping the "mobile device" referred to in limitation [1.3A] to Dill's mobile wallets 125, 130). A POSITA reading the claims of the '488 Patent in light of the Patent's specification would not have interpreted Dill's mobile wallet's 125, 130 to be "mobile devices" in the context of the '488 Patent. Rather, such a

POSITA would have understood that a "mobile device" is a "physical device that is mobile, such as phone or tablet." Ex. 2001, ¶38.

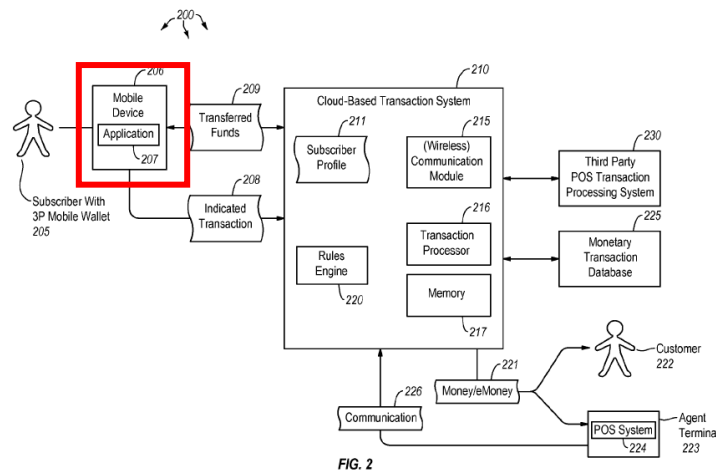
B. "Mobile Wallet Application"

<u>Claim Term</u>	<u>Patent Owner's Proposed Construction</u>
"mobile wallet application"	"wallet application installed on a SIM card or elsewhere on a mobile device."

The '488 Patent expressly defines "mobile wallet application":

As used herein, a mobile wallet application is a mobile wallet application installed on a SIM card or elsewhere on a mobile device..
Ex. 1001, 7:1-3 (emphasis added).

Figure 2 of the '488 Patent (shown below with Patent Owner's annotations) of the specification illustrates the mobile device 206 running mobile wallet application 207 (red box):



In connection with Figure 2, the specification also describes the mobile wallet application 207 as running on the mobile device:

... The subscriber has (or has access to) a mobile device 206 such as a phone or tablet. The mobile device runs the native or third party mobile wallet application 207.

The subscriber can indicate, using the mobile wallet application 207, which transaction or other action he or she would like to perform. The indicated transaction 208 is sent to the mobile wallet platform 210 to be carried out by the platform. Ex. 1001, 11:14-20 (emphasis added).

* * *

It should also be noted that the mobile device 206 may be any type of plan-based phone or tablet, or prepaid phone or tablet. Many subscribers, such as unbanked subscribers, may primarily use prepaid phones. The mobile wallet application 207 may be installed on both plan-based phones and prepaid phones. The mobile wallet application may be installed on the device's SIM card, or on the device's main memory. Ex. 1001, 12:7-13 (emphasis added).

A POSITA reading the claims of the '488 Patent in light of the specification would have understood that a "mobile wallet application" is a "wallet application installed on a SIM card or elsewhere on a mobile device."¹ Ex. 2001, ¶45. Given that the claim language itself distinguishes between a "mobile device" and a "mobile wallet application," a POSITA would have also understood that these terms have different meanings. Ex. 2001, ¶47.

¹ While the term "mobile wallet application" by itself refers to a "wallet application installed on a SIM card or elsewhere on a mobile device," the Claims of the '488 Patent recite a further restriction specifically limiting it to one installed on a SIM card. See, §III(C).

C. "Third-Party Mobile Wallet"

<u>Claim Term</u>	<u>Patent Owner's Proposed Construction</u>
"third-party mobile wallet"	"mobile wallet provided by a provider <u>other than</u> the provider of the cloud-based transaction platform"

The '488 Patent expressly defines a "third-party" mobile wallet application as one "provided by a provider other than the provider of the cloud-based transaction platform," and contrasts a third-party mobile wallet application with a native mobile wallet application:

The mobile wallet application may either be native (i.e. provided by the provider of the cloud-based transaction platform) or third party (i.e. provided by a provider other than the provider of the cloud-based transaction platform). Ex. 1001, 7:3-7 (emphasis added).

The notion of "native" and "third-party" mobile wallet applications is so fundamental to the specification that it is reflected in the Title of the '488 Patent: "Using a Mobile Wallet Infrastructure to Support Multiple Mobile Wallet Providers."

The '488 Patent improved upon prior art wallet system that required all users of the system to have obtained their wallets from the same provider. Using the methods of the '488 Patent, participants can engage in financial transaction regardless of which provider's wallet they are using. In the '488 Patent, third party mobile wallets are different from native mobile wallets, and the specification discloses a platform that supports both native and third party wallets. *Id.*, 6:51-54

(discussing “infrastructure that allows native mobile wallet application and third party mobile wallet applications to interact both with the transaction system and with each other.”) Ex. 2001, ¶46; *see also*, Id., 17:51-63.

A POSITA would therefore have understood, based on the specification of the ‘488 Patent, that a third-party mobile wallet is different than a native wallet, and that a "third-party mobile wallet" is a "mobile wallet that is provided by a provider other than the provider of the cloud-based transaction platform." Ex. 2001, ¶¶45-47.

IV. DESCRIPTION OF DILL

U.S. Patent Publication 2009/0265272 to Dill ("Dill") (Ex. 1005) teaches a method that allows "enrolled consumers to send a mobile money transaction to a consumer either enrolled under another entity or not enrolled—in which case they are able to enroll in a mobile wallet service, pick up cash at a retail location of the money transfer facilitator or other cash retail outlet or designate a destination for receipt of the money transfer." Ex. 1005, [0007]. Specifically, in Dill’s method, a “sender 105 can access the services of the money transfer facilitator 140 via a web site of the money transfer facilitator 140 and initiate a money transfer from a source account 165 owned by the sender 105 and “[t]he recipient 110 of the payment may then, for example, pick up the payment from the agent’s 135 retail location.” Id., [0051].

In Dill's method, in order for the funds to be transferred from the sender 105 to the recipient 110, a money transfer facilitator 140 "access[es] a source account 165 of one financial institution 160 and/or a destination account 175 of the same or a different financial institution 170 to affect a transfer from and/or to the accounts 165 and 175 via the financial transfer network 155." Id., [0049].

Dill describes that "the money transfer facilitator 140 can receive a request to initiate the money transfer transaction, for example, a payment from the sender 105 to the recipient 110." Id., [0054] Dill details that the "request can include a unique identifier for the recipient 110 of the money transfer transaction" and "[t]he unique identifier for the recipient 110 can comprise one or any combination of a phone number for a mobile device of the recipient, an email address for the recipient, an instant messaging identifier for the recipient, a preferred customer number for the recipient..." Id., [0054].

As a result, Dill teaches a method where the sender 105 sends a message that identifies the recipient 110 of the funds transfer to the money transfer facilitator 140. The money transfer facilitator 140 receives the message, determines an account for the recipient, and causes the sender's financial institution 160 to transfer the funds to the account of the recipient 110.

V. THE PETITION FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF SUCCESS

A. Dill Fails To Meet Petitioner's Own Construction of "Mobile Wallet"

With respect to the construction of "mobile wallet," the Petition states:

A POSITA would have understood that there are various types of mobile wallets: (1) where a mobile device holds value (such as on a secure chip) and (2) where the value is stored in an external account. The '488 Patent refers to the first type of mobile wallet.

Although not defined with more detail, the term "stored value" in mobile wallets is well-known and refers to a value stored on a mobile device (such as in a secure memory). *See, e.g.,* APPL-1011, [0009], [0022] ("Mobile communication devices ... are characterized by secure memory usable for storing value and a controller which manages the secure memory," "stored value represented by data on the mobile communication device"). ... A POSITA would have understood "debit the mobile wallet by the specified amount of funds" to include "*transferring the specified amount of funds from the stored value on a mobile device.*" Pet., at 4-5 (citations omitted; emphasis in original).

Thus, the Petition first construes "mobile wallet" as being limited to a type of mobile wallet where "*a mobile device holds value (such as on a secure chip),*" and then nests this construction within the Petition's construction of the larger phrase "debit the mobile wallet by the specified amount of funds." The Petition construes that larger phrase to mean "transferring the specified amount of funds from *the stored value on a mobile device.*"² The Petition posits that these constructions apply

² Patent Owner reserves the right to challenge Petitioner's constructions of "mobile wallet" and "debiting the mobile wallet" should this matter be instituted, or in any future proceeding. Nothing in this Patent Owner Preliminary Response should be

to claims 8-10 and 19-21. Pet., at 4 (heading for Section VII). However, the term "mobile wallet" appears in every independent claim, as the term is nested within other claim terms such as "mobile wallet application" and "third-party mobile wallet."

The Board's Rules governing IPRs provide:

"Inter partes review shall not be instituted unless the Board decides that the information presented in the Petition demonstrates that there is a reasonable likelihood that at least one of the claims challenged in the Petition is unpatentable." 37 C.F.R. § 42.108(c) (emphasis added).

Here, the information presented in the Petition fails to demonstrate that the cited references teach a "mobile wallet" as construed in the Petition. Specifically, the Petition argues that the claimed "mobile wallet" is limited to a type of mobile wallet where "a mobile device holds value (such as on a secure chip)." However, the reference relied on for this element, i.e., Dill, teaches a mobile wallet where the value is stored in an account external to the mobile device rather than on the mobile device itself.

In each of the Grounds, the Petition maps mobile wallets 125 and 130 from Dill to the "mobile wallet" recited in the claims.³ Dill makes plain that mobile wallets

construed as an admission or concession by Patent Owner that Petitioner's construction of these terms is correct.

³ See, e.g., Pet., at 17 (feature 1.0)(mapping "mobile wallets 125, 130" in Dill) ; Pet., at 21 (feature 1.3A)(displaying figure identifying Dill's mobile wallets 125, 130 as

125 and 130 do not reside on the mobile device – rather mobile wallets 125 and 130 reside within Mobile Network Operator 120 (i.e., the provider of cellphone service). Moreover, the value associated with mobile wallets 125, 130 is not stored on the mobile device. As shown in Figure 9 of Dill (shown below with Patent Owner's annotations), the value associated with mobile wallets 125 and 130 are stored at the Mobile Network Operator 120.

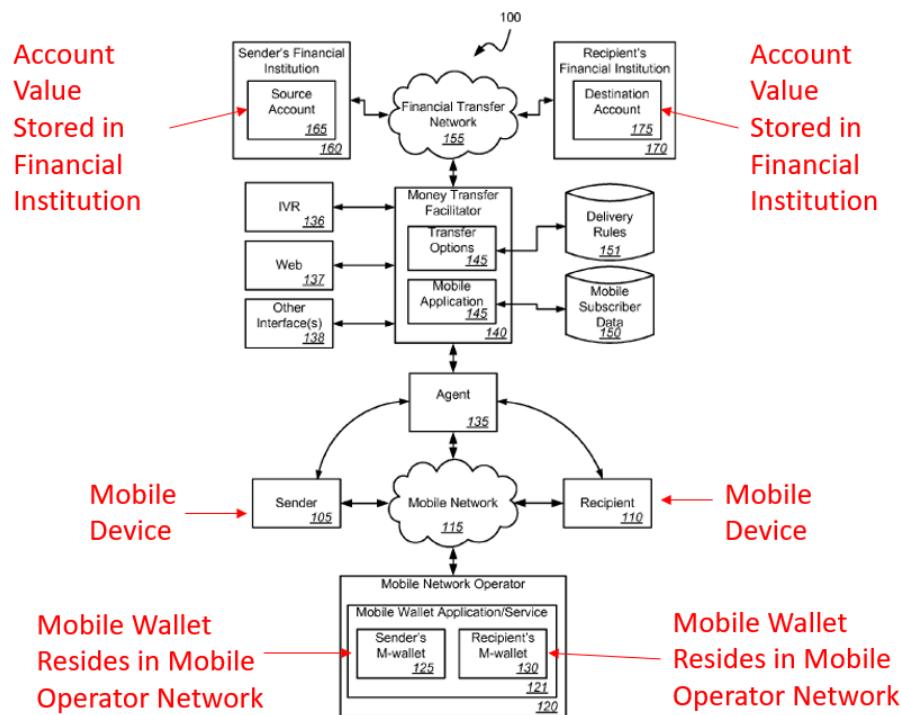


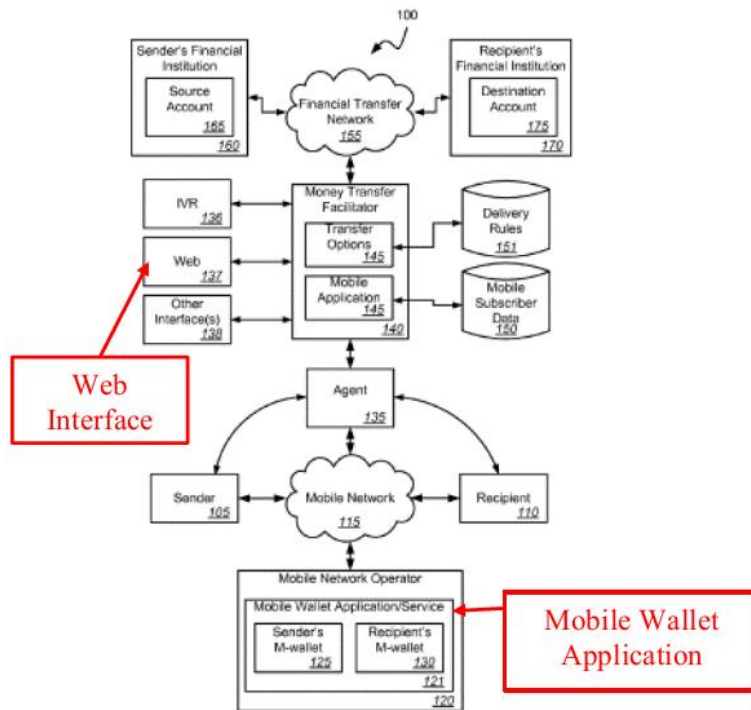
FIG. 9

"Mobile Wallets"); Pet., at 23 (feature 1.3B)(again referring to Dill's mobile wallets 125, 130); Pet., at 24 (feature 1.3C)(again referring to Dill's mobile wallets 125, 130); Pet., at 31-32 (feature 1.4C)(repeatedly referring to Dill's mobile wallets 125, 130) Pet., at 41 (feature 1.8)("configured to support transactions with these mobile devices 125, 130.").

In Dill, the account value is clearly stored in a manner that is external to the mobile device rather than on the mobile device itself. Ex. 2001, ¶51. The Petition does not argue otherwise. Given that the Petition construes "mobile wallet" as being limited to a type of mobile wallet where "a mobile device holds value (such as on a secure chip)," Dill's mobile wallets 125, 130 fail to meet the Petition's own construction of "mobile wallet" (which appears in every independent claim). Given the failure of the Petition to demonstrate that the cited references meet the claim interpretations advanced in the Petition, the Petition has not established a reasonable likelihood of success on the merits with respect to any of the Challenged Claims.

B. Dill's Mobile Wallet Application Is Not Installed On A Hardware SIM Card

Each independent claim of the '488 Patent recites a "mobile wallet application installed on a hardware SIM card." With respect to this limitation, the Petition maps Dill's mobile wallet application 121 (on the Mobile Operator Network 120) to the claimed "mobile wallet application installed on a hardware SIM card." This mapping is illustrated in the figure on page 23 of the Petition, and the text immediately under that figure (reproduced together below):



APPL-1005, Fig. 9 (annotated).

As shown in Petitioner's annotated Figure 9, Dill's Mobile Wallet Application/Service (121) is executed by the Mobile Network Operator (120). See, Ex. 1005, at [0053] ("[t]he mobile network operator system 120 can include and/or execute a mobile wallet application 120 or service. Generally speaking, the mobile wallet application 121 maintains mobile wallets 125 and 130 for one or more subscribers, such as the sender 105 and/or recipient 110 to the mobile wallet service 121.") Accordingly, Dill's mobile wallet application 121 is an application that is maintained by the mobile network operator 120, and is not even installed on the mobile device associated with sender (105) or receiver (110). Simply put, since Dill's mobile wallet application 121 is not on a mobile device, it is clear that mobile wallet

application 121 is not installed on a hardware SIM card on a mobile device, as claimed. Ex. 2001, ¶53.

The Petition alleges that “Dill’s software instructions (including mobile wallet application) may be implemented on any type of “machine-readable mediums suitable for storing electronic instructions” which a POSITA would have understood to include a hardware SIM card.” (Pet., 23). In reaching this conclusion, the Petitioner relies upon Dr. Houh’s statement that “A POSITA would have understood that the “machine readable mediums” referred to by Dill to execute its systems includes a hardware SIM card” (Ex. 10003 Par. [0096]). However, Dr. Houh’s statement is incorrect. The systems taught in Dill are not implemented on a mobile device that utilizes a SIM card. Ex. 2001, ¶54.

Fig. 1 of Dill is reproduced below:

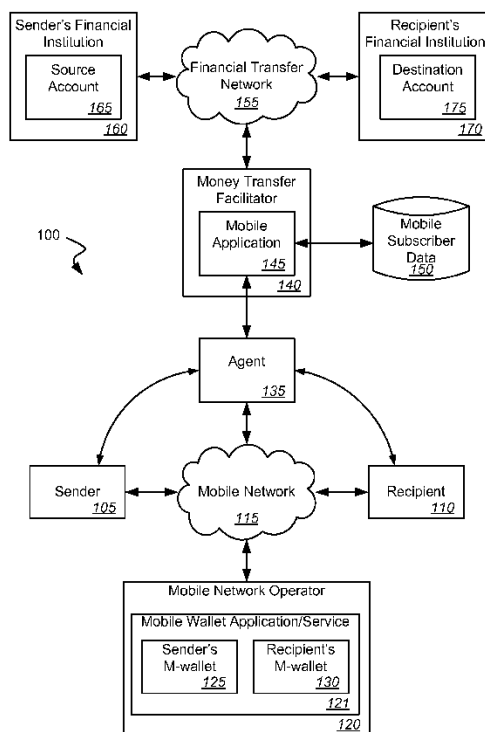


FIG. 1

Thus, Dill's system utilizes a network of computers that includes a mobile transfer facilitator (140), a Mobile Network Operator (120), a Mobile Subscriber Database (130), Sender Financial Institution (160), Recipient's Financial Institution (170), and an Agent (135). These computer systems do not include a SIM card. Ex. 2001, ¶54.

Simply put, the Petition has failed to show that the cited references teach or suggest a "mobile wallet application installed on a hardware SIM card," as required by each of the Challenged Claims. For this additional reason, institution should be denied.

C. The Petition Fails To Demonstrate That Dill Teaches A "Third-Party" Mobile Wallet

Each independent claim of the '488 Patent requires a "third party mobile wallet". As explained above, a "third party mobile wallet" is a mobile wallet provided by a provider other than the provider of the cloud-based transaction platform." See, §III(C). The Petition has omitted any attempt to map the "third party" mobile wallet recited in the Challenged Claims.

Instead, the Petitioner alleges that “Dill’s money transfer facilitator 140 is configured to conduct transactions between mobile wallets 125, 130 which may be external mobile wallets enrolled under another entity.” (Petition, 48). However, Dill expressly teaches that “the mobile wallet application 121 maintains mobile wallets 125 and 130 for one or more subscribers, such as the sender 105 and/or recipient 110 to the mobile wallet service 121.” (Ex. 1005, ¶ 53). As shown in Figure 1 (reproduced below), both senders’ M-wallet (125) and the Recipient’s M-wallet (130) are part of the same Mobile Wallet Service (121) that is maintained by the Network Operator (120).

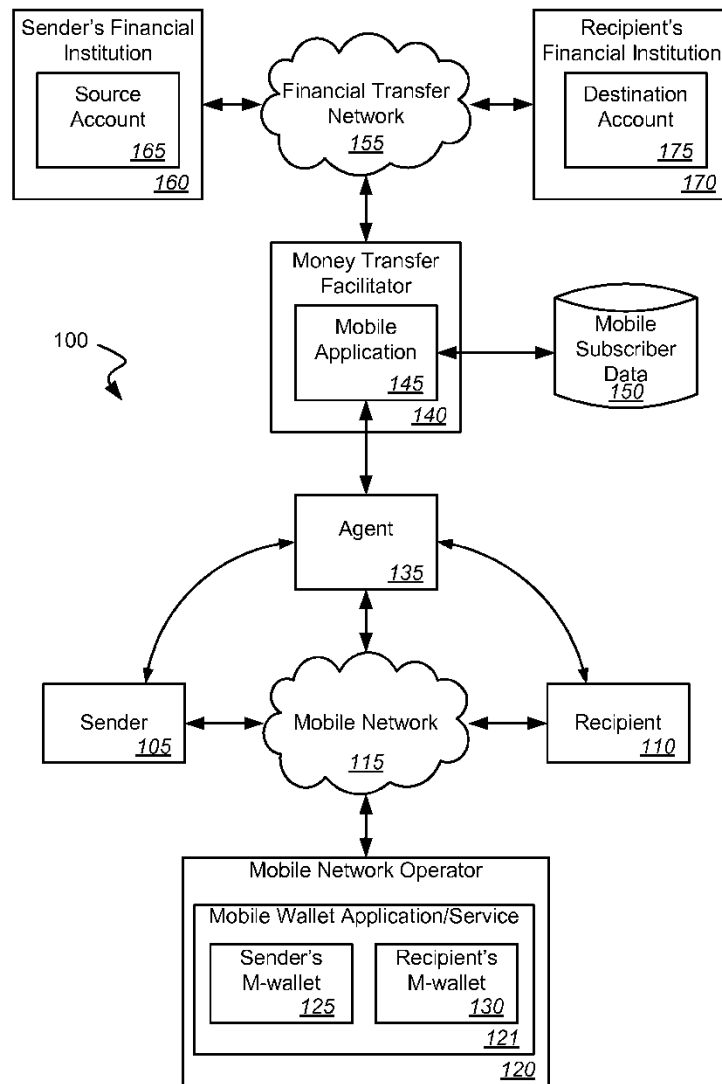


FIG. 1

Accordingly, Dill is wholly silent with regard to M- wallets enrolled under another entity as alleged by the Petitioner. Instead, in Dill, both the Sender's M-Wallet (125) and the Recipient's M-Wallet (130) are enrolled with the Mobile Network Operator (120).

With respect to dependent claim 4, the Petition first alleges:

[4.0] The computing system of claim 1, wherein the third party mobile wallet is provided by a third party mobile wallet provider;

Dill teaches facilitating transactions with third-party mobile wallets or wallets within its system. APPL-1005, [0036]. Dill also provides for transactions between “unrelated entities such as the sending mobile wallet 125 and receiving mobile wallet 130.” APPL-1005, [0057]. Therefore, Dill teaches that its financial transfer system is designed to work with mobile wallets outside its system. (Petition, 59).

Dill's reference to "unrelated entities" fails to meet the claimed "third party" mobile wallet limitations in the Challenged. The fact that Dill's sender 105 and receiver 110 may be "unrelated" does not mean that one of them provides a "third party" mobile wallet, as claimed. In Dill, a buyer and seller are considered "unrelated" when a buyer transfers funds to a seller's mobile wallet. See Ex. 1005, ¶57 ("Such a system 100 allows a money transfer facilitator 140, using a unique customer identifier and internal and/or external mapping databases 150, to provide a structured settlement between unrelated entities such as the sending mobile wallet 125 and receiving mobile wallet 130, or between the sending cash retail location and receiving mobile wallet 130.") However, neither the buyer nor the seller is a “provider” of the M- wallet. In this context, the fact that the parties are "unrelated" does not mean that one of the parties is utilizing a mobile wallet provided by a provider other than the Mobile Network Operator (120). Ex. 2001, ¶57.

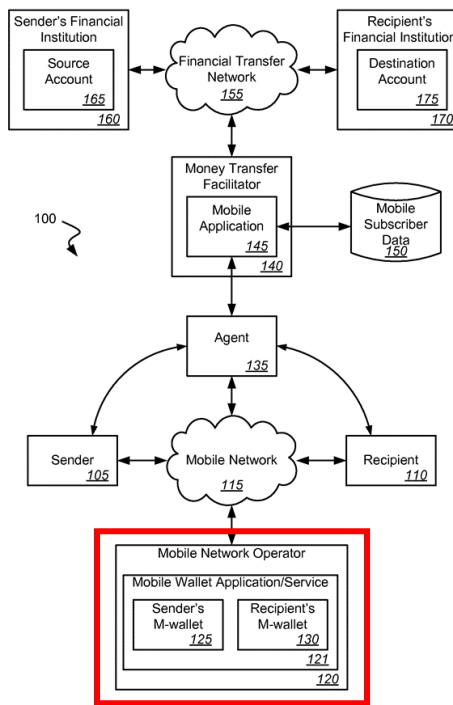


FIG. 1

Instead, as shown Figure 1 (reproduced above), both the Sender's M-wallet (125) and the Recipient's M-wallet (130) are part of the same Mobile Wallet Service (121) that is maintained by the Network Operator (120). Petitioner does not allege that this figure (or elsewhere in Dill) would have suggested to a POSITA that one of the mobile wallets 125, 130 was being provided by a provider other than the Mobile Network Operator 120 supporting the transaction system.

Dill further teaches that a user can send money from their M-wallet to a recipient who does not have an M-wallet. In this case, Dill's system “allows entities that are unrelated to allow their enrolled consumers to send a mobile money transaction to a consumer either enrolled under another entity or not enrolled—in

which case they are able to enroll in a mobile wallet service, pick up cash at a retail location of the money transfer facilitator or other cash retail outlet or designate a destination for receipt of the money transfer.” Ex. 1005, ¶[0038] (emphasis added).

In contrast to the claimed "third party" wallet, Dill teaches that, when a recipient does not have an M-wallet, no mobile wallet is used by the Recipient. Instead, the Recipient receives a cash payment by going to a retail location.

Simply put, Petitioner does not address the claim requirement of a "third party" mobile wallet, i.e., “a mobile wallet that is provided by a provider other than the provider of the cloud-based transaction platform,” as recited in the Challenged Claims. For this further reason, the Petition has failed to demonstrate a reasonable likelihood of success with respect to the Challenged Claims.

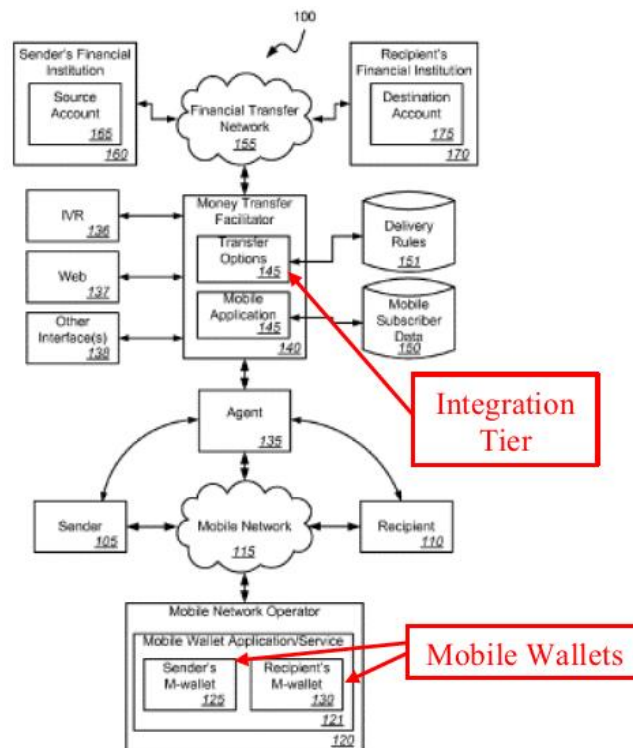
D. Dill's Transfer Options Module Does Not Include An Integration Tier Configured To Manage a Mobile Wallet Sessions With A Mobile Device, As Recited In All Independent Claims

Independent Claim 1 recites "an integration tier configured to manage mobile wallet sessions with a mobile device." Independent Claims 11, and 22 include a similar limitation.

The Petition offers no express construction for "an integration tier configured to manage mobile wallet sessions with a mobile wallet device." See Pet., at 5. However, in mapping this claim element to Dill's transfer options module 145, the Petition equates managing a session with a mobile wallet with managing aspects of

a financial transaction with a mobile wallet. Pet., at 19-22. This approach ignores the web environment in which the claimed session management limitation is recited (e.g., within an "integration tier" that includes "web services communication mechanisms"). In such an environment, the terms "session" and "financial transaction" would be understood quite differently by a POSITA. Ex. 2001, ¶63. For example, while multiple transactions can occur during a session; multiple sessions cannot occur during a transaction. Ex. 2001, ¶59.

The Petition maps the "integration tier" to transfer options module 145 in Dill. This mapping is illustrated on page 21 of the Petition, reproduced below:



APPL-1005, Fig. 9 (annotated).

The Petition explains its mapping of the integration tier to transfer options module 145 as follows:

As discussed in [1.0], Dill's system 100 includes a money transfer facilitator system 140 that manages transactions with a mobile wallet. APPL-1005, [0100]. System 140 "conduct[s] money transfer transactions" and includes "a transfer options module 145 communicatively coupled with the one or more interfaces 136- 138" that "can be adapted to receive transaction information for a money transfer transaction from a sender 105 through at least one or the interfaces 136-138, provide a notification of the transaction to a recipient of the transaction, and select one or more delivery options for completing the money transfer transaction." APPL-1005, [0101]; APPL-1003, ¶88. Dill specifically teaches transactions including depositing funds at the branch of an agent 135 using the sender's mobile device configured to run the sender's mobile wallet 125. APPL-1005, [0051], [0053], [0055], [0077], Figs. 5, 9. These transfers more broadly include "structured settlement[s] between unrelated entities such as the sending mobile wallet 125 and receiving mobile wallet 130." APPL-1005, [0057] APPL-1003, ¶89. In other words, Dill's transfer options module 145 sends and receives transaction details between mobile wallets 125, 130 within a mobile wallet application 121. APPL1003, ¶90. A POSITA would have understood module 145 to be a system element configured to manage transactions with a mobile wallet, i.e., the claimed "*integration tier configured to manage mobile wallet sessions with a mobile device.*" APPL-1003, ¶¶90-91. Thus, Dill teaches [1.3A]. APPL-1003, ¶91 Pet., 21-22. (emphasis in original).

This explanation fails to clearly articulate what is being mapped to the "mobile wallet device" recited in the claimed "integration tier." At one point, the explanation suggests that Dill's interfaces 136-138 are being mapped to the "mobile wallet device" while, later on, the explanation references "the sender's mobile device configured to run the sender's mobile wallet 125." There is no disclosure in Dill that

the identified integration tier ever communicates with the sender or receive at all, let alone manages their mobile wallet sessions. As set forth below, neither mapping satisfies the claim language for the "integration tier."

1. Dill's Interfaces 136-138 Do Not Map To The Mobile Device Recited In The Integration Tier Claim Element

The claimed integration tier must be "configured to manage mobile wallet sessions with a mobile device." Given that the mobile wallet application is "installed on a SIM card or elsewhere on the mobile device,"⁴ a POSITA would understand that the mobile device connects to a mobile wireless network, and the claimed "session" with such a mobile wallet device is over a mobile wireless network. Ex. 2001, ¶61.

To the extent that the Petition is mapping Dill's interfaces 136-138 to the "mobile device" recited in the "integration tier" element, Dill fails to disclose that interfaces 136-138 are associated in any way with any "mobile device," as claimed because interfaces 136-138 in Dill are not disclosed as being connected to a mobile network 115.

⁴ Ex. 1001, 7:14-16 ("As used herein, a mobile wallet application is a mobile wallet application installed on a SIM card or elsewhere on a mobile device."); Id., 12:27-36 ("The mobile wallet application may be installed on the device's SIM card, or on the device's main memory. Accordingly, the monetary transaction system 200 may be accessed and used via substantially any type of plan-based or prepaid mobile device.")

Dill's disclosure makes clear that a sender 105 can access Dill's transaction facilitator 140 through various channels, only one of which (one provided by agent 135) involves Dill's Mobile Network 115. As explained in Dill:

... Generally speaking, the agent 135 provides a channel by which entities can access the services of the money transfer facilitator 140. It should also be noted that ... the agent 135 and/or money transfer facilitator 140 can also provide other channels for accessing the services of the money transfer facilitator 140. For example, such channels can include but are not limited to a web site, a telephone service, a kiosk, an ATM or other channels. Generally speaking and as understood by one skilled in the art, via one or more such channels, a sender 105 can initiate a transaction to transfer money to a recipient 110. For example, a sender 105 can access the services of the money transfer facilitator 140 via a web site of the money transfer facilitator 140 and initiate a money transfer from a source account 165 owned by the sender 105. The recipient 110 of the payment may then, for example, pick up the payment from the agent's 135 retail location.

The system 100 can also include a mobile network 115, such as a cellular or other wireless network, communicatively coupled with the agent 135 and/or the money transfer facilitator 140. A mobile network operator system 120 can be communicatively coupled with the mobile network 115. As understood by one skilled in the art, the mobile network 115 and mobile network operator system 120 can support communication to and/or from mobile devices communicatively coupled therewith such as a mobile device associated with the sender 105 and/or a mobile device associated with the recipient 110. ... Ex. 1005, ¶¶ [0051] – [0052] (emphasis added).

Thus, Dill discloses that a sender 105 can access Dill's Transaction Facilitator 140 through various channels, which do not involve Dill's Mobile Wireless Network 115, and one channel, which does involve Dill's Mobile Network 115. This is shown

graphically in Figure 9 of Dill, reproduced below (with Patent Owner's annotations in red):

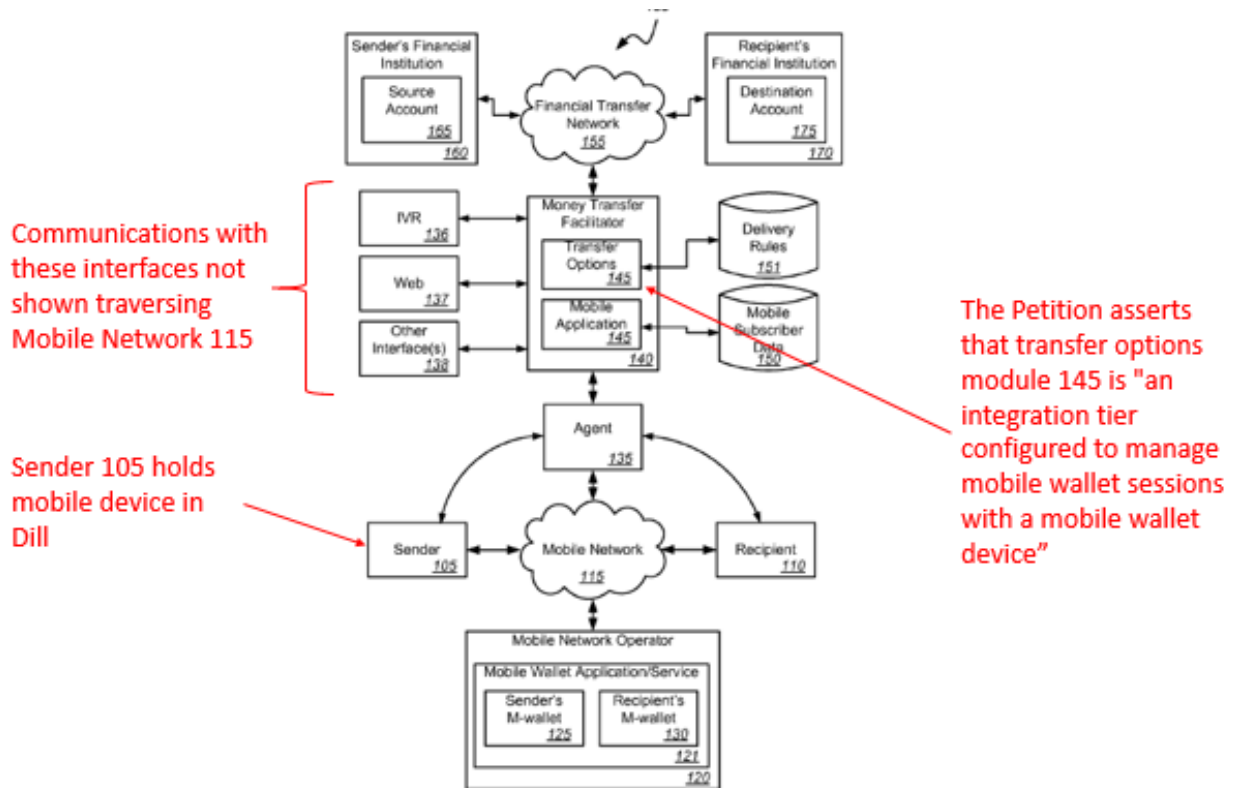


FIG. 9

While, in Figure 9, sender 105 is shown as connected to Mobile Wireless Network 115, the specification also teaches that sender 105 can access Money Transfer Facility 140 through other channels (e.g., interfaces 136-138) that do involve Mobile Wireless Network 115.

Given that interfaces 136-138 in Dill are not even connected to a mobile wireless network, a POSITA would understand that interfaces 136-138 do not involve a mobile device running a mobile wallet application (i.e., a "wallet

application "installed on a SIM card or elsewhere on the mobile device"), as claimed. See, note 2, *supra*; Ex. 2001, ¶61. Since the claimed integration tier must be configured to manage mobile wallet sessions with such a mobile device, sessions involving interfaces 136-138 (which do not involve such a mobile device) fail to meet the limitations of the claimed integration tier.

2. Transfer Options Module 145 In Dill Does Not Manage Sessions With The Mobile Device Of Sender 105 or Recipient 110

To the extent that the Petition is mapping the mobile device of Sender 105 in Dill to the "mobile device" recited in the claimed "integration tier," transfer options module 145 fails to "manage sessions" for the device of sender 105. In Dill, any mobile wallet sessions associated with the mobile device of the sender 105 occur over the Mobile Network 115 and are between sender 105 and the Mobile Network Operator 120, as illustrated below (Patent Owner's annotations in red):

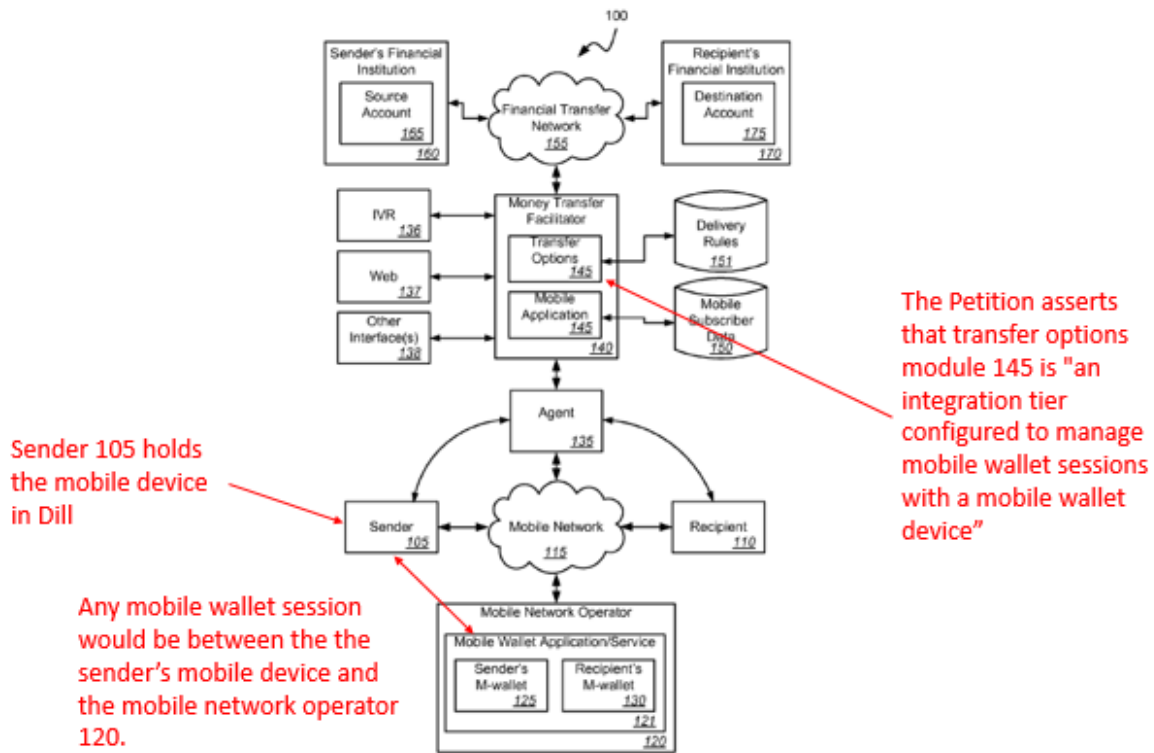


FIG. 9

To the extent there is any "mobile wallet session" with the mobile device of sender 105 in Dill, a POSITA would understand that Mobile Network Operator 115 (rather than transfer options module 145) would be the entity that managed the session. Ex. 2001, ¶62. Thus, to the extent the Petition is mapping the mobile device of sender 105 in Dill to the "mobile device," the mapping for the claimed "integration tier" fails because transfer options module 145 fails to "manage mobile wallet sessions" for the mobile device of sender 105 in Dill. Ex. 2001, ¶62.

Figure 1 of the '488 Patent and the corresponding description draw a distinction between Integration Tier 101 which, inter alia, is "configured to *manage* mobile wallet sessions," and other components such as Payment Handler 105

configured to *facilitate* transactions. Compare Ex. 1001, 9:63-64 ("Integration Tier 101 is configured to *manage* mobile wallet sessions,") with 10:24-26 (payment handler 105 "*facilitates* interactions with many different kinds of payment processors.") 2001, ¶61.

In Dill, the session with the mobile device of a sender 105 is managed by Mobile Operator Network 120. *See, e.g.,* Ex. 1005, ¶ [0077] (stating "the process begins with a *sender 105* initiating a money transfer by *sending a request to* a mobile wallet application of the *sender's mobile network operator 120...*"). To the extent there is an analogy with the '488 Patent, Dill's Money Transfer Facilitator 145 is analogous to Payment Handler 105 of the '488 Patent, i.e., both Payment Handler 105 in the '488 Patent and Dill's Money Transfer Facilitator 145 *facilitate* transactions, as opposed to *managing sessions* with a mobile device. It is clear from Fig. 1 of the '488 Patent that Payment Handler 105, which is not part of the integration tier, does not manage any mobile wallet sessions. 2001, ¶62.

The fact that the Mobile Network Operator 120 sends queries to and receives responses from Money Transfer Facilitator 145 during the mobile wallet session in no way diminishes the fact that Mobile network Operator 120 is in charge of managing the session with the mobile device of sender 105. 2001, ¶63.

Thus, the mappings in the Petition fail to disclose all of the limitations of the "integration tier." For this further reason, the Petition fails to demonstrate a reasonable likelihood of success with respect to any of the Challenged Claims.

VI. CONCLUSION

Institution should be denied because the Petition has failed to demonstrate a reasonable likelihood of success with respect to any of the Challenged Claims.

Respectfully submitted,

Dated: April 11, 2023

By: /s/ Jonathan K. Waldrop
Jonathan K. Waldrop
Reg. No. 50,334

CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Response complies with the type-volume limits of 37 C.F.R. § 42.24(b)(1) because it contains 6,309 words, excluding the parts of this Patent Owner's Response that are exempted by 37 C.F.R. § 42.24(a), according to the word processing system used to prepare this Patent Owner's Response.

Respectfully submitted,

Dated: April 11, 2023

By: /s/ Jonathan K. Waldrop
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CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** was served via email (as consented to by counsel) on April 11, 2023 to lead and backup counsel of record for Petitioner as follows:

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