

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PAYPAL HOLDINGS, INC., AND PAYPAL, INC.

Petitioner

v.

FINTIV, INC.,

Patent Owner

Case No.: IPR2023-00744

U.S. Patent No. 8,538,845

**DECLARATION OF KAI JOHNSON
IN SUPPORT OF PATENT OWNER'S RESPONSE**

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I. INTRODUCTION

1. My name is Kai Johnson. I have been retained as an expert witness by Plaintiff Fintiv, Inc. (“Fintiv” or “Patent Owner”) for this *Inter Partes* Review IPR2023-00744 of U.S. Patent No. 8,538,845 (the “’845 Patent”) filed by PayPal Holdings, Inc., and PayPal, Inc. (“PayPal” or “Petitioner”).

2. In the Petition, I understand that Petitioner is challenging the validity of Claims 1-3 and 5-7 (the “Challenged Claims”) of the ’845 Patent (Ex. 1001), under three grounds of unpatentability.

3. I have been asked to review and comment on statements made by Petitioner in the Petition by its expert, Dr. Sandeep Chatterjee, in the “Declaration of Dr. Sandeep Chatterjee in Support of Petition for *Inter Partes* Review of U.S. Patent No. 8,538,845,” dated March 23, 2023 (“Chatterjee Declaration,” Ex. 1003) and by the Board in its Institution Decision dated October 19, 2023.

4. This Declaration contains statements of my opinions formed in this case to date and the bases and reasons for those opinions. I may offer additional opinions based on further review of materials in this case, including opinions and/or testimony of other expert witnesses.

II. QUALIFICATIONS

5. This section summarizes my educational background, career history, publications, and other relevant qualifications. My curriculum vitae is attached as

Patent Owner's Exhibit 2002, which includes my detailed employment background, and professional experience.

6. I have a Bachelor of Science degree in Computer Science from the University of Wisconsin-Madison.

7. I am a consultant with over 32 years of business experience. I am currently the President of Sutton Abinger in San Diego, California, a consulting company focused on solutions for payment systems, security, transit, and mobile applications, through which I provide services to U.S. and international clients in the areas of payment systems, information security, cryptography, and mobile applications. I am also an Advisory Partner to Penser Consulting Ltd., a firm in London which provides consulting services related to the payments industry for clients in Europe, the Middle East, and Asia.

8. I was previously the Product and Technology Leader, Chief Architect, and Chief Security Officer for Softcard (formerly known as Isis), a joint venture among AT&T, T-Mobile, and Verizon Wireless to develop contactless mobile payments. Prior to that, I worked as a consultant to Verizon Wireless to develop consumer data products.

9. From 1999 to 2004, I worked in London, UK for enCommerce (acquired by Entrust) and SchlumbergerSema (acquired by Atos Origin) on both pre- and post-sales engagements, where many of my clients were in the telecom

and financial services industries, and where some of my responsibilities included business development in the mobile payments market.

10. I am a named inventor on the following three issued patents relating to contactless mobile payments: U.S. Patent Nos. 10,075,213; 10,387,873; and 11,132,668.

11. COMPENSATION

12. I am being compensated for my work in this case at the rate of \$350 per hour. I am also reimbursed for all reasonable expenses that I incur during the course of this case. My compensation does not depend upon the results of my analysis or the substance of my testimony, nor does my compensation depend on the outcome of this or any related proceeding. I have no personal interest in the outcome of this matter. I have no financial interest in Patent Owner or affiliation with any of the real parties in interest, the Patent Owner, or the named inventor of the '845 Patent. It is conceivable that I may own mutual funds whose portfolios include stock in Petitioner. If this is the case, the value of such holdings would not constitute a material part of my net worth.

13. The statements made and opinions provided in this Declaration are based on my own personal knowledge and, if called as a witness, I could and would testify in a manner consistent with this Declaration.

III. MATERIALS CONSIDERED

14. I have reviewed the following documents in forming the opinions expressed in this Declaration:

- All materials filed in this IPR up to and including this date, and
- The prosecution history of U.S. patent application 13/484,199, now U.S. Patent 8,538,845.
- The prosecution history of U.S. provisional patent application 61/493064.

15. I have also relied on my education, skill, training, and experience in the relevant fields of technology in forming my opinions. I have further considered the viewpoint of a person of ordinary skill in the art (“POSITA”) as of the time of the inventions of the ’845 Patent. I provide my opinion as to the proper level of skill of a POSITA in Section VI of this Declaration.

16. I reserve the right to supplement my opinions as expressed in this Declaration to address any new information obtained in the course of this proceeding or based on any new positions taken by Petitioner.

IV. SUMMARY OF MY OPINIONS

17. It is my understanding that the following table summarizes the grounds of challenge to the Challenged Claims raised in the Petition:

Ground	Invalidity Challenge	References	Challenged Claims
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1	§ 102	Tumminaro	5, 7
2	§ 103	Tumminaro	5-7
3	§ 103	Tumminaro and Keena	1-3

18. After a review of the alleged prior art asserted by Petitioner and the Chatterjee Declaration, it is my opinion that Petitioner has not shown a reasonable likelihood of success on the grounds of the Petition. As discussed below, references cited by the Petition do not meet Petitioner’s or the Board’s claim construction for “unbanked subscriber,” and multiple aspects of each of the Challenged Claims are not met by the cited references. My opinions, and the bases, therefore, are detailed throughout this Declaration.

V. LEGAL PRINCIPLES

19. Counsel for Patent Owner has informed me of the legal principles that apply in this proceeding.

20. I have been informed that Petitioner has the burden to prove that the claims challenged in the Petition are not patentable by a preponderance of the evidence, which I understand to be just enough evidence to make it more likely than not that Petitioner’s argument is correct.

21. A claim is invalid as obvious under 35 U.S.C. § 103 if the differences between the subject matter sought to be patented and the prior art are such that the subject matter of the claim as a whole would have been obvious at the time of the

invention to a person having ordinary skill in the art to which the invention pertains. I have been informed that the following factors are used to determine whether or not the claimed subject matter would have been obvious: (i) the scope and content of the prior art; (ii) the differences, if any, between the prior art and the claimed invention; (iii) the level of ordinary skill in the field of the invention; and (iv) any relevant objective considerations of non-obviousness.

22. A party asserting obviousness based on a combination of prior art references must demonstrate that one of ordinary skill in the art would have been motivated to combine the teachings of those references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so. It is my understanding that it is not enough to show that one skilled in the art could combine elements of multiple references, but instead there must be some reason that would have prompted a person of ordinary skill in the art to combine the elements in the way the claimed invention does. I understand that there must be some reasoned explanation as to why one of ordinary skill in the art would combine the references.

23. I understand that obviousness may be shown by considering more than one item of prior art and by considering the knowledge of a person of ordinary skill in the art, and that obviousness may be based on various rationales including: (i) combining prior art elements according to known methods to yield

predictable results; (ii) simple substitution of one known element for another to obtain predictable results; (iii) use of known techniques to improve similar devices in the same way; (iv) applying a known technique to a known device ready for improvement to yield predictable results; (v) “obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (vi) known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art; and (vii) some teaching, suggestion, or motivation in the prior that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

24. A combination of references would not have been obvious if the alleged modification(s) to be made to the reference(s) would have been inconsistent with the reference’s stated goals or method of operation or would have rendered the combination inoperable for its intended purpose. I further understand that for something to have been obvious, the party asserting obviousness must explain why a POSITA would have selected components for combination in the manner claimed.

25. I further understand that a claim is not obvious over a combination of prior art references if such references “teach away” from the claimed combination,

if there is no motivation to combine such references, or if the combination would lead to waste and inefficiencies not present in one or more of the references in isolation.

26. It is my further understanding that obviousness cannot be based on a hindsight combination of components selected from prior art references. For example, the challenged patent itself cannot be used as a basis for combining prior art references absent such a teaching in the patent. I also understand that an invention would not have been obvious simply because all of the elements of the invention may have been known separately in the prior art.

VI. LEVEL OF ORDINARY SKILL IN THE ART

27. I understand that the hypothetical POSITA is considered to have the normal skills and knowledge of a person in a certain technical field, as of the time of the invention at issue. I understand that factors that may be considered in determining the level of ordinary skill in the art include: (1) the types of problems encountered in the art; (2) the prior art solutions to those problems; (3) rapidity with which innovations are made; (4) the sophistication of the technology; and (5) the education level of active workers in the field. I also understand that “the person of ordinary skill” is a hypothetical person who is presumed to be aware of the universe of available prior art. Therefore, no such person actually exists.

28. Petitioner has proposed that a POSITA (or POSA) for the '845 Patent would have had “a working knowledge of mobile payment systems, including of software development for mobile payment systems. Such a POSA would have had a bachelor’s degree in electrical engineering, computer science, or equivalent training, and approximately two years of work experience in software development in the field of mobile payment systems. Lack of work experience can be remedied by additional education, and vice versa.” (Pet., p. 6.)

29. I agree with Petitioner’s characterization, provided that the two sentences quoted above are combined to yield this description: “A POSITA would have had a bachelor’s degree in electrical engineering, computer science, or equivalent training, and approximately two years of work experience in software development with a working knowledge of mobile payment systems, regulations, and techniques. Lack of work experience can be remedied by additional education, and vice versa.” I believe that this description is materially the same as Petitioner’s.

30. I have had at least this level of skill since at least 2009, when I led product management for Verizon Wireless’s implementation to support the launch of contactless mobile payments under the joint venture that would eventually be branded as Softcard. Softcard used contactless technology to allow users to pay

for items at stores and restaurants with credit and debit card credentials stored on their smartphones.

31. The opinions I express in this Declaration are from the viewpoint of such a POSITA as of June 3, 2011, the priority date assumed by Petitioner¹. (Pet., p. 1.)

VII. OVERVIEW OF THE '845 PATENT

A. Description of the Mobile Financial Services Platform for Unbanked Subscribers in the Specification

32. The '845 Patent describes a mobile financial services (mFS) platform designed to support unbanked subscribers. In the mFS platform, an unbanked subscriber has a “mobile wallet account” that allows the subscriber “to pay for goods and services on the mFS platform” (Ex. 1001, 11:34-35) or transfer money to other subscribers and non-subscribers (Ex. 1001, 12:34-35). As described in the specification, the mFS platform manages the unbanked subscriber’s account balance in the form of virtual currency or “eMoney”:

The mFS platform manages the balance of mobile wallet accounts for each subscriber as value is transferred from one mobile wallet to another (e.g. from a subscriber’s mobile wallet to an agent’s

¹ The Petition at p. 1 assumes a priority date of June 3, 2011. The '845 Patent claims priority to June 3, 2011.

mobile wallet in payment for goods or services). This value is referred to herein as “eMoney”.

As subscribers conduct business with mFS agents, they deposit or withdraw cash from their mobile wallet accounts. Virtual or eMoney credits are transferred between the subscriber’s mobile wallet account and the agent branch’s account as a form of currency to support the transaction. As agents accept cash into their cash register by mFS subscribers, they transfer the equivalent amount of eMoney credits into the mFS subscriber’s mobile wallet account. For instance, if an mFS subscriber gives an mFS agent \$10 to deposit into the subscriber’s mobile wallet account, the agent would place the cash into his register and transfer \$10 from the agent branch’s eMoney account into the subscriber’s mobile wallet account. While the agent acquired \$10 in his register, he transferred out \$10 of eMoney credits from his branch eMoney account. (Ex. 1001, 7:55-8:8, emphasis added.)

33. So, in the embodiment discussed above, when an unbanked subscriber makes a deposit, an mFS agent accepts the deposit and credits the unbanked subscriber’s mobile wallet account for the equivalent amount of eMoney. The agent company, in turn, maintains its own bank account: “The agent administrator deposits, withdraws, and distributes funds into and out of the agent company’s bank account. When an agent administrator deposits cash into an agent company’s bank account, it is credited as eMoney to the agent company’s account.” (Ex. 1001, 22:1-5.)

34. The eMoney balances in the subscriber's mobile wallet and the agent company's account are not legal tender (such as U.S. dollars), but a form of "scrip." Scrip is an alternative to legal tender that has its origins in antiquity and that was particularly used in the 19th and early 20th centuries in the American frontier, where banks and legal tender (i.e., notes and coins) were scarce.² Scrip remains in use in the modern U.S. economy in several forms, including Disney Dollars³ issued by The Walt Disney Company and redeemable for goods or services at many Disney facilities, gift cards issued for use at retailers⁴ such as the Starbucks Card, and prepaid phone cards where subscribers pre-purchase a given dollar amount of telecommunication services. Gaming chips issued by casinos are an example of scrip which can be purchased for and redeemed in U.S. dollars.

35. The '845 Patent describes an unbanked subscriber's "mobile wallet account" as a "stored value account" that contains eMoney and contrasts this with a banked subscriber's "prepaid value account" where the funds come from a prepaid debit card and bank account:

² "scrip money" defined in Eatwell, J., Milgate, M., & Newman, P. (Eds.). (1992). The New Palgrave Dictionary of Money and Finance. The Stockton Press. (Ex. 2014)

³ https://en.wikipedia.org/wiki/Disney_Dollars

⁴ <https://en.wikipedia.org/wiki/Scrip>

The term “mobile wallet” or “mobile wallet account” refers to a stored value account or prepaid access account (PPA) that allows the owner (or “subscriber”) to pay for goods and services on the mFS platform from his or her mobile wallet account. When the mFS eMoney transaction processor is used, the mobile wallet balance is maintained by the mFS platform and value is exchanged within the mFS program as eMoney. When the mPS platform is integrated to an external card processor, the mobile wallet utilizes funds from the Subscriber’s prepaid debit card and bank account to exchange value on the mFS platform. (Ex. 1001, 11:32-42, emphasis added.)

* * *

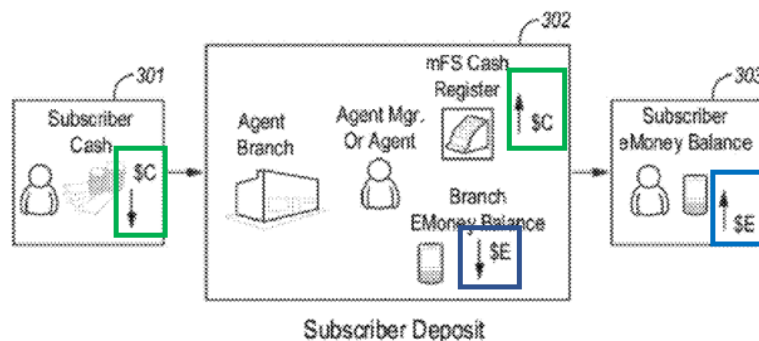
Performing the specified transactions may include communicating with the monetary transaction database 225 to determine whether the transaction is permissible based on data indicated in the unbanked subscriber’s profile (for instance, whether the subscriber has enough eMoney in his or her stored value account, or has enough money in his or her bank account). (Ex. 1001, 14:19-25, emphasis added.)

In the context of the ’845 Patent, a POSITA would have understood that a “stored value account” for an unbanked subscriber stores eMoney (i.e., scrip) rather than legal tender (i.e., U.S. dollars).

1. Deposit Transaction by an Unbanked Subscriber

36. Figures 3 and 12 of the '845 Patent show the participant interactions and monetary transactions that take place when an unbanked subscriber deposits cash into a mobile wallet account. In these figures, “\$C=Cash Balance and \$E=Electronic Money (eMoney) Balance.” (Ex. 1001, 15:15-16.)

37. Figure 3, titled “Subscriber Deposit,” reproduced in part and annotated below, illustrates “an unbanked subscriber making a deposit using a mobile wallet” (Ex. 1001, 15:7-8, emphasis added) where the “agent takes the cash and notifies the mobile wallet transaction system of the deposit” (Ex. 1001, 15:24-25, emphasis added):



38. Figure 3 illustrates “an unbanked subscriber making a deposit using a mobile wallet.” (Ex. 1001, 15:7-8.) In this process, the unbanked subscriber’s cash goes down (as shown in box 301), the agent’s cash goes up (as shown in box 302), the unbanked subscriber’s eMoney balance goes up (as shown in box 303), and eMoney balance at the agent branch goes down (as shown in box 302). As a result

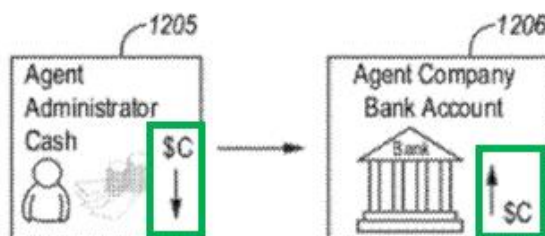
of this process, the subscriber has exchanged cash (i.e., legal tender) for eMoney (i.e., scrip). The specification explains the process in Figure 3 as follows:

To deposit cash in order to get eMoney credit, the subscriber informs the agent manager or agent that they want to deposit a certain amount of cash (in **301**). The agent manager/agent takes the cash and notifies the mobile wallet transaction system of the deposit using their agent manager or agent application (**302**). The transaction system **210** then credits the subscriber's eMoney account (**303**). Accordingly, any location that has registered to accept eMoney payments from subscribers' mobile wallets can also accept cash deposits. The agent branch's eMoney balance is reduced because their actual money balance was increased by the amount of the deposit. The subscriber's mobile wallet account is credited with eMoney in the amount of the deposit. In this manner, a subscriber can deposit cash into their mobile wallet account (in the form of eMoney) at any retail location or other agent branch location.

Thus, the agent manager receives the physical cash deposit into the subscriber's eMoney account via the agent manager or agent's application. The subscriber gives cash to agent manager or agent, and the mFS platform processes the request, updates the agent branch and subscriber's eMoney balances ... (Ex. 1001, 15:21-42, emphasis added.)

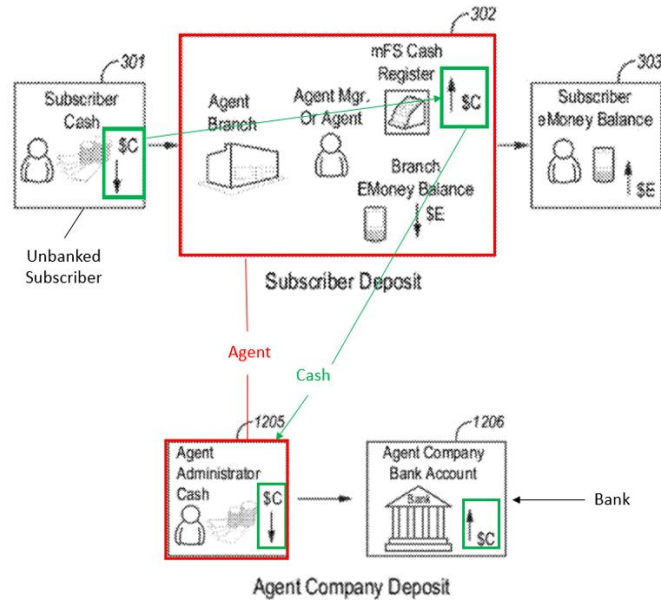
39. The specification explains that an agent receiving a deposit from an unbanked subscriber may, in turn, deposit the funds into the agent's bank account:

“After the agent company’s bank account has been set up, the agent administrator can make deposits into that account. As Figure 12B shows, once cash (1205) has been deposited into the bank account (1206) ...” (Ex. 1001, 22:19-22.) The interaction between the agent and the agent company bank is shown in Figure 12B, entitled “Agent Company Deposit” (reproduced in part below):



40. In this process, the agent administrator’s cash goes down (as shown in box 1205), and the cash balance in the agent company’s bank account goes up (as shown in box 1206).

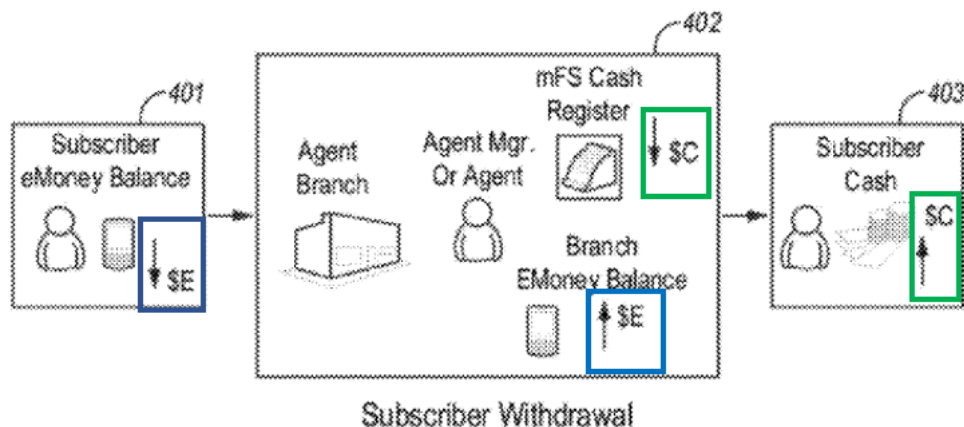
41. A diagram prepared by Patent Owner combining parts of Figures 3 and 12B illustrates the flow of cash when an unbanked subscriber makes a cash deposit with the agent, and the agent administrator takes the cash to deposit it in the agent company’s bank account.



2. Withdrawal Transaction by an Unbanked Subscriber

42. The process for a withdrawal by an unbanked subscriber in the '845 Patent for an unbanked subscriber reverses the deposit process described above. Figures 4 and 13 of the '845 Patent show the participant interactions and monetary transactions that take place when an unbanked subscriber withdraws cash from a mobile wallet account.

43. Figure 4, titled "Subscriber Withdrawal," reproduced in part and annotated below, illustrates the interactions between an unbanked subscriber and an agent in the context of a withdrawal:

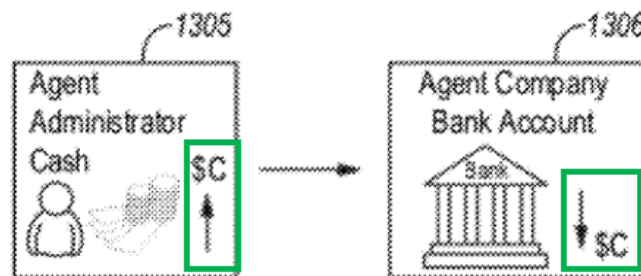


44. Figure 4 illustrates “an unbanked subscriber making a withdrawal using a mobile wallet.” (Ex. 1001, 16:8-10.) In this process, the unbanked subscriber’s cash goes up (as shown in box 403), the agent’s cash goes down (as shown in box 402), the unbanked subscriber’s eMoney balance goes down (as shown in box 401), and the eMoney balance at the agent branch goes down (as shown in box 402). As a result of this process, the subscriber has redeemed eMoney (i.e., scrip) for cash (i.e., legal tender). The specification explains this process as follows:

To withdraw cash at an agent branch, a subscriber submits a withdrawal request using their application (**401**). The subscriber may also enter information about the agent branch (e.g. name of establishment, name of agent, location or other information) that allows the monetary transaction system **210** to identify the agent branch. The transaction processor **216** may then determine whether the unbanked subscriber has enough eMoney to withdraw the requested amount. If he or she does have enough eMoney,

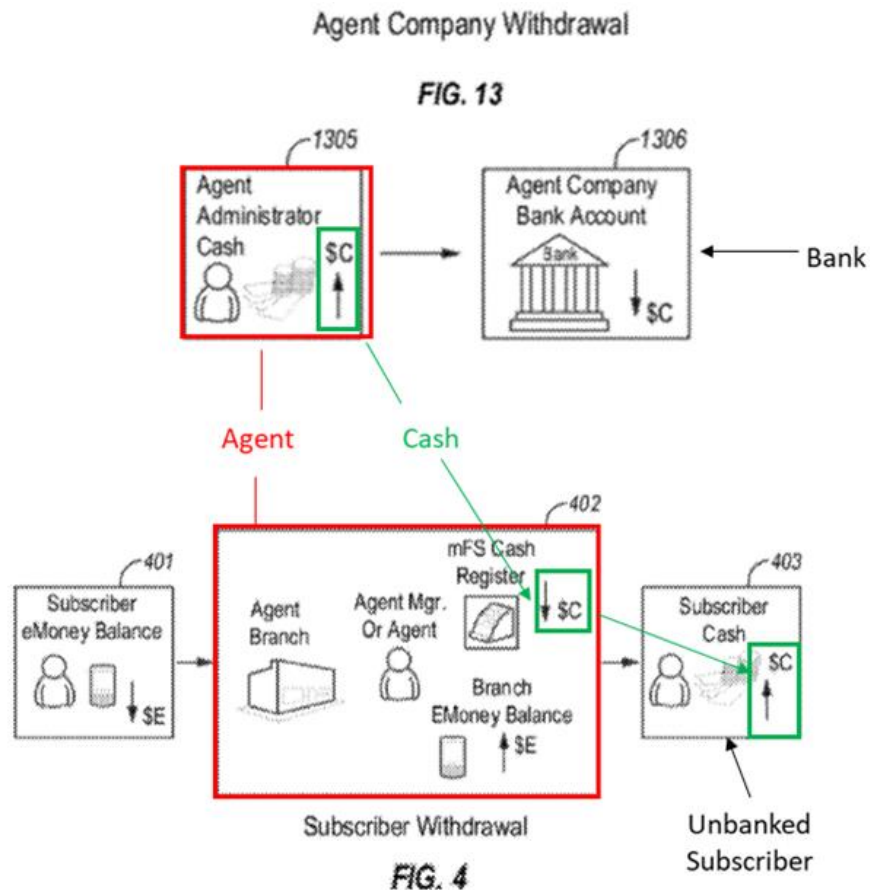
then the subscriber's eMoney is deducted and that amount is transferred to the agent branch's eMoney account (402). Then, the agent branch gives the subscriber the requested amount of cash (403). In this manner, any entity that has established itself as an agent branch (including retail stores, gas stations, service providers, etc.) can provide cash withdrawal to a mobile wallet subscriber (whether banked or unbanked). The agent's or agent manager's role is to verify the withdrawal request (e.g. via SMS on the agent's or agent manager's phone) and gives the cash to subscriber. The subscriber requests cash withdrawal from agent branch's eMoney account via the application, and receives physical cash from agent manager/agent. (Ex. 1001, 16:14-34, emphasis added.)

45. As the specification explains, “The agent administrator deposits, withdraws, and distributes funds into and out of the agent company's bank account.” (Ex. 1001, 22:1-3.) This cash is distributed to the agent, so that the agent has physical cash ready for withdrawals. The interaction between the agent administrator and agent company bank is shown in Figure 13, entitled “Agent Company Withdrawal,” reproduced in part and annotated below:



46. In this process, the agent's cash goes up (as shown in box 1305), and the cash balance in the agent company's bank account goes down (as shown in box 1306).

47. A diagram prepared by Patent Owner combining parts of Figures 4 and 13 illustrates the flow of cash withdrawn from the agent company bank by an agent administrator, distributed to the agent, and then withdrawn by an unbanked subscriber:



B. Recitation of “Unbanked Subscriber” Limitations in the Challenged Claims

48. The Petition challenges Claims 1-3 and 5-7 of the '845 Patent, of which Claims 1 and 5 are independent. Both independent claims are directed towards monetary transactions conducted by an “unbanked subscriber”:

1. A monetary transaction system for conducting monetary transactions between unbanked subscribers and other entities, the system comprising:

a mobile device configured to run a monetary transaction system application; an unbanked monetary transaction system subscriber that has a profile with the monetary transaction system, wherein the unbanked subscriber indicates, via the monetary transaction system application, one or more specified transactions that are to be performed using the monetary transaction system;

a monetary transaction system processor that performs the one or more transactions specified by the unbanked subscriber, wherein performing the specified transactions includes communicating with a monetary transaction database to determine whether the transaction is permissible based on data indicated in the unbanked subscriber's profile; ... (Ex. 1001, 29:33-48, emphasis added.)

* * *

5. A monetary transaction system for conducting monetary transactions between subscribers and other entities, the system comprising: ...

wherein the monetary transaction system is implemented to transfer funds between mobile wallets, including performing the following steps:

receiving subscriber communication over one of a plurality of channels connected to the monetary transaction system, the subscriber communication indicating that an unbanked subscriber desires to transfer a specified amount of funds to specified recipient using a specified payment method from the subscriber's mobile wallet; (Ex. 1001, 31:12-32:5, emphasis added.)

VIII. PETITIONER'S CONSTRUCTION OF "UNBANKED SUBSCRIBER"

49. The Petition construes an "unbanked subscriber" as follows:

... an unbanked subscriber is one that does not have or have access to a financial institution account. (Pet., p. 16, emphasis added.)

50. The term "financial institution" is broader than banks and credit unions, and would be understood by a POSITA to encompass any institution that provides financial services to customers who maintain a financial account with the institution.⁵ For example, institutions that manage debit card accounts (including

⁵ The term "financial institution" is defined in the U.S. Code as follows:

The term "financial institution" means any institution engaged in the business of providing financial services to customers who maintain a credit, deposit, trust, or

prepaid debit card accounts) for customers qualify as financial institutions because they maintain a “deposit ... or other financial account or relationship” with the customer. (See note 5.) Similarly, institutions that manage Automated Clearing House (ACH) and/or ATM transactions, fall under the category of financial institutions because they maintain a “financial account or relationship” with customers. (See note 5.) Accounts maintained by such entities for customers are “financial institution accounts.”

51. Under Petitioner’s construction, a subscriber who either has a financial institution account or has access to one does not meet the definition of an “unbanked subscriber.” For a subscriber to be “unbanked” under Petitioner’s construction, a subscriber must not have or have access to an account at any financial institution.

52. I have been advised that Petitioner bears both (i) the burden of setting forth how the Challenged Claims should be construed (see, 37 C.F.R. § 42.104(b)(3) (“the petition must set forth: ... [h]ow the challenged claim is to be construed”), and (ii) the burden of explaining how the cited references meet the Challenged Claims as construed by Petitioners. As described below, applying

other financial account or relationship with the institution. 15 U.S.C. §6827 (1999) (emphasis added).

Petitioner’s chosen construction of “unbanked subscriber” makes it clear that Petitioner has failed to meet the burden of explaining how the cited references meet the Challenged Claims.⁶

IX. THE PETITION FAILS TO DEMONSTRATE THAT TUMMINARO MEETS PETITIONER’S CONSTRUCTION OF “UNBANKED SUBSCRIBER” (ALL GROUNDS)

53. The Petition relies on U.S. Pat. Publication 2007/0255620 (“Tumminaro”, Ex. 1005) to argue that the limitations in the Challenged Claims that refer to an “unbanked subscriber” are anticipated (Ground 1) or obvious (Grounds 2 and 3).

54. Specifically, the Petition argues that subscribers with funds held in Tumminaro’s “pooled accounts” are “unbanked subscribers”:

... Tumminaro discloses the payment system is capable of ***“conducting monetary transactions between unbanked subscribers and other entities.”*** Tumminaro explains that “[t]he stand-alone closed loop payment system of the present invention is designed to integrate with a companion bank account. This account can be a preexisting account or, **for unbanked users, accounts can be created or held in a pooled account with the**

⁶ I do not provide an opinion about whether Petitioner’s construction of “unbanked subscriber” is correct, but merely provide my analysis of Petitioner’s chosen construction in the context of the Petition.

partner bank.” Ex-1005, [0447], emphasis added. (Pet., pp. 30-31, emphasis in original.)

* * *

As explained above, Tumminaro’s “pooled account” serves as “the unbanked subscriber’s mobile wallet account.” See Ex-1005, [0447]. Tumminaro discloses “crediting the unbanked subscriber’s mobile wallet account with the specified amount of funds.” Ex-1005, [0604] (“At times, **account holders may add funds to the pooled account as indicated at 5302. Such funds may be deposited at a partner merchant that has agreed to accept funds from account holders which are then deposited into the pooled account.**”). Thus, depositing funds into the pooled account “credit[s] the unbanked subscriber’s mobile wallet account with the specified amount of funds.” (Pet., p. 66, emphasis in original.)

55. As described below, the so-called “unbanked subscribers” in Tumminaro do not meet Petitioner’s definition for three independent reasons because such subscribers (i) have debit cards with direct access to accounts which are financial institution accounts, (ii) have a financial institution account (on Tumminaro’s payment system), and (iii) have and have access to a pooled account at a partner bank. These aspects of Tumminaro are discussed separately below. While Tumminaro may refer to its so-called “unbanked users” by name, the

Petition does not explain how such users lack a financial institution account or lack access to one, as required by Petitioner's construction.

A. The Petition Fails to Explain How Tumminaro's So-Called "Unbanked Subscribers" Do Not Have Access to a Financial Institution Account

56. Although the Petition argues that "... Tumminaro's 'pooled account' serves as 'the unbanked subscriber's mobile wallet account,'" (Pet., p. 66) as described below, the subscriber accounts in Tumminaro's "pooled account" are, in fact, financial institution accounts, and so cannot be available to "unbanked subscribers" under Petitioner's construction of that term.

57. Tumminaro's mobile payment system allows subscribers (including Tumminaro's so-called "unbanked subscribers") to make deposits to and withdrawals from their bank accounts (including pooled bank accounts) using ATMs:

The mobile payment system allows many different financial services for the user. Examples of Some services includes credit card load, debit card load, Automated Clearing House (ACH) load, ACH unload, person-to-person (P2P) payment, remote pay (RPAY), viral, person-to-merchant (P2M), and referrals. Other services may include automated teller machine (ATM) network load and unload such as through the NYCE, PLUS, or STAR ATM system. (Ex. 1005, [0261], emphasis added.)

58. Tumminaro makes it clear that the “load” (i.e., deposit) and “unload” (i.e., withdrawal) transactions may be performed using the subscriber’s account managed either by a partner financial institution (e.g., a partner bank) or internally by the mobile payment system itself:

Loading of an account refers to transferring of funds to an account on the mobile payment system where funds may be transacted. For example, a user may load funds from a checking account or credit card to the user’s mobile payment system account, which may be managed by financial partner or managed by the operator of the mobile payment system. (Ex. 1005, [0262], emphasis added.)

Unloading of an account refers to transferring of funds from the mobile payment system to another account. For example, a user may unload funds from the user’s mobile payment system account, which may be managed by financial partner or managed by the operator of the mobile payment system, to a checking account or credit card. (Ex. 1005, [0263], emphasis added.)

59. Tumminaro also makes it clear that the “load” (i.e., deposit) and “unload” (i.e., withdrawal) transactions apply to “pooled accounts,” and may be performed using any of the various “financial services” that the mobile payment system allows, including using ATMs:

Loading and unloading may be performed in any of the ways discussed in this application including through ACH, ATM, or credit card or interchange. (Ex. 1005, [0264].)

* * *

At times, account holders may add funds to the pooled account as indicated at **5302**. Such funds may be deposited at a partner merchant that has agreed to accept funds from account holders which are then deposited into the pooled account. Alternatively, the account holder may utilize their plastic debit card at an ATM to deposit cash or checks ... (Ex. 1005, [0604], emphasis added.)

60. By allowing its so-called “unbanked subscribers” to deposit and withdraw funds from the pooled account using ATMs, the operator of Tumminaro’s mobile payment system is engaged in the business of providing financial services to customers who maintain a deposit account with the financial institution. Unlike credit card, debit card, and ACH transactions, an ATM transaction occurs directly between the account holder and the financial institution that manages the deposit account. And Tumminaro makes clear that the operator of the mobile payment system is responsible for managing customer accounts even if the funds are held in a pooled account at a partner bank. Accordingly, the subscriber accounts with funds held in the pooled account are financial institution accounts. Specifically, Tumminaro explains that:

The system may include a system of record managed by the financial transaction system, recording transaction executed through the consumer interface. The system may include a pooled account managed by the financial transaction system, where a number of the clients accessing the system through the consumer interface have an account in the pooled account. (Ex. 1005, [0041], emphasis added).

* * *

... funds from each account holder are pooled at a single financial institution and each account holder has an interest in the pooled account equal to the funds deposited, minus the funds transferred to another account plus the funds received from others. Account holders may withdraw some or all of their available funds from the pooled account. (Ex. 1005, [0197], emphasis added).

61. Although the '845 Patent discusses that in some embodiments, subscribers can use ATMs and plastic debit cards with mFS platform, the subscribers in these instances are no longer “unbanked” under Petitioner’s proposed construction. Specifically, the '845 Patent states:

FIG. 17A illustrates a subscriber withdrawal using an automated teller machine (ATM). Subscribers in many countries have access to ATM machines and can use their mobile wallets to perform withdrawals using their (prepaid) debit card at most ATMs. Banks provide ATMs to their customers (typically at no charge) and to non-customers (typically for a small charge). The subscriber

requests a cash withdrawal from the subscriber's mobile wallet via the subscriber's debit card that is associated with the mobile wallet. The bank providing the debit card may receive settlement reports from the card processor and may transfer and/or settle funds from subscriber's account to the ATM network bank. An external card processor decrements the subscriber's mobile wallet balance (1701) and sends transaction reports to the bank for settlement. Accordingly, once the withdrawal request has been received and the external card processor (e.g. Visa® or MasterCard®) (1702) has debited the debit card account, the ATM (1703) dispenses the withdrawn cash to the subscriber (1704). (Ex. 1001, 25:1-18, emphasis added.)

62. As described above, Figure 17A of the '845 Patent depicts an embodiment where "banked" subscribers under Petitioner's proposed construction can make withdrawals from their mobile wallet using a plastic debit card. Notably, the bank, not the mFS platform, in the '845 Patent issues the debit card to the subscriber. Then the bank, not the mFS platform, performs the settlement for the ATM transaction.

63. This is in stark contrast to Tumminaro, where the Obopay system manages the transaction. Specifically, Tumminaro explains that "pooled accounts" hold the funds of so-called "unbanked subscribers" and direct ATM access to these accounts by such subscribers is illustrated in Figure 5 of Tumminaro, which is reproduced below with Patent Owners annotations:

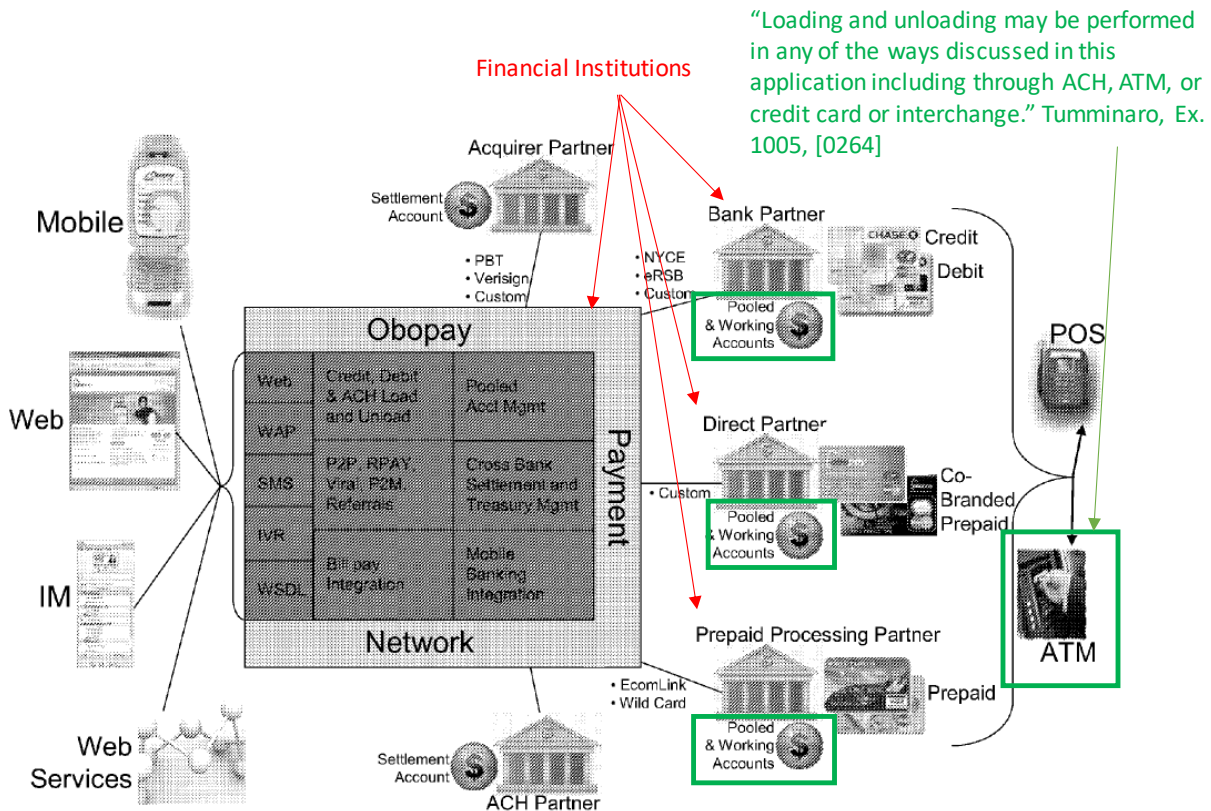


Fig. 5

64. Notably, Figure 5 depicts an NYCE interface for ATM transactions between a bank partner and the mobile payment system operator (labeled Obopay in the diagram), indicating that the mobile payment system operator operates the system of record that maintains balances for pooled accounts and is responsible for processing ATM deposits and withdrawals. Accordingly, Tumminaro’s so-called “unbanked subscribers” have access to a financial institution account.

65. The Petition does not dispute that the accounts held by Tumminaro’s so-called “unbanked subscribers” are financial institution accounts. In fact, the Petition directly acknowledges this by stating that, “Pooled accounts are bank

accounts for multiple users held at a partner financial institution or internally by the closed loop system itself.” (Pet., p. 23, emphasis added.)

B. The Petition Fails to Explain How Tumminaro’s So-Called “Unbanked Subscribers” Do Not Have a Financial Institution Account

66. Tumminaro explains that its “pooled account” is a bank account:

In an embodiment of the invention, a mobile device is associated to one or more bank accounts (checking, savings, credit, prepaid, or a pooled account, and the like) ... (Ex. 1005, [0242], emphasis added.)

* * *

The transactional databases **308** integrate directly with a pooled bank account 306 maintained at a partner bank. All funds stay within this account, ... (Ex. 1005, [0183], emphasis added)

67. The Petition does not explain how a subscriber whose funds are held in a “pooled account with a partner bank,” which is a bank account meets the Petitioner’s definition of “unbanked subscriber,” i.e., “one that does not have ... a financial institution account.”

68. As described above, Tumminaro’s subscribers (including so-called “unbanked users”) each have ATM access to a “financial institution account” on Tumminaro’s mobile payment system. In addition, Tumminaro describes its so-called “unbanked subscribers” as having a reloadable prepaid debit account:

In one embodiment of the present invention, an account holder adds money to a prepaid debit account in advance of purchases. ... Account holders then have access to these funds through their mobile devices to make payments and they may receive payments to their account activity from others. In other embodiments, funds may be transferred from a designated credit card account into the prepaid debit account. (Ex. 1005, [0196].)

69. The prepaid debit account to which an account holder may add funds is a “reloadable prepaid account,” which is a financial institution account. (See note 5 above.)

70. Notably, Tumminaro makes it clear that the mobile payment service provides debit cards with direct access to the subscriber funds held in a pooled account.

In another embodiment, each account holder may set up a prepaid debit account at any financial institution and access the account indirectly to transfer funds. Thus, account holders are not limited to a debit card with funds maintained in the pooled account at a particular financial institution. Rather, account holders may access a debit card account at a financial institution of their choosing. (Ex. 1005, [0198].)

71. A general-purpose prepaid card of this type is certainly a financial institution account, and Tumminaro’s mobile payment system is therefore operating in the role of a financial institution when it issues a debit card that

allows the user to access funds via the ATM network. Simply put, Tumminaro's mobile payment system clearly operates as a financial institution because each subscriber (including Tumminaro's so-called "unbanked subscribers") with funds in Tumminaro's pooled account *has access to a financial institution account*.

72. The Petition does not dispute that the operator of Tumminaro's mobile payment system is a financial institution, or that the accounts held by Tumminaro's so-called "unbanked subscribers" are financial institution accounts. In Petitioner's own language, "Pooled accounts are *bank accounts ...*," (Pet., p. 23, emphasis added) and so Petitioner acknowledges that Tumminaro's so-called "unbanked subscribers" have financial institution accounts.

C. Tumminaro Fails to Meet Petitioner's Construction of "Unbanked Subscriber"

73. While Tumminaro does refer its so-called "unbanked subscribers," it is clear as described above, that such subscribers are not "unbanked subscribers" as Petitioner has construed the term ("an unbanked subscriber is one that *does not have or have access to a financial institution account*.") (Pet., p. 16, emphasis added.) In the context of Tumminaro, a so-called "unbanked subscriber" is merely someone who did not have a financial institution account before the operator of Tumminaro's mobile payment system provided one. So, Tumminaro apparently uses this term as a marketing phrase rather than as a more specific term.

74. As discussed above, the term “financial institution” adopted by Petitioner for their construction of “unbanked subscriber” is broader than banks and credit unions and encompasses any institution that provides financial services to customers who maintain a financial account with the institution. And as discussed above, the operator of Tumminaro’s mobile payment system is a “financial institution” as defined by Petitioner.

75. The Petition does not dispute that Tumminaro’s mobile payment system itself provides “financial institution accounts,” such as a prepaid debit account or pooled account accessible via ATM deposits and withdrawals. Nor does the Petition offer any explanation why such accounts on Tumminaro’s mobile payment system are not “financial institution accounts.”

X. TUMMINARO FAILS TO MEET THE BOARD’S CONSTRUCTION OF “UNBANKED SUBSCRIBER” (ALL GROUNDS)

76. In its Decision Granting Institution of *Inter Partes* Review (the “Institution Decision”), the Board found that the ’845 Patent provides an explicit definition of the term “unbanked subscriber” (Institution Decision, p. 11). The explicit definition cited by the Board is that “[a]n ‘unbanked subscriber’ is a subscriber that does not have (or does not have access to) a bank account or credit union account.” However, all the subscribers in Tumminaro that can make deposits or transfers either have or have access to a bank account or a credit union

account, so Tumminaro fails to meet the Board’s explicit definition of “unbanked subscriber” as it applies to the ’845 Patent.

A. Types of Subscribers in Tumminaro

77. Tumminaro has at least three types of users as depicted in Figures 6-18 and described in [0285-0350]. Although Tumminaro describes some variations of these types in alternative embodiments or implementations, the variations are consistent with these three types.

78. Tumminaro has a type of user that is variously referred to as “invited,” “viral,” “nonmember,” or “unregistered” and which I will refer to as “unregistered.” This is a user who has been identified as a recipient of a P2P transfer from one of Tumminaro’s other types of users, but who has no direct relationship with the operator of Tumminaro. An “unregistered” user is not a subscriber and does not have an account in Tumminaro. The only operation available to an “unregistered” user is to register and become a “no-card” user. (Ex. 1005, [298-325].)

79. Tumminaro’s “no-card” user has registered with the operator of Tumminaro and has a pooled account maintained by the operator of Tumminaro with funds held in a pooled account at Tumminaro’s partner bank. A “no-card” user can deposit funds into the pooled account at the partner bank (Ex. 1005, Figure 8 and [0290-0292]), withdraw funds from the pooled account at the partner

bank (Ex. 1005, Figure 9 and [0293-0294]), and initiate P2P transfers (Ex. 1005, Figures 12, 13 and 16; [0344-0345], and [0348]). As the name suggests, Tumminaro's "no-card" user does not have a credit or debit card associated with their account in Tumminaro. A "no-card" user may request a credit or debit card issued by Tumminaro's partner bank but is not obligated to do so and may remain a "no-card" user indefinitely.

80. After requesting a credit or debit card from Tumminaro's partner bank and activating the card, a "no-card" user becomes a "carded" user (Ex. 1005, Figure 18 and [0350]). At the same time, the user's pooled account is closed, a new individual card account for the user is opened at Tumminaro's partner bank, and the user's funds are moved from the pooled account to the new individual card account. The individual card account is a bank account in every sense and form, with funds held in a bank account solely for the benefit of the user and available upon demand. The user has provided an address, contact information, and Social Security Number (Ex. 1005, [0277-0278]) and has passed compliance checks (Ex. 1005, [0592-0593]) prior to establishing this bank account.

81. Tumminaro often uses the term "registered users" to refer collectively to "no-card" and "carded" users, or the term "registered user" to refer to an individual user of this type. For example, "In a mobile payment system, registered users or members may send payment to other member or unregistered

users or nonmembers” (Ex. 1005, [0021]). For clarity, none of the “registered” user account in Tumminaro are “temporary” as suggested by the Board in its Institution Decision. The “registered” accounts in Tumminaro exist indefinitely until either the operator of Tumminaro or the subscribers themselves decide to close them.

B. Tumminaro’s Pooled Accounts and Virtual Pooled Accounts are Bank Accounts

82. Tumminaro consistently describes its “pooled accounts” as accounts at partner banks: “The financial institution may manage pooled accounts 138” (Ex. 1005, [0146]), “pooled accounts at participating banks, handle the front ledgers, report net positions to or on behalf of its partner banks, and allow the banks to conduct the final settlement” (Ex. 1005, [0192]), “for unbanked users, accounts can be created or held in a pooled account with the partner bank” (Ex. 1005, [0447]), “The system operator may be a bank, a financial institution, or may subcontract the pooled account management to another bank” (Ex. 1005, [0606]). Tumminaro never describes its “pooled accounts” in any way other than as accounts at partner banks.

83. Tumminaro also consistently depicts its “pooled accounts” as accounts at partner banks. As examples, Figure 5 shows “Pooled Accounts” only at the “Bank Partner,” “Direct Partner,” and “Processing Partner” which are depicted as stylized banks; Figures 6-9 depict the “Obopay Member Pooled

Account” only at “Bank Partner ‘A’” and “Bank Partner ‘B’”; and Figures 11-18 depict the “Obopay Member Pooled Account” and “Obopay Viral Pooled Account” only at the “Obopay Bank Partner.” Tumminaro never depicts its “pooled accounts” in any way other than as accounts at partner banks.

84. Tumminaro’s pooled accounts hold funds for its subscribers: “The system may include a pooled account managed by the financial transaction system, where a number of the clients accessing the system through the consumer interface have an account in the pooled account” (Ex. 1005, [0041]). Tumminaro permits relationships with multiple partner banks, each of which may have a pooled account (Ex. 1005, [0266-0269]). Tumminaro may associate an individual subscriber with a particular partner bank and place funds for the subscriber in the pooled account at that partner bank (Ex. 1005, [0270]).

85. As an alternative to keeping a separate pooled account at each partner bank, Tumminaro proposes a method of holding all the funds in a single pooled account at one bank with Tumminaro’s operator as the account holder. Banks may make loans using a portion of their deposits and earn interest on those loans. In the scenario where each partner bank holds a pooled account, the partner banks can earn interest from loans based on those deposits. However, in the scenario where Tumminaro’s operator holds all the funds in a single pooled account at a single bank, the remaining partner banks can no longer earn interest from loans based on

these deposits. To compensate the partner banks for this loss of income, Tumminaro introduces the concept of “virtual pooled accounts.” (Ex. 1005, [0516] and [0524].)

86. Tumminaro elaborates on the concept of a “virtual pooled account” to describe a method of distributing the interest earned on the single pooled account to the remaining partner banks who no longer hold pooled accounts. (Ex. 1005, [0517-0523].)

87. In this context, the “virtual pooled account” is a bank account that holds all the funds that would have been deposited at the pooled accounts at partner banks. Tumminaro makes it very clear that the account holder of the “virtual pooled account” is the operator of Tumminaro: “[T]he owner of the virtual pooled account (e.g., the mobile payment system service operator) will receive the float or interest on this money” (Ex. 1005, [0516]); “The owner of the virtual pooled account will receive the float on the virtual pooled account, and this float will be distributed to the multiple financial partners” (Ex. 1005, [0524]).

88. For clarity, the “virtual pooled accounts” in Tumminaro hold legal tender (e.g., U.S. dollars), represent the aggregate deposits of all “no-card” subscribers, and are owned by the operator of Tumminaro. As such, the “virtual pooled accounts” of Tumminaro are in no way equivalent to the “stored value

accounts” of the ’845 Patent, which hold eMoney (i.e., scrip) for unbanked subscribers.

C. All Funds Within Tumminaro Are Held in a Bank Account

89. In Tumminaro, all subscriber funds recorded in the system of record correspond to legal tender (e.g., U.S. dollars) deposited at one or more partner banks.

90. In the case of “no-card” users, the funds are held in a pooled account at a partner bank: “funds from each account holder are pooled at a single financial institution and each account holder has an interest in the pooled account equal to the funds deposited, minus the funds transferred to another account plus the funds received from others” (Ex. 1005, [0197]).

91. In the case of “carded” users, the funds are held in individual accounts, one account for each user, also at a partner bank: “debit card accounts are not held in a pooled account by mobile payment service provider, but in individual debit card accounts at a direct bank partner” (Ex. 1005, [0194]).

92. Tumminaro makes it clear that all its accounts are deposits in partner banks: “All funds represented by individual prepaid debit accounts will be maintained in commercial bank accounts held in trust for account holders” (Ex. 1005, [0193]).

D. All of Tumminaro’s Subscribers Have or Have Access to a Bank Account

93. All of Tumminaro’s subscribers, i.e. “registered users” either have or have access to a bank account. Tumminaro’s “unregistered” users are not subscribers, so whether they are banked or unbanked, they cannot be “unbanked subscribers.” Tumminaro’s “carded” subscribers have a bank account, which is the individual card account at Tumminaro’s partner bank, and so they are not “unbanked subscribers.” However, all of Tumminaro’s “no-card” subscribers also have or have access to a bank account and therefore are also not “unbanked subscribers.”

94. Tumminaro’s system ultimately relies on funds that are deposited into accounts from external sources. Tumminaro describes several methods of depositing these funds including credit or debit card charges (Ex. 1005, Figure 8 and [0290-0292]) and ACH transfers (Ex. 1005, [0264]). These methods require Tumminaro’s users to have external bank accounts. Credit card transactions are settled to a revolving credit account issued by a bank. Debit card transactions are settled to a demand deposit account issued by a bank. ACH transfers are settled to a deposit account issued by a bank. Any “no-card” user that would use these methods has a bank account and so is not an “unbanked subscriber.”

95. Tumminaro also permits several other types of transactions for “no-card” users. Each of these types of transactions clearly demonstrates that “no-card” users have access to a bank account.

96. Tumminaro permits “no-card users” to make withdrawals: “[T]he user may withdraw funds from a designated ATM or other facility associated with financial institution that manages the pooled funds” (Ex. 1005, [0254]). As discussed above, the pooled account is a bank account. The ability to withdraw funds from an ATM means that the user has access to a bank account. ATM withdrawals typically require the use of an ATM or debit card which would only be available to a “carded” user, but to the extent that Tumminaro permits cardless ATM withdrawals (which were available at the time⁷ but which are not present in Tumminaro), “no-card” users who could withdraw funds from an ATM have access to a bank account. And as described above, to the extent that Tumminaro’s “no-card” users can make ATM withdrawals, the operator of Tumminaro is the financial institution that provides those withdrawals by processing the ATM transactions. The same sentence in Tumminaro (Ex. 1005, [0254]) also permits withdrawals from “[an]other facility associated with financial institution that manages the pooled

⁷ <https://www.atmmarketplace.com/blogs/atm-withdrawals-made-easy-with-cellphones-for-the-card-challenged/>

funds.” This is a facility that permits withdrawals other than an ATM, so for example, a bank branch where Tumminaro would permit users to walk into the bank and withdraw money from the pooled account held by that bank. As discussed above, a pooled account held by a partner bank is unquestionably a bank account. Anyone, including Tumminaro’s “no-card” users, who can walk into a bank branch and withdraw money from a bank account has access to a bank account.

97. Tumminaro permits registered (i.e., “no-card” or “carded”) users, to establish direct deposits to their accounts: “[A] registered user may choose to have the user’s paycheck or a portion of the paycheck directly deposited into the system” (Ex. 1005, [0512]). The prerequisite information to establish a direct deposit is the account holder’s name, the routing number for the bank that holds the account, the account number at the bank, and the type of account (i.e., checking or savings). By providing the account number associated uniquely with the user’s account in Tumminaro and the routing number associated with the bank holding the account, Tumminaro gives its users access to a bank account to make direct deposits.

98. In a specific embodiment, Tumminaro allows users to deposit and withdraw funds from the pooled account: “Consumers and merchants can load and unload from a pooled MSPS working account” (Ex. 1005, [0499]). This gives

subscribers access to the pooled account, which is a bank account. So, in this embodiment subscribers have access to a bank account.

99. Tumminaro emphasizes that its subscribers have or have access to bank accounts in its own language in [0041]. Tumminaro says, “users through the consumer interface can access their money at a bank connected to the system,” which confirms that deposits in Tumminaro belong to the users (i.e., “their money”) and that the deposits are in a bank account that the users can access. Tumminaro emphasizes subscriber ownership of the funds in [0197]: “Account holders may withdraw some or all of their available funds from the pooled account.” Tumminaro continues in [0041] to say that “a number of the clients accessing the system through the consumer interface have an account in the pooled account,” which confirms that “no-card” subscribers in Tumminaro have an account in the pooled account which is at the partner bank. That is, Tumminaro’s “no-card” subscribers have a bank account.

100. In summary, Tumminaro fails to meet the Board’s explicit definition of “unbanked subscriber” which is “a subscriber that does not have (or does not have access to) a bank account or credit union account” because Tumminaro’s “unregistered” users are not subscribers, and Tumminaro’s “registered” users all either have or have access to a bank account.

XI. TUMMINARO DOES NOT TEACH THAT AN UNBANKED SUBSCRIBER CAN SPECIFY A PAYMENT METHOD

101. Claim 5 of the '845 Patent says in part:

receiving subscriber communication over one of a plurality of channels connected to the monetary transaction system, the subscriber communication indicating that an unbanked subscriber desires to transfer a specified amount of funds to specified recipient using a specified payment method from the subscriber's mobile wallet; (Ex. 1001, 31:34-32:5, emphasis added.)

102. For Tumminaro to satisfy this claim, it must describe an invention that enables an unbanked subscriber to specify an amount of funds for a transfer, specify a recipient for the transfer, and specify the payment method from the unbanked subscriber's mobile wallet to be used for the transfer. As described above, none of Tumminaro's subscribers are unbanked subscribers because they either have or have access to a bank account. However, even granting that some of Tumminaro's subscribers may be unbanked (which they are not), Tumminaro does not satisfy Claim 5 of the '845 Patent. Tumminaro does show that its subscribers can specify an amount of funds for a transfer and specify the recipient of the transfer, but Tumminaro does not show that a subscriber can specify a payment method from the subscriber's mobile wallet to be used for the transfer.

103. Tumminaro's paragraph [0242] says:

In an embodiment of the invention, a mobile device is associated to one or more bank accounts (checking, savings, credit, prepaid, or a pooled account, and the like) and the account holder can transfer funds in real time from one account to another without any access to a service center and without any internet or computer access. Advantageously, the account holder can select the account from which funds are obtained to make a purchase in real time.

104. The first sentence of this paragraph describes a mobile device associated with one or more bank accounts and says that the account holder can transfer funds between these accounts. This first sentence does not satisfy the claim because (1) all the accounts in question are bank accounts, so the account holder in this sentence cannot be an “unbanked subscriber,” and (2) the recipient in a transfer of funds between two bank accounts held by the account holder is always implicitly the account holder and there is no opportunity to specify a recipient.

105. The second sentence of this paragraph suggests that “the account holder can select the account from which funds are obtained to make a purchase in real time.” This second sentence also does not satisfy the claim because (1) as above, all the accounts in question are bank accounts, so the account holder in this sentence cannot be an “unbanked subscriber,” and (2) in all of the transfers to specified recipients in Tumminaro (i.e., P2P transfers and payments to merchants),

the source of funds is always implicitly either the pooled account or an individual card account and there is never an opportunity to specify a payment method from the subscriber's mobile wallet.

106. Figure 6 in Tumminaro shows a P2P transfer where both the subscriber and recipient have an account at a partner bank. If the payment method for the transfer was anything other than the account at the partner bank, Tumminaro would need to depict and describe a transfer of funds from this payment method. Neither Figure 6 nor the corresponding paragraphs [0286-0287] show any transfer of funds to or from any account. Nor do the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

107. Figure 7 in Tumminaro shows a P2P transfer where the subscriber has an account at one partner bank and the recipient has an account at a second partner bank. If the payment method for the transfer was anything other than the subscriber's account at Partner Bank "A," Tumminaro would need to depict and describe a transfer of funds from this payment method. Both Figure 7 and the corresponding paragraphs [0288-0289] show the source of funds as the subscriber's account at Partner Bank "A." Nor do the figure or corresponding paragraphs show any step where the subscriber could specify a payment method.

The payment method is always implicitly the subscriber's account at the partner bank.

108. Figure 13 in Tumminaro shows a P2P transfer where both the subscriber and recipient have an account at a partner bank. If the payment method for the transfer was anything other than the account at the partner bank, Tumminaro would need to depict and describe a transfer of funds from this payment method. Neither Figure 13 nor the corresponding paragraph [0345] show any transfer of funds to or from any account. Nor do the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

109. Flow D on pp. 26-27 in Tumminaro describes the sequence of interactions between the system and its users for a P2P transfer between two "no-card" users. This sequence of interactions is detailed and specific enough that a POSITA would assume that it is complete and does not omit any interactions between the system and its users. There is no step in this sequence of interactions or in the corresponding paragraphs [385-387] where the subscriber can specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

110. Flow E on p. 27 of Tumminaro describes the sequence of interactions between the system and its users for a P2P transfer between a “no-card” and a “carded” user. This sequence of interactions is detailed and specific enough that a POSITA would assume that it is complete and does not omit any interactions between the system and its users. There is no step in this sequence of interactions or in the corresponding paragraphs [388-389] where the subscriber can specify a payment method. The payment method is always implicitly the subscriber’s account at the partner bank.

111. Figure 23 in Tumminaro shows a P2P transfer where both the subscriber and recipient have an account at a partner bank. If the payment method for the transfer was anything other than the account at the partner bank, Tumminaro would need to depict and describe a transfer of funds from this payment method. Neither Figure 23 nor the corresponding paragraph [0417] show any transfer of funds to or from any account. The amounts shown in the “Obopay GL” represent transaction records and not transfers of funds. The amounts shown in the “Obopay In & Out Account” remain in this account and are not transferred to or from any other account. Nor do the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber’s account at the partner bank.

112. Figure 26 in Tumminaro shows a P2P transfer where both the subscriber and recipient have an account at a Bancorp Bank. If the payment method for the transfer was anything other than the account at the Bancorp Bank, Tumminaro would need to depict and describe a transfer of funds from this payment method. Other than the transfer of a \$0.10 fee to the Obopay Working Capital Account, neither Figure 26 nor the corresponding paragraph [0420] show any transfer of funds to or from any account. The amounts shown in the “Obopay GL” represent transaction records and not transfers of funds. Other than the fee, the amounts shown in the “Pooled Account FBO Obopay Customers” remain in this account and are not transferred to or from any other account. Nor do the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber’s account at the partner bank.

113. Figure 27 in Tumminaro shows a P2P transfer where the subscriber has an account at Bancorp Bank and the recipient has an account at First Premier Bank. This transfer uses two intermediate accounts owned by the operator of Tumminaro (i.e., Obopay), the “Obopay Working Capital Account” at Bancorp Bank and the “Obopay In & Out Account” at First Premier Bank. These intermediate accounts hold funds that the operator of Tumminaro uses to settle transfers between subscribers without making transfers between Bancorp Bank

and First Premier Bank. The source of the funds for this transfer is the “Pooled Account FBO Obopay Customers” at Bancorp Bank. The net balance of the operator’s intermediate accounts after the transfer increases by \$0.10, reflecting the deposit of \$5.10 into one intermediate account and withdrawal of \$5.00 from the other intermediate account. Neither the figure nor the corresponding paragraph [0421] show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber’s account at the partner bank.

114. Figure 35 in Tumminaro shows a transfer where the funds for the transfer remain in a pooled account at a partner bank. If the payment method for the transfer was anything other than the account at the partner bank, Tumminaro would need to depict and describe a transfer of funds from this payment method. Neither Figure 35 nor the corresponding paragraphs [0434-0454] show any transfer of funds to or from any account. Nor do the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber’s account at the partner bank.

115. Figure 44 in Tumminaro shows a purchase from a merchant where the funds for the transfer remain in a pooled account at a partner bank. If the payment method for the transfer was anything other than the account at the partner bank, Tumminaro would need to depict and describe a transfer of funds from this

payment method. Neither Figure 44 nor the corresponding paragraph [0506] show any transfer of funds to or from any account. Nor does the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

116. Figure 53 in Tumminaro shows deposits into, transactions within, and withdrawals from a pooled account. This figure shows that “Deposited Funds 5302” come from a source outside the “Pooled Account 5300” and that “Withdrawn Funds 5303” go to a destination outside the “Pooled Account 5300,” but it shows that “Transactions between account holders 5301” always come from and return to the “Pooled Account 5300.” If the payment method for the transfer was anything other than the “Pooled Account 5300,” Tumminaro would need to depict and describe a transfer of funds from this payment method. Neither Figure 53 nor the corresponding paragraphs [0603-6065] show any transfer of funds to or from any account other than the “Pooled Account 5300.” Nor does the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

117. Figure 69 in Tumminaro shows a sequence of mobile phone application screens during the process of initiating a transfer from a subscriber to

a recipient. This sequence of screens is detailed and specific enough that a POSITA would assume that it is complete and does not omit any interactions between the mobile phone application and the user. There is no step in this sequence of interactions or in the corresponding paragraph [0892] where the subscriber can specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

118. Figures 82-83 in Tumminaro show a sequence of mobile phone application screens during the process of initiating a transfer from a subscriber to a recipient. This sequence of screens is detailed and specific enough that a POSITA would assume that it is complete and does not omit any interactions between the mobile phone application and the user. There is no step in this sequence of interactions or in the corresponding paragraph [0903] where the subscriber can specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

119. Figures 87 and 88 in Tumminaro show transfers from a subscriber to a merchant. In the corresponding paragraphs [1133-1142], Tumminaro describes the method of processing these transactions using funds from a single account held by the subscriber. If the payment method for the transfer was anything other than the account at the partner bank, Tumminaro would need to depict and describe a transfer of funds from this payment method. Neither Figures 87-88 nor

the corresponding paragraphs [1133-1142] show a source of funds other than the subscriber's account. Nor does the figure or corresponding paragraphs show any step where the subscriber could specify a payment method. The payment method is always implicitly the subscriber's account at the partner bank.

120. In this summary of the methods of transfers described and depicted in Tumminaro, I have omitted transfers to “unregistered” users as these users do not have a “profile with the monetary transaction system” as required by Claim 5 in the '845 Patent. I have also omitted transfers from “carded” users as these users have an individual card account at a partner bank and so are not “unbanked subscribers” as required by Claim 5 of the '845 Patent. However, as with the transfers described above, in these cases, Tumminaro never shows a source of funds for a transfer other than the subscriber's account at a partner bank and never shows any step where a subscriber could specify a payment method other than the account at the partner bank.

121. As described in detail above, Tumminaro never shows that a subscriber can specify a payment method from the subscriber's mobile wallet in the context of a transfer to a recipient. In Tumminaro, the payment method for a transfer from a subscriber to a recipient is always implicitly the subscriber's account at the partner bank. So, Tumminaro does not satisfy the requirement of

Claim 5 in the '845 Patent that requires “an unbanked subscriber to ... [specify a] payment method from the subscriber’s mobile wallet.”

XII. THE PETITION FAILS TO DEMONSTRATE THAT TUMMINARO TEACHES SELECTING A PAYMENT METHOD AS RECITED IN CLAIM 5 (GROUNDS 1-2)

122. The specification of the '845 Patent describes multiple payment methods that may be added to an unbanked subscriber’s mobile wallet, including a stored value account from the platform or a stored value account from a third-party:

In one embodiment, the monetary transaction system **210** is implemented to add a mobile wallet platform stored value account to a mobile wallet. (Ex. 1001, 27:28-30, emphasis added.)

* * *

In another embodiment, the monetary transaction system **210** is implemented to add a third party stored value account to a mobile wallet. (Ex. 1001, 27:51-53, emphasis added.)

123. The '845 Patent specification explains that the subscriber selects from amongst various payment options for a transaction:

In one embodiment, the monetary transaction system **210** is implemented to pay a bill from a mobile wallet. The communications module **215** of the monetary transaction system **215** receives a subscriber communication over a communication channel **111** connected to the monetary transaction system (step **810**). The subscriber communication indicates that unbanked

subscriber **205** desires to pay a bill for a specified amount using a specified payment method from the unbanked subscriber's mobile wallet (e.g. eMoney). The monetary transaction system **210** validates the status of the selected payment method (step **820**) and performs a limit check and/or a velocity check on the selected payment method to ensure the eMoney transfer is permissible (step **830**). The monetary transaction system then debits the specified payment method by the specified amount of funds (step **840**) ... (Ex. 1001, 19:31-46, emphasis added).

124. The ability of an unbanked subscriber to select from multiple payment methods is reflected in Claim 5, which recites in part:

... receiving subscriber communication over one of a plurality of channels connected to the monetary transaction system, the subscriber communication indicating that an unbanked subscriber desires to transfer a specified amount of funds to specified recipient using a specified payment method from the subscriber's mobile wallet;

validating the status of the selected payment method;

performing at least one of a limit check and a velocity check on the selected payment method, ...

debiting the specified payment method by the specified amount of funds ... (Ex. 1001, 31:34-32:18.)

125. A POSITA would have understood the limitations in Claim 5, reciting “a specified payment method” and “the selected payment method,” to

require the unbanked subscriber to specify a payment method from the available payment methods in the mobile wallet and the transaction processing to be performed using the payment method selected by the unbanked subscriber.

126. The plain meaning of these limitations dictates that there must be more than one potential payment method available for selection in the unbanked subscriber's mobile wallet. Otherwise, the limitations requiring the subscriber to specify/select a payment method would be superfluous. Consider, for example, the dictionary definitions of the word "select":

If you select something, you choose it from a number of things of the same kind (Ex. 2004, *Collins English Dictionary*, definition of "select," emphasis added.)

selected, selecting, selects, v.tr. To take as a choice from among several (Ex. 2005, *American Heritage Dictionary*, Fifth Edition, definition of "select," emphasis added.)

selected, selecting, selects, *transitive verb*: to choose (as by fitness or excellence) from a number or group. (Ex. 2006, Merriam-Webster Dictionary, definition of "select," emphasis added)

127. The use of the phrases "selected payment method" and "specified payment method" in Claim 5 requires that there be more than one potential payment method available for selection in the mobile wallet. These limitations must be read in conjunction with the other limitations of Claim 5, requiring the subscriber to be an "unbanked subscriber." In combination, these limitations

require an “unbanked subscriber” to be able to select from more than one payment method available in the mobile wallet. If the subscriber in question has a financial institution account such as a demand deposit account or credit card account, the subscriber is not an “unbanked subscriber” under the Petitioner’s construction of that term.

128. The Petition attempts to argue that this limitation is met by Tumminaro:

Tumminaro discloses that users/members may use a pooled account or a prepaid debit card. Ex-1003, ¶157, Ex-1005, [0447] (“for unbanked users, accounts can be created or held in a pooled account with the partner bank.”) Depending on the user’s account configuration, the communication to the financial transaction system indicating that the user wishes to transfer funds to a specified recipient will include the payment method to be used (i.e., pooled account or prepaid debit card). Ex-1003, ¶157. Additionally, a mobile device may be “associated to one or more bank accounts (checking, savings, credit, prepaid, or a pooled account, and the like).” Ex-1005, [0242]. In the multiple account scenario, a user would typically pick which account to use to fund a transfer. Ex-1003, ¶157. (Pet., p. 43, emphasis added.)

129. However, the payment options that the Petition identifies from Tumminaro are all options that would nullify a subscriber’s status as an “unbanked subscriber” under the Petitioner’s construction of that term. As

explained above, Tumminaro’s pooled accounts and prepaid debit accounts are “financial institution accounts” as are “bank accounts.” So, accounts of these types could not be available to an “unbanked subscriber” under Petitioner’s construction of that term.

130. Petitioner’s expert further alleges that “[w]here a given user has two or more accounts associated, for example, a pooled account and a separate prepaid account such as a gift card or prepaid debit card, the user would typically pick one of the multiple accounts to use as a funding source.” (Ex. 1003, ¶157.) This assertion has no supporting citation to Tumminaro, and the term “gift card” does not appear anywhere in Tumminaro. As explained above, the other two payment options identified by Petitioner’s expert – the pooled account or prepaid debit account – are financial institution accounts that, if available to the subscriber, would nullify a subscriber’s status as an “unbanked subscriber” under Petitioner’s construction of that term.

131. Simply put, in arguing that the limitations in Claim 5 reciting “a specified payment method” and “the selected payment method” are met by Tumminaro, the analysis in the Petition has failed to consider that the payment methods identified in the Petition cannot be available to an “unbanked subscriber” under the Petitioner’s construction of that term.

XIII. THE PETITION FAILS TO DEMONSTRATE THAT TUMMINARO TEACHES A “LIMIT CHECK” AS RECITED IN CLAIM 1 (GROUND 3)

A. Claim 1 Requires a Limit Check and a Velocity Check

132. The relevant limitation in Claim 1 recites:

... performing one or more of a limit check and a velocity check on the unbanked subscriber’s mobile wallet account, the limit check determining whether sufficient funds are available to make the deposit amount, the velocity check determining whether the unbanked subscriber has exceeded a specified number of transactions within a specified time period ... (Ex. 1001, 29:63-67, emphasis added.)

133. I have been advised that the language in Claim 1 reciting “performing one or more of a limit check and a velocity check on the unbanked subscriber’s mobile wallet account,” requires performing at least one limit check and at least one velocity check.

B. Claim 1 Requires Both Performance of a Limit Check (i) “On the Unbanked Subscriber’s Mobile Wallet Account,” and (ii) That the Limit Check Determine Whether Sufficient Funds Are Available to Make the Deposit

134. The relevant limitation of Claim 1 recites:

... performing one or more of a limit check and a velocity check on the unbanked subscriber’s mobile wallet account, the limit check determining whether sufficient funds are available to make the deposit amount, ... (Ex. 1001, 29:63-67.)

135. Two aspects of this claim language are important. First, the claim language requires that the limit check “determines whether sufficient funds are available to make the deposit.” Second, the claim language recites that the limit check is performed “on the unbanked subscriber’s mobile wallet account.” A limit check that is unrelated to the unbanked subscriber’s mobile wallet account, or that is directed to an account different from the unbanked subscriber’s mobile wallet account, would therefore be outside the scope of this limitation.

C. The Intrinsic Evidence Demonstrates That the Claimed Limit Check Is Not Met by an Agent Counting Cash Provided by the Customer

136. The specification of the ’845 Patent discloses several examples of limit checks, e.g.:

The transaction processor **216** performs one or more of a limit check (to verify sufficient funds) ... (Ex. 1001, 16:53-54 – limit check in the context of a transfer.)

The transaction processor **216** ... performs a limit check ... (Ex. 1001, 42-45 – limit check in the context of a deposit.)

137. In addition, the specification discloses limits on an unbanked subscriber’s mobile wallet that may be used to perform the limit check:

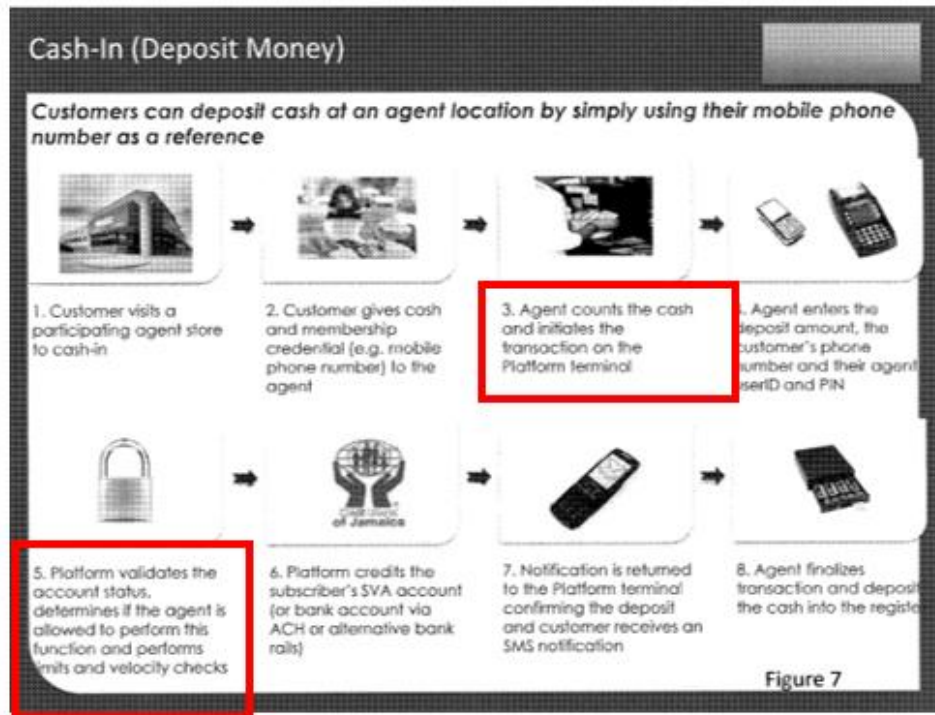
Transaction limits can be placed on user accounts. The transaction limits are fully configurable for each particular use case, channel and payment method that allows maximum flexibility to restrict higher risk use cases. (Ex. 1001, 29:16-19.)

138. None of these examples suggest that the performance of a limit check on the subscriber's mobile wallet account is met by an agent simply counting physical cash.

139. In addition, the intrinsic record makes clear that an agent counting cash is not the same as a limit check. The '845 Patent incorporates by reference the entirety of Provisional Patent Application Nos. 61/522,099 and 61/493,064. (Ex. 1001, 1:10-12.) The Petition relies on aspects of Provisional Application No. 61/522,099 (Ex. 1027) for claim construction of another term⁸ but fails to mention how the “limit check” is disclosed in Provisional Patent Application No. 61/493,064 (the “'064 Provisional Application”, Ex. 2003, at p. 51.)

140. Figure 7 of the '064 Provisional Application (reproduced below with Patent Owner's Annotations) is directed to the same type of deposit transaction as Claim 1:

⁸ See Pet., pp. 17-19, relying on Ex. 1027 for construction of “validating the status of the specified recipient to ensure the specified recipient has a valid mobile wallet account.”



141. As shown in Step 3 of this figure, the “[a]gent counts the cash” provided by the customer. The figure shows the limit check separately in Step 5. Figure 7 from the ’064 Provisional Application clearly makes a distinction between an agent counting cash and the limit check, and makes it plain that an agent counting cash is not the same as a limit check.

142. A POSITA would interpret the arrows in this figure and the numbers on the steps as clearly showing that the steps are distinct and sequential and that the steps are performed in the following order:

1. Customer visits a participating agent store to cash-in
2. Customer gives cash and membership credential (e.g. mobile phone number) to the agent

3. Agent counts the cash and initiates the transaction on the Platform terminal
4. Agent enters the deposit amount, the customer's phone number and their agent userID and PIN
5. Platform validates the account status, determines if the agent is allowed to perform this function and performs limit and velocity checks
6. Platform credits the subscriber's SVA account (or bank account via ACH or alternative bank rails)
7. Notification is returned to the Platform terminal confirming the deposit and customer receives an SMS notification
8. Agent finalizes transaction and deposits the cash into the register

In addition, a POSITA would understand the subject of each sentence describing a step as the actor responsible for performing the step. E.g., “Agent counts the cash ...” means that this step is performed by the Agent and not by another actor. In the context of this diagram, a POSITA could not come to the conclusion, as suggested by the Board in their Institution Decision, that Steps 3 and 5 are one and the same because each step in the diagram is clearly distinct, each step is performed in sequence, and the actors performing Steps 3 and 5 are different where the Agent counts the cash in Step 3 and the Platform performs limit and velocity checks in Step 5. A POSITA would understand the actor performing Step 5 (i.e., the

Platform) to refer the “mobile wallet platform” of the ’845 Patent and not a person.

143. In its Institution Decision, the Board suggested that Figure 7 discloses two limit checks, one at Step 3 and another at Step 5. There is no support for this in either the ’845 Patent or its prosecution history. The ’845 Patent refers to “a limit check” in the singular and never refers to multiple limit checks.

D. The Petition Has Failed to Demonstrate That the Cited References Teach or Suggest the Limit Check Recited in Claim 1

144. Claim 1 is directed to an unbanked subscriber making a deposit into the subscriber’s mobile wallet account and requires “a limit check ... on the unbanked subscriber’s mobile wallet account, the limit check determining whether sufficient funds are available to make the deposit amount.” In arguing that this limitation is met by Tumminaro and Keena, the Petition states:

j. [1i]: “performing one or more of a limit check and a velocity check on the unbanked subscriber’s mobile wallet account, the limit check determining whether sufficient funds are available to make the deposit amount, the velocity check determining whether the unbanked subscriber has exceeded a specified number of transactions within a specified time period;”

The combination of Tumminaro and Keena renders obvious this limitation. Ex-1003, ¶¶ 201-202. Tumminaro and Keena disclose performing a limit check to determine whether sufficient funds are available to make the deposit amount. A merchant load agent will

only deposit or top off the amount of cash physically received from the unbanked subscriber. Ex-1003, ¶ 202. Kenna also describes performing a limit check to determine whether the vendor has sufficient funds to perform the top-up operation. Ex-1006 at [0052]. Both these operations satisfy the “limit check” requirement of this limitation, and the claim only requires at least one of a limit check and a velocity check. Ex-1003, ¶ 202. (Pet., p. 65.)

145. Neither of the two arguments made above satisfies the claim language specifying “a limit check ... on the unbanked subscriber’s mobile wallet account, the limit check determining whether sufficient funds are available to make the deposit amount.”

146. With respect to the first argument, a merchant load agent counting physically received cash is not a limit check “on the unbanked subscriber’s mobile wallet account,” as claimed. There is no check whatsoever on the unbanked subscriber’s mobile wallet account when a merchant load agent counts physically received cash. Moreover, the intrinsic record makes clear that an agent simply counting cash is not a limit check within the context of the ’845 Patent.

147. With respect to the second argument, Keena’s alleged disclosure of “a limit check to determine whether the vendor has sufficient funds to perform the top-up operation” is also deficient. The “limit check” in Claim 1 of the ’845 Patent is performed “on the unbanked subscriber’s mobile wallet account.”

Determining whether the vendor has sufficient funds is not a “limit check” performed “on the unbanked subscriber’s mobile wallet account,” in the context of Claim 1.

148. In the alternative, the Petition argues that the claimed “limit check” would have been obvious to “safeguard against fraud and maintain compliance” with regulations. In this regard, the Petition states:

Additionally, it would have been obvious at the time of invention to a POSA to implement either or both of limit and velocity checks. As discussed with respect to limitation 5[h], Tumminaro describes both limit checks and velocity checks. It would have been obvious to a POSA at the time of invention to implement one or both checks for a deposit, in order to safeguard against fraud and maintain compliance with AML regulations. *Id.* For example, adding a velocity check would guard against an attempt to fraudulently deposit numerous counterfeit bills by splitting up what would otherwise be a single large deposit into numerous smaller deposits. *Id.*, ¶204. (Pet., pp. 65-66, emphasis added.)

149. These arguments do not withstand scrutiny. First, to the extent the Petition is implying that Claim 1 can be satisfied by “either” a limit check or velocity check – as opposed to “both” -- it is incorrect. (See, Section XI above.)

150. Second, the cross-reference to “limitation 5[h]” for the claimed “limit check” in Claim 1 is deficient. Claim 5 is directed to a transaction where an unbanked subscriber transfers funds from the unbanked subscriber’s account to a

specified recipient, and the limit check in that claim relates to whether the unbanked subscriber has sufficient funds in his account to fund the transfer to the recipient. In contrast, Claim 1 is directed to an unbanked subscriber depositing funds into the subscriber's own mobile wallet account.⁹ In connection with “limitation 5[h],” the Petition argues “[c]hecking the balance on person A's (*“unbanked subscriber”*) account serves as ‘performing ... a limit check.’ ” (Pet., p. 45.) The Petition does not explain how this mapping relates to Claim 1, where the limit check determines whether sufficient funds are available to make the deposit into the unbanked subscriber's mobile wallet account.

151. Third, to the extent the Petition is suggesting that it would have been obvious to implement the claimed “limit check” to “guard against an attempt to fraudulently deposit numerous counterfeit bills by splitting up what would otherwise be a single large deposit into numerous smaller deposits,” the Petition has failed to explain how such a check would meet the claim language. Here,

⁹ In Claim 5, the limit check is for “determining whether sufficient funds are available to make the deposit amount.” In the context of Claim 5, the “deposit amount” is the amount that an unbanked subscriber is transferring from his account and depositing in the account of the recipient. In addition, while Claim 1 recites that the claimed limit check is performed “on the unbanked subscriber's mobile wallet account,” Claim 5 contains no parallel language.

Claim 1 recites “a limit check ... on the unbanked subscriber’s mobile wallet account, the limit check determining whether sufficient funds are available to make the deposit amount.” The Petition does not explain how guarding “against an attempt to fraudulently deposit numerous counterfeit bills by splitting up what would otherwise be a single large deposit into numerous smaller deposits” relates to determining whether sufficient funds are available to make the deposit amount, as required by the “limit check” in Claim 1.

152. In summary, the Petition fails to show that the “limit check” recited in Claim 1 is met by Tumminaro and Keena. For this further reason, the Petition has not established a reasonable likelihood of success on the merits with respect to Ground 3.

XIV. CONCLUSIONS

153. Relying on my education, experience, skill, and training in the relevant field of art, and after reviewing the materials identified above, it is my opinion that:

154. Petitioner has not demonstrated a reasonable likelihood of success on its grounds for the Petition.

155. I hereby declare that all statements made herein of my knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false

statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

156. I reserve the right to supplement my opinions in the future to respond to any arguments that Petitioner raises and to consider new information as it becomes available to me.

157. In signing this Declaration, I understand that the Declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I acknowledge that I may be subject to cross examination in the case and that cross examination will take place within the United States. If cross examination is required of me, I will appear for cross examination remotely within the United States during the time allotted for cross examination.

Executed January 11, 2024, at San Diego, California.

A handwritten signature in blue ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Kai Johnson